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IMPLEMENTING EFFICIENCY MEASURES FOR EMPLOYMENT AND TRAINING PROGRAMS

Final Report

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ABSTRACT

In 2007, the Office of Management and Budget (OMB) required the development of efficiency measures for all federal government programs as part of the effort to improve federal government program performance. As a result of Program Assessment Rating Tool reviews, OMB asked the Employment and Training Administration of the U.S. Department of Labor to develop and implementing an outcome-based measure or measures of efficiency for employment and training programs administered by the agency. In response to this OMB directive, in May 2008, ETA initiated a study to identify outcome-based efficiency measures for implementation by 11 ETA-administered programs: Workforce Investment Act (WIA) Adult Program; WIA Dislocated Worker Program; WIA Youth Activities Program; WIA National Emergency Grants Program; Trade Adjustment Assistance Program; Wagner-Peyser/Employment Service (ES) Program; Senior Community Service Employment Program National Farmworker Jobs Program Indian and Native American Program Work Incentive Grant Program; and Apprenticeship Program.

A key lesson that emerges from this study is that it is critical in selecting measures, standards, rewards, and sanctions to anticipate the behavioral changes that are likely to be induced by the performance management policies adopted and to structure the system so that the presence of efficiency measures does not result in undesirable behavior by programs, states, and grantees. To be implemented within three years, the study recommends that efficiency measures should be closely tied to the current outcome performance measures in effect under ETA's Common Measures framework. Though the report highlights some of the challenges of comparing efficiency measure results across programs, the Common Measures provide common definitions for outcome measures and thus increase the potential for making meaningful comparisons of efficiency measure results within individual programs (e.g., across states/subgrantees) and across at least some of the ETA programs of interest. This report also recommends use of program expenditures (rather than appropriations or obligations) as the measure of program costs in efficiency measures. Among the efficiency measures recommended for consideration in this report are cost per entered employment, cost per retained in employment, cost divided by post-program (average) earnings, and cost divided by change in earnings. The report concludes with a series of recommendations concerning the specific efficiency measures that should (and should not) be considered for implementation by each of the 11 ETA programs that are the focus of this study and, if adopted, how these measures should be used to monitor and enhance program performance.

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Other significant input on the use of efficiency measures in workforce programs in other countries was provided by: Frank Fedyk, Associate Assistant Deputy Minister for Policy Research; Serge Bertrand, Director General for Evaluation; and Stephen Johnson, Director General for Corporate Planning and Accountability, Human Resources and Social Development Canada; Bill Wells, Department of Business Enterprise and Regulatory Reform, United Kingdom; and John Martin and David Grubb, Organization for Economic Cooperation and Development (OECD).

To ensure quality, the report included guidance and review from notable experts in the field of performance measurement. The following individuals served on a peer review panel: Carolyn Heinrich (University of Wisconsin), Jeffrey Smith (University of Michigan), Christopher King (University of Texas), and Beryl Radin (American University).

Finally, Jonathan Pollak (of Johns Hopkins University) played a key role in developing cost and outcome databases for ETA programs, as well as analyzing efficiency measure results by program and at the state-level, and developing regression models used in this report.

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

EXECUTIVE SUMMARY

INTRODUCTION

In 2007, the Office of Management and Budget (OMB) required the development of efficiency measures for all federal government programs as part of the effort to improve federal government program performance. As a result of Program Assessment Rating Tool (PART) reviews, OMB asked the Employment and Training Administration (ETA) to develop and implement an outcome-based measure or measures of efficiency for employment and training programs administered by the agency.[1] In response to this OMB directive, in May 2008, ETA initiated a study to identify outcome-based efficiency measures for implementation by 11 ETA-administered programs: Workforce Investment Act (WIA) Adult Program; WIA Dislocated Worker Program; WIA Youth Activities Program; WIA National Emergency Grants (NEG) Program; Trade Adjustment Assistance (TAA) Program; Wagner-Peyser/Employment Service (ES) Program; Senior Community Service Employment Program (SCSEP); National Farmworker Jobs Program (NFJP); Indian and Native American Program (INAP); Work Incentive Grant (WIG) Program; and Apprenticeship Program.[2]

While the definition of efficiency measures is relatively straightforward, there are a number of serious challenges to identifying appropriate and feasible measures for a single program. These challenges multiply when consideration is given to applying an efficiency measure or measures across more than one program. The efficiency measure or measures applied to one or more programs should at a minimum meet the following four criteria:

- be fair to the programs being judged;
- encourage desired service delivery and program outcomes;
- discourage undesired strategies and behaviors; and
- maintain program quality, integrity, and fiscal responsibility.

In addition, the efficiency measures recommended should be feasible and cost-effective to implement using participant, outcome, and cost data that are currently collected or that could potentially be collected in the future at a reasonable cost (such as data collected and reported as part of the Common Measures).

[1]Executive Office of the President, Office of Management and Budget, *Program Assessment Rating Tool Guidance No. 2007-7: Improving the Quality of PART Performance and Efficiency Goals*, issued December 12, 2007 (available at: http://georgewbush-whitehouse.archives.gov/omb/performance/guidance/part_guid_2007-07.pdf). The Program Assessment Rating Tool Guidance No. 2007-7 called for a government-wide initiative "to increase the government and public's ability to assess and improve a program's effectiveness and efficiency."

[2]Job Corps was not included because that program was not part of ETA during the period of the study.

STUDY FINDINGS

Findings from the Review of the Literature on Efficiency Measurement

The research shows that programs pay careful attention to the performance standards they face, and that the presence of performance standards can have important effects on who is served and the services received. Unfortunately, the effects of performance standards have not always been in the desired direction:

- The most significant problems that appear in the literature are that performance standards can encourage "cream skimming," where the programs are more likely to enroll individuals who would do well even without the programs, and "gaming," where programs spend resources manipulating their measured performance by strategically enrolling and terminating individuals in a manner that makes the program look most effective.

- Studies of Job Training Partnership Act (JTPA) and Job Corps indicate that ranking on performance measures is not related to program impact on key outcomes. Thus, it is important that measured performance not be misinterpreted as measuring program impact.

A key lesson from the literature, as well as ETA's and state/local experiences with efficiency measures, is that it is critical in selecting measures, standards, rewards, and sanctions to anticipate the behavioral changes that are likely to be induced by the performance management policies adopted and to structure the system so that the presence of efficiency measures does not result in undesirable behavior by states and grantees. In addition, careful thought should be given as to whether outcome-based efficiency measures should be applied only at the national level or whether they should be "drilled-down" from the federal to states and/or local workforce investment areas.

Findings on Use of Efficiency Measurement in the United States and Other Industrialized Countries

The primary lesson that emerged from a review of domestic and foreign government utilization of efficiency measures to assess public sector program performance is that government agencies have interpreted the concept of efficiency quite broadly. Within the United States, a review was conducted of efficiency measures used by five federal cabinet-level agencies: the U.S. Department of Agriculture (USDA), the Education Department (ED), the Department of Health and Human Services (DHHS), the Department of Housing and Urban Development (HUD), and the Department of Veterans' Affairs (VA). Within these departments, this assessment focused on programs that provide activities and services related to employment and training. Many federal agencies in the United States have more than one efficiency measure, and agencies have tailored the measures broadly to reflect their concerns about what aspects of their programs can be made more efficient. The most commonly used efficiency measure among programs reviewed were cost per participant, outcome- and output-based efficiency measures

timeliness of government decisions and service delivery measures, accuracy of payments or determinations, and costs per service provided.

Based on the interviews conducted and review of background documentation, the United Kingdom and Canada (along with other Organisation of Economic Cooperation and Development [OECD] countries) assess the performance of workforce development programs both on an ongoing basis and through periodic evaluations. While workforce agencies utilize performance monitoring systems to track program participation levels, outcomes, and program costs, they do not employ outcome-based efficiency measures (linking outcomes such as job placement to program expenditures). Some programs utilize processing/output efficiency measures as part of ongoing performance monitoring systems, such as measurements of accuracy and timeliness of payments to participants (but these measures are not tied to program costs). There is some concern over the potential for "gaming" if, as part of ongoing performance monitoring, program expenditures are directly linked to outcomes – mostly, the concern is that service delivery units (e.g., job centers) may target services on the less difficult to serve to reduce per-participant costs. Overall, major industrialized countries, as yet, have not implemented the types of outcome-based efficiency measures (contemplated by ETA) for ongoing performance management system, though some periodic evaluation efforts have rigorously examined cost-effectiveness and return on investment for workforce programs.

Findings from Interviews with State Workforce Agency Officials

Two rounds of interviews were conducted of state workforce agencies. State administrators offered several recommendations on developing and implementing efficiency measures for the 11 ETA programs:

- To the extent possible, develop efficiency measures that rely upon information already being collected by states – this will reduce the cost and burden of data collection for states/local areas.

- Some programs may do well on one efficiency measure but not another – so ETA should consider implementing more than one efficiency measure.

- Be careful in selecting and implementing efficiency measures so that you do not discourage sharing of funds and co-enrollment across partners and building integrated systems.

- Be cautious about making comparisons across states and local workforce areas on efficiency measures because there are many factors that affect program participation, outcomes, and costs. Making such comparisons (and setting of performance standards) for states/local areas could potentially create strong incentives for workforce programs to provide services that are least expensive (such as labor exchange services) and not tailored to the specific needs (and best long-term outcomes) of customers served.

State workforce agency officials observed that efficiency measures need to be carefully tailored to the goals of each ETA program, noting that special attention is particularly needed in

determining and applying efficiency measures for the WIA Youth, WIG, and Apprenticeship programs. State workforce officials agreed that outcome-based efficiency measures could be a useful tool for monitoring program performance, but they stated that great care is needed in selecting the specific measures and determining how they will be applied over time to monitor program performance. Several state administrators worried that if efficiency measures are implemented as part of regular performance measurement they would likely drive states/local areas toward providing less costly labor exchange services (such as those provided under Wagner-Peyser) – and that this would work against states and local areas providing training to enable workers to upgrade skills in order to fill higher skilled/wage jobs.

Findings from Analyses of Expenditure and Outcome Data to Produce Preliminary Efficiency Measure Results for ETA Programs

The quantitative analyses of available expenditure and outcome data (to produce estimates on select efficiency measures by program for a three-year period (PY 2005-2007) demonstrated the feasibility of producing outcome-based efficiency measure results for most of the 11 ETA programs, but also highlighted some of the concerns that have been expressed by ETA and state-level program officials, as well as the Expert Panel. In particular, the very substantial variation across programs in efficiency measure results points to the widely varying cost structures for programs that provide intensive assistance and training services (such as the TAA and WIA programs) versus programs such as the Wagner-Peyser program providing less customer intensive, labor exchange-type services. The often sizable differences between the highest and lowest states on efficiency measure results demonstrates how efficiency measure results can dramatically differ across states, as well as suggests that data submitted by states on either expenditures or outcomes may be based on inconsistencies in data collection or erroneous data. The analyses included in the report also examines the prospects for taking a step beyond implementing efficiency measures to implementing performance standards with or without statistical adjustments for each efficiency measure. Such performance standards, if adopted, would parallel the standards used for outcomes under Job Training Partnership Act (using regression-based adjustment models) and currently under WIA (using negotiations). The modeling efforts conducted for this report, which focuses on the three WIA programs, suggested that great caution and several additional years of results are required before ETA should consider implementing performance standards for states/grantees on the recommended efficiency measures.

STUDY RECOMMENDATIONS

Recommendation #1: Use Program Expenditures Rather than Appropriations or Obligations as the Measure of Program Costs in Efficiency Measures

Use of expenditures rather than appropriations, allocations, or obligations in calculating efficiency measures is recommended because (1) expenditures can vary substantially from what is initially appropriated/allocated, especially at the state level (because of transfers, rescissions, and unexpended funds); and (2) expenditures reflect what is actually spent on delivery of services and capture the underlying notion of efficiency. States interviewed, ETA program

offices, and the Expert Panel endorsed the use of expenditures over the other available measures of costs.

Recommendation #2: Use Common Measures as Starting Point for Measuring Program Outcomes in Efficiency Measures

If they were to be implemented within three years, efficiency measures should be closely tied to the current outcome performance measures in effect under ETA's Common Measures framework. Data is already being collected at the state and grantee levels on these outcomes, so the performance data needed to generate efficiency measure results would already be available (for most programs) – reducing costs and start-up time. In addition, though the report highlights some of the challenges of comparing efficiency measure results across programs and there is considerable variability across programs in terms of data quality and comparability, the Common Measures provide common definitions for outcome measures and thus increase the potential for making meaningful comparisons of efficiency measure results within individual programs (e.g., across states/subgrantees) and across at least some of the ETA programs of interest.

- ***Recommendation 2a: Cost per entered employment should be tracked (for monitoring purposes initially) as an efficiency measure for 8 of the 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. The WIA Youth program could use cost per placement in employment or education (as an alternative to cost per entered employment). The WIG and Apprenticeship programs should be excluded from implementing this measure.*** The main rationale for recommending cost per entered employment (and using cost per placement in education or training for the WIA Youth program) as an efficiency measure is as follows: (1) employment is a high priority for all programs (except WIA younger youth); (2) entered employment is the simplest and most direct way to assess whether programs are achieving their goals; (3) data are already being collected on the number of entered employments under the Common Measures (making this measure feasible and relatively inexpensive to implement); and (4) in comparison to other measures, data are available sooner for entered employment than for post-program earnings and job retention rates.

- ***Recommendation 2b: Cost per retained in employment should be tracked (for monitoring purposes initially) as an efficiency measure for 8 of the 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. The WIA Youth, Apprenticeship, and WIG programs should be excluded from implementing this measure.*** The main rationale for recommending cost per retained in employment as an efficiency measure is similar to cost per entered employment and is as follows: (1) job retention is a high priority for all programs (except WIA younger youth); (2) participants who are employed at the time of entry into the program are included in this measure (unlike entered employment rate); and (3) data are already being collected on the number of retained employments under the Common Measures (making this measure feasible and relatively inexpensive to implement). In comparison to entered employment rate, data on this measure is available later, but this indicator provides a downstream measure (of job retention and longer-term employment) of the effects of training and other employment services. Additionally, this measure is

appropriate for incumbent workers, a source of concern that some states expressed about the cost per entered employment efficiency measure, which (as defined under Common Measures) excludes individuals who were working at the time of enrollment.

- **Recommendation #2c:** ***Cost divided by post-program (average) earnings should be tracked (for monitoring purposes initially) as an efficiency measure in 8 of 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. The WIA Youth, Apprenticeship, and WIG programs should be excluded from implementing this measure.*** The rationale for recommending cost divided by post-program earnings as an efficiency measure for implementation by ETA programs is as follows: (1) effective programs should increase earnings as well as employment; (2) omitting earnings might encourage focus on inexpensive labor exchange or core services rather than intensive services and training; (3) participants who are employed at the time of entry into the program are included in this measure (unlike entered employment rate); and (4) data are already being collected on the pre- and post-earnings under the Common Measures (making this measure feasible and relatively inexpensive to implement). In comparison to the entered employment rate, data on this measure is available later, but this indicator provides a downstream measure of the earnings effects of training and other employment services that result in job retention and longer-term employment.

- **Recommendation #2d:** ***Cost divided by change in earnings should be tracked (for monitoring purposes initially) as an efficiency measure in 8 of the 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. The WIA Youth, Apprenticeship, and WIG programs should be excluded from implementing this measure.*** The rationale for recommending cost divided by change in earnings as an efficiency measure for implementation by ETA programs is as follows: (1) effective human capital building programs should increase earnings as well as employment; (2) omitting earnings might encourage focus on inexpensive labor exchange or core services rather than intensive services and training; (3) by looking at pre/post earnings change (versus average post-program earnings), programs face fewer incentives for "creaming" those individuals who are likely to have the highest post-program earnings; and (4) although an earnings change measure is not currently used under the Common Measures, data are already being collected on the pre- and post-earnings under the Common Measures (making this measure feasible and relatively inexpensive to implement).

Recommendation #3: Carefully Consider Programmatic Differences Before Implementing Efficiency Measures – Among the 11 ETA Programs, WIG, Apprenticeship, and WIA Youth Programs Will Likely Require a Different Set of Efficiency Measures

An often recurring message of ETA program administrators and state program operators – reinforced by the Expert Panel and findings from the literature – is that the 11 ETA programs have varying goals/objectives, target and serve different at-risk populations, offer widely varying

types and intensities of services, and have widely differing costs. As a result, efficiency measures need to be cautiously developed and tailored to what programs are attempting to achieve – and great care is needed in comparing results on such measures within programs (i.e., across states, grantees, and local jurisdictions) and across programs. For Apprenticeship, WIG, and the WIA Youth programs, ETA should be cautious in applying the measures identified in Recommendation #2 and should consider alternative measures as follows:

- ***Recommendation #3a: ETA should consider alternative efficiency measures for the Apprenticeship Program linked to the goals of the program and what federal funds are being spent on – for example, increasing the number of apprenticeships offered, building the quality of apprenticeship programs, and registering and monitoring of Apprenticeship programs accurately and in a timely manner. Therefore, ETA should consider applying the following alternative efficiency measures to the Apprenticeship program (all at the national level): cost per additional apprenticeship program registered and timeliness of registration decisions. Specific measures should be adopted after appropriate dialogue and analysis is undertaken.***

- ***Recommendation #3b: ETA should consider alternative efficiency measures for the WIG Program that reflect the training and technical assistance goals of this program. In particular, efficiency of this program should be aimed at measuring how the services of Disability Navigators increase the numbers of disabled individuals served by the One-Stop system (and various ETA programs operating out of the One-Stop system), as well as improvements in identifying individuals served by the workforce system and enhancements to the quality of services provided to disabled individuals. Therefore, ETA should consider applying the following alternative efficiency measure to the WIG program: cost per change in the number of One-Stop customers served with disabilities. Efficiency measures for WIG should be adopted after appropriate dialogue and analysis. Because the WIG program may be terminated, it may be appropriate not to develop efficiency measures for this program.***

- ***Recommendation #3c: The efficiency measure that should be applied to the WIA Youth Program is cost per placement in employment or education. In the longer term, the possibility of collecting separate cost and customer data for in-school and out-of-school youth should be investigated so that appropriate separate outcome and efficiency measures can be developed for these disparate groups. For example, if separate cost data were available for these two groups, it would feasible and perhaps appropriate to apply the four measures recommended for the WIA Adult and Dislocated Worker Programs to the older youth served by the WIA Youth Program (i.e., cost per entered employment, cost per retained in employment, cost divided by post-program earnings, and cost divided by pre/post-program earnings).***

Recommendation #4: Performance Standards for States/Grantees on Recommended Efficiency Measures Should Be Considered Exploratory at This Time -- Do Not Reward or Sanction States/Grantees for Performance on the Recommended Efficiency Measures

It is recommended that ETA track efficiency measure results for ETA programs of interest for several program years for program monitoring purposes only. Several years of experience are needed with the efficiency measures (perhaps three or more years) to determine if it is appropriate to set standards and apply rewards and sanctions to states and grantees on the efficiency measures (as is currently done for outcome measures). The additional time is needed to identify definitional problems (particularly with respect to expenditures to be included), allow for co-enrollment patterns to stabilize, analyze variation in performance on the efficiency measures across states, and determine if and how the standards should be adjusted to take into account various factors. It is also important to assess factors that account for variation across states/grantees on efficiency outcomes, as well. With the rapid changes in co-enrollment patterns underway in many states, it will be possible to assess how the large increases in participant and exiter counts affect the outcome-based efficiency measures (and outcomes for other Common Measures) over the next few years.

Recommendation #5: Improve Consistency and Quality of Cost, Customer Characteristics, and Outcome Data

This study has attempted to establish a baseline of efficiency measure results for the 11 ETA programs -- an effort that has not always resulted in success. For some programs (notably the WIA, ES, and TAA programs), there was success in obtaining both the cost and outcome data to generate three years of efficiency measure results both at the national and state levels. Other programs struggled with providing data for the full three-year period and some could not generate the outcome data needed for even one year (in part, because they may have recently transitioned to the Common Measures or were in the process of making this transition). The efficiency measure results for the programs able to provide three years of data at the state or grantee level revealed substantial variation in results within states from year to year and among states/grantees within a single program year. These variations were sometimes very large, and it is not clear that this variation is a true reflection of the "efficiency" of programs or of other factors – including substantial cross-state differences in co-enrollment patterns and in the ways in which states collect and report on both program costs and outcomes, as well as simply erroneous data. Given some difficulties in obtaining cost and outcome data for some programs at the federal and state/grantee levels – and the variable nature of efficiency measure results generated from the data provided -- we suggest that ETA carefully study variation in the ways in which expenditure and outcome data are being collected within programs (across states) and across programs, and require that states and grantees use common definitions and procedures to report data to ETA and that they be required to assure the quality of the data reported.

Recommendation #6: ETA Should Explore Developing Efficiency Models by Activity for Programs That Offer a Range of Activities

Some programs, such as WIA Adult and Dislocated Worker programs, offer a wide range of activities in terms of the cost per customer. For example, assisted core services may cost well under $100 per customer, but occupational training sometimes costs $10,000 or more per customer. The concept of cost per customer loses much of its meaning when services vary so much within and across states and grantees. More meaningful results are likely to be obtained for programs with a range of activities if separate regression models could be estimated for each major activity. Also, regression results vary over time as service strategies or population served changes. In WIA, for example, separate efficiency models could be estimated for each of the three tiers of service or for training and core assisted and intensive services combined. Unfortunately, it is not a simple matter to develop such models because cost data are currently not collected by activity in most states. To develop statistical models of efficiency measures, ETA would have to mandate that states/grantees and, most likely substate grantees as well, collect cost data by activity. To assure that the data are consistent across states, ETA would also have to require that a specific method be used to allocate joint costs and to deal with co-enrollment. We recognize that this would be a considerable burden, so our recommendation at this time is that ETA explores this issue further rather than immediately begin collecting such data.

Recommendation #7: Adjustment Models for Efficiency Measures Are Not Likely to Be Useful at the State-Level for Many Years; They Potentially Could be Useful and Valid at the Local/Grantee Level for Some Programs

The modeling efforts conducted for this report, which focused on the WIA Adult and Dislocated Worker programs (using WIASRD data), suggest that great caution and several additional years of results are required before ETA should consider implementing state-level regression models to adjust performance standards for states/grantees on the recommended efficiency measures. Overall, the regression models tested for the WIA Adult and Dislocated Worker programs did not provide sensible magnitudes and statistically significant coefficients for the regression coefficients in the models. It is possible that once the co-enrollment pattern stabilizes and several years of data after that are available, regression modeling might produce useful results. Other factors that could make such modeling useful include requiring states (and local areas where appropriate) and grantees to use consistently measured and high-quality data (see Recommendation 5) and that activity-level cost data be collected (see Recommendation 6).

Recommendation #8: Estimate Return on Investment (ROI) in Conjunction with Impact Studies but Not as Regular Performance Measurement

ROI and the closely related concept of cost-benefit analysis are essential to assess if a program is a worthwhile investment and to compare alternative investments -- we encourage the Department of Labor and states to conduct such analyses on a regular basis. However, it would be very expensive to measure ROI on an annual basis as a performance measure. Other

challenges to using ROI on a regular basis as a performance measure are (1) a lack of consensus about the best methods that should be used to generate appropriate comparison group data (e.g., some analysts believe that the matching methods that are widely used do not provide good comparison groups); (2) the time required to generate reasonable post-program data is too long to provide measures that are useful for annual performance measures; (3) there is a lack of consensus among economists and government agencies about the appropriate discount rate to use; and (4) for programs that provide earnings gains, it is difficult to make reasonable assumptions about how long observed earnings gains will persist. Thus, it is recommended that ROI and cost-benefit analysis should be considered an important tool for periodic program evaluation rather than annual performance assessment.

Recommendation #9: Further Study Is Needed on Several Topics Related to and Likely to Affect Efficiency Measure Results, Including Co-Enrollment and Cost Sharing

Through our conversations with ETA officials and states, we identified a number of important issues that must be resolved so that ETA's efficiency measures are consistent, valid, and reliable. These issues involve policy considerations that can only be made by ETA officials. For example, some programs, such as SCSEP and TAA, provide stipends or other cash payments on a regular basis; whether expenditures on stipends are included as an expenditure item would have a major effect on how costs compare across programs. Examples of such issues include:

- Should stipends, support services, and need-based payments be counted as expenditures in computing efficiency measures?
- How should co-enrollment be accounted for in efficiency measures?
- How should shared costs across programs, such as One-Stop Career Center infrastructure costs, be dealt with in efficiency measures?
- How should the efficiency measures deal with customers who remain in the program for more than one program year?
- How should self-service customers be dealt with in programs such as WIA Adult and Dislocated Worker programs where such customers are not counted for outcome measures?
- How should incumbent worker customers be dealt with in programs such as WIA Adult and Dislocated Worker programs where such customers are not counted for outcome measures?

Resolution of these issues is important for making sure that the efficiency measures are consistent within and across programs and to assure that programs and policy officials understand what is and is not being captured by the efficiency measures. As noted above, these issues generally require value judgments and some of them would have major cost implications for data collection.

CHAPTER 1:

INTRODUCTION

A. STUDY BACKGROUND, OBJECTIVES, AND METHODOLOGY

In 2007, the Office of Management and Budget (OMB) required development of efficiency measures for all federal government programs as part of the effort to improve federal government program performance. As a result of ongoing Program Assessment Rating Tool (PART) reviews, OMB charged the Employment and Training Administration (ETA) with the responsibility of developing and implementing an outcome-based measure or measures of efficiency for employment and training programs administered by the agency.[3] Apart from OMB's interest in the development of efficiency measures, ETA has a long-term interest in improving program efficiency so that both taxpayers and customers can be better served. In response to this OMB directive, in May 2008, ETA initiated a study aimed at identifying outcome-based efficiency measures for implementation by 11 ETA-administered programs:

- Workforce Investment Act (WIA) Adult Program;
- WIA Dislocated Worker Program;
- WIA Youth Activities Program;
- WIA National Emergency Grants (NEG) Program;
- Trade Adjustment Assistance (TAA) Program;
- Wagner-Peyser/Employment Service (ES) Program;
- Senior Community Service Employment Program (SCSEP);
- National Farmworker Jobs Program (NFJP);
- Indian and Native American Program (INAP);
- Work Incentive Grant (WIG) Program; and
- Apprenticeship Program.

[3]Executive Office of the President, Office of Management and Budget, *Program Assessment Rating Tool Guidance No. 2007-7: Improving the Quality of PART Performance and Efficiency Goals*, issued December 12, 2007 (available at: http://georgewbush-whitehouse.archives.gov/omb/performance/guidance/part_guid_2007-07.pdf). The Program Assessment Rating Tool Guidance No. 2007-7 called for a government-wide initiative "to increase the government and public's ability to assess and improve a program's effectiveness and efficiency."

To support this intensive effort, ETA formed an internal work group composed of program officials representing each of the above-referenced programs and each of the DOL regional offices.[4] The research effort was conducted in two phases – (1) an initial study phase (conducted from June 2008 through December 2008), which was primarily aimed at identifying one or more outcome-based efficiency measures (based primarily on the Common Measures) that could be uniformly implemented across the 11 ETA programs and a plan for implementing selected measures; and (2) a second study phase (conducted from January 2009 through December 2009, during a period of transition within the White House and DOL) which stressed a more cautious and flexible approach to identifying and implementing efficiency measures that would reflect the varying goals, types of populations served, and services provided by each of the 11 ETA programs of interest. The initial study phase, with a focus on implementation of one or more outcome-based efficiency measures across the 11 ETA programs (starting as early as June 2009), was executed in three stages:[5]

- **Stage I**--Identification of efficiency measure options for consideration and additional analysis (completed June 30, 2008 and presented in Interim Report #1);[6]
- **Stage II**--Analysis and preliminary recommendations of an efficiency measure or measures for implementation by ETA programs starting as early as June 2009 (completed September 30, 2008 and presented in Interim Report #2);[7]

[4] To support this effort, an independent team of researchers (from Capital Research Corporation and the Johns Hopkins University Institute for Policy Studies) was contracted to identify and analyze efficiency measure options and recommendations. An Expert Panel (of leading academicians in the field of performance measurement) also provided an independent external review of interim reports, and this final report.

[5] For additional details about the purpose and scope of the research effort during study Phase I, as well as planned data collection, analysis, and report preparation, see: Burt Barnow and John Trutko, *Improving Measures of Efficiency for Employment and Training Programs: Project Workplan*, prepared for the U.S. Department of Labor, Employment and Training Administration, prepared by Capital Research Corporation and Johns Hopkins University's Institute for Policy Studies, June 2008.

[6] Burt Barnow and John Trutko, *Improving Measures of Efficiency for Employment and Training Programs: Interim Report #1: Efficiency Measure Options for Selected ETA Programs*, prepared for the U.S. Department of Labor, Employment and Training Administration, prepared by Capital Research Corporation and Johns Hopkins University's Institute for Policy Studies, June 2008.

[7] Burt Barnow and John Trutko, *Implementing Efficiency Measures for Employment and Training Programs: Final (Year 1) Report: Recommended Efficiency Measures for Selected ETA Programs*, prepared for the U.S. Department

- **Stage III--** Preparation of a First Year report, which included two recommended efficiency measures for implementation starting as early as July 2009 and an assessment of potential implementation challenges (completed in December 2008 and presented in the First Year Final Report).[8]

Phase II of this study was initiated in January 2009 during a time of change in administrations (from the George W. Bush to the Barack Obama Administration) and featured a shift in approach to efficiency measurement across the 11 program of interest. In early 2009, during the transition period, the research team conducting this study met with ETA officials to discuss several important shifts that had occurred in underlying thinking about efficiency measures and their potential application to the ETA programs, including the following:

- Recognition that application of a single, uniform efficiency measure, such as cost per entered employment or cost divided by post-program earnings, may not be desirable across all 11 programs. ETA was now more open to greater flexibility and tailoring of efficiency measures (and definitions) to individual program goals, types of individuals served, and data availability. In particular, alternative efficiency measures and definitions might be appropriate for the WIA Youth, WIG, SCSEP, and Apprenticeship programs. In addition, there may be additional alternative measures that would be appropriate for implementation by one or more other programs.

- Within ETA/OMB, there was emerging interest in the feasibility of implementing a Return on Investment (ROI) measure. While such a measure would depend upon having reliable impact estimates for individual programs on an annual basis, ETA officials noted that ROI could potentially be very useful (if feasible) for systematically linking overall program costs and benefits. As a result, ETA officials suggested that an assessment was needed of the potential for applying ROI measures to specific programs, particularly those such as WIA where participant impacts have been measured in the past. Also, an assessment was needed of when it might be feasible to apply an ROI measure (e.g., as a result of periodic studies) and what steps individual programs would need to undertake to effectively implement a ROI-type measure.

- There was also increased interest in whether it might be feasible to disaggregated costs by service level (e.g., unassisted, intensive, and training services) in programs such as the

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of Labor, Employment and Training Administration, prepared by Capital Research Corporation and Johns Hopkins University's Institute for Policy Studies, June 2008.

[8] Burt Barnow and John Trutko, *Improving Measures of Efficiency for Employment and Training Programs: Interim Report #1: Efficiency Measure Options for Selected ETA Programs*, prepared for the U.S. Department of Labor, Employment and Training Administration, prepared by Capital Research Corporation and Johns Hopkins University's Institute for Policy Studies, March 2009.

Workforce Investment Act – and then potentially, link efficiency measures to service levels.

- ETA officials expressed heightened concern for a range of challenges that could potentially stand in the way of equitably implementing efficiency measures (and performance standards associated with those measures). In particular, ETA officials pointed to challenges such as cost sharing and co-enrollment – hallmarks of the One-Stop Career Center system – that could pose formidable barriers to implementing efficiency measures that equitably take into consideration costs of providing services and the numbers of customers served by programs. ETA officials indicated the need to carefully assess these challenges – and other potential issues – that could affect efficiency measure results national, at the state/grantee levels, and the local levels.

ETA officials indicated that as a result of these underlying shifts in views on efficiency measures, the schedule for implementation of efficiency measures by ETA programs was likely to be pushed back, and when (and if) implementation of such measures occurred, it was not necessarily optimal to have efficiency measures uniformly applied across the 11 programs. Rather, a more nuanced approach was emphasized – one that would more carefully tailor efficiency measures to individual programs and take into consideration both potential benefits and adverse effects of efficiency measures (such as potentially decreasing emphasis on more costly intensive/training services). Finally, because of the likelihood that decisions concerning implementation of efficiency measures by individual ETA programs, ETA officials indicated it would be important for the final report to fully document the results of study activities and serve as a resource for assisting ETA in making informed decisions concerning future selection and implementation of efficiency measures for some or all of the 11 ETA programs.

The study findings and recommendations offered in this report are based on the following data collection and analysis activities, conducted over the full length of this study (from June 2008 through the end of the study in December 2009):

- a review of background literature on performance measurement and management, with a focus on efficiency measurement in employment and training programs;

- an initial round of telephone interviews of officials at workforce agencies in six states (California, Florida, Missouri, New York, Utah, and Virginia) conducted in the early stages of this study (July/August 2008), which focused on performance measurement systems and use of efficiency measures in employment and training programs;

- telephone interviews with officials from the Organization for Economic Cooperation and Development (OECD), the United Kingdom, and Canada that explored use of efficiency measures for monitoring employment and training program performance in other developed countries;

- analysis of efficiency measures used in other federal agencies (including the Department of Health and Human Services (DHHS), Department of Education (DOE), Department of Housing and Urban Development (HUD), U.S. Department of Agriculture (USDA), and the Department of Veterans Affairs (VA);

- a second round of telephone interviews with officials at workforce agencies in five states -- California, Maryland, Ohio, New York, and Washington -- conducted near the end of the study (September/October 2009), aimed at gaining qualitative input on setting of efficiency measure standards, as well as potential effects of co-enrollment, One-Stop self-service customers, cost sharing, and other selected issues on efficiency measure results of states, grantees, and local workforce areas.

- collection/analysis of aggregate cost and outcome data for 11 ETA programs, intended to produce national and state/grantee level results on a range of efficiency measures, as well as to support multivariate regression analysis of potential adjustment models that could be used in setting/adjusting performance standards on efficiency measures; and

- ongoing review and comment by ETA program offices, ETA regional offices, an ETA internal Cross-Functional Performance workgroup, and an external Expert Panel.[9]

The purposes of these data collection and analyses activities were to assess the feasibility and appropriateness of the efficiency measures for implementation by the 11 ETA programs of interest, as well as to identify and carefully assess the potential challenges associated with implementation of efficiency measures and the likely short- and long-term effects (both beneficial and adverse) on ETA programs. The study was also aimed at producing a set of recommendations for implementation of one or more efficiency measures by the 11 ETA programs for consideration by ETA.

[9] The Expert Panel and ETA staff are identified in the acknowledgements page of this report.

This report is organized into eight chapters. This first chapter is intended to provide background on the study purpose, scope, and methodology. In addition, the remainder of this chapter provides some basic background on efficiency measurement (including definitions and a possible criteria for selection of efficiency measures appropriate to ETA workforce programs), followed by a listing of candidate efficiency measures that could be considered for implementation across the 11 ETA programs and an initial assessment of potential advantages and disadvantages of each of the candidate measures. **Chapter 2** reviews the literature on performance measurement, as well as the Employment and Training Administration's prior use of and experience with efficiency measures/standards in ongoing monitoring of workforce investment programs. **Chapter 3** provides a preliminary assessment of the types of measures that have been used by government agencies in the United States and in several other countries, including lessons learned from use of such measures. **Chapter 4** provides a summary of perspectives of state workforce officials on prior experience with efficiency measures, as well as views on a range of implementation issues associated with potential future adoption by ETA of outcome-based efficiency measures. The results of two rounds of interviews with states workforce agency officials are discussed in this chapter, including state administrators' perspectives on the appropriateness and feasibility of implementing efficiency measures for the 11 ETA programs, specific implementation challenges, and likely impacts should efficiency measures be applied to some or all of the ETA programs.

Chapter 5 focuses on the cost portion of the efficiency measure calculation, examining the three options available for measuring costs, providing a recommendation with regard to which cost type should be used, and detailing challenges to appropriately and consistently capturing costs when measuring program efficiency. **Chapter 6** examines a range of outcome

measures that could potentially be coupled with cost data to produce outcome-based efficiency measures for implementation by some or all of the ETA programs. The chapter then presents quantitative and qualitative analyses on a core set of the outcome-based efficiency measures with the aim of narrowing and focusing study recommendations on a set of feasible and relevant efficiency measures for possible implementation by the 11 ETA programs. This chapter also presents efficiency measure results for the past three program years for most of the 11 programs, both at the national level and at the state/grantee levels.

Chapter 7 presents alternative approaches to setting standards for ETA programs and alternative approaches to making adjustments for factors that may affect outcomes and costs of ETA programs. This chapter highlights ETA's historical experience with performance measurement, focusing on setting performance standards and making adjustments. The chapter then reports on the results of modeling efforts conducted under this study, focusing on the three WIA programs (using WIASRD data).

The final chapter (**Chapter 8**) provides a set of study recommendations for implementation of specific outcome-based efficiency measures for the 11 ETA programs.

B. DEFINITION AND CRITERIA FOR SELECTION OF EFFICIENCY MEASURES

In its 2007 guidance letter to federal agencies, OMB noted that the "Government's ability to determine a program's effectiveness, and to direct attention to genuinely desired outcomes, is largely dependent upon the quality of the program's performance and efficiency goals, i.e., their measures and targets." OMB also provided a basic definition of and purpose for generating such efficiency measures – terming such measures as "efforts to provide the most benefits (outcomes and outputs) for the taxpayer dollars spent." Finally, this OMB guidance letter underscored the

urgency for federal agencies to refocus their attention on improving the types of efficiency measures used to assess ongoing program performance: "…a substantial portion of PART [Program Assessment and Rating Tool] efficiency measures need to be revised in order to meet current PART guidance."[10]

Frequently, in employment and training programs (and more broadly for all government human service programs), efficiency measures use unit costs tied to one or more of the following: (1) participation (such as "cost per participant served or exited"); (2) delivery of services (such as "cost per participant trained"); or (3) outcomes (such as "cost per participant entering or retaining employment").[11] An underlying concept for many efficiency measures is that a unit cost for a particular time period (usually a program or fiscal year) is produced by dividing program costs by the number of participants served/exited, the number of participants/exiters receiving a particular service, or the number of participants/exiters achieving a certain outcome. For example, if a local workforce investment board spent $100,000 on an employment and training initiative in a program year and was able to place 50 of the individuals served (or exited) into employment during that same program year, the "cost per entered employment" for the program year would be $2,000 ($100,000 divided by 50). Some potential uses of such efficiency measures for programs (such as the 11 ETA programs that are part of this study) include the following:

- to measure performance on outcomes relative to costs;
- to compare efficiency over time for a single program;

[10]Executive Office of the President, Office of Management and Budget, *Program Assessment Rating Tool Guidance No. 2007-7: Improving the Quality of PART Performance and Efficiency Goals*, issued December 12, 2007 (available at: http://georgewbush-whitehouse.archives.gov/omb/performance/guidance/part_guid_2007-07.pdf).

[11]For example, GAO identifies several potential types of performance measures, making a distinction between three types of potential measures: "Performance measures may address the type or level of program activities conducted (process), the direct products and services delivered by a program (outputs), and /or the results of those products and services (outcomes)." United States General Accounting Office, *Glossary: Performance Measurement and Evaluation -- Definitions and Relationships,* GAO/GGD-98-26, April 1998 (available at: http://www.gao.gov/special.pubs/gg98026.pdf.).

- to compare efficiency across programs or services;
- to compare efficiency across states or grantees (including identifying outliers for possible corrective actions);
- to promote continuous improvement in program efficiency;
- to help inform or support decisions about how to best to allocate or target scarce resources within or across programs; and
- to meet external requirements (from OMB, Congress, and the public) for ongoing performance measurement and accountability.

While the definition of efficiency measures is relatively straightforward, there are a number of serious challenges to identifying appropriate and feasible measures for a single program – and these challenges multiply when consideration is given to applying an efficiency measure or measures across more than one program. The efficiency measure or measures applied to one or more programs should at a minimum meet the following four criteria:

- be fair to the programs being judged;
- encourage desired service delivery and program outcomes;
- discourage undesired strategies and behaviors; and
- maintain program quality, integrity, and fiscal responsibility.

In addition, the efficiency measures recommended for a specific program should be feasible and cost-effective to implement using participant, outcome, and cost data that are currently collected or that could potentially be collected in the future at a reasonable cost (such as data collected and reported as part of the Common Measures).[12]

Although discussed in much greater detail later in this report, among the challenges to developing and implementing efficiency measures that are feasible, useful, and appropriate across the 11 ETA programs are the following:

- **Programs have differing objectives –** In addition to performance goal indicators for employment, retention, and improving earnings – which are objectives typically shared across most employment and training programs – some programs emphasize other objectives. For example, some programs place more emphases on attaining educational

[12]For additional background on the Common Measures, see Training and Employment Guidance Letter No. 17-05, "Common Measures Policy for the Employment and Training Administration's (ETA) Performance Accountability System and Related Performance Issues" (available at: http://wdr.doleta.gov/directives/corr_doc.cfm?DOCN=2195).

degrees or other recognized credentials, such as achieving a high school diploma or GED (as is the case in the WIA Youth program) or journeyman status (as is the case in Apprenticeship programs).[13]

- **Measuring some outcomes is difficult –** While entered employment and increases in earnings may be relatively straightforward to measure, other outcomes are more difficult to measure or impose costly (or burdensome) data collection on reporting entities (such as states and local program grantees).[14] For example, under the Employment Service/Wagner-Peyser program, reduction in job vacancy time for employers and shortening duration of unemployment spells for workers are important, but also difficult to measure outcomes.

- **Measuring efficiency in a One-Stop environment is complicated –** One-Stop Career Centers emphasize leveraging resources, sharing space and other costs, and co-enrollment of participants with a focus on services rather than programs. These types of strategies complicate tracking and applying costs to services received and outcomes for co-enrolled participants. Methodologies for estimating costs of concurrent or sequential services by programs are needed where there are high degrees of service integration.[15]

In determining whether (and which) outcome-based efficiency measures should be implemented by specific ETA programs, it is essential to take into account both the criteria suggested above (i.e., appropriateness, fairness, cost to implement, etc), as well as the challenges likely to be faced by each program in implementing selected measures.

C. CANDIDATE EFFICIENCY MEASURES

In the early stages of this study, the research team identified and considered a range of candidate process and outcome measures that could potentially be combined with cost measures to produce one or more efficiency measures to be tracked across the 11 ETA programs. The

[13]For in-school youth, ironically employment may be an "unsuccessful" outcome, at least in the short run, as it may reduce attainment of important credentials.

[14]For training programs, for example, it would be preferable (though potentially burdensome) to measure attainment of employment or earnings changes due to the program (e.g., using experimental design).

[15]An added challenge for implementation of efficiency measures within ETA programs is setting of performance standards (i.e., requirements for achieving satisfactory performance on the measure), and adjustments on each selected efficiency standard for states/grantees, and/or local workforce areas to take into account underlying factors such as environmental/economic conditions, case mix (e.g., demographic characteristics of individuals served), and the mix of services provided (e.g., intensity and types of services provided). If efficiency measures and standards are implemented by ETA programs, it will be important to monitor and assess the effects of such measures on program operations and performance, particularly related to intended and unintended consequences.

efficiency measures identified and recommended for consideration for implementation by the 11 ETA programs were identified based on the following activities: (1) review of the literature on performance measurement, particularly related to monitoring employment and training programs; (2) initial discussion with members of the ETA Work Group (which included representatives from each of the 11 ETA programs, as well as ETA national and regional office staff); (3) review of current and past performance measurement requirements for each of the ETA programs; and (4) review of data systems and data elements collected by each of the ETA programs (particularly relating to program participation, services received, outcomes, and costs/expenditures). Exhibit 1-1 provides an overview of candidate efficiency measures the research team identified for consideration by ETA and OMB, broken down by measures for "short-term" and "long-term" consideration. Efficiency measures for short-term consideration – that is, measures that ETA was already collecting and potentially could be implemented within one to three years across some or all of the 11 ETA programs -- were the following:

- Cost per participant;
- Cost per exiter;
- Cost per entered employment;
- Cost per retained employment;
- Cost divided by increase in earnings (or cost per $1 increase in earnings);
- Cost divided post-program earnings (or cost per $1 post-program earnings);

Efficiency measures identified in the early stages of the research study for longer-term consideration (which could be phased in over time and applied to one or more ETA programs) were the following:

- Cost per exiter or participant receiving a particular service (such as an intensive or training service);
- Cost per positive outcome (e.g., placed in a job, the military, a registered apprenticeship program, education program, or advanced training program);
- Cost per recognized credential received; and
- Return on Investment (ROI)

EXHIBIT 1-1: CANDIDATE EFFICIENCY MEASURES FOR POSSIBLE IMPLEMENTATION BY ETA PROGRAMS

Potential Efficiency Measures	Definition of Measure (i.e., Numerator/ Denominator)	Arguments for and Against Using Measure	Applicability/Use of Measure Across ETA Programs
A. EFFICIENCY MEASURE ALTERNATIVES -- FOR SHORT-TERM CONSIDERATION			
Cost per Participant	Total Program Cost/ # of Participants Served	-Applicable to most/all programs. -Data is readily available -Easy to understand -No lags in data (i.e., inter-temporal issues)– can be immediately generated at the end of each year -Not costly or burdensome to produce -Is not an "outcome-based" efficiency measure – so of limited use in assessing program effectiveness-	-Applicability: Measure is potentially applicable across all 11 programs (with possible exception of WIG) -Use: Of only limited use, because measure is not linked to an outcome. Also, measure does not control for case mix, service mix, or economic conditions – which could result in unfair comparisons across programs and programs targeting services on less costly subpopulations and services.
Cost per Exiter	Total Program Cost/ # of Exiters	-Applicable to most/all programs. -Data is readily available -Easy to understand -No lags in data (i.e., inter-temporal issues)– can be immediately generated at the end of each year -Not costly or burdensome to produce -Is not an "outcome-based" efficiency measure – so of limited use in assessing program effectiveness	-Applicability: Measure is potentially applicable to most programs (with exception of programs where data are not collected for "exiters." -Use: Of only limited use, because measure is not linked to an outcome. Also, measure does not control for case mix, service mix, or economic conditions – which could result in unfair comparisons across programs and programs targeting services on less costly subpopulations and services.
Cost per Entered Employment	Total Program Cost/ # of Exiters or Participants Entering Employment in the 1st Quarter Following Exit	-Potentially applicable to most/all programs -Focuses on a key outcome of interest in most workforce programs – whether a participant obtains employment -Data is readily available -Relatively easy to understand -Short lags in data (i.e., inter-temporal issues)– can be generated (using UI wage record data) about two quarters after the end of program year -Relatively low cost and low burden to produce (based on existing administrative data which can be matched by Social Security Number) -Measure is an outcome-based efficiency measure -- so is of substantial use to understanding program effectiveness	-Applicability: Is potentially applicable across most ETA programs, though may not be as appropriate or fully capture outcomes of programs where individuals are already employed at intake (e.g., NFJP and Apprenticeship); aimed at subsidized employment (SCSEP) or capacity building (NEG and WIG); have education/credentialing goals (WIA-Youth and Apprenticeship); or do not directly serve participants (WIG). -Use: Substantial use for understanding program performance and cost-effectiveness because costs are linked to an outcome. Measure does not control for case mix, service mix, or economic conditions – which could result in unfair comparisons across programs and programs targeting services on less costly subpopulations and services.
Cost per Retained Employment	Total Program Cost/ # of Exiters or Participants Retained in Employment for Two Quarters Following Exit	-Potentially applicable to most programs -Data is readily available -Focuses on a key outcome of interest in most workforce programs – whether a participant obtains employment -Relatively easy to understand -Lengthier lags in data (i.e., inter-temporal issues)– can be generated (using UI wage record data) several quarters after the end of program year	-Applicability: Is potentially applicable across most ETA programs, though may not be as appropriate or fully capture outcomes of programs where individuals are already employed (e.g., NFJP and Apprenticeship), aimed at subsidized employment (SCSEP) or capacity building (NEG and WIG), have education/credentialing goals (WIA-Youth and Apprenticeship), or do not directly serve participants (WIG). -Use: Substantial use for understanding program performance and

EXHIBIT 1-1: CANDIDATE EFFICIENCY MEASURES FOR POSSIBLE IMPLEMENTATION BY ETA PROGRAMS

Potential Efficiency Measures	Definition of Measure (i.e., Numerator/ Denominator)	Arguments for and Against Using Measure	Applicability/Use of Measure Across ETA Programs
		(depending on post-program period) -Relatively low cost and low burden to produce (based on existing administrative data which can be matched by SSN) -Measure is an outcome-based efficiency measure -- so is of substantial use to understanding program effectiveness and costs	cost-effectiveness because costs are linked to an outcome. Measure does not control for case mix, service mix, or economic conditions – which could result in unfair comparisons across programs and programs targeting services on less costly subpopulations and services.
Cost Divided by Increase in Earnings	Total Program Cost/ Total Earnings Change from 2nd and 3rd Preprogram Quarters to 2nd and 3rd Post-program Quarters for Participants or Exiters	-Potentially applicable to most programs -Data is readily available -Focuses on a key outcome of interest in most workforce programs – whether a participant improves earnings (compared to earnings prior to participation) -Somewhat more difficult to understand than other potential measures -Lengthier lags in data (i.e., inter-temporal issues)– can be generated (using UI wage record data) several quarters after the end of program year (depending on post-program period) -Relatively low cost and low burden to produce (based on existing administrative data which can be matched by SSN) -Measure is an outcome-based efficiency measure -- so is of substantial use to understanding program effectiveness and costs	-Applicability: Is potentially applicable across most ETA programs, though may not be as appropriate or fully capture outcomes of programs aimed at subsidized employment (SCSEP) or capacity building (NEG and WIG), have education/credentialing goals (WIA-Youth and Apprenticeship), or do not directly serve participants (WIG). -Use: Substantial use for understanding program performance and cost-effectiveness because costs are linked to an outcome. Measure does not control for case mix, service mix, or economic conditions – which could result in unfair comparisons across programs and programs targeting services on less costly subpopulations and services.
Cost per Divided by Post-Program Earnings	Total Program Cost/ Total Earnings in 2nd and 3rd Post-program Quarters for Participants or Exiters	-Potentially applicable to most programs -Data is readily available -Focuses on a key outcome of interest in most workforce programs – stream of earnings after exit from the program -Somewhat more difficult to understand -Lengthier lags in data (i.e., inter-temporal issues)– can be generated (using UI wage record data) several quarters after the end of program year (depending on post-program period) -Relatively low cost and low burden to produce (based on existing administrative data which can be matched by SSN) -Measure is an outcome-based efficiency measure -- so is of substantial use to understanding program effectiveness and costs	-Applicability: Is potentially applicable across most ETA programs, though may not be as appropriate or fully capture outcomes of programs aimed at subsidized employment (SCSEP) or capacity building (NEG and WIG), have education/credentialing goals (WIA-Youth and Apprenticeship), or do not directly serve participants (WIG). -Use: Substantial use for understanding program performance and cost-effectiveness because costs are linked to an outcome. Measure does not control for case mix, service mix, or economic conditions – which could result in unfair comparisons across programs and programs targeting services on less costly subpopulations and services.

EXHIBIT 1-1: CANDIDATE EFFICIENCY MEASURES FOR POSSIBLE IMPLEMENTATION BY ETA PROGRAMS

Potential Efficiency Measures	Definition of Measure (i.e., Numerator/ Denominator)	Arguments for and Against Using Measure	Applicability/Use of Measure Across ETA Programs
B. EFFICIENCY MEASURE ALTERNATIVES -- FOR LONG-TERM CONSIDERATION			
Cost per Exiter or Participant Receiving a Particular Service	Total Program Cost (on Particular Service)/ # of Exiters or Participants Receiving a Particular Service	-Only applicable to programs that distinguish types of services (e.g., intensive versus non-intensive services or training versus non-training) -Data is readily available for some programs, but not all -Relatively easy to understand – though types of services vary across programs (e.g., intensive or training services may or may not be offered by a program or may not be consistently defined across programs) -No lags in data (i.e., inter-temporal issues)– can be immediately generate at the end of each year -May be burdensome to generate because labor and other costs have to be allocated to particular service and whether individuals receive a particular services (e.g., intensive or training service) must be documented -Is not an "outcome-based" efficiency measure – so of limited use in assessing program effectiveness	-Applicability: Potentially applicable to most programs, but type of service would likely be different across programs, e.g., if "intensive" services was the service measured, measure would likely be applicable to WIA Adult, WIA-DW, WIA-Youth; TAA; potentially applicable to NEG, SCSEP, NFJP, INAP; not applicable to ES, Apprenticeship, WIG. -Use: Of only limited use, because measure is not linked to an outcome. Measure does adjust to some extent for service mix, but does not control for case mix or economic conditions – which could result in unfair comparisons across programs and programs targeting services on less costly subpopulations.
Cost per Placement in Employment or Education	Total Program Cost/ # of Participants or Exiters in Employment (Including Military) or Enrolled in Post-Secondary Education and/or Advanced Training/Occupational Skills Training in the 1st Quarter After Exit	-Limited applicability – primarily to WIA-Youth program, though could be applied to other programs providing training related services -Data is readily available for WIA-Youth program and could potentially be generated by other programs providing training -Relatively easy to understand -Short lags in data (i.e., inter-temporal issues)– employment data can be generated (using UI wage record data) about two quarters after the end of program year; data on enrollment in education/training potentially immediately available at end of first quarter after exit -Relatively low cost and low burden to produce for WIA-Youth program (based on existing administrative data); need to gather and combine employment information with education/training and military service data if applied to other ETA programs -Measure is an outcome-based efficiency measure -- so is of substantial use to understanding program effectiveness	-Applicability: Likely applicable to just the WIA-Youth program -Use: Substantial use for understanding program performance and cost-effectiveness of youth training programs because costs are linked to an outcome. Measure does not control for case mix or economic conditions – which could result in unfair comparisons across programs and programs targeting services on less costly subpopulations and services.
Cost per Recognized Credential Received	Total Program Cost/ # of Participants or Exiters Receiving a Training Service Attaining a Recognized Credential During Participation or by the End of the 3rd Quarter	-Only applicable to programs that provide training services and identify individuals as receiving training and types of credentialing may differ across programs (e.g., under WIA Adult credentials include: HS Diploma/GED; AA/AS Diploma/Degree; BA/BS Diploma/Degree; Occupation Skills Licensure, Certificate or Credential; Other Recognized Educational or Occupational Skills Certificate/Credential) -Data is readily available for some programs, but not all	-Applicability: Likely applicable to several ETA programs – WIA Adult, WIA-DW, WIA-Youth, TAA, Apprenticeship; potentially applicable to NEG, SCSEP, NFJP, INAP; not applicable to ES, WIG. -Use: Substantial use for understanding program performance and cost-effectiveness because costs are linked to an outcome. Measure does not control for case mix or economic conditions – which could result in unfair comparisons across programs and programs targeting

EXHIBIT 1-1: CANDIDATE EFFICIENCY MEASURES FOR POSSIBLE IMPLEMENTATION BY ETA PROGRAMS

Potential Efficiency Measures	Definition of Measure (i.e., Numerator/ Denominator)	Arguments for and Against Using Measure	Applicability/Use of Measure Across ETA Programs
	After Exit	-Somewhat more difficult to understand – definition of "training" must be understood and intensity/duration/cost of training could be quite different across programs -Potentially lengthy lags in data (i.e., inter-temporal issues), though can be immediately generate at the end of each year for exiters (participants could be involved in training in programs such as Apprenticeship for 3 or 4 years) -Some burden to produce because credentialing must be tracked -Measure is an outcome-based efficiency measure -- so is of substantial use to understanding program effectiveness and costs	services on less costly subpopulations and services.
Return on Investment (ROI)	Solve equation for r: Impact yr 3/$(1+r)^3$ + impact yr 2/$(1+r)^2$ + impact yr 3/$(1+r)$ – cost per participant = 0[16]	-Potentially applicable to most programs -Data is very difficult and costly to produce – impact studies (with experimental design) would be needed to determine impacts of training and other treatments on participants -Difficult to understand -Lengthy lags in data (i.e., inter-temporal issues) – ROI can only be calculated after impacts are determined (which with respect to employment and earnings could take several years) -Measure is an impact-based efficiency measure, which controls for factors that could potentially influence/bias results -- so is of the greatest utility in understanding program cost-effectiveness -ROI Controls for difficulty or cost of serving different populations (e.g., hard-to-serve), service mix, and economic conditions	-Applicability: Is potentially applicable across most ETA programs, but very costly and time-consuming (and perhaps not possible) to produce impact results needed for ROI calculation -Use: Substantial use for understanding program performance and cost-effectiveness because of experimental design which controls for case mix, service mix, and economic conditions – if done properly results in fair comparisons across programs and programs targeting services on less costly subpopulations and services.

[16] Ideally, the ROI calculation should be based on impacts for all post-program years. The use of 3 years in the exhibit is for illustrative purposes only.

The measures identified were intended as a comprehensive listing of possible measures from which one or several measures could be selected and applied across some or all of the 11 ETA programs of interest. The chapters that follow examine in much greater detail based on both qualitative and quantitative analyses these candidate measures, culminating in Chapter 8 in specific recommendations for implementing outcome-based efficiency measures for the 11 ETA programs of interest. The next chapter provides a review of the literature on efficiency measurement in employment and training programs, as a backdrop for better understanding the analyses, key findings, and recommendations that follow in later chapters of this report.

CHAPTER 2:

REVIEW OF LITERATURE ON EFFICIENCY MEASUREMENT IN EMPLOYMENT AND TRAINING PROGRAMS

The Employment and Training Administration has had substantial experience with performance standards, and a number of studies have been conducted on the impacts of performance management on participants served, activities, costs, and program impacts.[17] While most analysts note the strong rationale for developing performance measures for government programs, there has been considerable controversy in the literature regarding the benefits of performance management systems, particularly as they have been applied since enactment of the Government Performance and Results Act (GPRA) in 1993. This section of the report reviews the literature on performance standards for workforce programs; most of the research was conducted on the performance standards system used under the Job Training Partnership Act (JTPA), WIA's predecessor.[18] Although much of the literature on performance management points to its salutary effects, there is little doubt from the literature that instituting performance standards can have a strong impact on program behavior, and not always in the desired direction. This section of the report summarizes the literature on performance standards in employment and training programs in several key areas: (1) the impact of performance standards on who is served, (2) the impact of performance standards on the services provided, (3) the relationship between performance measures and program impacts, (4) strategic responses by state and local programs to performance standards, (5) use of Return on Investment (ROI) for measuring

[17]See Appendix B for references for the literature review included in this section of the report.

[18]For a more in-depth review of the literature on performance standards in workforce programs, see Burt S. Barnow and Jeffrey A. Smith (2004). "Performance Management of U.S. Job Training Programs: Lessons from the Job Training Partnership Act." 4(3): 247-287. Most of this section is based on Barnow and Smith (2004). For a critical review of the performance management movement, see Beryl A. Radin (2006). *Challenging the Performance Movement: Accountability, Complexity, and Democratic Values*. Washington, DC: Georgetown University Press.

effectiveness and efficiency of workforce development programs, and (6) lessons learned by ETA and states/localities on the use and effects of efficiency measures/standards.

A. THE IMPACT OF PERFORMANCE STANDARDS ON WHO IS SERVED

The majority of the employment and training literature on performance incentives addresses the question of their effect on who gets served. Under JTPA, local service delivery areas (SDAs) had strong incentives to serve persons likely to have good labor market outcomes, regardless of whether those outcomes were due to JTPA. Similar incentives guide the WIA program. In fact, the absence of a regression model to adjust standards for serving individuals with labor market barriers should make these incentives stronger under WIA than they were under JTPA.

The literature divides this issue into two parts. First, do SDAs (WIBs under WIA) respond to these incentives by differentially serving persons likely to have good outcomes, whether or not those good outcomes result from the effects of the program? This is the literature on "cream skimming." Second, if there is cream skimming, what are its impact effects? Taking the best among the eligible could be economically efficient if the types of services offered by these programs have their largest net impacts for this group. In what follows, we review the literature on each of these two questions in turn.

Do Employment and Training Programs "Cream Skim?"

A few papers, all about the JTPA program, examine whether or not program staff cream skim in response to the incentives provided by the JTPA performance system. The key issue in this literature is the counterfactual: to what group of non-participants should the participants be compared in order to determine whether or not cream skimming has occurred? In all cases, the

studies proceed by comparing observable characteristics correlated with outcomes, such as education levels or participation in transfer programs such as Aid to Families with Dependent Children (AFDC) or Temporary Aid to Needy Families (TANF). A finding that participants have "better" characteristics relative to non-participants in the form of higher mean years of schooling or lower average pre-program transfer receipt, is interpreted as evidence of cream skimming.

Anderson et al. (1992, 1993) compare the characteristics of JTPA enrollees in Tennessee in 1987 with the characteristics of a sample of JTPA eligibles in the same state constructed from the Current Population Survey. The literature suggests that less than five percent of the eligible population participated in JTPA in each year (see the discussion in Heckman and Smith, 1999), which allows wide scope for cream skimming. Both papers find modest evidence of cream skimming. In particular, the Anderson et al. (1993) analysis of program participation and post-program job placement suggests that if eligible persons participated at random, the placement rate would have been 61.6 percent rather than 70.7 percent, a fall of 9.1 percentage points.

Heckman and Smith (2004) address the issue of self-selection versus selection by program staff using data from the Survey of Income and Program Participation (SIPP) on JTPA eligibles combined with data from the National JTPA Study. They break the participation process for JTPA into a series of stages – eligibility, awareness, application and acceptance, and participation – and look at the observed determinants of going from each stage to the next. They find that some differences between program eligibles and participants result primarily from self-selection at stages of the participation process, such as awareness, over which program staff have little or no control. The evidence in Heckman and Smith (2004) suggests that while cream

skimming may be empirically relevant, comparing the eligible population as a whole to participants likely overstates its extent, and misses a lot of substantive and policy-relevant detail.

The paper by Heckman, Smith, and Taber, (1996) presents a contrasting view. They use data from the Corpus Christi, Texas SDA, the only SDA in the National JTPA Study for which reliable data on all program applicants are available for the period during the experiment. In their empirical work, they examine whether those applicants who reach random assignment (i.e., were selected to participate in the program) differ from those who do not in terms of both predicted outcome levels (earnings in the 18 months after random assignment) and predicted program impacts (projected into the future and discounted). Heckman, Smith, and Taber (1996) argue that it is this stage over which program staff have the greatest control, although even here applicants may wander off if they find employment elsewhere, get in trouble with the law, and so on. The authors find strong evidence of negative selection on levels combined with weak evidence for positive selection on impacts. They attribute the former to a strong "social worker mentality" toward helping the hard-to-serve among the eligible that was evident in interactions with program staff at the Corpus Christi site. The Workforce Investment Act (WIA) program offers an interesting contrast to JTPA because the WIA performance standards are not adjusted by a regression model, and they therefore do not hold programs harmless for the characteristics of their participants. Because programs now have stronger incentives to enroll individuals with few barriers to employment, we would expect to observe enrollment shift toward this group. An internal (U.S. Department of Labor, 2002) study finds that this is precisely what appears to be occurring, at least in the area scrutinized:

> *A brief survey of States by our Chicago Regional Office indicated that WIA registrations were occurring at only half the level of enrollment achieved by JTPA. While some of this may be due to start up issues, there are indications that the reduced registration levels are due to a reluctance in local areas to officially register people in WIA because of*

> *concerns about their ability to meet performance goals, especially the "earnings gain" measure. It appears that local areas in these States are selective in whom they will be accountable for. Some local areas are basing their decisions to register a person on the likelihood of success, rather than on an individual's need for services.*

A study by the U.S. General Accounting Office (GAO, 2002) confirms these problems. The GAO report, based on a survey of 50 states, indicated "many states reported that the need to meet performance levels may be the driving factor in deciding who receives WIA-funded services at the local level."

Overall, the literature provides modest evidence that program staff responded to the incentives provided by the JTPA performance standards system to choose participants likely to improve their measured performance whether or not they benefited from program services, and studies of the implementation of WIA indicate that, if anything, the situation has been exacerbated by the new program. At the same time, the evidence from the Corpus Christi SDA indicates that staff concerns about serving the hard-to-serve could trump the performance incentives in some contexts.

What Are the Impact Implications of "Cream Skimming?"

A number of studies have examined the efficiency implications of cream skimming by estimating the correlation between performance measures and program impacts. Barnow and Smith (2004) summarize the evidence from the seven studies that comprise this literature. The seven papers examine a variety of different programs, ranging from the Manpower Development and Training Act (MDTA) program of the 1960s to Job Corps programs of today. Most rely on experimental data for their impact estimates. With one exception (Zornitsky et al., 1988), the findings are negative or mixed regarding the relationship between outcome-based performance measures of the type typically used in employment and training programs and program impacts. The (Zornitsky et al., 1988) findings refer to a program, the AFDC Homemaker-Home Health

Aide Demonstration, which differs from programs such as JTPA and WIA in that it provided a homogeneous treatment to a relatively homogeneous population. Taken together, the literature clearly indicates that, in the context of employment and training programs, commonly used performance measures do *not* improve program impact by inducing service to those who will benefit most. At the same time, the literature indicates that cream skimming likely has a very small effect, if any, on program earnings impact.

B. EFFECTS OF PERFORMANCE INCENTIVES ON SERVICES PROVIDED

At least two papers examine the effect of performance incentives on the types and duration of services offered in an employment and training program, holding constant the characteristics of persons served. Marschke's (2002) analysis uses the variation in performance incentives facing the training centers in the National JTPA Study to identify the effects of performance incentives on the types of services received by JTPA participants. Marschke (2002) finds evidence that changes in the performance measures employed in JTPA led SDAs to alter the mix of services provided in ways that would improve their performance relative to the altered incentives they faced. In some cases, these changes led to increases in efficiency, but in others they did not. Marschke (2002) interprets his evidence as indicating that SDAs' service choices are responsive at the margin, but that existing performance measures do a poor job of capturing program goals such as maximizing the (net) impacts of the services provided.

More recently, Courty and Marschke (2004) demonstrate that the JTPA performance management system affects the duration of training for some participants because program managers manipulate the duration of services for some participants in order to be able to count them on their performance measures for a specific program year. Courty and Marschke (2004)

find that these manipulations reduced the overall mean impact of the employment and training services provided by JTPA.

C. RELATIONSHIP BETWEEN PERFORMANCE MEASURES AND PROGRAM IMPACT

Performance measures for a program may be of intrinsic interest, or they may be a proxy for some underlying factor of interest that is not easy to measure on a relatively quick and inexpensive manner. For example, Blalock and Barnow (2001) note that programs may wish to use program impact as a performance measure, but accurately measuring impact requires many years and the presence of a randomly assigned control group. Because this is not generally compatible with obtaining quick, inexpensive measures, programs often rely on proxy measures such as post-program earnings or the pre-post change in earnings. If the goal is to have performance measures serve as a proxy for impact, then it is necessary to assess how well the types of measures that are practical and have been used for the JTPA and WIA programs correspond with program impact.

Two studies have explored this issue for JTPA in recent years, and another study looked at Job Corps programs. The studies by Barnow (2000) and by Heckman, Heinrich, and Smith (2002) both made use of the fact that the National JTPA Study provided experimental impact findings in 16 local areas and included the data needed to construct performance measures similar to those used by ETA. However, the approach used to measure performance does not include a control group, so it is not surprising that the performance measures used are at best weakly correlated with program impact.[19]

[19]A related problem is that performance measures must use short-term post-program earnings to measure performance, but the impact of a program is best measured over a longer period. Barnow and Smith (2004) review

The recent evaluation of Job Corps that was based on a classical experimental design provided Schochet and Burghardt (2008) with an opportunity to analyze how closely Job Corps' performance standards track the program's impacts. Job Corps is a primarily residential program for highly disadvantaged out-of-school youth. Schochet and Burghardt indicate that during the evaluation period, program years 1994 through 1996, the performance measures included eight measures in three broad areas: (1) program achievement (reading and math gains, GED attainment rate, and vocational completion rate), (2) placement measures (placement rate, average wage at placement, and the percentage of placements related to training), and (3) quality/compliance measures (ratings of federal monitors). Because of the random assignment used to assign treatment status, impact can be estimated as the difference between treatment and control group values on the outcome measures. Schochet and Burghardt (2008) compared program impacts for Job Corps centers ranked in each third of the performance distribution. They concluded "Our results indicate that at the time of the National Job Corps Study, measured center performance was not associated with impacts on key education, crime, and earnings outcomes."

D. STRATEGIC RESPONSES TO PERFORMANCE INCENTIVES

In addition to the substantive responses to performance incentives considered above, in which training centers changed what they actually did, local training programs can also attempt to change their measured performance without changing their actual performance. This behavior is referred to as a strategic response, or as "gaming" the performance system. Regardless of their differing goals, all types of organizations have an incentive to respond strategically to

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the literature on the relationship between short-term earnings impacts and long-term impacts, and they find that most studies find a very weak relationship between the two.

performance incentives, provided the cost is low, as doing so yields additional resources to further their own goals. The literature provides clear evidence of such gaming behavior under JTPA.

One important form of strategic behavior under JTPA was the manipulation of whether or not participants were formally enrolled. Under the JTPA incentive system, only persons formally enrolled counted towards site performance. In addition, for the first decade of JTPA's existence, training centers had substantial flexibility in regard to when someone became formally enrolled. Clever SDAs improved their performance by basing enrollments on job placements rather than the initiation of services. For example, some SDAs boosted performance by providing job search assistance without formally enrolling those receiving it in the program. Then, if an individual found a job, the person would be enrolled, counted as a placement, and terminated, all in quick succession. Similarly, SDAs would send potential trainees to employers to see if the employer would approve them for an on-the-job training slot; enrollment would not take place until a willing employer was found.

There are several pieces of evidence regarding the empirical importance of this phenomenon. The first is indirect, and consists of the fact that DOL found it enough of a problem to change the regulations. Specifically, in 1992, the Department of Labor required that individuals become enrolled once they received objective assessment and that they count as a participant for performance standards purposes once they received any substantive service, including job search assistance.

Other evidence comes from the National JTPA Study. As part of their process analysis of the treatments provided at the 16 SDAs in the study, Kemple, Doolittle, and Wallace (1993) conducted interviews of non-enrolled members of the experimental treatment group at 12 of the

16 sites. These results (available on Table 3.2 of their report) show that 53 percent of non-enrolled treatment group members received services, most often referrals to employers for possible on-the-job training (36 percent of all non-enrollees) and job search assistance (20 percent of all non-enrollees). They report that: "… most of the study sites enrolled individuals in classroom training when they attended their first class or in OJT when they worked their first day." There is also evidence that this type of behavior has continued under WIA. The U.S. General Accounting Office (2002, p. 14) notes that: "All the states we visited told us that local areas are not registering many WIA participants, largely attributing the low number of WIA participants to concerns by local staff about meeting performance levels."

The flexibility of JTPA also allowed strategic manipulation of the termination decision. Because performance standards in JTPA were based on terminees, SDAs had no incentive to terminate individuals from the program who were not successfully placed in a job. By keeping them on the rolls, the person's lack of success would never be recognized and used against the SDA in measuring its performance. As the Department of Labor explains in one of its guidance letters, "Without some policy on termination, performance standards create strong incentives for local programs to avoid terminating failures even when individuals no longer have any contact with the program."[20]

Problems with local programs retaining participants on the rolls long after they stopped receiving services go back to the days of JTPA's predecessor, the Comprehensive Employment and Training Act (CETA). In one of their guidance letters, the Department of Labor observed that "monitors and auditors found that some participants continued to be carried in an 'active' or 'inactive' status for two or three years after last contact with these programs." For Title II-A of

[20]See TEIN 5-93 available at: http://wdr.doleta.gov/directives/corr_doc.cfm?DOCN=770

JTPA, DOL limited the period of inactivity to 90 days, although some commentators suggested periods of 180 days or more.

Courty and Marschke (1996, 1997, 2004) provide additional evidence on the strategic manipulation of termination dates using data from the National JTPA Study. The first type of evidence consists of the timing of termination relative to the end of services as a function of the employment status of the trainee as of the end of services. Assuming that the timing of termination responds mainly to the employment at termination standard in place during the time their data were collected (rather than the wage rate or cost standards, which would be more difficult to game), they argue that sites should immediately terminate participants who are employed when their services end. In contrast, they should not terminate participants who are not employed at the end of their services; instead, they should wait and see if they later become employed, at which point they should then terminate them from the program. Not surprisingly, Courty and Marschke (1996, 1997, 2004) find that the sites in the National JTPA Study did exactly this. For example, Courty and Marschke (1997) found a spike in terminations at the end of services for employed participants, and a spike in terminations at the end of the mandatory 90 days after the end of services for participants not employed at the end of services.[21] Their analysis likely understates the full extent of sites' strategic behavior, as it takes the date of the end of services as given, when in fact sites had some control over this as well. For example, a participant without a job at the end of classroom training could be assigned to a job club in the hope that employment would soon follow.

Courty and Marschke (1997) interviewed 11 of the 16 sites in the National JTPA Study regarding their responses to the switch from measuring employment at termination to measuring it 90 days after termination. They report that:

[21]See Exhibit 1 in Courty and Marschke (1997).

> *…[m]ost administrators indicated that … case managers began tracking terminees until the follow-up period expired. To increase the chances that an employment match lasted until the third month, some SDAs reported that they offered special services between termination and follow-up, such as child-care, transportation and clothing allowances. Case managers also attempted to influence employers to keep their clients until the third month.*

Moreover, "training administrators reported that after the third month, they did not contact the client again." While these follow-up services may add value, their sudden termination at 90 days, and their sudden use after the change in performance standards, suggests motives other than impact maximization.

The second type of evidence from the National JTPA Study reported in Courty and Marschke (1996, 1997, 2004) concerns the timing of terminations relative to the end of the program year. In JTPA, performance was measured over the program year from July 1 to June 30. For SDAs in states where there were no marginal rewards for performance above the standard, this leads to an incentive to wait on termination until the end of the program year when possible, and then to strategically terminate each participant in the program year in which his or her marginal value is highest.

Courty and Marschke (2004) builds on the analyses in earlier works (Courty and Marschke, 1996 and 1997) by embedding them in an econometric framework and by examining whether the manipulation of the termination dates is merely an accounting phenomenon or whether it has efficiency costs. To do this, they look at non-experimental differences in mean impacts between persons terminated at training centers that appear to engage in more gaming (based on measures of the average waiting time to termination after the conclusion of training), at differences in mean impacts for trainees terminated in June (at the end of the program year) relative to other trainees, and at whether or not trainees are more likely to have their training truncated at the end of the program year. The impacts at the end of the training year are also

interacted with how close the center is to its performance standards for the year. All of their analyses indicate an apparent (and surprisingly large) efficiency cost to the gaming behavior.

E. USING RETURN ON INVESTMENT (ROI) AS A PERFORMANCE MEASURE

In making investment decisions, businesses must determine the best or most profitable use of scarce funds. In general terms, the metric that is used to compare potential investments is called *return on investment*, often referred to by its initials as ROI. Economists who try to determine the best use of public or private funds have developed a very similar concept that they refer to as *cost-benefit analysis*. Although the two concepts are closely related, an examination of several books on cost-benefit analysis and return on investment analysis yielded no cross references. Our interpretation is that return on investment analysis tends to focus more on the rate of return to investments, while cost-benefit analysis generally focuses more on net present values. (These terms are defined and described and below.) As described in more detail below, we believe that cost-benefit analysis is generally the preferred approach for comparing alternative investments. As public training programs have tried to learn from business practices, many analysts have advocated developing ROI or cost-benefit measures that can be used to judge how good investments in workforce programs are. The concept can be used to determine if a single program or project is worth carrying out, or it can be used to compare alternative projects or programs to rank them or to see if they are performing adequately. This section describes the concepts of ROI and cost-benefit analysis, provides some examples of how ROI and cost-benefit analysis have been applied to workforce development programs, and explores pros and cons of using ROI as a performance measure for workforce development programs.

Perhaps surprisingly, education and training were not explicitly recognized as investments with an expected return on the investment until the middle of the twentieth century when economists such as Gary Becker and T. W. Schultz (1961) began describing education and training as investments that could be characterized as "human capital." Although workforce development programs have implicitly viewed training as an investment, the Job Training Partnership Act (JTPA) explicitly recognized this in Section 106, which states:

> *The Congress recognizes that job training is an investment in human capital and not an expense. In order to determine whether that investment has been productive, the Congress finds that -- (1) it is essential that criteria for measuring the return on this investment be developed; and (2) the basic return on the investment is to be measured by long-term economic self-sufficiency, increased employment and earnings, reductions in welfare dependency, and increased educational attainment and occupational skills.*

The concept of ROI is quite straightforward—an ROI measure should relate the benefits of a project to its costs. In a book describing how to conduct ROI analyses for training programs, Jack Phillips (2003, p. 21) offers two definitions. He first suggests using a benefit-cost ratio, BCR, defined as BCR = Program Benefits ÷ Program Costs. Alternatively, he suggests that ROI can be measured as a percentage: ROI = (Net Program Benefits ÷ Program Costs) X 100. In practice, however, measuring ROI involves many additional decisions and assumptions. The decisions that must be made to compute the ROI of a project include both technical issues (e.g., How do we account for nonmonetary benefits such as improved health? Should we compute an annual rate of return or the overall rate?) and philosophical and judgmental issues (e.g., From whose perspective are the returns calculated? What time period following the investment should be included in the calculations?). Moreover, there is disagreement among experts on the most appropriate way to measure ROI. While Phillips (2003, p. 21) states that computing BCR is acceptable, economists generally shun the use of benefit-cost ratios; one leading text (Boardman et al. 2006) concludes that "Thus, benefit cost ratios are

subject to manipulation. For these reasons, *we recommend that analysts avoid using benefit cost ratios…*"

To help determine if ROI is a good performance measure, it is instructive to follow the steps that must be undertaken to compute the ROI. To understand what is involved, we use the steps outlined by Boardman et al. (2006) in their cost-benefit analysis text. Phillips (2003) covers much the same ground in his ROI volume. Rather than cover all the steps, we focus here on the three steps that are most likely to cause difficulty in using ROI as a performance measure.

Specify the alternatives. When calculating ROI, we estimate the costs and benefits for the investment, e.g., receiving WIA services, versus an alternative situation, usually referred to as the *counterfactual*. In the case of workforce development programs, the programs are typically assessed with a counterfactual of whatever programs and services participants would have obtained in the absence of the program; in some instances, the counterfactual is receiving no services. This is the approach used in key evaluations of workforce programs such as the Job Training Partnership Act (JTPA) and Job Corps in recent years.[22]

Decide whose costs and benefits count. In computing ROI, the results can differ markedly depending upon whose viewpoint is adopted; sometimes this issue is referred to as "who has *standing* for the analysis." Businesses typically want to know the value of a project from the perspective of stockholders, but for workforce programs, ROI can be computed from the perspective of participants, the government, or all the members of society. Cost-benefit evaluations, such as the ones cited above for JTPA and Job Corps, typically calculate the returns

[22] See Larry L. Orr, Howard S. Bloom, Stephen H. Bell, Fred Doolittle, Winston Lin, and George Cave (1996). *Does Training for the Disadvantaged Work? Evidence from the National JTPA Study*. Washington, DC: The Urban Institute Press, and Peter Z. Schochet, John Burghardt, and Sheena McConnell (2006). *National Job Corps Study and Longer-Term Follow-Up Study: Impact and Benefit-Cost Findings Using Survey and Summary Earnings Records Data*. Princeton, NJ: Mathematica Policy Research.

from all three perspectives, but a performance management system could use only one or two of these perspectives.

Predict the impacts quantitatively over the life of the project. This is one of the most difficult steps in a program evaluation, and it is more difficult in a performance management perspective. Benefits from a labor exchange program, whose main goal is to help customers find a new job more quickly, may occur over a relatively short period such as a month or a year at most. Because such programs generally have low costs for each customer, this type of program can still be a worthwhile investment. Training programs, whose goal is to increase skill levels and earnings for many years, may require many years of post-program earnings data to capture all the benefits to customers. This is one of the key problems in computing ROI for workforce programs: we must either use or project earnings gains for many years after a program occurs, or risk potentially greatly underestimating program benefits for investments with a long payoff period.

A second important issue in estimating program benefits is that we must generally have a control group or comparison group of people similar to the customers who did not participate in the program. In a workforce program, it is generally not enough to observe what customers earn before and after participation—some and often most of their post-program earnings would have accrued without the program. Thus, the best impact evaluations rely on a randomly selected control group of individuals who applied to the program or a comparison group of individuals who are similar to the participants but who did not receive the training. It is widely accepted that having a randomly assigned control group is the best method of creating a group that is as similar as possible to the treatment group. Unfortunately, incorporating random assignment into a

workforce program is expensive, time consuming, and sometimes considered unethical. This is particularly true if the program is to be evaluated each year.

The alternative of creating a comparison group has generated considerable controversy in recent years. Although sophisticated matching strategies, often based on propensity scores (the estimated probability of enrolling in the program given the person's characteristics), have been advocated by some researchers as being a reasonable alternative to random assignment, studies that have compared results from classical experiments with comparison groups generated by propensity score matching have frequently questioned how well the matching strategies achieve their goal of generating comparable groups and unbiased impact estimates.[23] Thus, the choices in creating an appropriate group for comparing the participants may boil down to a strategy that is infeasible or one that may lead to biased estimates of the impact.

A further complication of using ROI as a performance measure is that to make comparisons across states or local areas, the services received by the control or comparison group must be the same across all areas. Even random assignment is insufficient to solve this problem if control group members are permitted to enroll in other available training opportunities (such as courses available at the community college). If some states have more alternative training programs available and the control or comparison group is not barred from enrolling in these other programs, the counterfactual will not be the same across states, and the ROI estimated in different states are not comparable.

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[23] See Howard S. Bloom, Charles Michalopoulos, Carolyn J. Hill, and Y. Lei (2002). *Can Nonexperimental Comparison Group Methods Match the Findings from a Random Assignment Evaluation of Mandatory Welfare-to-Work Programs?* New York, NY: Manpower Demonstration Research Corporation; Jeffrey Smith and Petra Todd (2005). "Does Matching Overcome LaLonde's Critique of Nonexperimental Estimators?" *Journal of Econometrics* 125: 305-353; and Elizabeth T. Wilde and Robinson Hollister (2007). "How Close Is Close Enough? Testing Nonexperimental Estimates of Impact Against Experimental Estimates of Impact with Education Test Scores as Outcomes." Journal of Policy Analysis and Management. 26(3): 455-477. For a more optimistic appraisal, see Thomas D. Cook, William R. Shadish, and Vivian C, Wong (2008). "Three Conditions under Which Experiments and Observational Studies Produce Comparable Causal Estimates." Journal of Policy Analysis and Management. 27(4): 724-750.

It should be noted that some analysts believe that ROI can be a useful performance measure for workforce development programs. Most notably, the Integrated Performance Information (IPI) Project, which included teams from six states, developed a set of performance measures for workforce development programs.[24] The IPI report included two ROI measures among the eight measures recommended.[25] The two ROI measures recommended in the IPI report are measures of the return to taxpayers and participants over the five years following program exit. For the taxpayer measure, the report suggests capturing the return to taxpayers as the change in tax revenue and social welfare payments due to the program divided by the cost of the services provided. For the participant measure, the report suggests using the net impact on participant earnings and employer-provided benefits divided by program costs. To measure differences in earnings, fringe benefits, tax revenues, and social welfare payments, the IPI report recommends using unemployment insurance wage record data to generate comparison groups and earnings data, and accessing other administrative data to obtain tax and welfare information.

The IPI report does not gloss over the difficulties in estimating and using ROI as a performance measure. The report states "The return on investment measures have a long lag between the time of service and the time the results are available, are expensive to measure on a frequent basis, and the methodology is not sufficiently rigorous to accurately measure small changes over time." (p. 21). For these reasons, the report suggests that ROI be used as a "performance indicator" rather than an "accountability measure." The IPI report specifically recommends that ROI not be used for "setting targets and applying consequences." Thus,

[24] The six states are Florida, Michigan, Montana, Oregon, Texas, and Washington. See Washington State Training and Education Coordinating Board. (2005). Integrated Performance Information for Workforce Development: A Blueprint for States. Olympia, WA: Washington State Training and Education Coordinating Board.
[25] In addition to two ROI measures, the IPI report recommended the following six additional measures: short-term employment rate, long-term employment rate, median earnings in the second quarter after exit, credential completion rate, repeat employer customer rate, and employer market penetration rate.

although the IPI report suggests using ROI measures, they do not recommend using ROI as an annual performance measure with associated rewards and sanctions.

The IPI report's recommendations on the use of ROI are useful and apply to use of ROI in evaluating efficiency and effectiveness of ETA programs.[26] The application of these techniques for ROI and the closely related concept of cost-benefit analysis are essential to assess if a program is a worthwhile investment and to compare alternative investments. Hence, it would valuable for the Department of Labor and states to conduct such analyses on a regular basis. However, it would also be very expensive to measure ROI on an annual basis as a performance measure. In addition, there is a lack of consensus about the best methods that should be used to generate comparison group data. Some analysts believe that the matching methods that are widely used do not provide good comparison groups, and the time required to generate reasonable post-program data is too long to provide measures that are useful for annual performance measures.[27] Thus, the research on ROI and experiences of government agencies in using ROI to evaluate program performance suggest that while ROI and cost-benefit analysis should be considered an important tool for periodic evaluation of program performance, the methodology is problematic and of limited utility for annual performance reporting/monitoring.

[26] It should be noted that the ROI measures suggested by the IPI report could be improved upon in several ways. First, when possible random assignment should be used rather than developing a comparison group through matching procedures. Second, the return should be computed from the perspectives of society as a whole and from the perspective of the participants; neither proposed ROI measure calculates whether the program is a good investment from the perspective of society or potential participants. Third, limiting the post-program period to five years may bias the findings toward short-term investments, so a longer perspective, with varying assumptions about the decay of the impact, is more appropriate. Fourth, the IPI report appears to ignore the time value of money; we suggest that computing the internal rate of return is more appropriate. Finally, rather than just computing an ROI measure, evaluations should compute the net present value of the investment using a range of discount rates; this is the procedure that was used in the cost-benefit analyses of the JTPA program and Job Corps.

[27] One of our Expert Panel members recommended that random assignment be used in all states on a continuous basis to provide benefit measures, but this approach may not be feasible, particularly in the short run.

F. EMPLOYMENT AND TRAINING ADMINISTRATION EXPERIENCE WITH EFFICIENCY MEASURES

The Employment and Training Administration also has previous experience with efficiency standards under WIA's predecessor, the Job Training Partnership Act (JTPA). Under JTPA, Section 106(b)(4) required that efficiency measures be prescribed for the JTPA Adult Program and that the efficiency measures be related to the outcome measures used. The National Commission for Employment Policy (NCEP) sponsored an evaluation of the effects of JTPA performance standards on participants, services, and costs.[28] The study included quantitative statistical analysis of JTPA Annual Status Report (JASR) data linked to data on the characteristics of local program areas, as well as qualitative analysis based on interviews with 30 local programs and 87 service providers in eight states.

For the most part, the study found that the JTPA performance standards had the desired effects of holding programs harmless for differences in participant characteristics and local economic conditions. However, the study found that the cost standards had intrinsic problems and created some undesirable effects on participants served:

> *This evaluation found that the federal standards for the entered employment rate and wage rate for adults generally did not have unintended effects on clients or services. …The federal cost standards, however, had the most unintended effects and were the least comparably measured of all the federal performance measures. The evaluation found that SDAs in states that placed more weight on the federal cost standard tended to serve fewer hard-to-serve clients and that [local areas] concerned about exceeding the cost standards tended to design less intensive services. At the same time, this evaluation found serious measurement problems with the cost standards. We found large differences in the extent to which [local programs] were leveraging JTPA funds, either by using funds from other programs to help fund JTPA Title II-A programs or by using service providers that had alternative funding sources. As a result, it is difficult to compare the cost of services received by JTPA participants across [local programs]. (Dickinson, et al, p. 5).*

[28]See Katherine Dickinson et al. (1988). *Evaluation of the Effects of JTPA Performance Standards on Clients, Services, and Costs.* Washington, DC: National Commission for Employment Policy Research Report No. 88-15.

Based on their findings from both the quantitative and qualitative components of the study, the authors recommended that alternatives to the cost measures be explored. The authors noted that as a result of concern about the unintended impacts of the cost standards, ETA set more lenient cost standards in PY 1988, but they concluded that this policy change would not eliminate the disincentive problems in states that emphasize exceeding rather than meeting standards.

In response to the research findings, the NCEP made a number of recommendations for changing the statutory provisions of JTPA dealing with performance standards. Taking note of the study's findings regarding the undesirable incentives and comparability of cost issues, the Commission's first recommendation was:

> *The Commission recommends that Section 106(b)(4), which requires the Secretary [of Labor] to prescribe performance standards relating gross program expenditures to various performance measures, be amended to direct that cost-efficiency be monitored by states.*

In August 1992, the JTPA statute was amended, and the amendments repealed the federal requirement for efficiency standards and prohibited Governors from using efficiency standards in making awards to local areas.

G. STATE/LOCAL WORKFORCE AGENCY EXPERIENCE WITH EFFICIENCY MEASURES

A search of the literature reveals that some states and local areas have experimented with use of a variety of efficiency measures for better understanding costs of service delivery – and in some instances, attempted to link costs to outcomes.[29] Three examples of such efforts – which demonstrate the feasibility of efficiency measurement and possible measures that could be

[29]See Chapter 4 of this report for additional views from interviews conducted with six states on previous experience with efficiency measures and recommendations on how efficiency measures should be implemented.

adopted, as well as limitations and potential for unintended consequences of such measures – are discussed below.

Chicago Workforce Board – Use of a Volume and a "Positive Program Outcome" Efficiency Measure[30]

The Chicago Workforce Board (CWB) contracted with Workforce Enterprise Services Inc. (WES) to conduct a study to compare the cost of serving participants through Chicago's Workforce Investment Act (WIA) Title I adult, youth, and dislocated worker service providers to other comparable providers. A goal of the study was to help the Board and other stakeholders analyze the cost of operating WIA programs to see if the costs typically incurred by Chicago service providers are reasonable and comparable with the cost of operating such programs elsewhere. The project was divided into two phases:

- The goal of the first phase was to determine if it is feasible to conduct a comparative analysis of cost-per-outcome for Chicago service providers, and if so, identify a recommended analytic approach.
- During the second phase, WES applied the analytic approach developed during phase one to real-world cost and outcome information for Chicago WIA service providers.

During phase one, WES investigated whether or not local Workforce Investment Areas (LWIAs) elsewhere in the nation could be identified that are comparable to Chicago in terms of the characteristics of the registrants served and the mix of services provided. Initially, the Boards overseeing WIA services in four comparison sites (New York, Milwaukee, Philadelphia, and Indianapolis) agreed to participate in the project and supply the requested data. However several issues and problems arose as efforts continued to obtain data. Due to various information systems and resource limitations, the Boards of the comparison LWIAs were unable to provide complete data on a timely basis. As a result of these efforts, it was concluded that it would only

[30]Workforce Enterprise Services, Inc., "Chicago Workforce Board Cost per Participant Study Final Report; Cost Per Participant Comparison Study - Phase Two; Final Report," July 15, 2007.

be possible to obtain provider level data for Chicago providers. The Phase One Report discussed the traditional workforce development cost measures - cost per registrant (or participant) and cost per exiter (or terminee). The report found that these measures were straightforward to develop, but had weaknesses that limited their usefulness. The primary weakness identified was that these traditional cost measures do not incorporate program outcomes and are more correctly characterized as "volume" measures rather than cost efficiency measures.

The researchers noted, "since cost efficiency means little without effectiveness, a true cost efficiency measure must be designed that take into account the intended outcomes of WIA." As a result, WES explored alternative cost-related measures that would incorporate WIA outcomes and could be considered true cost efficiency measures. After reviewing several alternatives, a new measure was proposed that combined the achievement of federally-required programmatic outcomes and contractor expenditures. This statistic measured the ratio between the share of positive program outcomes achieved by a contractor (as a proportion of total outcomes achieved by all providers) and the contractor's share of total program expenditures. Ultimately, WES recommended that the CWB adopt a set of cost-related measures that are sensitive to both program volume indicators (e.g., rates of registration and program exit) and longer-term outcomes (e.g., employed at follow-up and earnings). The three measures recommended were: (1) cost per registrant, (2) cost per exiter, and (3) the share measure. Finally, the research contractor (WES) warned against the possibility of "unanticipated consequences" if the measures selected were not carefully selected and implemented:

> From the outset of the project, WES understood that the Board did not want to adopt a cost measurement system that might encourage short-term outcomes at the expense of long-term outcomes or discourage the provision of training. The Board wanted to avoid adopting a system that might discourage the provision of services to hard-to-serve populations.

To address this issue, WES recommended that the three cost-related measures not be used in isolation. WES recommended that a "cost profile" be developed for each provider that presented the Board with contextual information that would help the Board (and other stakeholders) interpret the cost measures. Along with the three cost-related measures, the proposed profiles included data showing:

- Budgeted and actual contractor expenditures at the line item level,
- Related expenditures for individual training accounts and on-the-job training,
- Contractor performance on federal WIA performance measures,
- The number of full-time equivalent (FTE) staff billed to the contract, and
- The number and percent of exiters from hard-to-serve populations.

Further, WES recommended that the profiles be used by the Service Delivery Committee (SDC) to select a relatively small sample of providers each year for a more intensive cost review. Contractors would be initially selected based on information presented in the cost profiles. The SDC would then examine the components of the contractor's costs in detail vis-à-vis the programmatic model used, the characteristics of the population served, and the results achieved. This more in-depth review by the SDC would be designed to yield a judgment regarding whether or not the contractor's cost were justified given these factors or if costs are too high given the results achieved.

California – Use of Per Client, Visit, and Several Outcome-Based Efficiency Measures[31]

In 2006, the California Workforce Investment Board's (CWIB) Accountability Committee called for a cost study of the One-Stop Career System. To complete a cost study of One-Stops, the CWIB contracted with a team of researchers in the College of Business and

[31]Richard Moore, Phillip Gorman, and Andrew Wilson, *California One-Stop System Cost Study Report*, prepared for the California Workforce Investment Board, prepared by California State University at Northridge, October 18, 2007. The comprehensive report of study and appendices are available on the CWIB Website at http://www.calwia.org.

Economics at California State University, Northridge to analyze the costs and operations of California's One-Stop Career Centers. Working with staff from the State of California's Employment Development Department (EDD) and the CWIB, the Cal State Northridge team developed the following research questions to guide the study:

- What resources do California One-Stops have and where do they spend them?
- What do partners contribute to the operation of the One-Stop and how does the pattern vary between sites?
- How much and what types of services do One-Stops produce, and how do sites vary from each other?
- What do different One-Stop services cost to produce and how do costs vary between sites?
- Can standard measures or service units and costs be developed and applied across One-Stops?

The study had two phases. In Phase I, the research team conducted four in-depth case studies. The goal of the case studies was to answer the research questions and develop methods that could be replicated in a statewide survey of One-Stops. In Phase II of the study, the team conducted a survey of 18 comprehensive One-Stops, which when added to the case study data provided a study sample of 22 full-service One-Stops. The study used the Activity Based Cost (ABC) accounting model to conduct its analysis. The purpose of the ABC Accounting Model was to better understand the real costs of producing a product or service. The ABC accounting model begins by mapping the processes and activities that generate costs and produce services. Case studies revealed that the One-Stops were built around four processes:

- A *universal services process*, where a person can walk in to the One-Stop and use services to find a job or training opportunities;
- An *enrolled services process*, where eligible clients formally enroll in programs such as the WIA Adult program, the Trade Adjustment Assistance Act program, or CalWorks;
- A *business services process*, which are services to business ranging from workshops on writing a business plan to rapid response services for companies facing a layoff or closure;
- A *youth services process*, where services to eligible youth are provided ranging from academic support to case management, to help finding a summer job.

Using this framework, the study estimated the costs of processes and the activities within them, and then estimated the cost-per-unit of services produced. It also estimated the costs incurred by partners within the One-Stops associated with each process. In the analysis, the research team developed a wide array of cost per-unit of service measures, which could potentially serve as management tools. From the case studies, the team developed a standard set of services One-Stops produced and then estimated the per-unit cost of producing those services, by dividing the total costs of a service by the number of units produced at each One-Stop. In the final report, the researchers presented "what we believe are the most valuable 'cost-per' measures for understanding One-Stop operations by process":

- **Universal Services:** Cost per Universal Client, Cost per Universal Visit, and Cost per Coaching and One-on-One Assistance Event;
- **Enrolled Service:** Cost per Enrolled Client, Cost per Client Receiving Case Management, and Cost per Enrolled Client Placed;
- **Business Services:** Cost per Rapid Response Employer Assisted; Cost per Rapid Response Employee Assisted; and Cost per Mass Hire Event; and
- **Youth:** Cost per Youth Served and Cost per Youth Placed in Employment.

This project was the first Activity Based Cost accounting analysis of One-Stop Career Centers and their finances, and as such, raised as many questions as it answered. Researchers concluded that One-Stops tend to structure their processes around the WIA program, so the four processes uncovered appeared to be fairly consistent across sites. Further, One-Stop services were customized to local needs and this customizing accounted in large part for the differences in costs between sites. Finally, the researchers recommended that the State Board take the lead in developing a voluntary system of standard measures of costs and services for the One-Stops. The researchers noted "such a system can evolve over time into a powerful method for improving the performance of One-Stops.

Idaho – Use of a Return on Investment Methodology[32]

The State of Idaho has employed a "Return on Investment" methodology to analyze the state's workforce investment activities relative to the effects and costs of the activities. According to the state, reviewing the level of investment (taxpayers' dollars) versus the return on that investment (participant gains in wages, taxes, and reduced public assistance) provides the state with "another look at the success of the programs beyond the required performance standards." For example, in its ROI analysis, for individuals enrolled in the Adult program in PY 2006, $5.24 was returned to the community for each dollar spent and the investment was returned by the participant in little more than six months; for dislocated workers, the investment was returned in six and one-half months with those leaving the program returning $5.59 to the community for each dollar invested. The Taxpayer Return on Investment represented the rate of return of taxpayer dollars, through increased tax contributions and decreased welfare costs. To calculate the Taxpayer Return on Investment, the Total Annual Benefit was divided by twelve to produce a Monthly Taxpayer Benefit. The program cost was then divided by the Monthly Taxpayer Benefit to calculate the number of months it takes to pay back the taxpayer investment in WIA for the year in question. When calculating the Impact of Investment (a measure of the program's overall benefit to the community), net earnings of the participants were included, as well as the increased tax contributions and decreased welfare costs.

H. CONCLUSIONS

Because workforce programs have a long history of using performance standards and the ETA has had substantial data collected, there is a substantial research record on the use of

[32] State of Idaho, "Workforce Investment Act – Annual Report for PY 2006," October 2007, available at: http://labor.idaho.gov/wia1/PY2006.pdf.

performance standards for workforce programs. The research shows that programs pay careful attention to the performance standards they face, and that the presence of performance standards can have important effects on who is served and the services received. Unfortunately, the effects of performance standards have not always been in the desired direction. The most significant problems that appear in the literature are that performance standards can encourage "cream skimming," where the programs are more likely to enroll individuals who would do well even without the programs, and "gaming," where programs spend resources manipulating their measured performance by strategically enrolling and terminating individuals in a manner that makes the program look most effective. In addition, studies of JTPA and Job Corps indicate that ranking on performance measures is not related to program impact on key outcomes. Thus, although performance management systems can be used to encourage desired behavior, care must be taken to assure that undesired behavior is minimized. In their overview of lessons learned from performance standards in employment and training programs, Courty and Marschke (2007) conclude with some optimism that federal officials can monitor the misalignment and gaming behavior of state and local programs and take corrective actions.

The lesson from ETA's and state/local experiences with efficiency measures is not that it is a bad idea to monitor program efficiency. Rather, the inference that should be drawn is that it is important in selecting measures, standards, rewards, and sanctions to anticipate the behavioral changes that are likely to be induced by the performance management policies adopted and to structure the system so that the presence of efficiency measures does not result in undesirable behavior by states and grantees. In addition, careful thought should be given as to whether outcome-based efficiency measures should be applied only at the national level or whether they should be "drilled-down" from the federal to states and/or local workforce investment areas. The

application of efficiency measures (and setting of standards on such measures) across states or local levels could, for example, lead to efforts by states and localities to reduce per participant costs by either providing less costly services (e.g., reducing the amounts of more costly staff-assisted and training services, in favor of self-service labor exchange services) or bolstering the numbers of individuals enrolled (and co-enrolled) in programs. With regard to ROI, the overall finding from this review is that ROI should be used periodically as a tool for evaluating program efficiency and effectiveness, but that it is not practical to use ROI for ongoing performance monitoring. Studies featuring ROI typically require lengthy period of time to conduct and net impacts based on experimental research designs (which are costly).

CHAPTER 3:

USE OF EFFICIENCY MEASURES FOR MONITORING PERFORMANCE IN DOMESTIC AND FOREIGN WORKFORCE DEVELOPMENT AND OTHER HUMAN SERVICE PROGRAMS

Other federal agencies, as well as government agencies in other countries, have to varying degrees used efficiency measures to monitor and assess performance of workforce development and other human services programs. This chapter provides an overview of the types of measures that have been tested by government agencies in the United States and in several other countries, including lessons learned from use of such measures.

A. USE OF EFFICIENCY MEASURES IN OTHER FEDERAL AGENCIES

Other federal departments and agencies have implemented efficiency measures to track ongoing program performance. This section of the report reviews efficiency measures used by five other federal cabinet-level agencies: The U.S. Department of Agriculture (USDA), the Education Department (ED), the Department of Health and Human Services (DHHS), the Department of Housing and Urban Development (HUD), and the Department of Veterans' Affairs (VA). Within these departments, this assessment focuses on programs that provide activities and services related to employment and training.[33]

Before presenting findings from this review, several caveats should be kept in mind. First, the OMB website where we obtained our data only includes programs with performance measures. There may be programs that have no measures but we did not know were missing from the website. Second, federal agencies are constantly considering whether they should add, drop, or modify their performance measures for strategic planning and accountability purposes,

[33] The source for this information is the OMB Internet site www.expectmore.gov as of May 14, 2010.

so the research may not reflect changes to the efficiency measures that are under consideration: for example, several measures were added and dropped since the exhibit was first prepared roughly one year prior to the development of the final version.

The efficiency measures for the 21 programs identified from the OMB website plus the Food Stamp Employment and Training Program are summarized in Exhibit 3-1. Most of the programs had one or two efficiency measures, but one program (Food Stamp Employment and Training) had no efficiency measures and the 21st Century Community Learning Centers Program in the Department of Education had five efficiency measures.

The two most commonly used types of efficiency measures are cost per participant, and outcome- and output-based efficiency measures with seven and eight measures observed, respectively. Two programs have efficiency measures based on administrative costs; for example the Food Stamp Nutrition Education program has the ratio of administrative costs to delivery costs as an efficiency measure.

The programs reviewed clearly considered timeliness of government decisions and service delivery to be an important aspect of efficiency, and there were three programs with nine timeliness measures identified. Other concepts of efficiency reflected in the measures include penetration rates and accuracy of determinations. For example, the USDA's Food Stamp Nutrition Education (FSNE) program uses "Ratio of FSNE Direct Education Participants Receiving Food Stamps to All FSNE Direct Education Participants" (a penetration-type efficiency measure).

EXHIBIT 3-1: EFFICIENCY MEASURES FOR SELECTED FEDERAL PROGRAMS (AS OF MAY 2010)

AGENCY	PROGRAM	MEASURE
USDA	Food Stamp Nutrition Education	Ratio of FSNE Administrative Costs to FSNE Delivery Costs
		Ratio of FSNE Direct Education Participants Receiving Food Stamps to All FSNE Direct Education Participants
		Ratio of Persons Reached by FSNE Social Marketing Who Receive Food Stamps to All Persons Reached by FSNE Social Marketing
	Food Stamp Employment and Training	None identified
	Trade Adjustment Assistance for Farmers	The Average Number Of Days for USDA to Make a Petition Determination Is 40 Days or Less.
		Timely Certification or De-Certification of Petitions Prior to the Beginning of a Second or Subsequent Year
Education	21st Century Community Learning Centers	The Percentage of SEAs That Submit Complete and Accurate Data on 21st Century Community Learning Centers Performance Measures in a Timely Manner Will Increase
		The Time It Takes SEAs to Draw Funds Down to Reimburse Grantees Will Decrease.
		The Percentage of State Educational Agencies that Submit Complete Data on 21st Century Program Performance Measures by the Deadline.
		The Average Number of Days It Takes the Department to Submit the Final Monitoring Report to an SEA after the Conclusion of a Site Visit.
		The Average Number of Weeks a State Takes to Resolve Compliance Findings in a Monitoring Visit Report.
	Adult Education State Grants	The Annual Cost per Participant
		The Cost per Adult Education Participant Who Advanced One or More Educational Levels or Earned a High School Diploma or GED
	American Indian Vocational Rehabilitation Services	Percentage of AIVRS Projects that Demonstrate an Average Annual Cost per Employment Outcome of No More than $35,000
		Percentage of AIVRS Projects that Demonstrate an Average Annual Cost per Participant of No More than $10,000
		Cost per Participant
	English Language Acquisition State Grants	The Annual Cost per Limited English Proficient Student Attaining English Language Proficiency.
		The Average Number of Days States Receiving Title III Funds Take to Make Subgrants to Subgrantees.
	Federal Pell Grants	Administrative Unit Cost
	High School Equivalency	The Cost per Training for HEP Participants Who Earn a GED

EXHIBIT 3-1: EFFICIENCY MEASURES FOR SELECTED FEDERAL PROGRAMS (AS OF MAY 2010)

AGENCY	PROGRAM	MEASURE
Education	Migrant and Seasonal Farmworker	Percentage of Projects that Report an Average Annual Cost per Employment Outcome within a Specified Range (to Be Determined).
	Projects with Industry for People with Disabilities	The Percentage of Projects Whose Annual Cost Per Placement Is No More than $11,000
		Annual Cost per Participant
		The Percentage of Projects with Industry Projects Who Demonstrate an Average Annual Cost per Participant of No More than $4,500
	Tech-Prep Education State Grants	Cost per Secondary Student
	Tribally Controlled Postsecondary Vocational and Technical Institutions	Cost Per Participant
	Vocational Education State Grants	Cost per Secondary Student
		Cost Per Postsecondary Student.
	Vocational Rehabilitation Demonstration and Training Programs	The Percentage of Projects that Met Their Goals and Objectives as Established in Their Original Applications.
	Vocational Rehabilitation Training	The Federal Cost per RSA Supported Rehabilitation Counseling Graduate at the Masters-Level
Health and Human Services	Independent Living Program	Promote Efficient Use of Chafee Foster Care Independence Program (CFCIP) Funds by 1) Increasing the Number of Jurisdictions that Completely Expend Their Allocations within the 2-Year Expenditure Period and 2) Decreasing the Total Amount of Funds that Remain Unexpended by States at the End of the Prescribed Period
		Increase the Percentages of FCIP Youth Who Avoid High-Risk Behaviors which Might Otherwise Lead to Criminal Investigations and Incarceration
	Refugee Social Services	For Refugees Receiving Temporary Assistance for Needy Families (TANF) or Other Forms of Federal Cash Assistance, Shorten the Length of Time from Arrival in the U.S. to Achievement to Self Sufficiency.
	Temporary Assistance for Needy Families	Increase the percentage of state work participation rates that meet or exceed requirements
Housing and Urban Development	Community Development Block Grants	Cost per Single Family Rehabilitated Unit Will Remain Consistent Adjusted for Inflation Factors.
	Public Housing	Each Year, the Federal Cost of Public Housing per Occupied Unit Will Remain Less that the Federal Cost of Voucher per Occupied Unit.
Veteran Affairs	Vocational Rehabilitation and Employment Program	Average Cost of Placing Participant in Employment.

The Vocational Education State Grants Program shares an important feature with the WIA Youth Program—the participants vary considerably in age, and hence, the use of a single efficiency measure could make comparisons across states difficult to interpret. To make their cost per participant figures more meaningful, the Education Department has separate efficiency measures of cost per participant for secondary and postsecondary participants.

The primary lesson from this review is that agencies have interpreted the concept of efficiency quite broadly. Many agencies have more than one efficiency measure, and agencies have tailored the measures broadly to reflect their concerns about what aspects of their programs can be made more efficient. The most commonly used efficiency measure among programs reviewed was cost per participant; outcome- and output-based efficiency measures were also common, focusing on timeliness of government decisions and service delivery, accuracy of payments or determinations, and costs per service provided.

B. USE OF EFFICIENCY MEASURES IN OTHER INDUSTRIALIZED COUNTRIES

The project team conducted telephone interviews with officials at the Organisation for Economic Co-operation and Development (OECD), Canada, and the United Kingdom (UK) to discuss use of efficiency measures in administering employment and training programs in major industrialized nations. Discussions focused on the use of efficiency measures (tying outcomes to costs), as well as other performance measures, as part of regular performance monitoring activities and periodically as part of longer-term evaluation efforts. It is important to note that while there are important lessons to be learned from the experiences of other industrialized countries with regard to performance measurement, that the structure, objectives, and available resources of workforce development programs in other countries can be quite different from that

found in the United States – and so, caution is needed in applying the experiences of other nations to the workforce development system in the United States. Below, key findings from these interviews with officials from the OECD, as well as the Canadian and UK government agencies responsible for administering workforce programs are highlighted, with particular emphasis on the extent of use of efficiency measures and other performance measures in ongoing monitoring and periodic evaluation efforts.

Organisation for Economic Co-operation and Development (OECD). While the OECD member countries examine a range of participation and outcome measures and have conducted periodic studies examining return on investment (ROI) of workforce investment programs, OECD officials interviewed were not aware of ongoing performance monitoring systems used by member countries to track outcome-based efficiency measures of large-scale employment and training programs. Several countries were cited as having conducted special studies, some of which examined the costs and benefits of training and other services. For example, the Scandinavian countries (including Norway and Sweden) include detailed registration data, which allows for monitoring participant characteristics, services received, and employment outcomes (with an emphasis on employment outcomes rather than earnings); Ireland (the Employment, Enterprise, and Trade Agency) initiated a number of cost-benefit studies that have focused on employment and training initiatives. The studies conducted on performance of workforce programs by OECD countries tend to be one-time studies and focus mostly on short-term employment outcomes (such as initial job placement and retention at six months). Use of earnings histories (by matching to administrative earnings data collected for taxes or social insurance) is not widespread in OECD countries – though there is increasing interest in doing so. Finally, according to OECD officials, there is increasing interest in

applying random assignment (and experimental design) to employment and training initiatives. France, the United Kingdom, Sweden, and Germany have launched such studies; though again, such studies are periodic and not part of ongoing performance measurement efforts.

Canada. Canadian provincial governments are mostly responsible for structuring and underwriting job training costs, though the central government provides some funding and ongoing oversight. The two levels of government – central and provincial governments – work together to evaluate/monitor the effectiveness and cost-effectiveness of the various types of training provided (e.g., classroom, industry, apprenticeship, and other training). Officials from Canada's main employment and training agency – Human Resources and Social Development Canada – highlighted the main features of current efforts to assess the performance of key programs of this vast department both on an ongoing and periodic basis:

- **Departmental Annual Performance Reporting.** Part of the Canadian government's responsibility is to make certain there are performance measures for programs administered by the agency – and that data are collected and analyzed on performance through regular monitoring activities and periodic evaluation efforts. Each fall, a Departmental performance report is produced.[34] This annual report includes a "scorecard" on a number performance indicators for the (1) general population served (e.g., all persons qualifying for unemployment insurance payments) and (2) for several population subgroups (e.g., aboriginals, youth). There are several broad measures of program success used for the general population to gauge outcomes and cost savings – such as the percentage of unemployed individuals that return to work within 13 weeks, and savings accrued to the public purse as a result of the early return to work of unemployed workers receiving training and other assistance. Analyses and performance measures are also tailored to some extent to special populations – for example, one performance measure used is savings to the social services account.

[34]The Human Resources and Social Development Canada 2006-07 performance report is available via the Treasury Board of Canada Secretariat website at: http://www.tbs-sct.gc.ca/dpr-rmr/2006-2007/inst/csd/csd00-eng.asp. Other reports on the Department's website are the following: (1) a 2007 Employment Insurance Monitoring and Assessment report, available at http://www.hrsdc.gc.ca/en/employment/ei/reports/eimar_2007/toc.shtml; (2) a report on the Summative Evaluation of Employment Benefits and Support Measures under the Terms of the Canada/British Columbia Labour Market Development Agreement, available at: http://www.hrsdc.gc.ca/en/publications_resources/evaluation/2007/sp_ah_666_04_04e/sp_ah_666_04_04e.pdf; and (3) a 2008-2009 Report on Departmental Plans and Priorities, available at http://www.tbs-sct.gc.ca/rpp/2008-2009/inst/csd/csd00-eng.asp

- **Individual Program Annual Reporting and Ongoing Performance Monitoring.** There are also annual reports prepared on individual programs operated by Human Resources and Social Development Canada, which are more detailed than the annual Departmental report discussed above. For example, the Department prepares an annual Employment Insurance report (required by law), which draws on operational reports submitted by provinces and assesses both program outcomes and costs. Analyses are provided for Canada and at the provincial level. For example, one focus of measurement is on return to and retention in work of individuals receiving unemployment insurance. Some examples of processing efficiency measures (though not tied to program expenditures) used by the Department include the following (note: the 2008-2009 target is in parenthesis):

    - Percentage of access to automated telephone information services with no busy signals (2008-09 target: 95%)
    - Percentage of general inquiry calls answered by an agent within 18 seconds (85%)
    - Percentage of specialized calls answered by agents within 180 seconds (80%)
    - 24/7 Availability of Service Canada Internet - information and transaction (98%)
    - Percentage of Canadians with access to a Service Canada point of service within 50 kilometers of where they live (95%)
    - Percentage of notifications sent within seven days of receipt of applications (80%)
    - Percentage of Employment Insurance benefit payment or non-payment notification issued within 28 days of filing (80%)
    - Percentage of retirement benefit payment or non-payment notification issued within first month of entitlement (85%)
    - Percentage of Old Age Security (OAS) basic benefit payment or non-payment notification issued within first month of entitlement (90%)
    - Percentage of Apprenticeship Incentive Grant payments issued within 28 days of filing (85%)
    - Payment Accuracy of Employment Insurance (95%)
    - Payment Accuracy of Old Age Security (95%)
    - Client satisfaction in relation to services provided (80%).[35]

- **Periodic Evaluation Efforts.** All major programs administered by the Department are evaluated on a five-year schedule.[36] These more in-depth programmatic evaluations (typically, planned by the Department, but contracted out to private firms) examine program performance and costs in a more in-depth and controlled way than the ongoing performance monitoring efforts. Use of employment and earnings over a two- or three-year period (using both survey and administrative data) is incorporated into periodic evaluation efforts that focus on individual programs. In longer-term evaluation efforts, the Department has examined participant earnings for each dollar spent (relying on

[35] Human Resources and Social Development Canada Report Card, available at: http://www.tbs-sct.gc.ca/dpr-rmr/2006-2007/inst/csd/csd00-eng.asp.

[36] While there is not an OMB-like agency that oversees Departmental performance, there is Cabinet-level review of individual programs every four years (this group performs management oversight, looking in a more arm's length way than OMB would at program performance). In addition, new programs require a plan for future evaluation to assess program performance.

administrative data). For example, the Department has calculated costs of participation in terms of direct program expenditures (including overhead costs for third party deliverers, individual out-of-pocket costs, and foregone earnings during the participation period). The Department is able to examine overall cost, such as the average cost of skills upgrade training. The Department has found that detailed breakdowns of program costs are often more difficult to obtain than output or outcome performance. For example, the Department has found that it is onerous for staff to complete weekly time sheets (to provide a breakdown of staff costs by intervention), and as a result, has periodically conducted short-term "time and motion" surveys to allocate staff time across function and program funding sources.

The results of performance monitoring and periodic evaluation efforts are not used by the Department to punish or reward provinces. The Department is very careful in making cross-provincial comparisons because of substantial variation in population and environmental characteristics across provinces. Where problems with performance are uncovered, the Department typically "initiates a conversation" to discuss the problem and potential solutions. Departmental officials observed that with respect to implementing efficiency measures at the provincial or local service delivery level, care is needed in applying the measures so as to avoid "gaming" – for example, local program managers could potentially target easier-to-serve individuals to achieve lower (per participant) costs of service delivery and better outcomes (such as job placement and retention).

United Kingdom (UK). According to officials at the Department of Business Enterprise and Regulatory Reform (BERR), the UK workforce system features primarily a "work first" approach to delivery of services for unemployed individuals. The system operates in a more centralized manner than the U.S. workforce system, offering basically the same structure of benefits and services (with emphasis on job search assistance) across its estimated 800 Jobcentre Plus offices (i.e., there is not the kind of variability in types of services and partners that is a hallmark of One-Stop Career Centers in the United States). Jobcentre Plus's main performance

measurement targets, published in an annual business plan, are designed to improve overall productivity, efficiency, and effectiveness. The performance measures are the following: [37]

- *Helping people into work - Job Outcome Target* -- To achieve a total points score of 11.1 million based on the job outcomes Jobcentre Plus achieves.
- *Helping employers to recruit - Employer Engagement Target* -- To achieve 92% in the delivery of our services to employers according to the standards we have set for our business.
- *Delivering a good service to our customers - Customer Service Targe*t -- To achieve 86% in the delivery of services according to the standards we have set for our business.
- *Providing work-focused support at the right time - Interventions Delivery Target* -- To ensure that Jobcentre Plus work-focused support is given to customers at the correct time in 86% of cases measured.
- *Timely processing of benefit claims - Average Actual Clearance Time* -- To process customer claims for Incapacity Benefit, Income Support, and Jobseeker's Allowance within an average number of working days: Incapacity Benefit, 15 days; Income Support, 10 days; and Jobseeker's Allowance, 11.5 days.
- *Cutting fraud and error - Fraud and Error Target* -- To deliver a total volume of 2 million counter-fraud and error activities by March 2009.[38]

Each year, performance in each of these areas is assessed, but direct linkages are not made between these measures and expended funds. Budgets are set for the Jobcentre Plus program on a three-year basis. The Department considers outcomes in light of budgets and may make adjustments from year-to-year in program budgets based on outcomes and performance. Hence, in the UK there is an overall objective of getting more outcomes for a fixed budget, but performance on outcomes and decisions about an appropriate budget for a program are considered separately.

Conclusions. Based on the interviews conducted and review of background documentation, the UK and Canada (along with other OECD countries) assess the performance

[37]Performance of local centers is measured in part based on a "points" system, which adjusts to some extent performance in light of the severity of employment barriers faced by those served. Different types of individuals served get different "points" in measuring performance depending on the degree of difficulty in serving and placing the individual into work. Success in placement of harder-to-serve individuals into employment gets awarded more points (e.g., a centre might get 12 points if a single parent is moved into employment, while they may get only one point if a job-ready individual is placed).

[38]Source: From the Department of Work and Pensions website, available at: http://www.jobcentreplus.gov.uk/JCP/Aboutus/Jobcentreplusperformance/2008_-_9_Targets/index.html

of workforce development programs both on an ongoing basis and through periodic evaluations. While workforce agencies utilize performance monitoring systems to track (typically on an annual basis and often quarterly) program participation levels, outcomes, and program costs, they do not employ outcome-based efficiency measures (linking outcomes such as job placement to program expenditures). Some programs utilize processing/output efficiency measures as part of ongoing performance monitoring systems, such as measurements of accuracy and timeliness of payments to participants (but these measures are not tied to program costs). There is some concern over the potential for "gaming" if, as part of ongoing performance monitoring, program expenditures are directly linked to outcomes – mostly, the concern is that service delivery units (e.g., job centers) may target services on the less difficult to serve to reduce per-participant costs.

The UK, Canada, and OECD countries – similar to the United States – also conduct periodic evaluations of program performance. For example, the Canadian government schedules comprehensive evaluations of major workforce programs at least every five years. These evaluation studies examine program participation, outcomes (including employment and earnings based on tax records), and overall program costs in a more exhaustive, controlled, and systematic manner than the ongoing performance monitoring systems. In some cases, impact studies have been funded to examine return on investment (ROI) and statistically link employment and earnings to costs of providing services. UK and Canadian officials indicated that they do not directly reward or punish regions/provinces/localities based on outcomes or efficiencies (e.g., provide incentive bonuses tied to performance), but as part of the annual budgeting process examined outcomes in light of program budgets and, if appropriate, discuss shortcoming in performance. Overall, major industrialized countries, as yet, have not implemented the types of outcome-based efficiency measures (contemplated by ETA) for

ongoing performance management system, though some periodic evaluation efforts have rigorously examined cost-effectiveness and return on investment for workforce programs.

CHAPTER 4:

STATE WORKFORCE AGENCIES' VIEWS ON USE OF EFFICIENCY MEASURES TO MONITOR PROGRAM PERFORMANCE

Two rounds of interviews with state workforce agency officials provided an opportunity to probe state administrators about their general views on the appropriateness and feasibility of implementing efficiency measures for the 11 ETA programs, as well to obtain direct input on candidate measures, specific implementation challenges, and likely impacts should efficiency measures be applied to some or all of the ETA programs. Research staff conducted interviews with six state workforce agencies in the early stages of the study and then a second round of interviews in the concluding months of this study with five states, as follows:

- An initial round of telephone interviews of officials at workforce agencies in six states (California, Florida, Missouri, New York, Utah, and Virginia) was conducted in the early stages of this study (July/August 2008), with a focus on gathering information on performance measurement systems and efficiency measures being used to monitor workforce programs, views on possible outcome-based efficiency measures, and perspectives on possible uses and implementation challenges of such measures.

- A second round of telephone interviews with officials at workforce agencies in five states (California, Maryland, Ohio, New York, and Washington) was conducted near the end of the study (September/October 2009), aimed at gaining qualitative input on setting of efficiency measure targets/standards, as well as potential effects of co-enrollment, One-Stop self-service customers, cost sharing, and other selected issues related to implementation and use of efficiency measure results.

Because of the timing of these interviews and use of different interview instruments (see Appendix A for a copy of the questionnaires) with substantially different questions, the results of these interviews are reported in two sections below.

A. FINDINGS FROM AN EARLY ROUND OF INTERVIEWS WITH SIX STATES

The six states involved in the early round of interviews were purposively selected, with input from the ETA national and regional offices, which nominated states that were particularly active in the performance management area. While state administrators from these states generally viewed efficiency measures as potentially helpful for monitoring performance of employment and training programs, they expressed serious reservations about the use of such measures to compare states and establish standards on which states would be rewarded or sanctioned. Key findings from these interviews are highlighted below.

Existing Use of Efficiency Measures. Most of the six states interviewed during the initial round have experimented to some extent with efficiency measures in the past – mostly cost per exiter or cost per participant efficiency measures. A few states have linked costs to outcomes in such measures, though this is the exception more than the rule. Several states have initiatives to expand the use of efficiency measures in the near future. There have also been some initiatives within states by local workforce areas to track program efficiency and measure return on investment (ROI). Some efficiency measures used or being considered for future implementation in the six states interviewed are:

- cost per participant;
- cost per exiter;
- cost per registrant;
- customers served per full-time equivalent (FTE) staff;
- total cost per universal (core services) customer;
- total cost per universal (core services) visit;
- cost per service;
- cost per entered employment;
- cost per business served; and
- cost per one-on-one coaching event.

States (with the exception of one state) generally do not sanction or distribute incentives to local workforce areas based on efficiency measures; typically, efficiency measures are used to

monitor performance and identify outliers. For example, in one state, if performance is lagging on a particular efficiency measure for a given substate area, the state typically uses the area's performance on the measure as the basis for discussing performance and possible changes in service delivery strategies to enhance performance. A second state uses what it terms a "Job Stat" process, in which the state meets quarterly with local workforce agency staff to review performance before submitting the state's performance reports to USDOL. In a third state, efficiency measures have aided in better program planning; for example, where there have been exceptionally high costs per customer, local boards have been notified and given an opportunity to assess factors that may be contributing to high costs; from the state's perspective, the use of efficiency measures has helped some local WIBs to rein in costs.

When states have employed multiple efficiency measures, they have not formally weighted the measures, though some efficiency measures are considered to be more important than others from the state's perspective. Efficiency measures are generally not considered by state/local areas to be as important as outcome measures (especially when compared to performance measures reported under Common Measures, such as entered employment or job retention rates). States have not set standards/benchmarks for efficiency measures they use, and they are unsure whether such standards can be applied fairly across local workforce areas because of differences in service delivery approaches, characteristics of the population served, and environmental conditions (such as unemployment rate). One state uses cost per exiter as one of four criteria for determining if local areas qualify for WIA state incentive funds.

Challenges to Gathering Data on Outcomes. States from the early round of interviews identified co-enrollment as potentially a huge problem that could make it difficult (or impossible) to make cross-state and cross-workforce area comparisons unless all states adopt

identical service strategy and co-enrollment policies.[39] Variation in policies concerning co-enrollment was evident both across states and within states (across local workforce areas). For example, among the six states interviewed:

- One state is a "co-enrollment state" which means that virtually all WIA and ES participants are co-enrolled.[40] As a result of high rates of co-enrollment, state per participant and exiter costs are very low but may not offer an effective way of distinguishing cost efficiency of training and other more intensive services. Because of co-enrollment across WIA and ES programs, self-service (unassisted) clients swamp those receiving staff-assisted intensive and training services – driving the system to a low cost per participant served.

- In a second state, co-enrollment polices vary across local areas, which makes comparison of efficiency measures across local workforce areas (within the state) very difficult. The state has encouraged co-enrollment for a long time, and as a result, about one-quarter of the Workforce Investment Boards (WIBs) in the state are co-enrolling all Wagner-Peyser and WIA participants.

- In a third state, everyone coming through the One-Stop Career Centers is initially enrolled under Wagner-Peyser, but only small numbers of these customers go on to enroll in WIA. Wagner-Peyser funds pay for core services and part of the intensive services received by WIA customers. There is also some co-enrollment of WIA Dislocated Workers in the state-funded dislocated worker program, but when average cost per participant and exiter are calculated, they are based only on the WIA Dislocated Worker program costs (i.e., per participant costs exclude the contribution made by the state-funded dislocated worker program) Unlike some other states, co-enrollment is the exception, that is, relatively few Wagner-Peyser participants are co-enrolled in WIA (though all WIA participants are co-enrolled in Wagner-Peyser).

Officials in several states noted that with regard to efficiency measures, the numbers served (and outcomes) depend to a large extent on the types of individuals served and the types of services provided. For example, many more individuals can be served for a given amount of funds in labor exchange-type programs than in training programs. It is possible that if performance of

[39]Challenges in accounting for co-enrollment in applying efficiency measures across states and local areas was a key focus of the second round of interviews with states conducted near the end of this project and are covered in Section B of this chapter.

[40]Discussion with ETA officials indicated that several states have moved recently or are planning to move in the direction of co-enrolling all or substantial numbers of Wagner-Peyser, WIA, and TAA participants across programs. A new data system – the Workforce Investment Streamlined Performance Reporting (WISPR) approved by OMB (1205-0469) –could improve tracking of all participants in these programs. Additional background is available on the U.S. Department of Labor website, at the Performance and Results page, available at: http://www.doleta.gov/performance/guidance/wia.cfm?CFID=23589588&CFTOKEN=55168650.

states and local workforce areas is based solely on an outcome-based efficiency measure such as cost per entered employment, that over time states will gravitate away from providing more costly intensive and training services toward emphasizing labor exchange services.

Views on Efficiency Measures for Certain ETA Programs. The Work Incentive Grant (WIG) program and WIA Youth (particularly, the program component serving younger youth were singled out in interviews with state workforce officials as requiring special attention with regard to developing and applying efficiency measures:

- *WIA Youth Program* - One state administrator noted that "*Youth is a different ball game – you have older/younger; in-school/out of school youth; it is really different – you have to look at the desired outcomes for the program you are dealing with."* In particular, while employment, job retention, and earnings change are important goals for older youth served under the program, such goals are longer-term objectives for younger youth. Employment may, in fact, be counterproductive to younger participants compared to completing school and earning education credentials. As discussed later, efficiency measures that capture employment and education/credentialing would more appropriately connect to the underlying multiple purposes of the WIA Youth program component. An additional challenge with regard to the WIA Youth program is that expenditure data are only available at the national level for the program as a whole – and, unlike several performance measures applied to the program, WIA Youth expenditure data are not available broken down for expenditures on "younger" versus "older" youth served (or for in- versus out-of-school youth).

- *Work Incentive Grant Program* – Unlike the other ETA programs, the WIG program does not directly enroll or serve individual customers. Rather, the Disability Navigators (DNs) funded under this initiative are responsible for building the capacity of state and local workforce agencies to conduct outreach to and more effectively serve individuals with disabilities. In one state, for example, state administrators observed: "*WIG is an add-on program – it would be hard to look at this program the same as WIA or others. Funding goes for building an infrastructure, not delivery of services to specific participants."* In a second state, administrators noted that it would not make sense to apply efficiency measures in the same way for WIG as for other ETA programs (such as the WIA or Wagner-Peyser programs) because Disability Navigators funded under the program have no caseload and do not provide direct client services. The primary role of DNs is to train staff at the local workforce level on disability issues and effective service delivery for disabled individuals. The WIG program currently assesses program performance using the Common Measures (including entered employment, employment retention, and average earnings), but limits analysis to the workforce areas receiving Disability Program Navigator (DPN) cooperative grants. The DPN grants issued under the WIG program are aimed at systemic change – and it is important to note that Navigators funded under the

grants provide training to staff that is expected to yield improvements in access and quality of services to disabled individuals over the length of the grant period (and even after the grant is concluded). Measuring the full effects of the WIG program is also constrained by limiting performance reporting to analysis of participation levels and outcomes for WIA participants (i.e., the WIG reporting system relies on the WIASRD data) – which means that the effects of DPN grants are missed for other (non-WIA enrolled) customers of the One-Stop system (e.g., Wagner-Peyser/ES registrants). Similar to the Apprenticeship and WIA Youth programs, reasonable alternatives for measuring efficiency are needed for the WIG program, which take into consideration special circumstances with regard to program goals, types of individuals targeted and served, and services delivered.

In addition, state agency officials were concerned that One-Stop Career Center self-service customers and incumbent workers could pose problems with respect to calculating valid efficiency measure results for the WIA program. A problem with self-service customers is that while WIA funds are expended to assist such customers, they are not counted for performance outcomes (such as entered employment or post-program earnings). Therefore, in using an efficiency measure such as cost per entered employment, costs of providing services allows self-service customers to be counted in the numerator of the efficiency measure, and excludes the outcomes for self-service customers in the denominator of the measure. One potential solution factors out WIA expenditures for those self-service customers that do not enroll in WIA intensive services – though this may prove difficult because of a lack of data breaking out WIA costs by service level.

Similarly, there is a potential problem with using an outcome-based efficiency measure, such as cost per entered employment, because it excludes exiters who are employed at the time of registration. The effect of not being counted for performance purposes (i.e., because the individual is employed at the point of registration) is that funds are expended on provision of services to these individuals, and yet, there is no possibility for receiving credit with respect to entered employment. This is a particular problem for incumbent workers who receive WIA

intensive or training services, whose costs would be included in the efficiency measure calculation, but whose outcomes (e.g., entered employment) would not be. There are several possible approaches to dealing with this problem, including making adjustments after-the-fact to efficiency measure results by subtracting out costs associated with serving incumbent workers (in the numerator of the efficiency measure), adding in the number of incumbent workers exiting the program (who were excluded from the denominator), or adjusting the standard for acceptable performance.

Views of States on Future Implementation of Efficiency Measures. States are open to the idea of implementing efficiency measures and believe they can have value in terms of better managing programs and resources, but they are concerned that ETA (and others) will make inappropriate comparisons of efficiency measure results across states. The main problem cited by state administrators is that programs are administered differently, especially with regard to policies governing co-enrollment, sharing of costs (within the One-Stop Career Center system and across funding streams), types of services delivered, and methodologies used in capturing and allocating program costs. These differences can make comparisons across states (and local workforce areas) problematic. Fears of inappropriate and unfair cross-state comparisons were expressed by most of the state administrators interviewed. For example, administrators in one state worried that the federal government will make cross-state comparisons when there is so much diversity across states – and even go a step further and set identical standards or benchmarks for all states: *"We don't see a level playing field across states that would permit setting of standards across states. We are worried about the possibility of the federal government making comparisons of our state with other states. Efficiency measure data are useful to analyze and provide context, but efficiency measure data are not useful as a report card*

to compare states." In another state, administrators noted that a program such as Wagner-Peyser would "love" to implement cost per participant, exiter, or entered employment measures, because costs would be very low compared to other programs such as WIA, TAA, and SCSEP. Several state administrators noted that some programs provide more costly services, because the goal of such programs is to enhance work-related skills and capabilities, as evidenced in the comment of one such state administrator: *"Obviously, Wagner-Peyser may look better on cost per participant, exiter, and entered employment than some of the other programs that provide more intensive/training services. If data are collected and measures are available, comparisons will inevitably be made."*

Officials in several states also observed that it is important to consider long-term effects of efficiency measures on programs, and especially, the incentives that efficiency measures create which might be counterproductive to providing high quality and intensive services tailored to customer need. State and local agencies will, according to several state administrators interviewed, respond quickly and ingeniously to what they are being measured on – which could have adverse consequences on providing services that are carefully tailored to meeting customers' needs. Program officials in one state pointed out that under a performance system used over a decade ago for the Wagner-Peyser program, the state used several efficiency measures that focused on outputs per staff-year worked, e.g., obtained employment per staff-year worked and job orders per staff-year worked. The state had mixed results with efficiency measures based on staffing levels (which are no longer in use): *"Managers got sophisticated fast – for example, they told us 'please don't fill that staff vacancy'…whatever they are being measured on drives what they do…we did get their attention on what were our priorities…it is amazing how you can change behavior with incentives…people get very smart, very fast."*

Finally, state administrators offered several other recommendations on developing and implementing efficiency measures for ETA programs:

- To the extent possible, develop efficiency measures that rely upon information already being collected by states – this will reduce the cost and burden of data collection for states/local areas.

- Some programs may do well on one efficiency measure but not another – so ETA should consider implementing more than one efficiency measure.

- Be careful in selecting and implementing efficiency measures so that you do not discourage sharing of funds and co-enrollment across partners and building integrated systems.

- Be cautious about making comparisons across states and local workforce areas on efficiency measures because there are many factors that affect program participation, outcomes, and costs. Making such comparisons (and setting of performance standards) for states/local areas could potentially create strong incentives for workforce programs to provide services that are least expensive (such as labor exchange services) and not tailored to the specific needs (and best long-term outcomes) of customers served. In addition, the 11 ETA programs each have somewhat (and sometimes substantially) different goals and objectives for targeted customers.

Overall, based on the initial round of interviews with state workforce agency officials, as well as discussion with ETA representatives, if implemented, efficiency measures need to be carefully constructed and tailored to the goals of each ETA programs. Special attention is needed in determining and applying efficiency measures for the WIA Youth, WIG, and Apprenticeship programs. State workforce officials agreed that outcome-based efficiency measures could be a useful tool for monitoring program performance, but they stated that great care is needed in selecting the specific measures and determining how they will be applied over time to monitor program performance. In particular, there was concern that state and local programs could potentially be unfairly compared with one another (e.g., both in terms of comparisons of results across states for an individual program or simplistic comparisons of efficiency measure results across all of the programs at the national or state levels).

Additionally, if efficiency measures are eventually applied to states and local workforce areas, there was concern about adverse long-term consequences for the types of persons served and services provided. Many of the concerns and challenges to establishing efficiency measures identified in the first round of interviews with state workforce agencies were echoed (and elaborated on) during the second round of states interviews, the results of which are summarized in the next section.

B. FINDINGS FROM A SECOND (LATE) ROUND OF INTERVIEWS WITH FIVE STATES

The aim of the second round of telephone interviews with five states conducted near the end of the project was to gain more qualitative input on candidate efficiency measures and the setting of efficiency measure targets/standards, as well as potential effects of co-enrollment, enrollment of One-Stop self-service customers, and cost sharing on efficiency measure results. Initially, the team worked with PROTECH to identify states appropriate for these interviews, giving consideration to factors such as size and location of the state, numbers of WIA/ES/TAA co-enrollments, and numbers of One-Stop self-service customers being enrolled under WIA. Five states were selected for interviews: California, Maryland, Ohio, New York, and Washington. The discussion guide attached in Appendix A guided interviews, which were conducted in September and October 2009. Key findings from interviews conducted with the five state agencies are highlighted below, with a particular focus on some of the specific challenges to implementing efficiency measures across the 11 ETA programs.

Co-enrollment Policies/Practices. The co-enrollment policies and practices across the five states interviewed varied considerably. All the states allow for co-enrollment, but some states are much more aggressive in their promotion of co-enrollment across programs. In four of

the five states (excluding New York), administrators noted that there is variation across local workforce areas in co-enrollment practices. At one end of the range is New York, which strongly encourages local workforce areas to co-enroll individuals across WIA, ES, and TAA. New York was the only state of the five interviewed that has policies that result in the automatic co-enrollment of staff-assisted Wagner-Peyser participants into WIA. New York's interpretation is that federal regulations (issued in a DOL TEGL) require the state to enroll individuals into a particular program if the services they receive are a staff-assisted service that is wholly or partially funded by a particular funding source. The state's policy is to enroll One-Stop customers into a particular program (such as WIA or ES) once they have receive a staff-assisted service. Customers coming into One-Stops are normally assessed (during their first or second visit), which is considered to be a staff-assisted service – and are co-enrolled in both the Wagner-Peyser and WIA Programs. Further, if an individual is enrolled in TAA, he or she would also be co-enrolled under the WIA-Dislocated Worker and Wagner-Peyser programs. As a result of the state's policy, there has been a very large increase in the number of Wagner-Peyser participants co-enrolled into WIA (and, overall, WIA participation has surged in the last several years).[41]

At the other end of the spectrum among the five states interviewed is Maryland, which allows co-enrollment, but cautions local areas that they will still be held accountable for meeting performance standards for each program (and that those co-enrolled will be included in performance measure calculations for each program in which they are enrolled). Maryland officials noted that in the past, some local areas that co-enrolled WIA Adult customers into the WIA-Dislocated Worker program have experienced some difficulties in meeting WIA Dislocated Worker performance standards – in particular, meeting the earnings performance measure. The

[41] See Chapter 7 for data on the surge of enrollments under WIA during the past three program years in New York (in comparison to other states).

state has a policy that One-Stop customers receiving WIA Adult services are to also be co-enrolled under Wagner-Peyser. In contrast, local areas are not encouraged to enroll Wagner-Peyser participants into WIA (though they are allowed to do so). The longer average training period for the WIA Dislocated Worker and TAA programs conflicts with a performance measure applied to the Wagner-Peyser program – namely, that Wagner-Peyser participants obtain employment within six months of being registered under the Wagner-Peyser program. Hence, the state does not encourage local areas to co-enroll either WIA Dislocated Workers or TAA participants into the Wagner-Peyser program.

Ohio, and California's policies regarding co-enrollment are in the middle ground between Maryland and New York – both states encouraged co-enrollment (though do not mandate it) and had special co-enrollment initiatives involving some local workforce areas. Generally, California encourages local workforce areas to co-enroll One-Stop customers under WIA, ES, and TAA (when appropriate) so that customers receive the full range of services that are needed. Since July 2008, the state has been piloting a co-enrollment initiative in 12 of its 49 Local Workforce Investment Areas (LWIAs). In local workforce areas involved in the pilot, all One-Stop customers are first enrolled in the Wagner-Peyser program. Most Wagner-Peyser participants are then co-enrolled under WIA once they receive a staff-assisted service (which includes an initial assessment) and are counted for performance purposes under both the WIA and Wagener-Peyser Programs. TAA participants in pilot sites are all co-enrolled in the WIA Dislocated Worker program; if a WIA Dislocated Worker is TAA-eligible, he or she is co-enrolled under TAA. Because there are several large LWIAs involved in the pilot, the state has experienced an increase in recent years in the number of co-enrolled customers across the state (particularly, in the number of Wagner-Peyser participants co-enrolled under WIA).

In Ohio, co-enrollment is encouraged between the WIA, TAA, and Wagner-Peyser programs, but there is no mandate to do so. The state has what it terms "integrated" local areas, which are seven local areas and part of an eighth local area (of the state's 20 LWIAs) that are working under a mandate that all TAA participants also be co-enrolled under the WIA Dislocated Worker Program. The state is in the process of expanding this integration project throughout the state. The state began this integration project in the areas with the highest concentration of trade-affected workers. Within Ohio, there is no mandate for co-enrollment of Wagner-Peyser participants in WIA. However, there is considerable co-enrollment between the Wagner-Peyser and WIA programs.

Finally, the State of Washington is similarly in the middle ground with Ohio and California. The state has no formal policy on co-enrollment, but has what it terms an "integrated framework." [42] Generally, the state encourages co-enrollment across workforce development programs when it is appropriate, but it is not required. The state wants local areas to take a holistic approach to serving customers – the states encourages local workforce areas to co-enroll across workforce programs when it benefits the customer, but it does not encourage co-enrollment for the sake of co-enrollment. As a result of the state's flexibility, there is some variation across local areas in co-enrollment across local workforce areas in the state. In particular, two local workforce investment areas (the Southwest and Spokane WIBs) have been co-enrolling quite a few Wagner-Peyser participants under WIA. State officials, however, observed that these two local areas had scaled back on co-enrollment recently because they had found that co-enrollment had lowered their WIA performance outcomes relative to other areas as their participant cohorts took on Wagner-Peyser characteristics.

[42] See state's web site for additional details (at http://www.wa.gov/esd/1stop/).

Change in the Numbers and Proportion of Co-Enrolled Customers. Three of the five states interviewed indicated that there had been an increase in co-enrollment – with New York indicating that there has been a very substantial increase in co-enrollment. New York's policy regarding co-enrollment across WIA, ES, and TAA went into effect in July 2006 – and as a result, there have been dramatic increases in both the number and percentage of individuals co-enrolled across these programs. In contrast, Maryland has seen some increase in the numbers of WIA Adults co-enrolled in ES (but not the reverse), and there has been a decrease in co-enrollment between WIA Adult and WIA Dislocated Worker Programs because of fear that WIA Adults could potentially drag down performance on the WIA Dislocated Workers earnings performance measure. California and Ohio have experienced somewhat of an increase in numbers of co-enrolled individuals in recent years, in part due to state encouragement for co-enrollment (when it is appropriate) and because of co-enrollment pilot projects involving local areas. Washington reported there have not been shifts in co-enrollment patterns across programs in recent years.

Views on How to Deal with Co-Enrollment in Measuring Program Efficiency. States emphasized that ETA should take great care in implementing efficiency measures. In particular, because of the potential effects of co-enrollment, cost sharing, and other cross-state differences on efficiency measure results, administrators in all four states indicated that ETA should not implement state-level performance standards with regard to efficiency measures and states should not be rewarded or sanctioned based on efficiency measure results. There is much concern that efficiency measures could potentially drive states in the direction of offering lower cost services, at a time when ETA is pushing states to provide more training. One state administrator observed that:

> "Low cost is not an indicator of a quality program – efficiency does not measure quality of services provided. The purpose of performance measures is to drive a program toward meeting certain objectives – it would be a big mistake to put a measure out there without knowing how you want to drive the program. It would be bad idea to have efficiency measures unless you want to drive the program toward provision of cheap services. ETA is pushing a training agenda right now, which is not consistent with providing low-cost services (which are the likely result of implementing efficiency measures)."

In another state, an administrator was worried about ETA eventually moving toward adoption of "system-wide" efficiency and outcome measures: "Because of its emphasis on automated service and job placement – and the much larger number of customers served under Wagner-Peyser – efficiency measure results (such as cost per entered employment) on system-wide measures would be largely driven by the ES (and be very low compared to similar measures for WIA and TAA participants who receive much more expensive training services)."

Accounting for Program Costs. All five states interviewed receive WIA expenditure data from local areas and could potentially provide this data to ETA at minimal costs if the content and format of the data are the same as that submitted by local areas. There was some concern expressed about ETA creating additional paperwork burden for states and local areas -- for example, one state administrator observed that states are very busy and do not necessarily have time and resources to format and send the data to the federal government; an administrator from a second state observed that if the federal government introduced a new form and the formatting required different breakdowns from what is currently being provided by local areas, it could be very expensive for the state to provide the local area expenditure data to the federal government. A third state noted that a challenge to collecting and reporting from local workforce areas in the state is that each local area has its own financial system, so the content and format of expenditure data varies. This also has implications for the state (or federal government) changing requirements for content or format of expenditure data submitted by local

workforce areas – namely, that each area in the state would need to implement changes to collection and/or reporting of expenditure data.

Four of the five states do not receive expenditure data from local areas disaggregated by service level. The fifth state – New York - just started to require local areas (as of March 2009) to provide additional expenditure breakdown (each month) on training costs for three types of training: Individual Training Accounts (ITAs), On-the-Job Training (OJT), and customized training. The training breakdown is for direct costs of training (i.e., does not include staff or infrastructure costs). It has not been difficult for LWIAs to provide direct training costs, but New York state administrators noted that it would be difficult if LWIAs were required to disaggregate and report indirect-type costs (such as staff costs associated with intensive services, which result in an individual being referred to training). States were primarily concerned with the costs associated with requiring states to submit service level expenditure breakouts and difficulties with breaking down non-training related costs (especially indirect costs). For example one state administrator observed that the state and localities are facing serious resource constraints right now:

> "The state and local areas are strapped for cash—they would need additional resources to cover extra reporting costs. The state's IT [Information Technology] staff are facing a lot of demands on their time, especially with making system changes associated with extended UI benefits and TAA program changes; stimulus-related changes seem to be coming down each day. In addition, local governments are struggling with layoffs because of a loss of local tax revenues – many One-Stops in the state, for example, are cutting back staff right now because of budget cutbacks."

Finally, all five states interviewed indicated that within a One-Stop environment there is extensive cost sharing, especially between WIA and the Wagner-Peyser program. State administrators were in agreement that it would be very difficult to account for shared costs across programs and had no specific suggestions on how to account for shared costs in

calculating efficiency measure results for coordinated programs such as WIA, TAA, and the Wagner-Peyser programs.

Accounting for Self-Service Customers. Receipt of staff-assisted services typically transitioned One-Stop customers from being "self-service" customers to being enrolled in a particular program (such as WIA) and counted for performance purposes. For example, one state administrator observed: "The state and LWIAs use TEGL definitions (i.e., "significant staff assistance") to determine when customers are counted for performance purposes." States acknowledged that it is somewhat of a problem to exclude such customers from efficiency measure results on the outcome side (in the denominator of the efficiency measure), while counting costs associated with serving self-service customers (in the numerator of the efficiency measure results). The states indicated that costs associated with self-service customers are not all that great (especially when compared to intensive and training services). The states did not have specific recommendations on accounting for self-service customers in calculating efficiency measure results – though because costs are not that significant for this group, several states indicated that it is probably best to leave this group out of the outcomes but include costs associated with this group in the efficiency measure result (as long as this is done uniformly across states). It would be difficult for states to break out costs associated with serving self-service customers in One-Stops.

Accounting for Incumbent Workers. With regard to incumbent workers, states are in agreement that not counting incumbent workers in certain outcomes and for efficiency measure results is problematic, but states are divided on how to deal with this issue. One state that served relatively few incumbent workers (Maryland) indicated that it might be better to look at incumbent workers separately – that is, look at funds given to companies for incumbent worker

training and the numbers of incumbent workers served (and their outcomes). For incumbent workers, this state indicated it would be important to look at wage gain (as an outcome) and wage gain in relation to expenditures (as an efficiency measure). A second state (California) thought incumbent workers should be included in efficiency measure results. A state administrator noted that if job retention (rather than entered employment) is used as the basis for the efficiency measure, incumbent workers would be included in both outcome and efficiency measure results. Because of this, this administrator felt that job retention might be a better measure to use than entered employment (which excludes exiters who are employed the quarter prior to enrollment) as the basis for measuring program efficiency. A third state (New York) indicated that it served some incumbent workers and advocated with regard to efficiency measures such as cost per entered employment that incumbent workers should be included. In Washington ,the numbers of incumbent workers served varies in cycles (i.e., from year to year), and there is also considerable variability across localities. State administrators noted that one way to incorporate incumbent workers into performance measurement would be to switch to employment rate rather than entered employment rate (which under WIA performance standards, excludes workers who are employed the quarter before entry into WIA). Finally, Ohio state workforce officials noted that incumbent workers served in the WIA Adult and Dislocated Worker Programs are typically served under waivers. As such, they do not count for outcome measures, and yet, they are served with WIA funds and so the costs of serving such individuals would potentially count on the cost side but not on the outcome side in an efficiency measure such as cost per entered employment. Administrators in this state (and other states) felt there was no good way to adjust for incumbent workers in efficiency measure results.

Accounting for Costs Spread Over More than One Year. This was an issue for each of the five states, and it is particularly, likely to affect efficiency measure results for programs such as WIA, Apprenticeship, and TAA that offer longer-term training. For example, one state (Ohio) estimated that 70 percent of WIA participants are engaged in training that is spread across two or more program years. Two states (California and Maryland) indicated that the only way to really solve this problem is to track expenditures by participant, but that states and local areas do not do this and it would be costly to do so. Washington state workforce officials noted that some costs that are spread across multiple program years are more difficult than others – for example, while it is possible to track and adjust for costs such as individual training account (ITA) costs, it is difficult to track non-training related costs (such as costs related to the provision of intensive services).

Return on Investment as a Methodology for Assessing Program Efficiency and Effectiveness. Four of the five states interviewed (with the exception of Washington) have not used ROI in recent years to assess program performance or efficiency (though some local areas within states have attempted to implement ROI studies). Washington state workforce officials indicated that cost-benefit analysis is conducted on workforce programs every four years. These officials acknowledged that cost-benefit and ROI-type studies are "kind of expensive and there is variability in methodology to generate consistent numbers…it would be difficult to estimate ROI every year." State workforce officials in all five states agreed that ROI studies can be expensive and complicated – and that results are not always timely – for example, according one state administrator, "Timeliness is an issue with ROI – it may be 10 years before you get the ROI results. It is important to look to see if you can get data you need and get it quickly enough to make ROI results useful." Overall, officials in the five states agreed that it would be impractical

to use ROI for regular/ongoing performance monitoring, but that it could be a useful tool for periodically evaluating program performance.

Overall Views on Implementation of Efficiency Measures. Overall, the five states interviewed are in general agreement that efficiency measures that regularly examine program costs and efficiency are important, but that efficiency measures should not be incorporated into the annual Common Measure performance measurement process whereby performance standards are set for individual measures and states are reward or sanctioned based on whether standards are met. Several state administrators worried that if efficiency measures are implemented as part of regular performance measurement they would likely drive states/local areas toward providing less costly labor exchange services (such as under Wagner-Peyser) – and that this would work against states and local areas providing training to enable workers to upgrade skills in order to fill higher skilled/wage jobs. Reflecting underlying concerns in several of the states interviewed, one state official observed: "It is easy to get carried away with efficiency and this could create wrong incentives to ignore certain subpopulations on equity and efficiency measures. Efficiency measures may also create perverse incentives to avoid more effective treatments…be careful on incentives—they can come back to bite you – and be careful on how you set standards."

CHAPTER 5:

OPTIONS AVAILABLE, ANALYSIS, AND CHALLENGES TO MEASURING COSTS IN CALCULATING EFFICIENCY MEASURES

As discussed earlier in Chapter 1, in order to generate an efficiency or unit cost measure, it is necessary to account for costs in the numerator of the measure and a unit of participation, service delivery, or outcome in the denominator of the measure. This chapter focuses on the cost portion of the efficiency measure calculation, examining the three options available for measuring costs, providing a recommendation on which cost type should be used, and detailing challenges to appropriately and consistently capturing costs when measuring program efficiency.

A. OPTIONS AVAILABLE, ANALYSIS, AND RECOMMENDATIONS FOR MEASURING PROGRAM COSTS

Based on discussions with ETA officials (and a review of the literature and available data sources within ETA), three potential types of "cost" data could be considered for the numerator of each efficiency measure:

- **Appropriations/Allotments –** "Appropriations" are defined by the Government Accountability Office as "*Authority given to federal agencies to incur obligations and to make payments from Treasury for specified purposes.*"[43] Appropriations are generally the amount of funding made available by Congress for spending on a given program (such as the TAA program) during a fiscal year. Appropriations have been used by ETA in calculating "cost per participant" for programs such as WIA and Wagner-Peyser. Such measures have been used primarily as part of the planning process prior to the start of a program year to estimate the numbers of individuals who can likely be served for a given funding level. Allotments are the amount of appropriated funds distributed to a state or grantee based upon a legislative or regulatory formula.[44] Allotments exclude amounts retained by the federal government to administer programs. In programs that do not have

[43] See U.S. Government Accountability Office (2004). *Principles of Federal Appropriations Law*, Third Edition, Volume 1. Washington, DC: U.S. Government Accountability Office Report GAO-04-261, SP, p. 2-5.
[44] Although the term "allocation" is used quite often in an interchangeable manner with allotment, in the context of formula programs the appropriate term is allotment.

a formula distribution, this term may be used to denote the discretionary amount planned to be distributed to a grantee/contractor.

- **Obligations –** According to the General Accounting Office (GAO), *"…obligations reflect orders placed, contracts awarded, and other similar transactions during a fiscal year. As an expression of an agency's total financial commitments for a given period, gross obligations portray the relative size of an organization, without regard to the type of underlying budgetary resource or when resulting outlays may occur."*[45] Hence, obligations are funds that have been committed through contracts, grants, and other vehicles.

- **Expenditures –** Expenditures are funds paid or the amount of funds due (depending on whether a cash or accrual basis is used) for provision of goods or services pursuant to a grant or contract agreement. With regard to accounting for various program expenditures, ETA's Office of Financial and Administrative Management (OFAM) noted (in an electronic response to a question posed by the research team) that *"as far as the accounting process for the various levels, the process varies depending on what type of program you look at and how it operates. The general process is that DOL obligates federal funds to direct grantees, and requires those grantees to provide financial reports which include cash transactions, obligations for lower level grants or contracts, and cost reporting. There could be several levels of grants/contracts below DOL, but the direct grantees are responsible for summarizing all financial data for those sub-levels when reporting back to DOL."*[46]

Telephone interviews with six states and discussions with ETA program officials, as well as analyses of data on individual programs, confirmed that expenditure data should be used when calculating efficiency measures for ETA programs. Expenditures are preferred to allotments or obligations because they are based on what is actually expended on providing services for program participants, taking into consideration rescissions, transfers between programs, and expenditure of program funds across more than one program year. Exhibit 5-1 provides an illustration of how the use of expenditures versus allotments can make a difference when calculating cost per entered employment for a program such as the WIA Adult program.

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[45]United States General Accounting Office (GAO), *Federal Budget: Agency Obligations by Budget Function and Object Classification for Fiscal Year 2003*, GAO-04-834, June 2004 (available at http://www.gao.gov/new.items/d04834.pdf).

[46]Also according to OFAM, the term "drawdown or payment" is sometimes used to reflect the "transfer of cash to a grantee/contractor based on grantee requests/contractor invoices to reimburse the grantee/contractor for expenditures on a valid grant/contract. Source of quotations in footnote and text is OFAM electronic response to a question.

EXHIBIT 5-1: VARIATION IN COSTS (WIA ADULT, PY 2005)

State	PY 2005 Allotments	PY 2005 Expenditures	Difference (Expenditures - Allotments)	Percentage Difference
Total	$972,406,996	$989,481,877	$17,074,881	1.8%
New Mexico	$6,460,982	$9,547,783	$3,086,801	47.8%
Delaware	$1,978,186	$2,505,938	$527,752	26.7%
Nevada	$4,643,187	$5,729,486	$1,086,299	23.4%
Mississippi	$12,201,673	$15,006,538	$2,804,865	23.0%
Hawaii	$3,026,432	$3,686,765	$660,333	21.8%
New Jersey	$21,742,322	$25,210,314	$3,467,992	16.0%
Kentucky	$17,150,395	$18,785,452	$1,635,057	9.5%
North Carolina	$30,650,748	$33,559,283	$2,908,535	9.5%
Louisiana	$20,206,337	$22,087,656	$1,881,319	9.3%
Washington	$22,810,203	$24,588,371	$1,778,168	7.8%
Florida	$42,534,930	$45,228,422	$2,693,492	6.3%
Puerto Rico	$35,811,897	$38,032,686	$2,220,789	6.2%
Utah	$5,186,709	$5,452,807	$266,098	5.1%
Oregon	$16,023,659	$16,644,227	$620,568	3.9%
Pennsylvania	$33,565,397	$34,786,979	$1,221,582	3.6%
Michigan	$41,989,813	$43,393,133	$1,403,320	3.3%
Texas	$88,060,741	$90,920,855	$2,860,114	3.2%
Arizona	$16,629,687	$17,133,496	$503,809	3.0%
Ohio	$40,994,031	$41,977,559	$983,528	2.4%
New York	$77,930,704	$79,595,396	$1,664,692	2.1%
Wisconsin	$11,542,384	$11,772,235	$229,851	2.0%
Wyoming	$2,640,294	$2,676,683	$36,389	1.4%
Alabama	$17,442,093	$17,665,302	$223,209	1.3%
Illinois	$44,436,912	$44,847,898	$410,986	0.9%
Idaho	$2,801,747	$2,815,094	$13,347	0.5%
Minnesota	$9,435,871	$9,412,227	-$23,644	-0.3%
California	$137,225,360	$136,577,973	-$647,387	-0.5%
Montana	$2,561,631	$2,540,090	-$21,541	-0.8%
Maryland	$9,919,836	$9,778,360	-$141,476	-1.4%
Nebraska	$2,499,885	$2,460,076	-$39,809	-1.6%
Missouri	$15,743,342	$15,480,533	-$262,809	-1.7%
Virginia	$12,535,527	$12,322,012	-$213,515	-1.7%
New Hampshire	$1,900,876	$1,857,842	-$43,034	-2.3%
Kansas	$6,673,042	$6,497,283	-$175,759	-2.6%
Rhode Island	$2,824,329	$2,714,604	-$109,725	-3.9%
Tennessee	$19,176,233	$18,420,971	-$755,262	-3.9%
Massachusetts	$14,684,986	$14,037,922	-$647,064	-4.4%
Georgia	$16,958,731	$16,091,106	-$867,625	-5.1%
Alaska	$3,029,756	$2,858,082	-$171,674	-5.7%
Maine	$3,069,783	$2,869,752	-$200,031	-6.5%
North Dakota	$2,218,186	$2,064,034	-$154,152	-6.9%
Connecticut	$7,592,184	$6,955,344	-$636,840	-8.4%
West Virginia	$6,286,348	$5,747,333	-$539,015	-8.6%
Arkansas	$9,574,708	$8,710,671	-$864,037	-9.0%
Iowa	$4,265,476	$3,854,824	-$410,652	-9.6%
Oklahoma	$9,753,985	$8,582,068	-$1,171,917	-12.0%
District of Columbia	$3,876,655	$3,388,419	-$488,236	-12.6%
Colorado	$13,187,525	$11,452,728	-$1,734,797	-13.2%
South Dakota	$2,385,238	$2,020,786	-$364,452	-15.3%
Vermont	$2,249,082	$1,859,946	-$389,136	-17.3%
Indiana	$15,987,777	$12,916,277	-$3,071,500	-19.2%
South Carolina	$18,329,181	$14,360,256	-$3,968,925	-21.7%

Note: Total excludes funds not distributed to states; data provided by OFAM.

As shown in the exhibit, for the United States overall, in PY 2005, expenditures in the WIA Adult program were slightly higher (about $17 million or 1.8 percent) than allotments. Despite the relatively small difference at the national level, as shown in Exhibit 5-1, there can be substantial differences between allotments and expenditures at the state level; for example, in 13 states, the percentage difference between expenditures and allocations is plus or minus 10 percent or more, and in one state, the difference was nearly 50 percent.

Actual expenditure patterns can be quite different from allotments and obligations because of transfers of funds, rescissions, and allotted funds not expended. Within a state (or at the local workforce level), patterns of expenditures can change based on priorities and needs of states and local workforce areas (based on changing economic conditions and needs of the individuals served by each program). In WIA, for example, funds can be transferred to some extent among the Adult, Dislocated Worker, and Youth programs; and Governors can move funds from one local workforce investment area to another if the funds are not being spent. Original allotments can also be affected by rescissions and supplemental appropriations. As another example, in PY 2008, the Department of Labor is required to apply three different rescissions, which result in an across-the-board cut of allotted funds to states.[47] Such rescissions result in cutbacks of training and other services (thus, affecting overall expenditure levels).

[47] The rescissions are to be applied to various WIA funds during FY 2008 as follows: (a) to the FY 2007 Advance fund year source, a 1 percent across-the-board rescission; (b) to the FY 2008 Advance fund year source (appropriated in advance in the FY 2007 appropriation act), a 1.747 percent across-the-board rescission; and (c) to unexpended balances of formula funds appropriated for PY 2005 and PY 2006 which includes fund year sources PY 2005, FY 2006, PY 2006, and FY 2007, a rescission of $250 million, required by P.L. 110-161, applicable to the WIA Adult, Dislocated Worker and Youth formula programs only. For additional details, see U.S. Department of Labor, Training and Employment Guidance Letter No. 24-07, "Rescissions During Fiscal Year 2008 for Workforce Investment Act (WIA) Programs, issued March 26, 2008, available at: http://wdr.doleta.gov/directives/corr_doc.cfm?docn=2620.

EXHIBIT 5-2: ARGUMENTS FOR AND AGAINST VARIOUS MEASURES OF COSTS

Types of Costs	PROS	CONS
Appropriations/ Allotments	• Available at beginning of program/fiscal year • Not subject to revision due to audits	• Does not reflect resources used to produce outcomes—funds can be used from prior years, carried over to future years, be reallocated, or be rescinded • For longer programs, particularly programs that last more than one year, appropriations/allotments in a single year fail to capture all the resources spent on exiters for that year
Obligations	• Available sooner than expenditures • Closer than appropriations to concept of resources used to produce services	• Does not reflect resources used to produce outcomes in particular year • More difficult to track than appropriations/allotments and expenditures • For longer programs, particularly programs that last more than one year, obligations in a single year may fail to capture all the resources spent on exiters for that year
Expenditures	• Measures resources used to produce outcomes, which is goal of efficiency measure • Expenditures audited for accuracy • Viewed as fairest measure by states and program offices	• Can be revised due to audits • Require more time to gather data than other cost measures • For longer programs, particularly programs that last more than one year, expenditures in a single year fail to capture all the resources spent on exiters for that year

Exhibit 5-2 (above) provides an overview of the arguments for and against each of the measures of cost for use in calculating efficiency measures. It is recommended that ETA use actual expenditures (rather than appropriations, allocations, or obligations) in calculating efficiency measures because (1) expenditures can vary substantially from what is initially appropriated/allocated, especially at the state level (e.g., because of transfers, rescissions, and unexpended funds unexpended funds); and (2) expenditures reflect what is actually spent on delivery of services and capture the underlying notion of efficiency. States interviewed, ETA

program offices, and the Expert Panel endorsed the use of expenditures over the other available measures of costs.

B. CHALLENGES INVOLVED IN PRODUCING ACCURATE AND TIMELY EXPENDITURE DATA TO PRODUCE VALID AND RELIABLE EFFICIENCY MEASURE RESULTS ACROSS STATES

Even though use of actual expenditure data is recommended for calculating efficiency measures, there are a number of challenges and issues that arise in using expenditure data. Among the main challenges, most of which were identified in discussions with state administrators, are the following:

Challenge #1 - Varying Cost Allocation Methods Used Across States and Local Areas. The ways in which states and local workforce areas collect, allocate, and report on expenditures vary substantially. For example, an official in one state workforce agency observed: "There are different ways that states account for costs – how do you standardize across states? There are also differences in accounting procedures below the state level (at the local level). Within our state, for example, Wagner-Peyser pays for some of the core and intensive services for WIA enrollees." Two particular problems with respect to allocating and reporting expenditures were cited in discussions with states and ETA program officials, which could affect efficiency measure results (and undercut comparability of results across states and local areas)**.** These two issues are discussed below.

Sharing of Costs across Programs and in the One-Stop Career Center System Clouds Calculating Efficiency Measures by Funding Stream

Over the past decade, there has been a mandate to build a comprehensive One-Stop Career Center system that brings together various programs within a single physical location and shares (to the extent possible and appropriate) the costs of serving individuals. States have

created One-Stop delivery systems supported by Memoranda of Understanding (MOUs) and cost allocation plans in local areas with the intent of leveraging resources from Wagner-Peyser, WIA, TAA, and VETS, as well as other local partners. The range of other funding sources/partner programs in One-Stop Career Centers is designed meet needs of customers served by the workforce investment system. In such a system, individuals may receive services by one or more programs (either at the same time or sequentially), and various funding streams may be brought together to pay for services. For example, an individual enrolled in the WIA Dislocated Worker program may also be co-enrolled and simultaneously (or sequentially) receive services paid for by the WIA Adult, TAA, Wagner-Peyser, and/or non-DOL programs. Core unassisted services—when a participant first comes into the One-Stop Career Center—may have been paid for with Wagner-Peyser, WIA, and/or other funding sources (e.g., county funding), while training services may be reimbursed by a combination of WIA Dislocated Worker and TAA funding (perhaps combined with and further subsidized with funds from a Pell Grant, state-funded training assistance program, or subsidized training at a community college.) Hence, the sharing of funds and co-enrollment of participants, which can greatly affect numbers of individuals served across programs, makes it complicated (at times nearly impossible) to isolate costs of serving a particular individual with a particular funding stream. One state administrator warned that if ETA was not careful in developing and applying efficiency measures that there could be an adverse effect on the One-Stop Career System:

> "Why is DOL looking to develop efficiency measures for individual programs/funding streams versus the system as a whole? For the last 9 or 10 years, we have been talking about creating a 'system.' If this is the case, we don't know if calculating cost per participant, etc. by program (funding stream) is the best thing. Our state has undertaken serious efforts to build a workforce development system. A fundamental question I would ask is what are we doing with individual program measures? There are system costs for all of these programs operating in a One-Stop environment. There are also shared costs. The whole idea is to share performance across programs/funding streams.

> It is important to look at what performance looks like in a One-Stop Career Center where you leverage performance and cost. It is confusing to states to ask them to develop systems on the one hand, but be accountable for individual programs (and funding streams)."

One possibility would be to develop a "composite efficiency measure" for the One-Stop system as a whole. One of the challenges to developing a composite measure for the One-Stop system is that some of the 11 ETA programs are not located at the One-Stop (e.g., in some states, there still exists stand-alone Wagner-Peyser/ES offices that operate in tandem with One-Stops). A One-Stop is a place – not a program – that offers a varying constellation of voluntary and mandatory partners from one state to another (and even within states, sometimes there is variation within and across localities as well). As a result, comparing cost per placement or other outcome-based efficiency measures is complex. Further, the cost of supporting One-Stop operations comes from a variety of sources outside of ETA programs that may be difficult or impossible to track (e.g., county government or TANF programs may be contributing to paying the operating costs of the One-Stop, but are not included in the 11 ETA programs). An alternative to a composite measure for the One-Stop system would be a composite "system" measure that would assess efficiency across the 11 ETA programs, or possibly a broader array of programs including TANF, Food Stamps Employment and Training, and similar programs. An example would be to calculate cost per placement using all expenditures across the 11 ETA programs in the denominator and an unduplicated count of job placements across the same ETA programs (taking into consideration co-enrollments across WIA, TAA, and other programs by counting co-enrolled individuals only once).

Complexities of Calculating Staff Time by Program Activity

Allocating staff time by activity is a particular challenge should DOL institute a cost per activity-type efficiency measure. Staff time is a major cost item for all of the programs. Some

states use time sheets or random moment time studies to allocate staff time across funding streams. For example, among the states interviewed, one state uses random moment time sampling to allocate staff time across programs – WIA, Wagner-Peyser, etc. – at the state and local levels; however, within a program such as WIA, the state does not track staff time devoted to core, intensive, or training services. A second state uses a case study approach to break down costs by activity: under a special study focusing on a small number of local workforce areas in the state, a team of university researchers conducted site visits to One-Stop Career Centers to develop estimates of staff and other expenditures by program activity within the One-Stop setting.[48] This proved to be a very time intensive and the researchers uncovered idiosyncrasies in co-enrollment, sharing of costs, and accounting for costs that made it difficult to make valid comparisons across local areas.[49]

Challenge #2 - Need to Account for Expenditures of Funds Received Over Multiple Years. After programs receive an initial allotment of funding in a program, states and local workforce areas have several years to expend funds (for example, under the WIA program, states have up to three years to expend program funds after they have been allocated for a given program year). As a result, when collecting and analyzing expenditure data to support efficiency measure calculations, it is necessary to gather expenditure amounts from allotments for the current program year and past program years expended during the program year of focus. For example, for WIA, this means that to calculate cost per entered employment for PY 2006, expenditures that occurred during the program year (July 1, 2006 through June 30, 2007) of

[48]Richard Moore, Phillip Gorman, and Andrew Wilson, *California One-Stop System Cost Study Report,* prepared for the California Workforce Investment Board, prepared by California State University at Northridge, October 18, 2007.

[49]An alternative to collecting cost data by activity would be to take into account the activity mix of participants (e.g., the percentage of individuals trained) when setting performance standards for efficiency measures).

program funds received for the current program year (PY 2006), as well as the two previous program years (PY 2004 and PY 2005) would have to be gathered.

Challenge #3 – Expenditures for Individuals Served by the 11 Programs May Occur over One or Several Years. Customers are enrolled in programs for varying periods, depending upon the types of services delivered. For a labor exchange program, such as the Wagner-Peyser program, expenditures typically occur over a relatively short period of time – several weeks to several months. Such expenditures typically would be confined to one or two program years, depending upon when an individual enters the program (e.g., if an individual enrolled near the end of the program year, then participation could easily stretch across more than one program year). At the other extreme are programs that provide substantive training, such as the Apprenticeship, WIA, and TAA programs. For example, individuals enrolled in WIA and TAA may participate in training that extends over two or three program years (using funding stretching across multiple program years). Expenditures on apprentices may go on for up to five years, depending on the length of the apprenticeship program. To further complicate matters, the funding for training costs for apprentices comes from states, unions, and/or employers (rather than the federal government). The duration of program participation and expenditures for other ETA programs also varies considerably – for example, an older worker may be engaged in subsidized work under the SCSEP program for one year or much longer. The overlapping of expenditures across two or more program years is not a big problem, but because an individual is counted as exiting or entering employment only for the last year of participation in the program, it requires a simplifying "steady state" assumption (i.e., that although costs of serving an individual may lap across more than one year, unless there are extraordinary changes in patterns

of expenditures or exiting, costs per outcome will even out over the long run and from year to year).

Challenge #4 – Lags Occur in Reporting on Expenditures at Various Levels of Government and Final Expenditure Data May Not Become Available for Several Years After the Fact. For programs with several administrative levels, there may be a significant time lag between when money is spent at the lowest program level (such as a service provider or contractor) and when it is reported to the local workforce area or grantee, the state, and finally, the federal government). States submit final annual expenditure data for the ETA programs generally within 90 days of the end of each program year. However, the expenditure data submitted by states can be revised after it is submitted to ETA – for example, financial audits may result in disallowance or modification of program expenditures for a year or even longer after the close out of a program year.

Challenge #5 – Inclusion or Exclusion of Subsidized Wages, Need-Based Payments, and Stipends Can Substantially Affect Performance on Efficiency Measures. With regard to programs such as SCSEP (where about three-quarters of program expenditures are devoted to wage subsidies for program participants), TAA (where substantial amounts of program funds are expended on Trade Readjustment Allowances [TRA] or income supports), and NEG (where in the case of NEGs in response to disasters a large portion of fund are expended on wages for temporary workers rather than training), the inclusion or exclusion of such payments can very significantly alter outcomes for efficiency measures such as cost per entered employment.[50]

[50]The Federal Trade Act provides special benefits under the Trade Adjustment Assistance (TAA) program to those who were laid off or had hours reduced because their employer was adversely affected by increased imports from other countries. These benefits include paid training for a new job, financial help in making a job search in other areas, or relocation to an area where jobs are more plentiful. Those who qualify may be entitled to weekly Trade Adjustment Allowances (TRA) after their unemployment compensation is exhausted. Additional background on TAA and TRA is available on the U.S. Department of Labor website, at http://workforcesecurity.doleta.gov/unemploy/tra.asp.

Moreover, whether a customer receives TRA or unemployment compensation (which would not be included as a TAA cost) depends in part on factors such as the state's unemployment rate. ETA officials overseeing SCSEP and TAA observed that definitions of the cost items included in the numerator of efficiency measures need to be carefully defined – and in the case of these two programs, should exclude wage subsidies and income supports.

Challenge #6 – Burden/Costs Likely to Be Imposed on States and Localities to Ensure Standardized Cost Data Are Collected; Technical Assistance and Training Likely to Be Necessary. Given the variation in practices across states and localities, collection of expenditure data in a form that is comparable across states/grantees and local programs would likely impose substantial burden and costs on reporting units (i.e., states, grantees, and localities), particularly if such cost data was furnished by program and by discreet activity. It will likely be necessary to provide guidance, training, technical assistance, and ongoing monitoring to ensure that expenditure data are provided in an appropriate format. Also, to avoid gaming by grantees, ETA may find it necessary to standardize some aspects of cost reporting so that measures are consistent across grantees and so that grantees do not make changes to their allocation of costs simply to improve measured performance.

Challenge #7 – Cost-of-Living Differences, Along with Differing Practices with Regard to Co-Enrollment, Sharing of Costs Across Programs, and Accounting Procedures, Make States Anxious About Comparisons of Efficiency Measure Results Across States and Localities. Cost-of-living differences across states and localities (especially staff and facility cost differences, which are major cost elements) could affect performance on efficiency measures. One state official, for example, cautioned against ETA making what might be unfair comparisons across states: "We would have concerns if you start comparing states or setting

standards because costs vary from state to state. Costs are so significantly different across states, for example, compared to (say) Kansas, our state has much higher rents and staff costs. If comparisons were made across states, you might need a cost-of-living adjustment. It is tough to compare a state with among the highest cost–of-living on an efficiency measure to say the 49th or 50th state (in terms of cost-of-living). There is a fairness issue – how much it costs to do business in one state versus another state is a factor."[51] Different policies with regard to co-enrollment and cost sharing across states and local WIBs can have substantial effects on efficiency measure results. Most of the states interviewed for this study expressed concerns over the potential for inappropriate and unfair comparisons being made once efficiency measure results became available.

C. CONCLUSIONS

The main recommendation that emerges from this chapter is that ETA should use actual expenditures in calculating efficiency measures because (1) expenditures can vary substantially from what is initially appropriated/allocated, especially at the state level (e.g., because of transfers, rescissions, and unexpended funds unexpended funds); and (2) expenditures reflect what is actually spent on delivery of services and capture the underlying notion of efficiency. Despite this overall recommendation, there are serious challenges documented in this chapter to collecting and utilizing expenditure data that can complicate uniform implementation of efficiency measures and cloud interpretation of the results nationally and across grantees/states, including: (1) substantial variation in the ways in which states and local workforce areas collect, allocate, and report on expenditures; (2) complexities of accounting for cost sharing and co-

[51]One potentially complicating factor for making adjustments for cost-of-living differences is that there is not a federal government cost-of-living index to adjust costs across states.

enrollment across closely linked workforce development programs (particularly within a One-Stop system that emphasizes integration across programs and sharing of funds to serve often co-enrolled individuals); (3) accounting for funds that are allocated in one year, but often spent over the course of several years; (4) accounting for expenditures on individuals (especially for apprentices and others receiving long-term training) that could be spread over several years (e.g., as many as five years for apprentices); (5) lags in reporting of expenditures to the federal government from local workforce areas and states/grantees, as well as adjustments that may occur many years later due to audits; (6) complexities associated with determining which expenditures should be include in efficiency measure calculations, particularly related to high-cost items such as needs-based payments, stipends, and subsidized wages (that can rival or exceed training and other employment service costs in programs such TAA, NEG, and SCSEP); and (7) variations across states and localities in cost-of-living.

CHAPTER 6:

OPTIONS AVAILABLE, ANALYSIS, AND CHALLENGES TO CALCULATING EFFICIENCY MEASURES

As observed earlier in this report, to generate an efficiency measure, it is necessary to account for costs in the numerator of the measure and a unit of participation, service delivery, or outcome in the denominator of the measure. The preceding chapter focused on the cost side of the equation, and this chapter focuses on the denominator – primarily outcomes – that could be used to produce one or more efficiency measures that could be implemented across the 11 ETA programs of interest. It first examines a range of outcome measures that could be coupled with cost data to produce outcome-based efficiency measures for implementation by some or all the ETA programs. The chapter then presents quantitative and qualitative analyses on a core set of the outcome-based efficiency measures with the aim of narrowing to a set of feasible and relevant efficiency measures for possible implementation.

A. OUTCOME/PERFORMANCE MEASURES USED BY ETA PROGRAMS

One key recommendation of state workforce administrators and ETA program offices was that, at least in the short run, ETA efficiency measures be tied to existing outcome/performance measures, as well as data currently being collected by each of the programs. Use of existing outcome measures – particularly those used under Common Measures, would make it much less burdensome for states and local areas to implement such efficiency measures. In addition, data on employment outcomes for ETA programs (e.g., employment, retention, and earnings) comes from other administrative systems – for example, the Unemployment Insurance wage record system – that are fixed and unlikely to change.

Exhibit 6-1 compares the types and definitions of outcome measures used by the 11 ETA programs. As shown in this exhibit, 9 of the 11 ETA programs are currently (as of December 2009) using the same three outcome measures under what are termed the "Common Measures": WIA Adult, WIA Dislocated Worker; NEG, TAA, Wagner-Peyser/ES; SCSEP, NFJP, WIG, and INA programs. The three outcome measures commonly in use across these programs are entered employment rate, employment retention rate, and average (post-program) earnings (see the exhibit for how each of these measures is defined).[52] Each of the ETA programs covered by the Common Measures also have management information systems that support the collection and analysis of participant-level data required for calculating outcomes reported under Common Measures.

The WIA Youth program is also covered by the Common Measures, but the performance measures used are somewhat differently defined for WIA Youth. For example, as shown in Exhibit 6-1, a WIA Youth exiter is viewed as a having a "positive" outcome if he or she is placed in employment or education: *"of those who are not in postsecondary education or employment (including the military) at the date of participation, the number of youth participants who are in employment (including the military) or enrolled in postsecondary education and/or advanced training/occupational skills training in the first quarter after the exit quarter divided by the number of youth participants who exit during the quarter."* The WIA Youth program performance is also assessed in terms of the program's capacity to help youth

[52] In addition, in TEGL 17-05, ETA defines a set of parameters for each of these measures; for example, with regard to the entered employment rate: "Individuals who are employed at the date of participation are excluded from this measure (i.e., programs will not be held accountable for these individuals under this measure). Individuals who, although employed at the date of participation, have either received a notice of termination of employment or whose employer has issued a Worker Adjustment and Retraining Notification (WARN) or other notice that the facility or enterprise will close, or who are transitioning service members are considered not employed at the date of participation and are included in the performance measure. Employment at the date of participation is based on information collected from the individual, not from wage records.

EXHIBIT 6-1: DEFINITIONS AND USE OF OUTCOME MEASURES ACROSS ETA PROGRAMS

PROGRAM	EMPLOYMENT MEASURES	EMPLOYMENT RETENTION MEASURES	EARNINGS MEASURES	EDUCATION/SKILLS ATTAINMENT OR OTHER MEASURES
WIA (Excluding Youth), Wagner-Peyser, TAA, SCSEP, INA, WIG, and NFJP. (Note: All of these programs use Common Measures.)	**Entered Employment:** Of those who are not employed at the date of participation, the number of participants who are employed in the first quarter after the exit quarter divided by the number of participants who exit during the quarter.	**Employment Retention:** Of those who are employed in the first quarter after the exit quarter, the number of participants who are employed in both the second and third quarters after the exit quarter divided by the number of participants who exit during the quarter.	**Average Earnings:** Of those participants who are employed in the first, second, and third quarters after the exit quarter, total earnings in the second quarter plus total earnings in the third quarter after the exit quarter divided by the number of participants who exit during the quarter.	
WIA Youth (Note: The Youth program is covered by Common Measures, but uses difference measures.)	**Placement in Employment or Education:** Of those who are not in postsecondary education or employment (including the military) at the date of participation, the number of youth participants who are in employment (including the military) or enrolled in postsecondary education and/or advanced training/occupational skills training in the first quarter after the exit quarter divided by the number of youth participants who exit during the quarter.	None	None	**Attainment of a Degree or Certificate**: Of those enrolled in education (at the date of participation or at any point during the program), the number of youth participants who attain a diploma, GED, or certificate by the end of the third quarter after the exit quarter divided by the number of youth participants who exit during the quarter. **Literacy and Numeracy:** Gains of those out-of-school youth who are basic skills deficient, the number of youth participants who increase one or more educational functioning levels divided by the number of youth participants who have completed a year in the program (i.e., one year from the date of first youth program service) plus the number of youth participants who exit before completing a year in the program.

EXHIBIT 6-1: DEFINITIONS AND USE OF OUTCOME MEASURES ACROSS ETA PROGRAMS

PROGRAM	EMPLOYMENT MEASURES	EMPLOYMENT RETENTION MEASURES	EARNINGS MEASURES	EDUCATION/SKILLS ATTAINMENT OR OTHER MEASURES
Apprenticeship Program (Apprenticeship is transitioning from these measures to the Common Measures)	None	**Employment Retention**: The number of apprentices employed nine months after registration divided by the number of apprentices registered in the first quarter of the fiscal year.	**Earnings Gain**: The difference between the average of the current wage of the total number of entrants still employed nine months later and the average of the starting wage of the total number of entrants registered in the first quarter of the fiscal year.	**Average Cost Per Registered Apprentice:** Program budget allocation divided by total active federal program participants (apprentices).

Note: The aim of Common Measures is to have common performance measures for programs with similar goals. Originally, ETA and VETS collaborated to define Common Measures, and as of July 1, 2005, these measures were implemented for the WIA Title IB and Wagner-Peyser/Employment Services and VETS programs; TAA programs implemented the Common Measures on October 1, 2005. INA, SCSEP, and NFJP transitioned to the Common Measures reporting system in PY 2006. Common Measure outcomes are calculated for the WIG program using WIASRD data -- for each measure, the result is calculated for WIA enrolled individuals with disabilities for the workforce areas receiving Disability Program Navigator (DPN) cooperative agreements. The Apprenticeship is making the transition to the Common Measures framework (from the performance measures shown in the table).

Source: U.S. Department of Labor website for the Glossary of Performance. More detailed discussion of each of these measures is available also in Training and Employment Guidance Letter No. 17-05, "Common Measures Policy for the Employment and Training Administration's (ETA) Performance Accountability System and Related Performance Issues," issued by DOL/ETA, February 17, 2006,and a change to this original guidance.

attain additional educational degrees/certifications and improvements in numeracy and literacy proficiency.

The WIG program is also covered by the Common Measures displayed in Exhibit 6-1, but because the WIG program has no enrolled customers, the measures must be implemented somewhat differently.[53] For each measure, the rate is calculated for WIA enrolled exiters with disabilities served in workforce areas receiving Disability Program Navigator (DPN) grants. This means that other customers of the One-Stop system not enrolled in WIA, such as Wagner-Peyser exiters (i.e., not co-enrolled in WIA), go uncounted under the Common Measures for the WIG program.[54] When interpreting performance and efficiency measures for the WIG program, it is important to take into consideration that the program is primarily a capacity building program aimed at improving access and service delivery for individuals with disabilities within the workforce development system. Unlike the other Common Measure programs, individuals are not formally enrolled in the WIG program or served directly by Disability Navigators.[55]

Apprenticeship is in the process of transitioning from the measures shown in Exhibit 6-1 to the Common Measures. During FY 2009, the Office of Apprenticeship (OA) is collecting baseline data to support the transition to the Common Measures. Three quarters of data collected through Common Reporting Information System (CRIS) will be reviewed and analyzed. Targets for entered employment, retention, and average earnings will be set using the baseline results for

[53]The program has set annual performance goals for each of the three Common Measures, as well as for a fourth measure – percentage of exiters with disabilities in the workforce areas receiving a DPN cooperative agreement.
[54]In a February 11, 2008 Memorandum to Round One and Two DPN states, notes: "Although the Wagner-Peyser program registers many more individuals than those identified in the WIASRD, ETA is unable to derive data at the local workforce area level to identify impacts of Navigators located there."
[55]To further complicate matters, disability status is not always disclosed by individuals served under WIA, ES, TAA, and other programs – and there is considerably variability across programs in the percentage of individuals who in fact disclose whether they have a disability. Individuals with disabilities are often co-enrolled in a number of ETA programs and a range of other programs (particularly Vocational Rehabilitation) – so accounting for participation and tying participation to costs is complicated. Finally, with regard to cost, the budget for WIG is a fraction of the budget of programs such as WIA and ES, and costs of the WIG program (particularly related to supporting the more than 500 Disability Navigators across the country) is supplemented by funds from the Social Security Administration and states (e.g., in New York, an estimated half the costs of Disability Navigators is paid by the state). Finally, funding for the WIG program has not been renewed and the program will end in the coming year.

apprentices who complete training programs during subsequent reporting years.[56] As shown in Exhibit 6-1, the performance measures used in the past by Apprenticeship, while including measures of employment and earnings, are somewhat different from those mandated under the Common Measures. For example, the Apprenticeship Program has not in the past used a measure of entered employment. The Apprenticeship program has used the concept of retention in employment, but the definition and way in which "retention" has been calculated are different from that of the Common Measures, i.e., retention in the Apprenticeship program has been defined as "the number of apprentices employed nine months after registration divided by the number of apprentices registered in the first quarter of the fiscal year."

As also shown in the exhibit, while the Apprenticeship program has used an earnings measure, unlike the Common Measures, the earnings measure has been one of "earnings gain" and is substantially different in nature from the Common Measures' post-program "average earnings" measure, i.e., earnings gain in the Apprenticeship program has in the past been defined as "the difference between the average of the current wage of the total number of entrants still employed nine months later and the average of the starting wage of the total number of entrants registered in the first quarter of the fiscal year."[57] There are also three other issues (discussed earlier in this report) regarding Apprenticeship that make the program different from the other ETA programs and should be taken into consideration in establishing efficiency measures appropriate to this program: (1) generally, costs of training and serving apprentices are paid by the state, unions, employers, and/or participants (i.e., so federal costs of the program are low and generally are targeted on promoting Apprenticeship and helping to ensure that programs offered are of high quality); (2) apprentices are enrolled for up to five years, so costs in the year of exit

[56]Specifically, OA received the first set of data from the CRIS; two additional quarters of data are expected December 2008 and January 2009; and a draft of the targets is expected to be available by June 2009.
[57] In prior years the Common Measures used earnings gain rather than post-program earnings.

may be much less representative of the total cost than in other programs; and (3) some states administer their apprenticeship program themselves, so there are no federal costs.

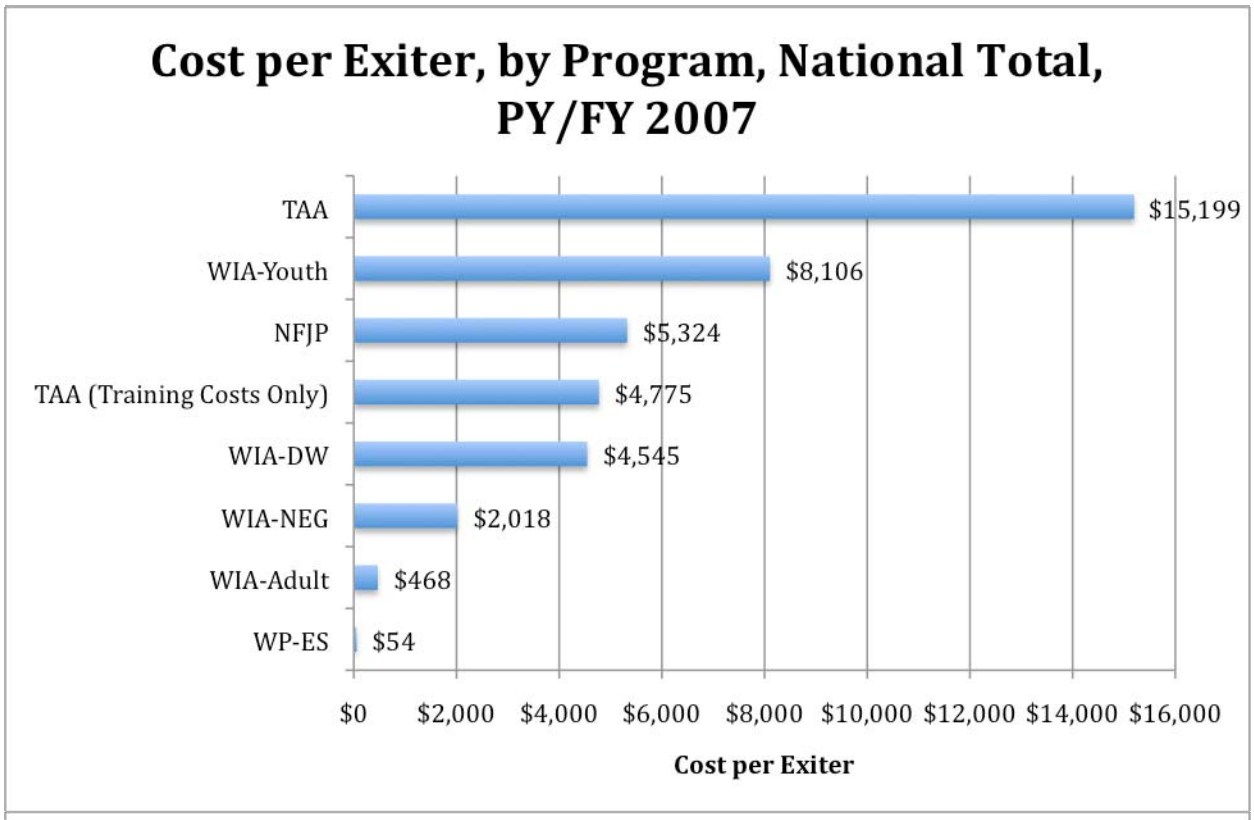
Overall, the current measures of participation and outcome collected by the 11 ETA programs suggest that at least in the short run, a feasible and potentially cost-effective strategy for implementing efficiency measures would be adopting efficiency measures that build on the structure of the outcome Common Measures being collected and reported by ETA programs. As will be discussed later in this report in the study's recommendations (see Chapter 8), considerable caution is required and there are a number of serious methodological and data constraints that will need to be resolved before valid and reliable efficiency measurement can be implemented by the 11 ETA programs.

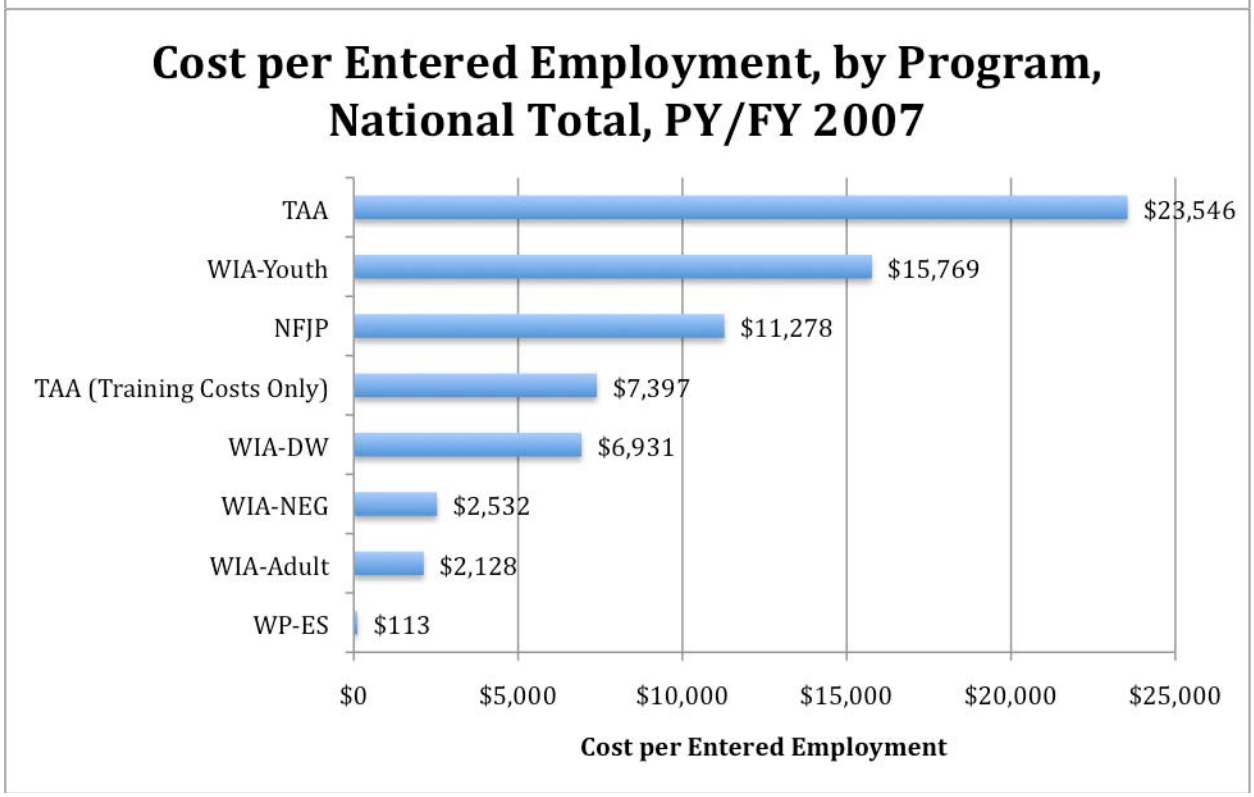
B. ANALYSES OF EFFICIENCY MEASURES RESULTS BASED ON THE COMMON MEASURE OUTCOMES AT THE NATIONAL LEVEL

ETA program offices provided data on Common Measure performance outcomes, and the Office of Financial and Administrative Management (OFAM) provided data on program expenditures to support development of estimates of efficiency measure results for PY/FY 2007. The estimates provided in this section and the next section (on state-level results) are preliminary and (as discussed throughout this report) great care should be taken in making cross program comparisons. For several program it was also possible to collect cost and outcome data that permitted three years of analyses of efficiency measure results.[58] Exhibit 6-2 provides preliminary analysis of results for efficiency measure results for candidate efficiency measures (based on the Common Measures) at the national level for PY/FY 2007.

[58] OFAM provided three years (PY 2005 through PY 2007) of expenditure data for the 11 ETA programs; Common Measure outcome results for three years were provided for the WIA (Adults, Dislocated Worker, Youth, and NEG), Wagner-Peyser, and TAA programs. NFJP was able to provide PY 2007 outcome data, but not for earlier because the program had only started to track Common Measure outcomes in PY 2007. Outcome data was not available for INAP, WIG, or the Apprenticeship program.

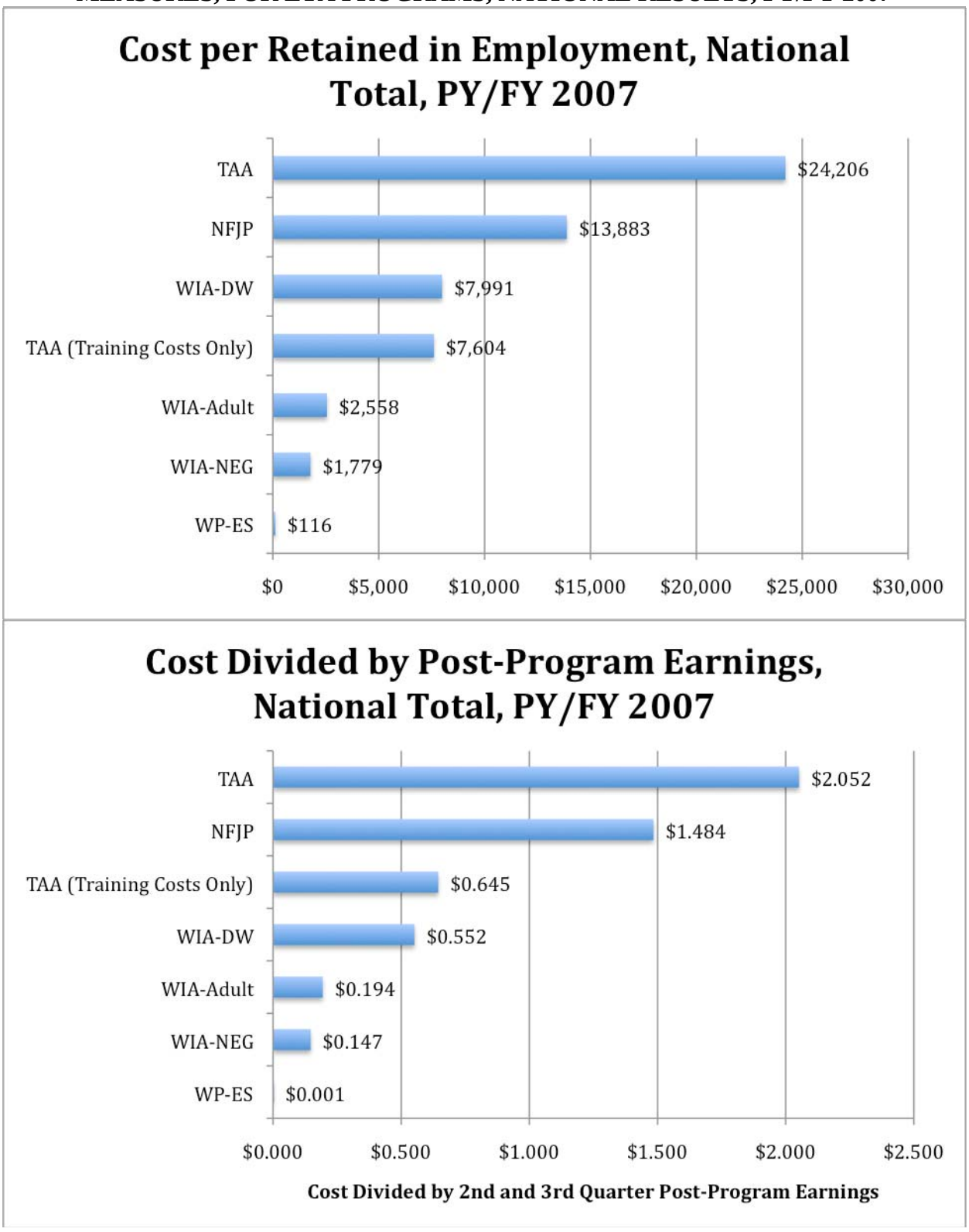
EXHIBIT 6-2: ESTIMATED RESULTS FOR FOUR OUTCOME-BASED EFFICIENCY MEASURES FOR ETA PROGRAMS, NATIONAL RESULTS, PY/FY 2007





Notes: Figures are based on data provided by OFAM on expenditures and ETA program offices for outcomes.
*For WIA-Youth, cost per placement in education or employment was used in place of cost per entered employment.

EXHIBIT 6-2: ESTIMATED RESULTS ON FOUR OUTCOME-BASED EFFICIENCY MEASURES, FOR ETA PROGRAMS, NATIONAL RESULTS, PY/FY 2007



Notes: Figures are based on data provided by OFAM on expenditures and ETA program offices for outcomes.
*For WIA-Youth, cost per placement in education or employment was used in place of cost per entered employment.

The four charts shown in Exhibit 6-2 demonstrate the substantial variability in cost across programs. Below, the results are highlighted for each of these four measures:

- **Cost per Exiter:** The term "exiter" is defined as follows under the Common Measures**:** "An exiter is a participant who has not received a service funded by the program or funded by a partner program for 90 consecutive calendar days, and is not scheduled for future services. The exit date is the last date of service."[59] The "cost per exiter" efficiency measure is calculated by taking total program costs (in terms of expenditures) and dividing by the number of exiters terminating the program during the year by the particular program. Cost per exiter in PY/FY 2007 ranged from in excess of $15,000 in the TAA program ($15,199) to less than $1,000 for the WIA Adult Program ($468) and Wagner-Peyser/ES Program ($54). As also shown in the exhibit, when only training costs are considered under the TAA program (i.e., Trade Adjustment Allowances [TRA] are excluded) cost per exiter decreases by about two-thirds, from $15,199 to $4,775.[60]

- **Cost per Entered Employment.** This outcome-based efficiency measure is calculated by taking total program costs (in terms of expenditures) and dividing by the number of exiters (who were not employed at program entry) entering employment in the first quarter following exit from the particular program. As shown in the exhibit, in PY/FY 2007, cost per entered employment ran in excess of $20,000 for the TAA program ($23,546) to just $113 in the Wagner-Peyser program. The costs shown for the WIA Youth Program -- $15,769 -- are for cost per placement in employment or education. This very substantial variation points to the widely varying cost structure for programs that provide intensive assistance and training services (such as TAA) versus those providing less customer intensive, labor exchange-type services. Even when only training costs are considered for the TAA program, costs are much higher than the Wagner-Peyser Program and similar to the WIA-Dislocated Worker Program.

- **Cost per Retained Employment.** This efficiency measure is calculated by taking total program costs (in terms of expenditures) and dividing by the number of exiters employed in the first quarter after exit and who are employed in both the second and third quarters after the exit quarter. Exhibit 6-2 shows how cost per retained employment, based on expenditures, varies significantly across ETA programs for PY/FY 2007. As shown in the exhibit, cost per retention in PY/FY 2007 were as high as $24,206 for the TAA Program ($7,604 for TAA when only training costs are included) to less $3,000 for the

[59] Training and Employment Guidance Letter No. 17-05, "Common Measures Policy for the Employment and Training Administration's (ETA) Performance Accountability System and Related Performance Issues," issued by DOL/ETA, February 17, 2006 and a change to this original guidance.

[60] Cost per exiter can be affected significantly at the national and particularly state levels by policies related to co-enrollment and where the gateway for "participation" or "enrollment" occurs for individuals entering the One-Stop system. For example, even though expenditures for the WIA Adult Program have remained virtually unchanged (at just under $1 billion), the number of program exiters increased from 626,225 to 1,984,923 between PY 2005 and PY 2007. This change in the number of exiters (a 217 percent increase between PY 2005 and PY 2007) is reflected in a steep decrease in cost per exiter – from $940 in PY 2005 to $331 in PY 2007 (a 64.8 percent decrease). The precipitous increase in exiters (and fall in per exiter costs) is the result (at least in part) of changes in policies in some states governing enrollment of self-service One-Stop customers and co-enrollment of Wagner-Peyser participants into WIA.

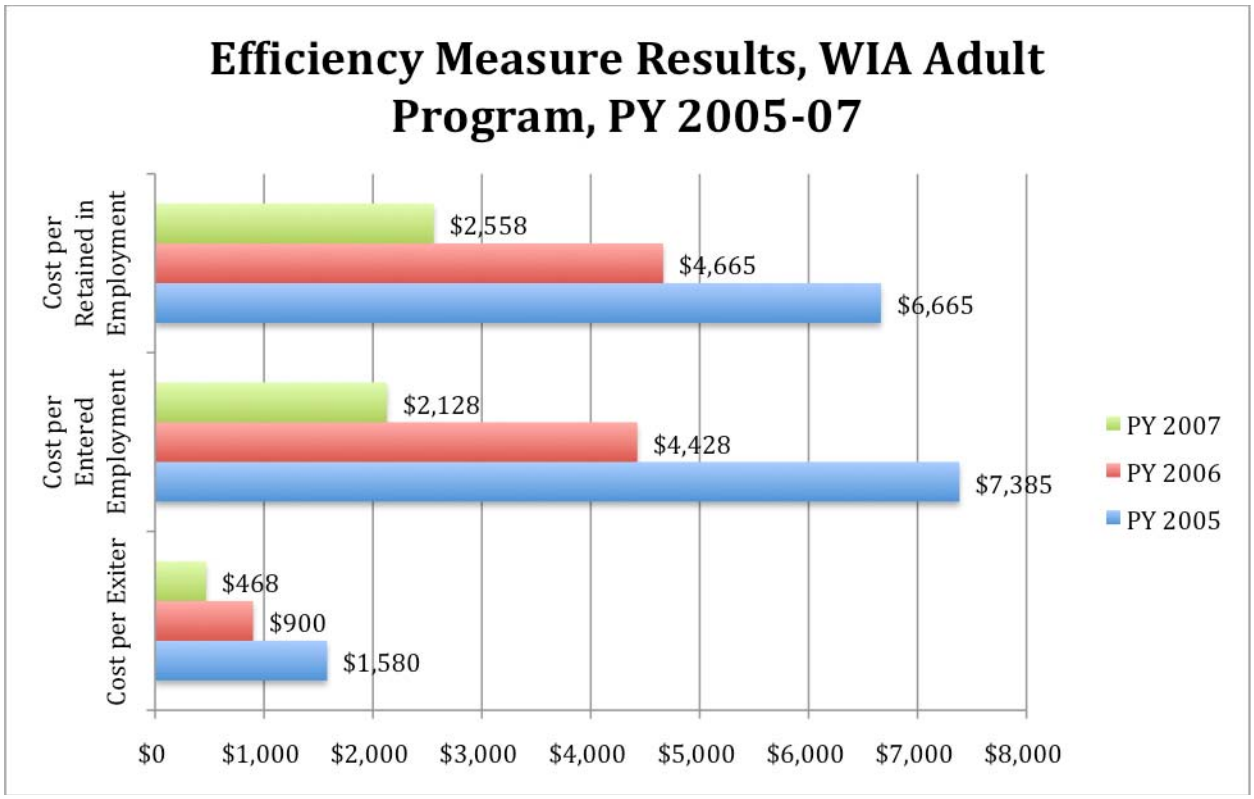
WIA Adult Program ($2,558), WIA NEG ($1,779), and the Wagner-Peyser Program ($116).

- **Cost Divided by Post-Program Earnings.** This efficiency measure is calculated by taking total program costs (in terms of expenditures) and dividing by total earnings in the second quarter plus total earnings in the third quarter after the exit quarter. Exhibit 6-2 shows that cost divided by post-program earnings range as high as $2.05 for TAA and $1.48 for NFJP, to less than $0.20 for the WIA Adult ($0.19), NEG ($0.15) and Wagner-Peyser (less than $0.01).

At the national level, not only is there considerable variation across programs, but within programs there is substantial year-to-year variation in efficiency measure results. Exhibit 6-3 provides a series of charts that compare efficiency measure results for several years (usually three years) for the WIA Adult, WIA Dislocated Worker, WIA Youth, Wagner-Peyser, and Trade Assistance Act Programs. The top portion of each exhibit graphically shows efficiency measure results by program year on three efficiency measures – cost per exiter, cost per entered employment, and cost per retained in employment. The bottom portion of each exhibit provides more detailed data in a table, including data on factors that determine each of the efficiency measures, as well as efficiency measure results. For example, for the WIA Adult Program, the table provides data on expenditures, number of exiters, number entering employment, number retained in employment, and post-program earnings for PY 2005-07. In addition, the table provides data on one additional efficiency measure not included in the graph – cost divided by post program earnings. The table also shows the change for each data item between 2005 and 2007, which is helpful in identifying particular factors that may be changing rapidly and potentially driving efficiency measure results (e.g., increases in exiters versus expenditures).

Across the five programs shown in Exhibit 6-3, the program displaying the greatest change over the three-year period is the WIA Adult program. As shown in the first of the exhibits (Exhibit 6-3a), while expenditures declined slightly (6.2 percent) over the three-year period (PY 2005-07) for the WIA Adult Program, there was more than a tripling of the number

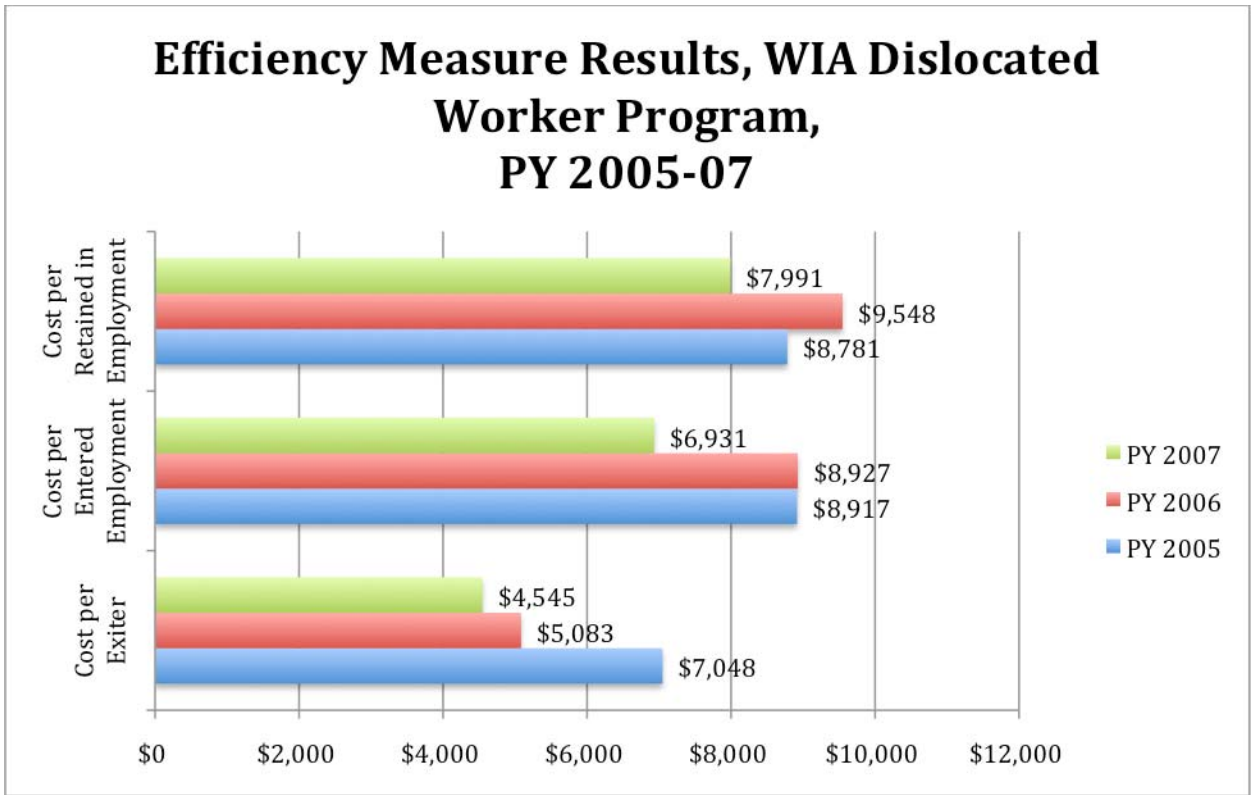
EXHIBIT 6-3a: EFFICIENCY MEASURE RESULTS FOR SELECTED PROGRAMS, 2005-07



WIA Adult Program	PY 2005	PY 2006	PY 2007	Change PY 2005-07
Expenditures	$989,481,877	$972,812,239	$928,304,645	-6.2%
# Exiters	626,182	1,081,243	1,984,923	217.0%
# Entering Employment	133,982	219,701	436,207	225.6%
# Retained in Employment	148,470	208,540	362,920	144.4%
Post Program Earnings	N/A	$2,349,832,107	$4,784,807,604	N/A
Cost per Exiter	$1,580	$900	$468	-70.4%
Cost per Entered Employment	$7,385	$4,428	$2,128	-71.2%
Cost per Retained in Employment	$6,665	$4,665	$2,558	-61.6%
Cost Divided by Post Program Earnings	N/A	$0.41	$0.19	N/A

Note: Figures are based on data provided by OFAM on expenditures and ETA program offices for outcomes.

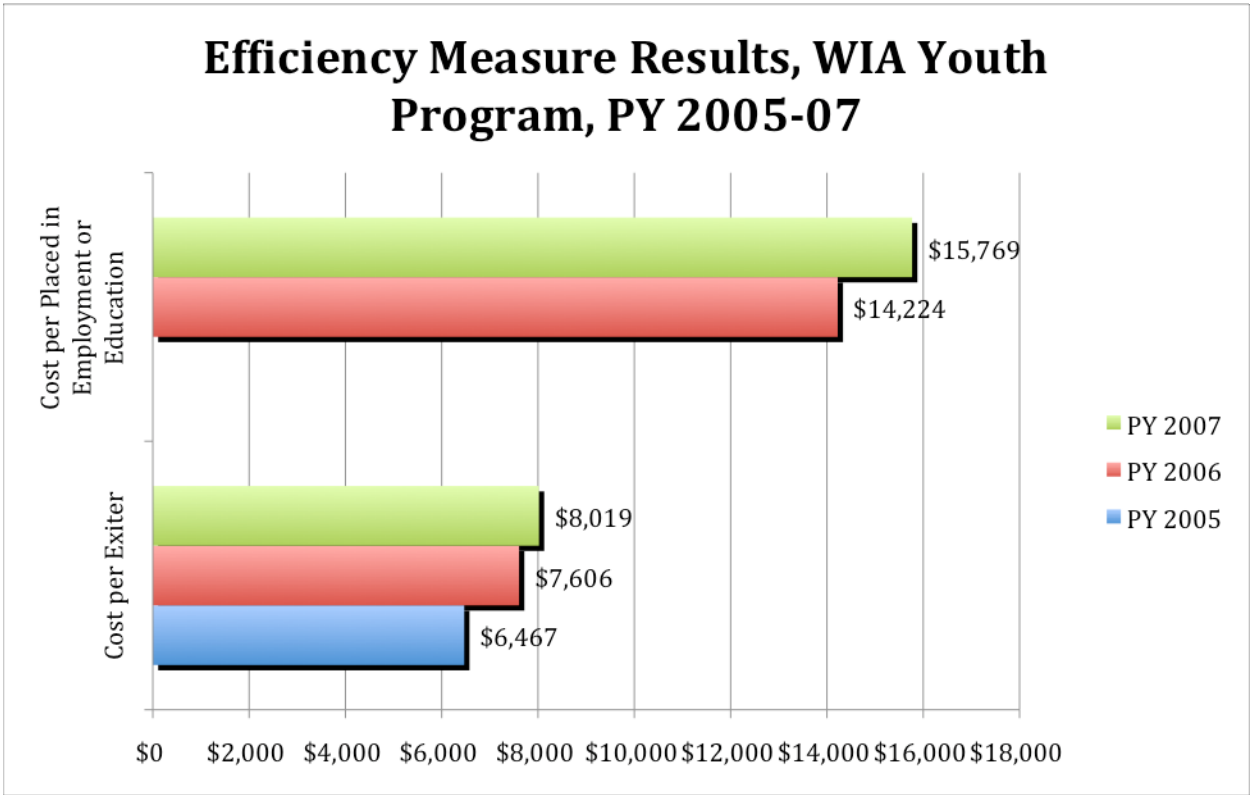
EXHIBIT 6-3b: EFFICIENCY MEASURE RESULTS FOR SELECTED PROGRAMS, 2005-07



WIA Dislocated Worker	PY 2005	PY 2006	PY 2007	Change PY 2005-07
Expenditures	$1,073,768,048	$1,061,829,731	$1,062,881,904	-1.0%
# Exiters	152,350	208,906	233,845	53.5%
# Entering Employment	120,415	118,946	153,352	27.4%
# Retained in Employment	122,279	111,208	133,012	8.8%
Post Program Earnings	N/A	$1,488,444,765	$1,925,846,839	N/A
Cost per Exiter	$7,048	$5,083	$4,545	-35.5%
Cost per Entered Employment	$8,917	$8,927	$6,931	-22.3%
Cost per Retained in Employment	$8,781	$9,548	$7,991	-9.0%
Cost Divided by Post Program Earnings	N/A	$0.71	$0.55	N/A

Note: Figures are based on data provided by OFAM on expenditures and ETA program offices for outcomes.

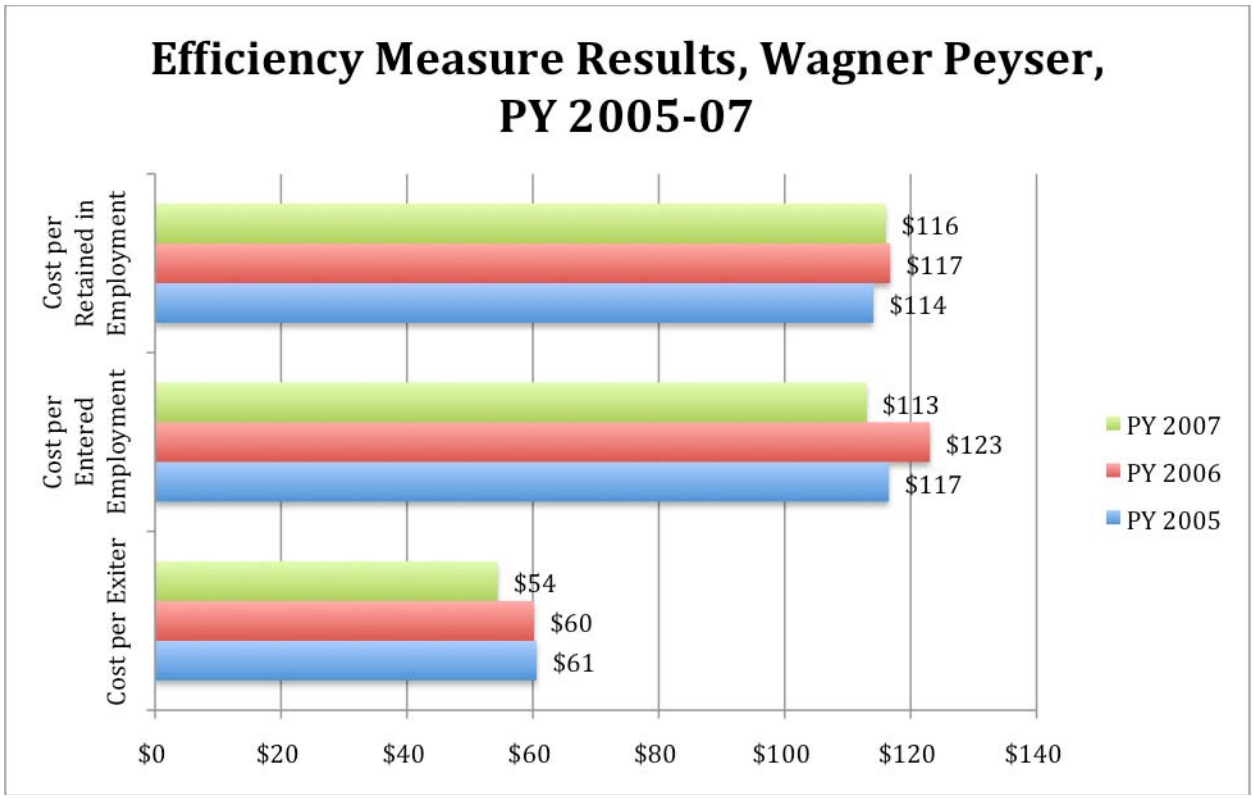
EXHIBIT 6-3c: EFFICIENCY MEASURE RESULTS FOR SELECTED PROGRAMS, 2005-07



WIA Youth	PY 2005	PY 2006	PY 2007	Change PY 2005-07
Expenditures	$964,935,524	$906,348,036	$897,344,260	-7.0%
# Exiters	149,210	119,155	111,905	-25.0%
# Placed in Employment or Education	N/A	63,721	56,906	N/A
Cost per Exiter	$6,467	$7,606	$8,019	24.0%
Cost per Placed in Employment or Education	N/A	$14,224	$15,769	N/A

Note: Figures are based on data provided by OFAM on expenditures and ETA program offices for outcomes. Data was not available for PY 2005 on the number placed into employment or education.

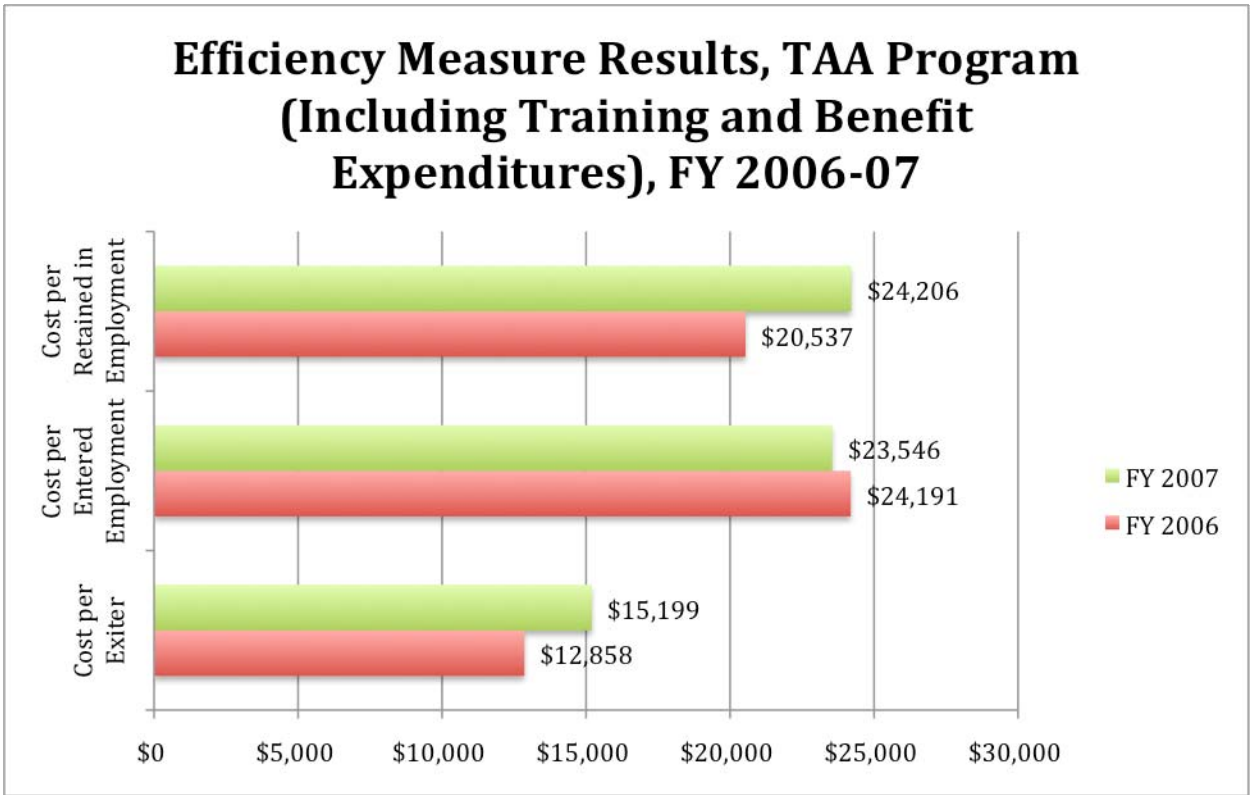
EXHIBIT 6-3d: EFFICIENCY MEASURE RESULTS FOR SELECTED PROGRAMS, 2005-07



Wagner-Peyser/ES	PY 2005	PY 2006	PY 2007	Change PY 2005-07
Expenditures	$733,372,773	$741,538,970	$716,291,359	-2.3%
# Exiters	12,099,618	12,317,667	13,167,927	8.8%
# Entering Employment	6,292,364	6,025,247	6,337,438	0.7%
# Retained in Employment	6,428,226	6,350,889	6,173,210	-4.0%
Post Program Earnings	$1,828,165,860,512	$1,706,491,491,655	$1,421,133,516,337	-22.3%
Cost per Exiter	$61	$60	$54	-10.3%
Cost per Entered Employment	$117	$123	$113	-3.0%
Cost per Retained in Employment	$114	$117	$116	1.7%
Cost Divided by Post Program Earnings	$0.0004	$0.0004	$0.0005	25.6%

Note: Figures are based on data provided by OFAM on expenditures and ETA program offices for outcomes.

EXHIBIT 6-3e: EFFICIENCY MEASURE RESULTS FOR SELECTED PROGRAMS, 2005-07



TAA-Training and Benefits	PY 2006	PY 2007	Change PY 2006-07
Expenditures	$713,360,351	$788,352,845	10.5%
# Exiters	55,482	51,870	-6.5%
# Entering Employment	29,489	33,482	13.5%
# Retained in Employment	34,735	32,569	-6.2%
Post Program Earnings	$490,009,891	$384,218,859	-21.6%
Cost per Exiter	$12,858	$15,199	18.2%
Cost per Entered Employment	$24,191	$23,546	-2.7%
Cost per Retained in Employment	$20,537	$24,206	17.9%
Cost Divided by Post Program Earnings	$1.46	$2.05	40.9%

TAA -Training Expenses Only	PY 2006	PY 2007	Change PY 2006-07
Expenditures	$193,456,107	$247,659,201	28.0%
Exiters	55,482	51,870	-6.5%
# Entering Employment	29,489	33,482	13.5%
# Retained in Employment	34,735	32,569	-6.2%
Post Program Earnings	$490,009,891	$384,218,859	-21.6%
Cost per Exiter	$3,487	$4,775	36.9%
Cost per Entered Employment	$6,560	$7,397	12.8%
Cost per Retained in Employment	$5,569	$7,604	36.5%
Cost Divided by Post Program Earnings	$0.39	$0.64	63.3%

Note: Figures are based on data provided by OFAM on expenditures and ETA program offices for outcomes.

of exiters (217 percent increase, from 626,182 to nearly 2 million exiters, as shown in the table). As a result of the surge in the number of exiters, there was also very substantial percentage increases in the number of exiters entering employment (226 percent increase) and exiters retained in employment (144 percent increase). The increases in numbers of individuals flowing through the WIA Adult Program finding and retaining jobs are reflected in steep decreases in efficiency measure results between PY 2005 and PY 2007 – a 70 percent decrease in the cost per exiter, a 71 percent decrease in cost per exiter entering employment, and a 62 percent decrease in cost per exiter retained in employment. As discuss earlier in this report, some states have aggressively moved in the direction of co-enrolling large numbers of Wagner-Peyser customers (and in some cases other One-Stop customers as well) into the WIA program, which accounts for some (and perhaps much) of the surge in enrollment in the WIA program in recent years.

The patterns of change as shown in the other four exhibits that make up Exhibit 6-3, while not showing nearly the volatility of the WIA Adult Program, demonstrate the considerable year-to-year fluctuation in efficiency measure results (and the underlying factors that determine efficiency measure results). Generally, with the exception of the TAA program (for which only two years of results were available), there was a relatively slight decrease in program expenditures (e.g., -1 percent for the WIA Dislocated Worker). The TAA Program for the two years for which data were available experienced about a 10 percent increase in overall expenditures (and a 28 percent increase for training expenses, as shown in Exhibit 6-3e). Patterns for efficiency measure results across programs over the three-year period examined varied in both direction (i.e., increases and decreases) and in extent of change. The efficiency measure results for the WIA Dislocated Worker Program (shown in Exhibit 6-3b), similar to the WIA Adult Program, displayed a significant downward trend, though not as dramatic as for the WIA Adult Program – for example, cost per entered employment decreased by 22 percent from $8,917 in PY 2005 to $6,931 in PY 2007.

Data available for the WIA Youth Program (Exhibit 6-3c) shows a slight decrease in expenditures (a 7 percent decrease), accompanied by a one-quarter decline in exiters (from 149,210 exiters in PY 2005 to 111,905 exiters in PY 2007). Cost per exiter increased by about the same percentage as the loss in the number of exiters (24 percent). Data on cost per exiter placed in employment or education (the Common Measure outcome for the WIA Youth Program, which was available for only two years), increased slightly (from $14,244 in PY 2006 to $15,769 in PY 2007).

With regard to the Wagner-Peyser Program (see Exhibit 6-3d), change in the efficiency measure results for the three years was relatively modest. The cost per entered employment, for example, decreased slightly over the three-year period (by 3 percent) from $117 in PY 2005 to $113 in PY 2007. As discussed earlier in this chapter, given its emphasis on less intensive labor exchange services, the efficiency measure results (in dollar terms) for the Wagner-Peyser Program are only a fraction of those in other programs (e.g., cost per entered employment was slightly above $100 in each of the three-years observed, compared to costs per entered employment cost per entered employment in excess of $20,000 for the TAA program, when training and benefit costs are included).

Finally, data was available on efficiency measure results for the TAA Program for two years – and those two years, demonstrate just how much efficiency measure results (and underlying factors such as expenditures, can change from one year to the next. In addition, the TAA results shown in the final exhibit in the series (in Exhibit 6-3e) show how in a program like TAA efficiency measure results can be quite different when cash benefit costs (i.e., Trade Adjustment Allowances, TRA) are included in or excluded from program expenditures. As shown in the exhibit, unlike the other programs, expenditures increased by a fairly significant margin over the two years for which data was available – training and benefit expenditures together increased by 10.5 percent between FY 2006 and FY 2007 and TAA training

expenditures alone increased by nearly one-quarter (23.7 percent). The table shows that while cost per entered employment decreased slightly (by -3 percent, from $24,191 to $23,546) for the two-year period when training and benefit costs are taken into consideration, when only training costs are considered, cost per entered employment increased by 13 percent (from $6,560 to $7,397).

C. ANALYSES OF EFFICIENCY MEASURES RESULTS AT THE STATE LEVEL

Several exhibits follow that show the considerable variation that exists in efficiency measure results across states (for programs that collect data at the state level and were able to furnish outcome results that could be matched with expenditures to produce efficiency measure results). The estimates provided in this section of the report (on state-level results) are preliminary and (as discussed throughout this report) great care should be taken in making cross-program and cross-state comparisons. In addition, there are critical differences in the ways in which programs are structured and operate, as well as the ways in which expenditures are accounted for that may explain the often highly variable efficiency measure results across states (and even within states, across program years). The analyses presented in this section are intended to begin to establish a baseline of data on efficiency measure results by state, as well as to highlight how variable and volatile patterns can be within programs across states (and within states, from year to year). Some key trends with regard to state-level results on efficiency measures are highlighted below:

- **There is substantial variation across programs at state levels in efficiency measure results.** Exhibit 6-4 show state level patterns for PY 2007 for the WIA Adult, WIA Dislocated Worker, WIA Youth, Wagner-Peyser, TAA, and National Emergency Grants Programs on four Common Measure defined efficiency measures: cost per exiter (Exhibit 6-4a), cost per entered employment (6-4b), cost per retained in employment (Exhibit 6-4c), and cost divided by post program earnings (Exhibit 6-4d). At the bottom of each table is the average across all states, as well as a summary

EXHIBIT 6-4a: COST PER EXITER BY PROGRAM, PY 2007

State	WIA-Adult	WIA-DW	WIA-Youth	Wagner-Peyser	TAA (Training Only)	TAA (Training and Benefits)	NEG
Alabama	$4,512	$5,902	$9,755	$34	$19,923	$44,986	N/A
Alaska	$6,814	$18,074	$5,081	$82	$8,546	$9,106	$489
Arizona	$768	$6,025	$11,013	$58	$3,137	$4,995	N/A
Arkansas	$407	$34,589	$9,911	$38	$8,296	$23,085	$965
California	$3,877	$10,458	$9,489	$59	$11,463	$23,956	$12,262
Colorado	$5,409	$9,053	$8,782	$53	$4,877	$15,276	N/A
Connecticut	$271	$14,168	$14,017	$57	$4,640	$13,652	$1,979
Delaware	$1,516	$9,056	$11,530	$61	N/A	N/A	N/A
DC	N/A	$189,049	$23,308	$158	N/A	N/A	N/A
Florida	$2,453	$7,165	$7,428	$48	$4,584	$9,018	$3,979
Georgia	$7,178	$13,557	$7,904	$42	N/A	N/A	$1,366
Hawaii	$2,200	$6,359	$8,660	$57	$129	$212	$1,693
Idaho	$155	$5,172	$5,864	$32	$4,618	$8,222	$11,531
Illinois	$418	$8,661	$10,588	$68	$6,582	$20,086	$8,442
Indiana	$361	$5,488	$6,962	$46	$2,581	$12,686	N/A
Iowa	$7,939	$6,717	$9,519	$36	$24,434	$38,357	$4,382
Kansas	$153	$36,138	$9,145	$94	$4,908	$13,052	$31,923
Kentucky	$6,258	$6,650	$9,336	$45	$7,549	$26,333	$186
Louisiana	$269	$9,585	$10,925	$60	$6,265	$12,835	$1,235
Maine	$8,200	$6,663	$8,539	$114	$1,931	$4,267	$3,717
Maryland	$87	$12,002	$9,837	$95	$2,809	$13,151	$73,966
Massachusetts	$2,707	$5,505	$10,892	$85	$7,945	$17,536	$2,012
Michigan	$108	$14,135	$8,750	$53	$7,540	$33,045	N/A
Minnesota	$5,432	$4,175	$4,946	$67	$7,179	$16,300	$47,901
Mississippi	$547	$688	$4,317	$24	$1,169	$3,272	$1,408
Missouri	$4,349	$7,358	$8,175	$81	$14,698	$26,613	$5,980
Montana	$66	$8,227	$11,142	$66	$7,261	$9,770	$3,410
Nebraska	$7,009	$10,515	$11,482	$90	$6,063	$15,296	$23
Nevada	$870	$5,475	$10,620	$56	$1,612	$4,868	N/A
New Hampshire	$51	$5,697	$7,224	$62	$1,829	$5,453	$5,071
New Jersey	$7,767	$7,247	$7,826	$96	$5,285	$24,126	N/A
New Mexico	$5,104	$20,578	$6,004	$56	$4,025	$6,000	N/A
New York	$146	$658	$10,124	$72	$1,097	$4,239	N/A
North Carolina	$973	$10,329	$10,960	$33	$4,050	$22,458	$724
North Dakota	$160	$8,623	$5,572	$90	$19,944	$37,424	N/A
Ohio	$5,506	$16,010	$10,680	$74	$2,400	$7,801	$10,504
Oklahoma	$123	$12,685	$15,049	$59	$7,009	$20,876	$2,483
Oregon	$6,433	$9,104	$9,274	$30	$11,786	$28,772	$3,016
Pennsylvania	$6,405	$6,944	$9,543	$84	N/A	N/A	$264
Puerto Rico	$7,407	$26,507	$3,244	$194	$62	$87	N/A
Rhode Island	$3,050	$11,078	$10,431	$108	$4,314	$17,436	$13,879
South Carolina	$2,200	$5,659	$7,983	$28	$10,122	$35,344	N/A
South Dakota	$2,851	$3,667	$4,807	$80	$3,160	$5,752	N/A
Tennessee	$2,172	$7,902	$5,663	$36	$1,034	$8,698	N/A
Texas	$3,559	$9,852	$6,803	$35	$2,848	$6,410	$986
Utah	$34	$5,373	$6,560	$52	$4,801	$11,890	N/A

EXHIBIT 6-4a: COST PER EXITER BY PROGRAM, PY 2007

State	WIA-Adult	WIA-DW	WIA-Youth	Wagner-Peyser	TAA (Training Only)	TAA (Training and Benefits)	NEG
Vermont	$11,506	$12,412	$9,719	$132	$8,190	$25,664	N/A
Virginia	$401	$5,963	$7,466	$60	$4,195	$14,547	$106,481
Washington	$438	$7,363	$9,529	$53	$3,396	$8,221	$44,190
West Virginia	$3,966	$5,903	$9,954	$43	$10,880	$26,620	$5,114
Wisconsin	$5,047	$5,882	$7,457	$176	$4,464	$12,377	$3,650
Wyoming	$151	$5,100	$14,081	$53	$31,445	$31,445	N/A
Total	**$468**	**$4,545**	**$8,106**	**$54**	**$4,775**	**$15,199**	**$2,018**
High State	**$11,506**	**$189,049**	**$23,308**	**$194**	**$31,445**	**$31,445**	**$106,481**
Low State	**$34**	**$658**	**$4,317**	**$24**	**$62**	**$87**	**$23**

Note: Figures are based on data provided by OFAM on expenditures and ETA program offices for outcomes.

EXHIBIT 6-4b: COST PER ENTERED EMPLOYMENT BY PROGRAM, PY 2007

State	WIA-Adult	WIA-DW	WIA-Youth*	Wagner-Peyser	TAA (Training Only)	TAA (Training and Benefits)	NEG
Alabama	$6,831	$7,198	$19,464	$67	$29,538	$66,696	N/A
Alaska	$30,694	$54,410	$8,910	$244	$16,798	$17,898	$1,613
Arizona	$4,437	$8,064	$19,808	$288	$3,872	$6,165	N/A
Arkansas	$18,119	$51,783	$17,592	$68	$15,136	$42,121	$633
California	$9,035	$14,905	$15,677	$157	$16,028	$33,496	$16,390
Colorado	$10,619	$10,415	$15,171	$97	$6,868	$21,510	N/A
Connecticut	$14,915	$16,846	$23,362	$104	$8,539	$25,121	$3,383
Delaware	$11,031	$10,140	$18,105	$114	N/A	N/A	N/A
DC	N/A	$129,971	$19,771	$288	N/A	N/A	N/A
Florida	$10,189	$8,855	$15,768	$106	$8,337	$16,403	$4,248
Georgia	$11,912	$18,067	$13,090	$72	N/A	N/A	$1,401
Hawaii	$9,968	$7,214	$16,702	$170	$178	$294	$2,389
Idaho	$8,516	$5,536	$9,617	$121	$6,978	$12,424	$14,706
Illinois	$13,506	$12,039	$20,684	$164	$8,558	$26,119	$6,030
Indiana	$5,415	$8,311	$16,350	$97	$3,952	$19,424	N/A
Iowa	$10,826	$8,361	$14,669	$74	$31,320	$49,166	$8,170
Kansas	$7,556	$40,351	$23,105	$141	$6,515	$17,327	$282,744
Kentucky	$10,443	$7,708	$16,358	$73	$12,385	$43,205	$302
Louisiana	$559	$9,920	$21,253	$138	$21,302	$43,638	$793
Maine	$14,380	$8,368	$16,933	$203	$3,113	$6,877	$5,156
Maryland	$10,265	$14,988	$17,968	$201	$3,873	$18,131	$92,457
Massachusetts	$15,409	$6,823	$17,049	$163	$9,742	$21,502	$3,228
Michigan	$11,952	$15,644	$17,802	$123	$11,646	$51,043	N/A
Minnesota	$8,169	$7,667	$7,877	$162	N/A	N/A	$93,520
Mississippi	$947	$876	$6,761	$36	$1,923	$5,384	$1,809
Missouri	$7,417	$10,050	$15,482	$152	$22,331	$40,433	$6,108
Montana	$11,266	$10,479	$17,095	$97	$635,339	$854,867	$2,747
Nebraska	$13,246	$10,952	$17,368	$155	$6,729	$16,975	$16
Nevada	$7,550	$7,872	$22,702	$100	$4,192	$12,656	N/A
New Hampshire	$8,530	$6,607	$15,241	$107	$2,780	$8,290	N/A
New Jersey	$9,280	$8,184	$14,780	$169	$10,030	$45,788	$330,208
New Mexico	$10,658	$16,414	$12,665	$126	$5,154	$7,685	N/A
New York	$296	$1,337	$15,688	$135	$1,885	$7,282	N/A
North Carolina	$1,659	$11,275	$18,162	$65	$5,361	$29,730	$640
North Dakota	$7,014	$10,607	$10,757	$248	$24,930	$46,780	N/A
Ohio	$9,836	$18,315	$19,263	$113	$3,733	$12,130	$11,024
Oklahoma	$333	$17,715	$23,272	$99	$8,488	$25,282	$1,943
Oregon	$9,813	$10,388	$17,236	$66	$33,234	$81,133	$3,787
Pennsylvania	$13,372	$9,791	$20,480	$250	N/A	N/A	$309
Puerto Rico	$12,012	$37,003	$13,488	$2,434	$92	$129	N/A
Rhode Island	$5,117	$13,467	$26,853	$152	$6,176	$24,963	N/A
South Carolina	$9,284	$9,329	$16,224	$43	$14,674	$51,237	N/A
South Dakota	$6,477	$3,686	$9,615	$185	$4,235	$7,708	N/A
Tennessee	$5,947	$10,258	$11,807	$59	$1,893	$15,925	N/A
Texas	$6,100	$13,369	$14,629	$85	$4,687	$10,547	$1,536
Utah	$153	$10,313	$14,100	$87	$7,387	$18,292	N/A
Vermont	$15,589	$11,128	$25,484	$285	$10,374	$32,507	N/A

EXHIBIT 6-4b: COST PER ENTERED EMPLOYMENT BY PROGRAM, PY 2007

State	WIA-Adult	WIA-DW	WIA-Youth*	Wagner-Peyser	TAA (Training Only)	TAA (Training and Benefits)	NEG
Virginia	$8,492	$9,309	$13,229	$126	$6,324	$21,928	N/A
Washington	$8,527	$7,811	$15,123	$100	$5,106	$12,362	$28,775
West Virginia	$7,062	$5,444	$15,751	$87	$15,808	$38,677	$4,845
Wisconsin	$8,256	$6,567	$14,055	$375	$7,141	$19,799	$4,834
Wyoming	$15,034	$5,525	$22,338	$113	$47,168	$47,168	N/A
Total	**$2,128**	**$6,931**	**$15,769**	**$113**	**$7,397**	**$23,546**	**$2,532**
High State	**$30,694**	**$129,971**	**$26,853**	**$2,434**	**$635,339**	**$854,867**	**$330,208**
Low State	**$153**	**$876**	**$6,761**	**$36**	**$178**	**$294**	**$302**

Note: Figures are based on data provided by OFAM on expenditures and ETA program offices for outcomes. * Cost per placement into Employment or Education is used for the WIA Youth Program.

EXHIBIT 6-4c: COST PER RETAINED IN EMPLOYMENT BY PROGRAM, PY 2007

State	WIA-Adult	WIA-DW	Wagner-Peyser	TAA (Training Only)	TAA (Training and Benefits)	NEG
Alabama	$5,290	$6,348	$53	$34,925	$78,858	N/A
Alaska	$16,842	$34,952	$183	$18,736	$19,963	$474
Arizona	$4,549	$12,284	$225	$4,653	$7,410	N/A
Arkansas	$11,667	$51,783	$71	$13,703	$38,132	$412
California	$6,983	$16,619	$137	$20,200	$42,215	$14,002
Colorado	$8,526	$8,978	$99	$7,181	$22,491	N/A
Connecticut	$12,508	$18,573	$127	$8,815	$25,934	$1,968
Delaware	$7,256	$9,230	$120	N/A	N/A	N/A
DC	N/A	$116,828	$348	N/A	N/A	N/A
Florida	$3,366	$7,908	$111	$9,833	$19,347	$982
Georgia	$11,121	$18,718	$78	N/A	N/A	$1,498
Hawaii	$9,929	$8,175	$151	$194	$320	$10,258
Idaho	$5,095	$4,508	$55	$5,924	$10,549	$10,250
Illinois	$11,660	$13,449	$115	$9,061	$27,652	$6,253
Indiana	$7,156	$7,806	$100	$3,919	$19,260	N/A
Iowa	$7,171	$8,864	$60	$34,263	$53,786	$15,379
Kansas	$5,680	$47,055	$107	$7,184	$19,106	N/A
Kentucky	$7,209	$7,805	$71	$13,240	$46,187	$250
Louisiana	$960	$14,741	$111	$22,824	$46,755	$970
Maine	$10,638	$7,895	$151	$2,976	$6,574	$3,329
Maryland	$8,780	$13,767	$182	$3,892	$18,219	$10,567
Massachusetts	$13,937	$6,918	$188	$11,209	$24,740	$3,886
Michigan	$11,799	$16,739	$125	$12,566	$55,075	N/A
Minnesota	$6,426	$7,644	$107	$11,077	$25,148	$63,352
Mississippi	$900	$1,033	$53	$2,158	$6,042	$803
Missouri	$6,879	$11,094	$159	$23,659	$42,838	$3,797
Montana	$9,022	$8,848	$81	$11,345	$15,265	$1,848
Nebraska	$8,630	$9,621	$157	$6,897	$17,399	$4
Nevada	$6,328	$10,201	$113	$2,994	$9,040	N/A
New Hampshire	$7,978	$6,051	$121	$2,987	$8,908	$53,244
New Jersey	$10,137	$8,384	$201	$10,987	$50,156	$330,208
New Mexico	$7,265	$15,096	$138	$5,650	$8,424	N/A
New York	$487	$1,997	$179	$1,854	$7,162	N/A
North Carolina	$963	$9,961	$68	$6,062	$33,620	$430
North Dakota	$7,736	$8,159	$220	$24,930	$46,780	N/A
Ohio	$7,353	$18,761	$163	$4,227	$13,735	$17,959
Oklahoma	$806	$12,618	$97	$9,543	$28,424	$1,114
Oregon	$8,758	$11,127	$55	$16,883	$41,216	$3,553
Pennsylvania	$13,200	$9,560	$367	N/A	N/A	$795
Puerto Rico	$10,286	$31,285	N/A	$91	$128	N/A
Rhode Island	$3,547	$13,755	$161	$6,841	$27,648	$26,602
South Carolina	$8,663	$10,841	$51	$16,574	$57,872	N/A
South Dakota	$6,127	$3,245	$121	$4,849	$8,826	N/A
Tennessee	$4,321	$10,590	$70	$2,109	$17,743	N/A
Texas	$6,502	$12,716	$129	$4,334	$9,754	$929
Utah	$89	$8,813	$73	$7,816	$19,356	N/A
Vermont	$13,808	$8,722	$339	$10,732	$33,628	N/A

EXHIBIT 6-4c: COST PER RETAINED IN EMPLOYMENT BY PROGRAM, PY 2007

State	WIA-Adult	WIA-DW	Wagner-Peyser	TAA (Training Only)	TAA (Training and Benefits)	NEG
Virginia	$5,433	$8,562	$105	$7,075	$24,534	N/A
Washington	$7,739	$7,815	$88	$5,097	$12,339	$10,575
West Virginia	$5,269	$5,429	$95	$18,380	$44,970	$7,464
Wisconsin	$5,822	$4,609	$304	$6,676	$18,510	$2,131
Wyoming	$10,467	$2,455	$104	$94,336	$94,336	N/A
Total	**$2,558**	**$7,991**	**$116**	**$7,604**	**$24,206**	**$1,779**
High State	**$16,842**	**$116,828**	**$367**	**$94,336**	**$94,336**	**$4**
Low State	**$89**	**$1,033**	**$51**	**$91**	**$128**	**$330,208**

Note: Figures are based on data provided by OFAM on expenditures and ETA program offices for outcomes.

EXHIBIT 6-4d: COST DIVIDED BY POST PROGRAM EARNINGS, BY PROGRAM, PY 2007

State	WIA-Adult	WIA-DW	Wagner-Peyser	TAA (Training Only)	TAA (Training and Benefits)	NEG
Alabama	$0.477	$0.429	$0.000	$3.183	$7.188	N/A
Alaska	$1.147	$1.750	$0.006	$1.974	$2.103	$0.026
Arizona	$0.407	$0.902	$0.006	$0.404	$0.644	N/A
Arkansas	$1.015	$4.011	$0.001	$1.789	$4.978	$0.047
California	$0.436	$1.041	$0.000	$1.355	$2.833	$1.157
Colorado	$0.672	$0.630	$0.001	$0.460	$1.442	N/A
Connecticut	$1.158	$1.152	$0.002	$0.540	$1.590	$0.089
Delaware	$0.738	$0.704	$0.007	N/A	N/A	N/A
DC	N/A	$7.504	$0.017	N/A	N/A	N/A
Florida	$0.180	$0.513	$0.000	$1.741	$3.426	$0.096
Georgia	$0.927	$1.280	$0.000	N/A	N/A	$0.132
Hawaii	$0.820	$0.558	$0.010	$0.020	$0.033	$0.786
Idaho	$0.482	$0.343	$0.001	$0.536	$0.955	$0.555
Illinois	$1.039	$0.857	$0.001	$0.814	$2.485	$0.385
Indiana	$0.637	$0.552	$0.001	$0.311	$1.531	N/A
Iowa	$0.865	$0.773	$0.001	$2.594	$4.071	$1.361
Kansas	$0.455	$3.198	$0.003	$0.406	$1.079	N/A
Kentucky	$0.483	$0.643	$0.001	$1.178	$4.109	$0.021
Louisiana	$0.077	$1.031	$0.001	$9.375	$19.204	$0.069
Maine	$1.102	$0.663	$0.008	$0.249	$0.551	$0.193
Maryland	$0.758	$0.932	$0.003	$0.317	$1.482	$0.805
Massachusetts	$1.520	$0.445	$0.002	$0.870	$1.921	$0.191
Michigan	$1.413	$1.432	$0.001	$1.048	$4.591	N/A
Minnesota	$0.527	$0.451	$0.001	$3.856	$8.754	$3.326
Mississippi	$0.094	$0.095	$0.000	$0.266	$0.745	$0.071
Missouri	$0.763	$0.870	$0.002	$2.015	$3.649	$0.209
Montana	$0.687	$0.548	$0.002	$0.795	$1.070	$0.117
Nebraska	$0.904	$0.780	$0.004	$0.702	$1.772	N/A
Nevada	$0.530	$0.644	$0.002	$0.176	$0.532	N/A
New Hampshire	$0.866	$0.381	$0.004	$0.246	$0.734	$3.258
New Jersey	$0.902	$0.570	$0.002	$1.230	$5.617	$15.396
New Mexico	$0.713	$1.281	$0.003	$0.335	$0.500	N/A
New York	$0.032	$0.115	$0.001	$0.148	$0.571	N/A
North Carolina	$0.085	$0.752	$0.000	$0.677	$3.756	$0.038
North Dakota	$0.745	$0.688	$0.010	$1.725	$3.237	N/A
Ohio	$0.844	$1.459	$0.001	$0.307	$0.997	$1.211
Oklahoma	$0.071	$0.955	$0.001	$3.877	$11.547	$0.090
Oregon	$0.883	$0.845	$0.000	$1.106	$2.701	$0.280
Pennsylvania	$1.059	$0.642	$0.003	N/A	N/A	$0.081
Puerto Rico	$3.127	$8.273	$0.000	$0.007	$0.010	N/A
Rhode Island	$0.286	$0.986	$0.009	$0.505	$2.039	$3.638
South Carolina	$1.018	$0.966	$0.000	$1.600	$5.586	N/A
South Dakota	$0.570	$0.246	$0.004	$0.966	$1.757	N/A
Tennessee	$0.346	$0.867	$0.000	$0.231	$1.947	N/A
Texas	$0.540	$0.901	$0.000	$0.306	$0.689	$0.084

EXHIBIT 6-4d: COST DIVIDED BY POST PROGRAM EARNINGS, BY PROGRAM, PY 2007

Utah	$0.007	$0.610	$0.001	$0.574	$1.421	N/A
Vermont	$1.092	$0.563	$0.039	$0.835	$2.618	N/A
Virginia	$0.557	$0.654	$0.001	$0.674	$2.338	N/A
Washington	$0.639	$0.439	$0.001	$0.315	$0.764	$0.510
West Virginia	$0.530	$0.386	$0.002	$1.282	$3.138	$0.323
Wisconsin	$0.619	$0.322	$0.009	$0.582	$1.613	$0.167
Wyoming	$0.911	$0.175	$0.003	$30.943	$30.943	N/A
Total	**$0.194**	**$0.552**	**$0.001**	**$0.645**	**$2.052**	**$0.147**
High State	**$3.127**	**$8.273**	**$0.039**	**$30.943**	**$30.943**	**$15.396**
Low State	**$0.007**	**$0.175**	**$0.000**	**$0.020**	**$0.033**	**$0.021**

Note: Figures are based on data provided by OFAM on expenditures and ETA program offices for outcomes.

of the high and low state value for each program on each measure. One of the most interesting findings of this analysis is how significant the difference is between the high and low state. For example, in Exhibit 6-4b, for the WIA Adult Program, while the average cost per entered employment was $2,128, the range between the highest state (Vermont, which recorded costs per entered employment of $11,506) and the lowest state (Utah, $34) was substantial. The often extreme differences between the highest and lowest state demonstrate how efficiency measure results can dramatically differ across states. In addition, the extremes suggest that data submitted by states on either expenditures our outcomes may be based on inconsistencies in data collection or simply erroneous data.

- **Within programs there are substantial year-to-year fluctuations on efficiency measure results.** On a given measure, such as cost per entered employment, there is substantial change in efficiency measure results from year-to-year at the state level. Overall, as shown in Exhibit 6-5a, the national average cost per entered employment for the WIA Adult Program decreased from $7,385 in PY 2005 to $2,128 in PY 2007 (a 71 percent decrease). Exhibit 6-5a, which is sorted by state in descending order by percentage change in cost per entered employment between PY 2005 and PY 2007, shows that for some states the cost per entered employment for the WIA Adult Program more than doubled over the 3-year period (Georgia, 155 percent; Alaska, 141 percent, and Nevada, 125 percent), while for four states cost per entered employment decreased by more than 90 percent between PY 2005 and PY 2007 (New York, -92 percent; Louisiana, -96 percent; Oklahoma, -97 percent; and Utah, -99 percent).

- **Underlying trends point to volatility in number of exiters terminated rather than expenditure patterns as a key factor in determining efficiency measure results, especially for the WIA Adult Program.** Exhibits 6-5b and 6-5c illustrate how underlying patterns of expenditure and participation can drive efficiency measure results nationally and at the state level. Exhibit 6-5b show extremely large increases in the numbers of WIA Adult exiters at the national level entering employment (a 226 percent increase, from 133,982 entering employment in PY 2005 to 436,207 entering employment in PY 2007). Several states accounted for a large share of this increase, especially New York, with the number of exiters entering employment increasing by 902 percent, from 20,963 to 210,049. Utah (7,107 percent increase), Oklahoma (3,245 percent increase), and Louisiana (2,837 percent increase) had even higher percentage increases in the number of exiters entering employment (though the actual increase in numbers of exiters entering employment were far less than those recorded in New York). Exhibit 6-6c shows a modest decrease in expenditures at the national level for the WIA Adult program from PY 2005 to PY 2007 (a -6.2 percent decrease), but fairly substantial swings in expenditures (both positive and negative) when patterns are observed at the state level. For example, expenditures increased by over 50 percent for the WIA Adult Program over the three-year period in three states (76 percent in South Carolina, 54 percent in Mississippi, and 51 percent in Colorado), while falling by in excess of 25 percent in five states.

EXHIBIT 6-5a: CHANGE IN COST PER ENTERED EMPLOYMENT, WIA ADULT PROGRAM, PY 2005 TO 2007

State	PY 2005	PY 2006	PY 2007	Change 2005 to 2007
Georgia	$4,676	$7,419	$11,912	154.7%
Alaska	$12,759	$11,307	$30,694	140.6%
Nevada	$3,360	$4,333	$7,550	124.7%
Maine	$7,927	$9,576	$14,380	81.4%
Colorado	$6,597	$9,461	$10,619	61.0%
South Dakota	$4,091	$7,382	$6,477	58.3%
South Carolina	$6,739	$11,103	$9,284	37.8%
Michigan	$8,883	$10,831	$11,952	34.5%
Arkansas	$13,696	$15,249	$18,119	32.3%
Missouri	$5,700	$7,261	$7,417	30.1%
Oregon	$7,656	$8,354	$9,813	28.2%
Alabama	$5,574	$9,229	$6,831	22.5%
Florida	$8,342	$8,680	$10,189	22.1%
Hawaii	$8,322	$14,012	$9,968	19.8%
Nebraska	$11,081	$10,212	$13,246	19.5%
New Hampshire	$7,201	$8,990	$8,530	18.5%
Massachusetts	$13,642	$10,532	$15,409	12.9%
Wisconsin	$7,585	$9,436	$8,256	8.8%
Maryland	$9,503	$8,740	$10,265	8.0%
North Dakota	$6,637	$7,166	$7,014	5.7%
Mississippi	$899	$878	$947	5.3%
Ohio	$9,733	$11,163	$9,836	1.1%
Tennessee	$5,958	$6,156	$5,947	-0.2%
Illinois	$14,090	$13,358	$13,506	-4.1%
Iowa	$11,304	$10,952	$10,826	-4.2%
California	$9,825	$9,681	$9,035	-8.0%
Puerto Rico	$13,321	$14,149	$12,012	-9.8%
Virginia	$9,464	$10,223	$8,492	-10.3%
Washington	$9,654	$8,657	$8,527	-11.7%
Delaware	$12,720	$9,010	$11,031	-13.3%
West Virginia	$8,210	$12,645	$7,062	-14.0%
Montana	$13,161	$16,652	$11,266	-14.4%
Minnesota	$9,835	$9,832	$8,169	-16.9%
Wyoming	$18,209	$17,753	$15,034	-17.4%
New Jersey	$11,305	$10,404	$9,280	-17.9%
Pennsylvania	$16,637	$14,996	$13,372	-19.6%
Connecticut	$18,900	$14,361	$14,915	-21.1%
Texas	$7,811	$7,161	$6,100	-21.9%
Indiana	$7,176	$7,413	$5,415	-24.5%
New Mexico	$14,208	$12,168	$10,658	-25.0%
Idaho	$12,681	$8,854	$8,516	-32.8%
Vermont	$23,544	$18,471	$15,589	-33.8%
Kentucky	$17,266	$12,889	$10,443	-39.5%
Kansas	$13,707	$19,406	$7,556	-44.9%

EXHIBIT 6-5a: CHANGE IN COST PER ENTERED EMPLOYMENT, WIA ADULT PROGRAM, PY 2005 TO 2007

State	PY 2005	PY 2006	PY 2007	Change 2005 to 2007
Arizona	$8,178	$7,404	$4,437	-45.7%
Rhode Island	$10,687	$6,153	$5,117	-52.1%
North Carolina	$14,849	$10,387	$1,659	-88.8%
New York	$3,797	$1,573	$296	-92.2%
Louisiana	$13,077	$3,415	$559	-95.7%
Oklahoma	$9,763	$5,259	$333	-96.6%
Utah	$12,449	$79	$153	-98.8%
DC	$8,801	$7,263	N/A	N/A
Total	$7,385	$4,428	$2,128	-71.2%

Notes: Figures are based on data provided by OFAM on costs and ETA program offices for outcomes.

EXHIBIT 6-5b: CHANGE IN NUMBER ENTERING EMPLOYMENT, WIA ADULT PROGRAM, PY 2005 TO 2007

State	PY 2005	PY 2006	PY 2007	Change 2005 to 2007
Utah	438	64,698	31,565	7106.6%
Oklahoma	879	1,319	29,400	3244.7%
Louisiana	1,689	6,348	49,598	2836.5%
New York	20,963	40,860	210,049	902.0%
Kentucky	1,088	1,300	1,899	74.5%
Indiana	1,800	2,050	2,853	58.5%
Vermont	79	99	124	57.0%
Mississippi	16,688	16,884	24,442	46.5%
Kansas	474	437	657	38.6%
Arizona	2,095	2,048	2,734	30.5%
South Carolina	2,131	1,981	2,720	27.6%
Delaware	197	244	246	24.9%
Idaho	222	299	277	24.8%
Texas	11,640	12,146	14,366	23.4%
Rhode Island	254	357	298	17.3%
Connecticut	368	475	421	14.4%
Pennsylvania	2,091	2,385	2,379	13.8%
Wyoming	147	156	165	12.2%
Tennessee	3,092	3,238	3,463	12.0%
New Jersey	2,230	2,190	2,484	11.4%
Ohio	4,313	4,541	4,794	11.2%
Iowa	341	362	363	6.5%
New Mexico	672	807	713	6.1%
Massachusetts	1,029	1,123	1,089	5.8%
Montana	193	149	193	0.0%
Missouri	2,716	2,680	2,671	-1.7%
West Virginia	700	496	679	-3.0%
North Dakota	311	260	300	-3.5%
Illinois	3,183	3,340	3,050	-4.2%
New Hampshire	258	227	246	-4.7%
Minnesota	957	906	903	-5.6%
Colorado	1,736	1,480	1,629	-6.2%
Washington	2,547	2,533	2,387	-6.3%
California	13,901	13,460	12,954	-6.8%
Michigan	4,885	4,313	4,549	-6.9%
Nebraska	222	279	200	-9.9%
Virginia	1,302	1,262	1,158	-11.1%
North Carolina	2,260	2,660	1,938	-14.2%
Maryland	1,029	1,015	875	-15.0%
Puerto Rico	2,855	2,466	2,395	-16.1%
Arkansas	636	516	528	-17.0%
Florida	5,422	5,939	4,447	-18.0%
South Dakota	494	320	368	-25.5%
DC	385	421	277	-28.1%
Oregon	2,174	1,837	1,553	-28.6%
Wisconsin	1,552	1,229	1,093	-29.6%

EXHIBIT 6-5b: CHANGE IN NUMBER ENTERING EMPLOYMENT, WIA ADULT PROGRAM, PY 2005 TO 2007

State	PY 2005	PY 2006	PY 2007	Change 2005 to 2007
Alabama	3,169	1,788	1,891	-40.3%
Hawaii	443	228	254	-42.7%
Maine	362	298	199	-45.0%
Georgia	3,441	2,152	1,689	-50.9%
Alaska	224	200	107	-52.2%
Nevada	1,705	900	575	-66.3%
Total	133,982	219,701	436,207	225.6%

Notes: Figures are based on data provided by OFAM on costs and ETA program offices for outcomes.

EXHIBIT 6-5c: CHANGE IN PROGRAM EXPENDITURES, WIA ADULT PROGRAM, PY 2005 TO 2007

State	PY 2005	PY 2006	PY 2007	Change 2005 to 2007
South Carolina	$14,360,256	$21,995,034	$25,251,355	75.8%
Mississippi	$15,006,538	$14,830,793	$23,148,499	54.3%
Colorado	$11,452,728	$14,001,577	$17,298,946	51.0%
Missouri	$15,480,533	$19,458,293	$19,810,617	28.0%
Louisiana	$22,087,656	$21,677,197	$27,744,974	25.6%
Michigan	$43,393,133	$46,715,168	$54,368,281	25.3%
Georgia	$16,091,106	$15,966,403	$20,118,760	25.0%
Indiana	$12,916,277	$15,196,059	$15,449,667	19.6%
Massachusetts	$14,037,922	$11,827,175	$16,780,295	19.5%
South Dakota	$2,020,786	$2,362,352	$2,383,442	17.9%
Alaska	$2,858,082	$2,261,426	$3,284,220	14.9%
Oklahoma	$8,582,068	$6,936,044	$9,780,427	14.0%
New Hampshire	$1,857,842	$2,040,803	$2,098,339	12.9%
Ohio	$41,977,559	$50,691,722	$47,155,811	12.3%
Tennessee	$18,420,971	$19,932,239	$20,595,096	11.8%
Arkansas	$8,710,671	$7,868,303	$9,566,922	9.8%
Delaware	$2,505,938	$2,198,398	$2,713,681	8.3%
Nebraska	$2,460,076	$2,849,267	$2,649,259	7.7%
Kentucky	$18,785,452	$16,756,060	$19,830,730	5.6%
Vermont	$1,859,946	$1,828,584	$1,933,057	3.9%
North Dakota	$2,064,034	$1,863,074	$2,104,255	1.9%
Iowa	$3,854,824	$3,964,688	$3,929,696	1.9%
Florida	$45,228,422	$51,550,344	$45,310,101	0.2%
Maine	$2,869,752	$2,853,751	$2,861,647	-0.3%
Texas	$90,920,855	$86,983,125	$87,627,892	-3.6%
Wyoming	$2,676,683	$2,769,487	$2,480,679	-7.3%
Illinois	$44,847,898	$44,615,193	$41,194,133	-8.1%
Maryland	$9,778,360	$8,871,352	$8,981,576	-8.1%
Oregon	$16,644,227	$15,347,195	$15,239,406	-8.4%
Pennsylvania	$34,786,979	$35,766,601	$31,812,213	-8.6%
New Jersey	$25,210,314	$22,784,831	$23,050,998	-8.6%
Connecticut	$6,955,344	$6,821,389	$6,279,168	-9.7%
Utah	$5,452,807	$5,095,187	$4,836,487	-11.3%
California	$136,577,973	$130,301,074	$117,033,956	-14.3%
Montana	$2,540,090	$2,481,122	$2,174,267	-14.4%
Idaho	$2,815,094	$2,647,200	$2,358,925	-16.2%
West Virginia	$5,747,333	$6,271,884	$4,794,828	-16.6%
Washington	$24,588,371	$21,927,581	$20,353,995	-17.2%
Virginia	$12,322,012	$12,901,625	$9,833,971	-20.2%
New Mexico	$9,547,783	$9,819,766	$7,599,500	-20.4%
Minnesota	$9,412,227	$8,908,141	$7,376,734	-21.6%
New York	$79,595,396	$64,264,267	$62,131,044	-21.9%
Wisconsin	$11,772,235	$11,597,449	$9,024,091	-23.3%
Kansas	$6,497,283	$8,480,620	$4,964,203	-23.6%
Nevada	$5,729,486	$3,899,799	$4,341,042	-24.2%

EXHIBIT 6-5c: CHANGE IN PROGRAM EXPENDITURES, WIA ADULT PROGRAM, PY 2005 TO 2007

State	PY 2005	PY 2006	PY 2007	Change 2005 to 2007
Puerto Rico	$38,032,686	$34,890,210	$28,769,937	-24.4%
Alabama	$17,665,302	$16,501,484	$12,917,607	-26.9%
Arizona	$17,133,496	$15,162,653	$12,130,943	-29.2%
Hawaii	$3,686,765	$3,194,766	$2,531,942	-31.3%
Rhode Island	$2,714,604	$2,196,710	$1,525,004	-43.8%
North Carolina	$33,559,283	$27,628,947	$3,214,475	-90.4%
DC	$3,388,419	$3,057,827	N/A	N/A
Total	$989,481,877	$972,812,239	$928,304,645	-6.2%

Notes: Figures are based on data provided by OFAM on costs and ETA program offices for outcomes.

The often extreme differences between the highest and lowest state demonstrate how efficiency measure results can dramatically differ across states. In addition, the extremes suggest that data submitted by states on either expenditures our outcomes may be based on inconsistencies in data collection or simply erroneous data.

- **Within programs there is a lot of variation from year-to-year in efficiency measure results.** On a given measure, such as cost per entered employment, there is substantial change in efficiency measure results from year-to-year at the state level. Overall, as shown in Exhibit 6-5a, the national average cost per entered employment for the WIA Adult Program decreased from $7,385 in PY 2005 to $2,128 in PY 2005 (a 71 percent decrease). Exhibit 6-5b, which is sorted in descending order, shows that for some states the cost per entered employment for the WIA Adult Program more than doubled over the 3-year period (Georgia, 155 percent; Alaska, 141 percent; and Nevada, 125 percent), while for four states cost per entered employment decreased by more than 90 percent between PY 2005 and PY 2007 (New York, -92 percent; Louisiana, -96 percent; Oklahoma, -97 percent; and Utah, -99 percent).

- **Underlying trends point to volatility in number of participant served rather than expenditure patterns as a key factor in determining efficiency measure results, especially for the WIA Adult Program.** Exhibit 6-5b and c illustrate how underlying patterns of expenditure and participation can drive efficiency measure results nationally and at the state level. Exhibit 6-5b show extremely large increases in the numbers of WIA Adult exiters at the national level entering employment (a 226 percent increase, from 133,982 entering employment in PY 2005 to 436,207 entering employment in PY 2007). Several states accounted for a large share of this increase, especially New York, with the number entering employment increasing by 902 percent, from 20,963 to 210,049. Utah (7,107 percent increase), Oklahoma (3,245 percent increase), and Louisiana (2,837 percent increase) had even high percentage increases in numbers entering employment. Exhibit 6-6c shows a modest decrease in expenditures at the national level for the WIA Adult program from PY 2005 to PY 2007 (a -6.2 percent decrease), but fairly substantial swings in expenditures (both positive and negative) when patterns are observed at the state level. For example, expenditures increased by over 50 percent for the WIA Adult program over the three-year period in three states (76 percent in South Carolina, 54 percent in Mississippi, and 51 percent in Colorado), while falling by in excess of 25 percent in 5 states.

D. CONCLUSIONS

The analyses in this section – particularly the quantitative analyses – suggest that additional time and caution are needed before implementation of one or more efficiency measure by the 11 ETA programs that are the focus of this study. As discussed earlier in this chapter, the Common Measures provide a structure that could potentially facilitate cost-effective

implementation of outcome-based efficiency measures across some or all of the 11 ETA programs. The analyses included in this chapter for recent years (2005-07) demonstrate both the feasibility of producing outcome-based efficiency measure results for most of the 11 ETA programs, but also highlight some of the concerns that have been expressed by ETA and state-level program officials, as well as the Expert Panel. In particular, the very substantial variation across programs in efficiency measure results on a measure such as cost per entered employment points to the widely varying cost structure for programs that provide intensive assistance and training services (such as the TAA and WIA Programs) versus programs such as the Wagner-Peyser program providing less customer intensive, labor exchange-type services. The often sizable differences between the highest and lowest state demonstrate how efficiency measure results can dramatically differ across states, as well as suggest that data submitted by states on either expenditures our outcomes may be based on inconsistencies in data collection or simply erroneous data. The next chapter addresses the possible setting of standards (through regression models) should ETA implement efficiency measures across (all or some) of the 11 programs. Similar to this chapter, the results of this modeling effort suggest that ETA should approach the implementation of efficiency measure – and holding states/grantees for performance on such measures – with extreme caution.

CHAPTER 7:

POTENTIAL APPROACHES TO SETTING AND ADJUSTING STANDARDS FOR EFFICIENCY MEASURES

Performance measurement systems for employment and training program (and other public sector programs) – which include standards or expectations – are typically aimed at one or more of the following:

- Encouraging units to maximize some outcome, input, or process of interest;
- Providing feedback to government monitors and the public on how programs are doing ("performing");
- Fostering continuous improvement;
- Assessing if a program is worth maintaining; and
- Comparing various programs to judge their relative value.

Designing a performance measurement system for public sector programs typically involves the following basic steps. First, one establishes a consensus on specific measurable program goals. Second, one defines empirical measures to use in quantitatively assessing performance toward those goals (e.g., outcome and efficiency measures). Third, most programs or organizations also set expectations for progress toward performance goals, that is, targets for performance improvements to be achieved in a given timeframe. In many public sector performance measurement systems, these targets are annual, and increasingly, they also may incorporate expectations for "continuous performance improvements," a "total quality management" (TQM) principle (Deming, 1986). [61] It is this third step – approaches to establishment of standards (for recommended efficiency measures) and the factors that could potentially be applied to adjusting

[61] Yet, few public programs opt to undertake the final step of developing formal procedures to regularly adjust performance expectations for unanticipated or uncontrollable factors that might thwart progress toward the goals. In this regard, they neglect a corresponding tenet of TQM that advocates the use of statistical analysis to adjust for factors outside managers' control in evaluating and managing performance (Deming, 1986).

performance from year-to-year and across states/localities – that is the principal focus of this chapter.

The sections that follow focus on (1) alternative approaches to setting standards for ETA programs and (2) alternative approaches to making adjustments to factors that may affect outcomes and costs of ETA programs. Prior to this discussion, we highlight ETA's historical experience with performance measurement, with a particular focus on setting performance standards and making adjustments. ETA's prior experience provides some important lessons that can help inform decisions about whether and how to set performance standards for employment and training programs.

A. OVERVIEW OF ETA'S EXPERIENCE WITH SETTING AND ADJUSTING PERFORMANCE STANDARDS FOR EMPLOYMENT AND TRAINING PROGRAMS [62]

Performance management for workforce investment programs began on an exploratory basis in the later years of the Comprehensive Employment and Training Act (CETA), the nation's major workforce program from 1973 through 1982.[63] Economists working for the Assistant Secretary for Policy, Evaluation, and Research (ASPER) in the late 1970s advanced the idea of holding local CETA programs accountable for their performance as measured by the impact of the programs on earnings and employment, but they also recognized the unfairness of setting the same earnings or employment rate standard for local programs that served very different populations in varying local economic conditions. This laid the groundwork for the formalization of performance measures under the Job Training Partnership Act (JTPA), the

[62] Portions of this section of the report are based on an unpublished paper co-authored by one of the authors of this report (Burt Barnow): Burt Barnow and Carolyn Heinrich, "One Size Fits All? The Pros and Cons of Performance Standard Adjustments," Johns Hopkins University and University of Wisconsin-Madison, Draft (January 23, 2009). See the end of the report for a bibliography of articles cited in this section.

[63] Christopher King provided background for this section on the history of performance management under CETA and JTPA.

nation's primary workforce development program from 1982 through July 2000.[64] The performance measures used for adults, youth, and dislocated workers, which evolved over time, are shown in Exhibit 7-1 for program years 1998 and 1999, the final years that JTPA operated. The table also shows the adjustment factors and regression-determined adjustments for the adult follow-up employment rate. If, for example, a local program increased the proportion of adult terminees who were women by 10 percentage points, the program's performance standard for the adult follow-up employment rate would decline by 0.5 percentage points, if all other characteristics remained the same.

In establishing national performance measures and standards, the federal government used data on past experience to set targets that they expected approximately 75 percent of the local service delivery areas (SDAs) would be able to meet or exceed; that is, performance standards were set at the performance level of the SDA at the 25th percentile in the prior period.[65] Governors were also empowered to select additional measures, set standards for acceptable performance for each measure that differed from the Secretary's standards, determine how performance on the individual standards was to be combined to provide an overall measure of performance, adjust standards for the state's SDAs to reflect differences in participant characteristics and local economic conditions, and determine sanctions and rewards, subject to federal requirements. Although the particular variables and adjustment parameters varied from year to year, the basic approach remained the same; the bottom half of Exhibit 7-1 shows the variables in the PY 1998-1999 models for the WIA Adult program. Local programs that failed

[64] States distributed 78 percent of the federal funds to approximately 600 local units of government and consortia of local units of government that were referred to as service delivery areas (SDAs) and were responsible for service provision. JTPA program activities, including vocational or basic skills classroom training, on-the-job training (OJT), job search assistance, and work experience, were sometimes provided by SDAs themselves but were more commonly delivered through contracts with community colleges and other nonprofit and for-profit training organizations.

[65] Service delivery areas under JTPA were analogous to local workforce investment areas under WIA.

EXHIBIT 7-1:
JTPA PERFORMANCE MEASURES, NATIONAL STANDARDS AND FACTORS IN THE NATIONAL ADJUSTMENT MODEL FOR JTPA ADULT FOLLOW-UP RATE PERFORMANCE STANDARDS IN PROGRAM YEARS 1998 AND 1999

Performance Measures	**National Standards**		
Title II-A Adult			
Adult follow-up employment rate	60%		
Adult weekly earnings at follow-up	$289		
Welfare follow-up employment rate	52%		
Welfare weekly earnings at follow-up	$255		
Title II-C Youth			
Youth entered employment rate	45%		
Youth employability enhancement rate	40%		
Title III Dislocated Workers			
Entered employment rate	73%		
Factors and Adjustments in National Model for Adult Follow-Up Employment Rate			
Terminee Characteristics (Percent)	*Regression Adjustment*	*Local Economic Conditions*	*Regression Adjustment*
Female	-0.050	Unemployment rate	-0.608
Age 55 or more	-0.130	Three-year growth in	0.245
Not a high school graduate	-0.066	earnings in trade	
Post high school (including college)	0.008	Annual earnings in	-0.539
Dropout under age 30	-0.015	trade	
Black (not Hispanic)	-0.027	Families with income	-0.211
Minority male	-0.026	below poverty level	
Cash welfare recipient	-0.031	(percent)	
Long-term TANF recipient	-0.018		
Supplemental Security Income (SSI) recipient	-0.133		
Basic skills deficient	-0.037		
Individual with a disability	-0.096		
Lacks significant work history	-0.055		
Homeless	-0.043		
Viet Nam era veteran	-0.081		
Not in labor force	-0.108		
Unemployed 15 or more weeks	-0.073		
Unemployment insurance claimant or exhaustee	0.022		

Source: Social Policy Research Associates (1999). Guide to JTPA Performance Standards for Program Years 1998 and 1999. Menlo Park, CA: Social Policy Research Associates, p. I-3 and II-10.

to meet half or more of the core JTPA standards were ineligible to receive performance awards, and if an SDA failed to meet half or more of the standards in two consecutive years, the governor was required to implement a reorganization plan for the SDA. Thus, it is important to note that the JTPA performance management system had stronger reward and sanction provisions than were later required by the Government Performance and Results Act (GPRA)—organizations that did well could obtain substantial additional resources, and those that did poorly could lose their right to operate the program.

Although at the onset, many states simply used the Secretary of Labor's standards without adjustments, by the early 1990s, a majority recognized that failure to adjust standards for local economic conditions and participant characteristics was generating incentives to enroll individuals who would do best in the labor market regardless of the impact of the program (referred to as "cream skimming" or "creaming"). As a result, more governors opted to use the Secretary's adjustment model, and following the 1992 JTPA amendments, governors were *required* to adjust performance standards, either using the optional DOL regression models or some alternative approach that was approved by DOL (Barnow, 1992).[66] Yet despite the DOL's efforts to "level the playing field" and reduce creaming, there is still ample evidence of gaming of the performance management system by local programs to improve their measured performance, through actions such as the strategic enrollment and timing of customers' entry and exit from the program (Courty and Marschke, 1996, 2004). A review of research in this area

[66] In fact, the criteria for using adjustments other than the DOL regression model were quite strict and discouraged states from developing their own adjustment procedures. The Department of Labor's guide to performance standards (Social Policy Research Associates, 1999) stated that the adjustment procedures had to meet the following criteria: (1) procedures for adjusting performance standards must be responsive to the Act, consistently applied among the SDAs and substate areas, objective and equitable throughout the state, and in conformance with widely accepted statistical criteria; (2) source data must be of public use quality and available upon request; (3) results must be documented and reproducible, and (4) adjustment factors must be limited to economic factors, labor market conditions, geographic factors, characteristics of the population to be served, demonstrated difficulties in serving the population, and type of services to be provided.

(Barnow and Smith, 2004) concluded that the JTPA system was highly susceptible to manipulation by local program operators. At the same time, recent research contrasting the JTPA and WIA systems suggests that the regression model adjustments likely tempered such problems (Heinrich, 2004); without them, both incentives and means for local programs to engage in cream skimming behavior are greater.

This research also suggests some aspects of the JTPA performance standards adjustment procedure that one might question.[67] For example, in using data from the prior program year to develop regression adjustment models, only statistically significant variables of the expected sign and a reasonable magnitude were retained in the model. Thus, if the coefficient for percent of participants who were black in the entered employment rate model was either positive (counter-intuitively) or not statistically significant, that variable would be excluded from the model for that year.[68] Although Barnow (1996) showed inconsistent treatment of people with disabilities because of this feature, changes in the adjustment procedures did not follow.[69] And in other ways, the implementation of the performance standards adjustments may have been too rigid. If a governor decided to use the Secretary's adjustment model, he or she could modify the target level of performance, but governors could not change the regression coefficients themselves (e.g., to encourage enrollment of certain groups beyond simply holding local areas harmless for serving that group), nor could they add adjustments for characteristics not in the models (e.g., to

[67] An issue we do not discuss here is whether it was correct to estimate the adjustment models at the local workforce area level rather than the individual level. There are arguments for and against both approaches, and sometimes grouping data can lead to large changes in the estimated relationships (Blalock, 1961).
[68] In addition to the two criteria noted in the text, five other criteria were also used to decide which variables were included in the adjustment models (Social Policy Research Associates, 1999, p. III-8).
[69] For example, data from a number of years could have been pooled, which would likely have led to fewer changes in the variables included in the models and to smaller changes in the magnitude of the adjustments. Another alternative would have been to limit the magnitude of the change in the adjustments so that the incentives would not vary so much from year to year.

give credit for serving refugees or the disabled in years when such characteristics were not included in the model).

Overall, despite the deficiencies, the use of the regression adjustment models was largely accepted by the various parties and appears to have contributed to leveling the playing field and to producing more valuable information for policymakers to use both for program management and accountability purposes. By the time the JTPA program ended, the national regression-based adjustments were the default case and were generally perceived as a fair and appropriate way to set performance standards.

When the Workforce Investment Act became operational in July 2000, the performance management system was modified in several significant ways, both in terms of the measures used and the performance standards adopted. Standards are now set for states as well as local areas, and the standards are "negotiated" rather than set by a regression model. No automatic adjustments are made to take account of economic conditions or participant characteristics, but states may petition to the Department of Labor if circumstances have changed. The WIA legislation did not require dropping the model-based performance management system used under JTPA, so the switch was based on preferences rather than necessity.[70] There were several reasons for substituting a negotiated standards system for a model-based system. First, ETA wanted to signal that WIA was going to be different than JTPA, so change was considered good in its own right. Second, the group charged with developing the performance management system felt that under JTPA the system was "looking back," and they believed that a negotiated standards system was prospective in nature rather than retrospective. Finally, a model-based

[70] The lack of a regression adjustment model is not based on statutory language. While not requiring the use of a regression model, the statute states that the state-level standards are supposed to be set "taking into account factors including differences in economic conditions, the characteristics of participants when the participants entered the program, and the services to be provided."

system, by definition, requires that data for the regression models be collected. States indicated to ETA that they found the JTPA data collection requirements to be onerous, and they urged that the data collection be reduced under WIA (Barnow and Smith, 2004).[71]

B. OPTIONS FOR SETTING EFFICIENCY MEASURE STANDARDS FOR ETA PROGRAMS

In the three-step process of establishing a performance measurement system discussed above, once agreement is attained on performance measures to be adopted, most programs or organizations set expectations for progress toward performance goals, that is, targets for performance (possibly including improvements) to be achieved in a given timeframe.

Because WIA, like JTPA and CETA before it, is a multi-level program, measures can be applied at the national, state, and/or local levels. Each level of the program is responsible to the level directly above it, and in the case of the U.S. Department of Labor, DOL is responsible to OMB. OMB has indicated that it is establishing outcome-based efficiency measures for all programs, so the primary task for ETA is determining how best to assure that the states have incentives to help ETA meet the standards imposed by OMB. Under WIA, establishing performance measures and standards for the Local Workforce Investment Areas (LWIAs) is the responsibility of the states, so that issue is not discussed here. Thus, the primary issue addressed in this report is how ETA should establish efficiency measures and standards for states.

There are at least three basic approaches available to ETA with regard to setting performance standards for the recommended efficiency measures (i.e., cost per entered employment and cost divided by post-program earnings): (1) set no standards, (2) set standards without adjustments; or (3) set standards with adjustments. These options are discussed below.

[71] For the specific performance measures used and further discussion of the WIA and JTPA performance measurement system, see Barnow and Smith (2004).

Alternative #1: Set No Standard. Setting no standard is a strategy that essentially means that the performance measures are for primarily informational/monitoring purposes -- and no incentive payments are awarded or sanctions imposed as a result of how well or poorly an operating unit performs. A similar strategy, which we include under this broad heading, is to establish standards that have no rewards or sanctions. Such a strategy would make states conscious of their efficiency but provide less incentive to meet or exceed standards because there is no gain or loss from exceeding or falling short of the standard.

If no standards for performance are promulgated, the federal government, states, and local grantees/operators, may use the measures to track how programs are achieving goals over time and across local operating units. The federal government, states, and local operating units may make adjustments in their program operations as appropriate to enhance prospects for future performance. For example, to improve performance on a measure such as cost per entered employment, a local program operator might change staffing levels, alter client flow through services, change the mix of services delivered, or enhance linkages to other service providers. Such changes might be undertaken to either reduce costs or improve outcomes. The option of adopting no standards might be an appropriate initial strategy when a new system of measures is introduced because it gives time to develop a track record of results upon which standards can later be set. It also provides time for reporting units (e.g., states, grantees, and local operators) to troubleshoot potential glitches in data collection/reporting. Finally, and as discussed in greater detail later in this paper, using performance results for informational purposes only (and not setting standards or rewarding performance) reduces incentives for distorting or "gaming" performance results. If specific standards are set or performance is rewarded or punished based on performance standards, states, grantees, or local operating units may institute

strategies/procedures that do not promote overall program objectives for purposes of appearing to perform statistically better on what they are being measured (e.g., "creaming" the most likely to succeed applicants).[72]

Alternative #2: Set Standards Without Adjustments. The second option open to ETA with regard to setting standards in relation to efficiency measures is to set standards without making adjustments across programs or geographic area. On an efficiency measure such as cost per entered employment, the same standard could be established across each program. Arguments for this approach are that it is easy for program operators to understand and administratively straightforward – without the need for costly analyses of factors potentially underlying performance—and that it could be deemed appropriate for all states to meet the same standard.[73]

Setting the same standard for a given efficiency measure across programs (or applying the same standard within a program across states or local jurisdictions) may be appropriate if the goals, service delivery approaches, costs, and types of individuals served are similar across programs. The pitfall to setting the same standard is that in the case of the 11 ETA programs of interest, that while employment and improving earnings is a common emphasis, the populations served and mix of services provided are quite varied. For example, the SCSEP program, which focuses services on older workers, provides a different mix of services than the WIA Youth program (which targets in-school and out-of-school youth). In comparison to the SCSEP or WIA Adult and Dislocated Worker programs, the Wagner-Peyser program typically provides a less costly mix of services, and participants may be involved in such services for only a matter of days or weeks (until they find a job). As will be seen in the analyses section later in this report,

[72] See below for more discussion on how instituting measures and standards can lead to gaming.
[73] See Barnow and Heinrich (2009) for a discussion of arguments for and against adjustments to standards.

there are very substantial differences in results on measures such as cost per entered employment across the 11 ETA programs, which suggest that setting one standard across all programs would in most likelihood be undesirable.

Alternative #3: Set Standards with Adjustments. The third, and most complicated and costly option available, is to set and adjust standards for performance measures across programs -- and within programs, across states, grantees, and local program operators. The adjustments to performance standards may be based on the following:

- **Past performance.** ETA could use prior performance as a starting point and base the next year's standard on what is considered to be reasonable continuous improvement.
- **Relative performance.** In some situations there may be a "ceiling effect," where states that are already performing very efficiently cannot be expected to improve as much as those not performing as well. For example, a program in the top 10 percent of the efficiency distribution may not be able to achieve as great an improvement as one in middle of the distribution, so expected performance should take this into account.
- **Statistical adjustments.** In this approach, regression analysis or a similar approach is used to take account of how expected performance varies with factors such as participant characteristics, the economic environment, activities and services used, and the cost of providing services. This is the approach that was used under JTPA to "level the playing field" across grantees facing different environments and to hold them harmless from these variations.
- **Consensus agreement.** This is the approach currently used for WIA. Under this approach, standards for individual units are negotiated between ETA and the states.

The concepts of fairness and equity have been set forth to argue both for and against the use of performance adjustments.[74] The most often cited reason for adjusting standards is to "level the playing field," or to make performance management systems as fair as possible by establishing expectations that take into account different demographic, economic, and other conditions or circumstances outside of public managers' control that influence performance. It

[74] Pro- and con- arguments presented in this section are based on Burt Barnow and Carolyn Heinrich, "One Size Fits All? The Pros and Cons of Performance Standard Adjustments, Johns Hopkins University and University of Wisconsin-Madison, Draft (January 23, 2009), forthcoming.

has also been argued, however, that it is not acceptable to set lower expectations for some programs than others, even if they serve more disadvantaged populations or operate in more difficult circumstances. For example, do we perpetuate inequities in education if less rigorous standards for reading and math performance are established for schools serving poorer children? Or if a single standard is set for all, could governments instead direct more resources to those programs that face more difficult conditions or disadvantaged populations to help put them on a more level playing field?

Another argument of those advocating performance adjustments is that they better approximate the value-added of programs (rather than gross outcome levels or change). For policy makers or program managers, having a better understanding of the contributions of program activities to performance (net of factors that are not influenced by the production or service processes) may contribute to more effective use of the performance information to improve program operations and management. The use of adjusted performance measures is also more likely to discourage (if not eliminate) "gaming" responses, in which program managers attempt to influence measured performance in ways that do not increase impacts (e.g., by altering who is served and how). A system that adjusts for population characteristics and other such factors will reduce the efficacy of these gaming strategies and the misspent effort and resources associated with them. Of course, these benefits may be contingent on program managers understanding and having confidence in the adjustment mechanisms. Regression-based performance adjustment models (discussed below in greater detail) have been criticized for having low explanatory power (as measured by R^2) and flawed specifications, suggesting that sometimes adjustments may be biased or unreliable.[75]

[75] The argument that a low R^2 implies that the statistical model is not useful is in most cases false. A low R^2 means that there is a lot of noise in predicting the overall level of the dependent variable, not necessarily that the results are

Some scholars have criticized these more (technically) rigorous approaches to performance measurement as too positivist or elitist, arguing that they may put performance analysis and results out of reach of practitioners and the public (i.e., limiting their transparency and usefulness for accountability purposes) (Shulock, 1999). In WIA, the U.S. Department of Labor discontinued use of the regression-based performance standards adjustment procedures and replaced them with a system of negotiated standards with the goal of promoting "shared accountability" (U.S. DOL-ETA, 2001). It was suggested that factors outside managers' control that affected program outcomes (some immeasurable) might be more easily conveyed and weighed in negotiations.[76]

In other cases, the use of performance standards adjustments may be viewed as incompatible with the objective of motivating particular individual or organizational responses to performance requirements. For example, some performance measurement system designers intentionally set a more ambitious standard—also known as a "stretch target"—which is not adjusted in order to motivate laggards to change their ways and aspire to achieve higher standards of performance. In the TANF high performance bonus system, states that in the past had invested little to help clients achieve self-sufficiency had to work harder to meet performance requirements for client work participation, job entry, retention, and earnings gains.

A related argument for not developing or using performance standard adjustments is to promote equity in outcomes, that is, to hold up the same standard for *all* individuals or organizations, despite the greater challenges that may be involved in achieving the minimum

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unreliable. Indeed, one may obtain statistically significant coefficients for the adjustment factors even with a low R^2, implying that there are important factors that have a strong effect on predicted performance and should be accounted for in measuring performance. Based on similar reasoning, Rubenstein et al. (2003) argue that performance standard adjustments should also be attempted even when the number of organizations available for comparison is small.

[76] The use of negotiated standards under WIA has been very unpopular. See Social Policy Research Associates (2004) and Barnow and King (2005).

level of performance for some. The recent education reforms that require states to set standards for reading and mathematics proficiency and to ensure that all children achieve these minimum levels within a specified timeframe, regardless of their backgrounds, special needs, school resources, etc., are an example of this approach. In fact, the U.S. Department of Education describes its requirements for "challenging state standards" and student testing as one of the "pillars" of NCLB that is intended to strengthen "accountability for results" (Radin, 2006: 62-63). In addition to requiring states to measure and report "adequate yearly progress" under strict timelines and in compliance with federal guidelines, NCLB also established a uniform target for schools to have 100% of their students proficient in reading and mathematics within 12 years. Some states have responded accordingly by developing their own performance-based funding incentive systems, in which school districts, schools, and even principals receive incentive payments for schools or students who "demonstrate progress" or exceed performance expectations. Texas and California, for example, are funding incentive awards at approximately one-half billion dollars per year, and a number of states (including Arizona, Colorado, Florida, North Carolina, Ohio, and Tennessee) are using value-added statistical models to measure teachers' contributions to learning and to give teachers credit based on how much better (than expected) their students perform on tests compared to peers (House Research Organization, Texas House of Representatives, 2004).

C. APPROACHES TO MAKING STATISTICAL ADJUSTMENTS

The objective of producing accurate knowledge of program impacts or the value-added of government activities through statistical modeling (e.g., regression analysis) has been strongly advocated by numerous coalitions organized to promote "evidence-based policy making," that is,

government policies and practices based on or guided by scientifically rigorous evidence of their effectiveness.[77] If accepted as the principal objective of a performance measurement system, it is an imperative (in the absence of an experimental evaluation) to model statistically the relationship of government activities (i.e., the technology of public production) to performance outcomes, while adjusting for factors that influence outcomes but are not (or should not be) controlled by public managers. In effect, by adjusting performance expectations for factors that are not controlled in production, the estimates of performance are more likely to accurately (and usefully) reflect the contribution (or value-added) of public managers and program activities to any changes in performance.

Although there are a number of alternatives to statistically adjusting performance expectations, in light of the limitations associated with informal procedures and the lack of transparency with their use in practice, we focus primarily in this interim report on formal statistical methods for performance standards adjustments. One such technique involves adjusting a common performance standard or target (P_s) to which an individual or organization's measured performance (P_m) is compared. In public employment and training programs, for example, federal and state officials may establish target performance goals (e.g., a minimum entered employment rate or cost per entered employment) for states/local agencies by using a regression model to adjust for client demographic characteristics (X) and other uncontrollable factors (Z) that may influence performance (e.g., local area unemployment rates). Typically,

[77] For example, there is a Center for Evidence-Based Policy (at Oregon Health and Science University), a National Coalition for Evidence-Based Policy, the Cochrane Collaboration and the Evidence for Policy and Practice Information and Coordinating Centre (both established in the United Kingdom), evidence-based policy networks, evidence-based journals and journal clubs, and evidence-based policy making newsletters and bulletins that review and disseminate current research findings on the effectiveness of interventions.

baseline data and/or data on past performance (P_0) and the vectors X and Z of factors influencing performance are pooled across units and used to estimate a model such as:

$$P_0 = \alpha + \beta_1 X + \beta_2 Z + \varepsilon.$$

The estimates of β_1 and β_2 are subsequently used as weights for the influence of these factors in adjusting the common standard (P_s) to derive unit (e.g., agency-specific) performance targets for a given performance measure. Performance is then judged not by comparing actual performance (P_m) across units and/or time, but by comparing the differential between a unit's target (P_{si}) and its measured performance (P_{mi}). [78]

There are a number of factors to consider when developing statistical (regression) models to adjust for outcomes and costs (which are the key components of efficiency measures, such as cost per entered employment). With regard to outcomes (the denominator in efficiency measures), among the key factors to control for in such adjustment models are the following:

- **Participant characteristics –** Characteristics of individuals enrolling or exiting programs can significantly affect how well programs perform. For example, among the factors used in the JTPA national model for the adult follow-up employment rate (discussed earlier) were gender, age, education, race/ethnicity, and receipt of cash assistance. Example of other factors that could be considered for such models are: veteran status, employment status at registration, limited English proficiency, basic skill deficiencies, homeless status, disability status, and offender status.

- **Economic factors –** Local economic conditions have a substantial effect on the ability of program participants to secure and retain employment, as well as the wages which they are likely to receive. For example, among the factors used in the JTPA national model for the adult follow-up employment rate (discussed earlier) were unemployment rate, three-year growth in earnings in trade, annual earnings in trade, and families with income below poverty.

- **Program activities –** The types of program activities and intensity of such activities can affect how well participants/exiters perform in terms of outcomes such as employment and earnings both over the short- and long-term. For example, the attainment of a degree (such as an Associates or BA degree) or certification can affect

[78] Later in this chapter, we provide a preliminary model and utilize data from the WIA program to analyze various factors (e.g., participant characteristics, environmental factors, services received, etc.) that may explain variation across states in results on efficiency measures such as cost per entered employment.

how much an exiter from a training program makes in his/her new job. In a program such as WIA or TAA, for example, there are several levels of service that could be considered within a model – receipt of core unassisted services, receipt of intensive services, or receipt training services.

- **Co-enrollment** – With emphasis in recent years being placed on partnering and coordination of services, as well as leveraging of resources, to bring the full array of services to bear on behalf of program participants, it is important when developing models to take into account co-enrollment. For example, WIA participants may be enrolled at the same time in more than one WIA program (e.g., the WIA Adult and Youth programs or the Adult and Dislocated Worker programs, or even all three of these programs at once or sequentially). Additional, WIA participants may be referred to (and enrolled in) a host of other programs to both stretch resources and maximize chances for positive outcomes, including Wagner-Peyser, TAA, the Indian and Native American Program, and others. Policies with regard to co-enrollment and the extent to which co-enrollment is tracked in various information systems can vary substantially across states and, within states, across local workforce areas. To the extent possible – and it can be a problem if information systems are not linked across programs – it is important to take into account patterns of co-enrollment both because they may affect outcomes and alter costs.

With regard to the cost side of the equation (i.e., the numerator in an efficiency measure), it is important to consider the following that can drive up or down costs of providing services:

- **Shared/joint cost across programs --** Particularly within a One-Stop system and programs that emphasize strong linkages to other programs and co-enrollment to leverage resources/services, there can be significant sharing of costs across programs that makes it difficult to fully account for the costs of serving a particular individual. For example, costs for the WIA program can be significantly affected by whether other programs (such as Wagner-Peyser, rehabilitation services, welfare programs) pay none, some portion, or all of the costs of One-Stop operations. Tuition costs in TAA or WIA can be substantially stretched if training participants use Pell Grants; support service costs such as transportation or purchase of work clothing/tools may be reimbursed by welfare programs or other programs. This is (and will be) a challenging dimension of designing adjustment models for programs.

- **Cost-of-living differences (across states/local areas) –** Cost of staff salaries, tuition for participants, office space, and a host of other items can substantially vary across states and local jurisdictions. With regard to efficiency measures, such cost differentials can have serious impacts on a measure such as cost per entered employment; for example, it may be much more costly to provide services in urban areas such as the New York metropolitan area, compared to small cities, towns, and rural areas. Factors such as average weekly wage rate for retail trade or average weekly wage rate for wholesale trade might be incorporated into adjustment models to reflect such differentials across states or localities.

- **Inflation (over time)** – Making comparisons of efficiency measure results across program or fiscal years necessitates use of inflation adjusters (such as the consumer price index (CPI) or producer price index (PPI)) or possible change in average wage rates.

The next section of this report explores the potential for taking into consideration some of these factors in building a statistical adjustment model and present preliminary results of adjustment models applied to the WIA Adult, Dislocated Worker, and Youth programs.

D. ADJUSTING EFFICIENCY MEASURES USING STATISTICAL MODELS: PRELIMINARY MODELS AND RESULTS FOR THE WIA ADULT, DISLOCATED WORKER, AND YOUTH PROGRAMS

This section explores the potential for using regression analysis to statistically adjust standards for the recommended efficiency measures. Overall, while it is technically possible to build such models, when applied to the WIA program the various models did not generally yield statistically significant coefficients that could explain the wide variation in efficiency measure results across states. This analysis suggests that while adjustment models have been useful in the past for explaining variation in outcomes for exiters from employment and training programs (such as those served under JTPA), that for various reasons explained below, such models (at least at the state level) do not appear promising for explaining variation in efficiency measure results across states for the 11 ETA programs.

Background. A number of regression models were constructed to estimate the extent to which variation in efficiency measure results might be explained by a set of characteristics of the population served, environmental factors, and various levels of program services received by participants. This exploratory analysis focuses on exiters from the WIA Adult, Dislocated Worker, and Youth programs with the goals of (1) determining if such models can be built, (2) defining the types of variables that can and should be included in such models, and (3) initially

testing whether such models generate statistically significant and reasonable coefficients that are helpful in explaining variation in efficiency measure results across states. We have focused on the three WIA programs because (1) its predecessor program (JTPA) had a considerable track record using regression models to adjusts performance results for outcome measures (across local workforce areas) and (2) the WIA program collects detailed data on individual participant characteristics, service utilization, and outcomes (i.e., exiters of the program) that can be readily matched with state-level expenditure data. By focusing on the WIA program, this exploratory analysis provides a case study of the potential feasibility and effectiveness of such adjustment modeling, including identifying potential pitfalls in applying such adjustment models to employment and training programs. If such models are feasible and useful for adjusting performance results for the WIA program, they might also be useful for other programs (with perhaps a somewhat different set of explanatory variables), such as the Wagner-Peyser and TAA Programs.

Several data sources were used for this exploratory analysis: (1) the Workforce Investment Act Standardized Record Data (WIASRD) covering exiters for a three-year period (PY 2004-06) was used to generate data on participant characteristics (e.g., gender, age at registration, race/ethnicity, etc.), services received (e.g., whether intensive or training services were received), and outcomes (such as whether an exiter entered and retained employment, post-program earnings);[79] (2) Bureau of Labor Statistics (BLS) and Census Bureau data were used to generate several key environmental variables at the state level (e.g., unemployment rate, average wage rates, etc.); and (3) WIA Program expenditure data (provided by OFAM) was aggregated to the state level for each of the three program years of interest. Because cost data for the WIA

[79] For documentation of this dataset, see Social Policy Research Associates, *PY 2005 WIASRD Data File Public Use Including Data Quality Revisions, Record Layout,* March 23, 2007.

program is only available at the state level (i.e., WIA program expenditures by local workforce investment areas are not reported to USDOL), participant, services receipt, and outcome data were aggregated to the state level and the models were estimated at the state level.[80] [81]

In specifying the independent and dependent variables to be included in the various regression models to be tested, we first considered and built on the main variables that were used in the original JTPA adjustment models (see the earlier discussion in Section A of this chapter and Exhibit 7-1 for the specific independent and dependent variables included in the JTPA model). We broadened our modeling effort to include some additional independent variables that were not included in the JTPA model, which we felt could be reasonably expected to explain variation in results on the efficiency (dependent) variables. We discuss the specific dependent and independent variables included in our models below (and they are shown in the tables that show our regression results). It is important to note that shortcomings in several of the variables found within the WIASRD precluded their use in these models. For instance, for the WIA Adult and Dislocated Worker Programs, because of substantial amounts of missing data from individual exiter records, information on unemployment compensation receipt, low-income status, homeless status, and offender status, among others, could not be used. Similarly, for WIA Youth, foster care and low-income status could not be used.

With regard to understanding potential effects of co-enrollment on efficiency measure results across states, there were also clear limitations. Whether a WIA participant was co-enrolled in other programs was not consistently entered on exiter records by local workforce

[80] Expenditure data at the Local Workforce Investment Area (LWIA) level are not submitted to the U.S. Department of Labor by local areas or the states; hence, at this time it is not possible to run the various cost models at the local level which would allow for many more observations on an annual basis (e.g., about 600 observations if the analysis was at the LWIA level versus 51 observations at the state level, with the inclusion of the District of Columbia). As is discussed later in this section, the small number of observations is a serious limitation to producing models with explanatory power.

[81] This is unlike the regression models used under JTPA, which were used to adjust performance at the local workforce area – referred at the time as the Service Delivery Area (SDA).

areas. Hence, co-enrollment in other programs could not be included in the models (though it was possible to include co-enrollment of WIA exiters in other WIA-funded programs and the Wagner-Peyser program as variables in the models).

Models were tested using one year of data (PY 2006), as well as for two and three years (PY 2004-06). Given that any statistical model for a single year, run at the state level, would have a relatively small sample size (51 observations) – and therefore, be less likely to generate statistically significant coefficients for independent variables of interest than a sample with many more observations – we report on models with WIASRD data pooled for three years in the exhibits.[82] Using three years of pooled data boosted the number of observations from 51 observations to 153 observations – though as will soon be shown, this pooling across three years did not result in the models having much in the way of statistically significant coefficients.

Overview of the Models Tested. Two sets of models were constructed for all dependent variables: (1) Pooled Ordinary Least Squares (OLS) and (2) Fixed Effects. Each of these models is briefly discussed below, including their relative advantages and their limitations. The two models were used because each approach has limitations. The *Pooled OLS Model* is generally defined as:

$$Y_{it} = \beta_0 + \beta_{x_{it}}\chi + \beta_{L_{it}}L + \beta_{P_{it}}P + \beta_{C_{it}}C + u$$

where: aggregated state (i) level observations are pooled across the three program years (t), Y_{it} = Total expenditures$_{it}$/outcome$_{it}$, X is a vector of individual characteristics of the exiter population,

[82]It should be noted that all exiters for the WIA Adult and Dislocated Worker programs who exited in the fourth quarter of program year 2006, are excluded from the Employment Retention and Post Program Earnings common measures and the efficiency measures based on them. This is because at the time of the release of the 2007 WIASRD data, there had not been sufficient time to allow for a third quarter post-program follow up. As a result, if we assume steady state programs, then one-twelfth of the customer observations are missing. The only viable solution to this problem other than waiting until the data become available is to limit the analysis of these two efficiency measures to PY2004 and PY2005. These models were estimated, and the results are available upon request. However, very few explanatory measures had statistically significant regression coefficients, which is not surprising given the limited sample size of only 102. This is not an issue for the Entered Employment Rate and the efficiency measure based on its underlying outcomes.

L is a vector of local area economic characteristics, P is a vector of programmatic/service level characteristics, and C is a vector of co-enrollment characteristics. The OLS regression model is advantageous in that it is widely used, well understood, and accepted in a performance management context for workforce investment programs. Moreover, it provides easily interpretable coefficients describing the relationship of a single characteristic to the efficiency measures, holding the other characteristics constant. The pooled nature of the model also has the benefit of estimating coefficients from both differences between states and within states over time. Moreover, using multiple years should reduce the likelihood of having adjustment factors vary a great deal from year to year, as sometimes occurred when annual models were estimated to adjust performance standards under JTPA.

There are, however, some serious potential drawbacks to using a pooled OLS regression model with geographically aggregated observations over time. The theory that allows for the use of pooled OLS over several years requires that the samples for each year be independent of one another. Generally, this can only be achieved through drawing a random sample from a large population in each time period. Specifically, for the coefficient estimates to be unbiased and standard errors to be valid, not only must the unobserved factors that affect the outcome measures be uncorrelated with the explanatory variables within a single time period, as would be required for avoiding classic omitted variable bias for OLS in a single program year, they must also be completely independent across time periods.[83]

[83] In other words, if there is an unobserved constant characteristic of a state that affects the outcome measure (e.g. a state specific "fixed effect") that is omitted from the model, not only will the coefficients be biased if that characteristic is correlated with one or more of the explanatory variables, tests of significance and our inference assumptions will also be invalid regardless of whether or not the unobserved state "fixed effects" bias the coefficients through correlation with the explanatory variables. Simply the fact that there are unobserved constant characteristics of states/local populations/WIA programs that impact outcomes (and are omitted from the models), requires viewing pooled OLS results in this setting with some skepticism. Moreover, given limited data availability and often very different programs within states, assuming that there are not unobserved state "fixed effects" that impact outcomes may be a very strong assumption to make.

Overcoming an omitted variable bias problem is possible. While not ideal, if we assume that the relationship of the omitted variable is consistent across all states, the use of the coefficient for the adjustment of standards would simply adjust for both the observed variable and the unobserved variable. However, drawing valid inferences from pooled cross sections does require eliminating the fixed state effects, should they exist. This is what the *Fixed Effects Model* – the second model tested -- is designed to accomplish. The Fixed Effects Model is generally defined as:

$$\ddot{Y}_{it} = \beta_{x_{it}} \ddot{\chi} + \beta_{L_{it}} \ddot{L} + \beta_{P_{it}} \ddot{P} + \beta_{C_{it}} \ddot{C} + \ddot{u}$$

This model, also called the *"within transformation,"* is computationally identical to pooled OLS, except that it utilizes *time-demeaned* observations, $\ddot{Y}, \ddot{X}, \ddot{L}, \ddot{P}, \ddot{C}$, instead of the original observations. Simply put, time-demeaned observations result from subtracting the cross-year averages from individual year observations.

Without going into detail as to why this is the case,[84] what is important to note is that this transformation drops out any unobserved time constant characteristics that affect the outcomes and may or may not be correlated with the other explanatory variables, including the state "fixed effects."[85] It should also be noted that, while the reported coefficients are interpreted in exactly the same way as those reported for the pooled OLS model, the Fixed Effects model is specifically looking at the extent to which the *time variation* in the dependent variable can be

[84] See, for instance, Wooldridge, *Introductory Econometrics: A Modern Approach, 3rd edition* (2006) chapter 14.
[85] Also note that the model intercept and any explanatory variables that are constant over all time periods, or have a constant rate of change, are also dropped. However, because the data was aggregated at the state level there were no time constant variable that would be dropped by the transformation, as would be the case for any participant characteristics, for instance, in an individual level panel.

explained by changes in the explanatory variables *within* states over time (hence, the term "within transformation").[86]

The Fixed Effects Model is not without its drawbacks, however. While the transformation does remove the unobserved time constant "fixed effects," it does not remove unobserved time-varying effects that relate to issues such as unobserved programmatic or co-enrollment changes. As a result, to the extent that we are unable to account for the non steady-state nature of these programs during the period studied though the explanatory variables, especially in relation to co-enrollment and external financial support, there is a potential for bias. Another significant issue is that the Fixed Effects Model requires large changes in the variables over time to draw proper inferences. If an explanatory variable does not change over time (a) it will be completely dropped by the "demeaning" of the data, and (b) if it only varies slightly over time, statistically valid effects cannot be estimated with high likelihood. Also, the Fixed Effects Model is far more susceptible to bias in the estimated coefficients due to classic measurement error in the underlying data than OLS estimates are. There is reason to believe that at least some of the data used for this study suffers from substantial measurement error.[87]

Dependent Variables (Efficiency Measures) and Independent Variables Included in the Adjustment Models Tested. The *dependent variables* used in the models are efficiency measures, including the two measures recommended in our earlier report for implementation by the 11 ETA programs – cost per entered employment and cost divided by post-program earnings.

[86] For readers more familiar with the somewhat (historically) better known "least squares dummy variable (LSDV) model" where dummy variables are added for all but one state, it should be noted that this model produces identical results to LSDV and holds the same benefits of dropping out the individual state "fixed effects."

[87] Apart from the many known measurement problems, either addressed or not, that are listed in the record layout documents that accompany each version of the public release WIASRD data, careful examination of the dataset reveals some unlikely observations and/or missing data where it should not be missing. Moreover, it appears as though certain variables are inconsistently reported across states (e.g., being served by a Wagner-Peyser funding stream appears to be one) and there is a tendency for individuals receiving higher levels of service to have better reporting, even beyond the fact that certain questions are only asked for exiters with higher levels of service.

In recommending these efficiency measures for implementation for WIA (and the other ETA programs), an effort was made to align the constructed efficiency measures with the already established Common Measures because states are already tracking the Common Measure outcomes. For the WIA Adult and Dislocated Worker Programs, the main dependent variables included in the models are defined as follows:

1) **Cost per Entered Employment** equals [Total State Expenditures] / [the number of individuals counted as "entering employment" by the common performance measure's definition of entering employment];
2) **Cost per Employment Retention** equals [Total State Expenditures] / [the number of individuals counted as "retaining employment" by the common performance measure's definition of employment retention]; and
3) **Cost divided by Total Post-Program Earnings** = [Total State Expenditures] / [the aggregate 2nd Quarter + 3rd Quarter post exit earnings that are used to calculate the Adult and Dislocated Worker Average Earnings Common Measure].[88]

The WIA Youth Program required construction of a different dependent variable because the three dependent variables calculated for the Adult and Dislocated Worker programs are only applicable to older youth (and not younger youth served by the program). Cost data for the WIA Youth Program is only available at the state level for both older and younger youth (combined). Thus, to use the available cost data, it was necessary to come up with a composite efficiency measure that would be applicable to both older and younger youth. The efficiency measure recommended for the WIA Youth Program – and used as the dependent variable in the regression model -- is Cost per Positive Outcome, where the numerator is total expenditures across the state for the WIA Youth Program, and the denominator is the number of exiters that are counted as *either* "yes" for Placement in Employment or Education (WIASRD Item 966) or "yes" for Attainment of Degree or Certificate (WIASRD Item 967).

[88] For documentation of how each of the variables is defined see Social Policy Research Associates, *PY 2005 WIASRD Data File Public Use Including Data Quality Revisions, Record Layout,* March 23, 2007.

The *independent variables* used in the models were the same for the WIA Adult and Dislocated Worker programs, but differed (by necessity) for the WIA Youth program. As noted earlier, we reviewed the earlier JTPA adjustment model in determining which variables to include in the models. We tried to be inclusive in terms of adding variables not included in the JTPA model that we hypothesized could explain variation in efficiency measure results. As noted earlier, we were unable to include some potential variables in the WIASRD data set because of missing data. With the exception of the economic factors and program expenditure data included in the model, we were limited to the variables reported in the WIASRD. The independent variables included in the regression models tested for the WIA Adult and Dislocated Worker programs were as follows:

- Age -- percent under 22, 22-29, 30-44, 45-54, and 55 year of age or older
- Gender -- percent female
- Race/Ethnicity -- percent white, black, Hispanic, other or multiple races
- Veteran status (percent veteran)
- Percent working at registration
- Education -- percent not a high school graduate
- Percent with limited English proficiency
- Percent with Temporary Assistance for Needy Families (TANF) receipt within 6 months
- Percent enrolled in multiple WIA Programs
- Percent funded by Wagner-Peyser
- Type of WIA services received – percent receiving training, percent receiving intensive services, percent receiving core services
- Average weekly wage rate for retail trade workers (for state)
- Average weekly wage for production workers in manufacturing (for state)
- Percent below poverty (for state)
- Average unemployment rate, non-seasonally adjusted (for state)

The independent variables included in the regression models tested for the WIA Youth programs were as follows:

- Percent younger youth
- Gender -- percent female
- Race/Ethnicity -- percent white, black, Hispanic, other or multiple races
- Percent pregnant or parenting

- Percent working at registration
- Education -- percent in-school, dropout, not a high school graduate
- Percent with Temporary Assistance for Needy Families (TANF) receipt within 6 months
- Percent enrolled in multiple WIA Programs
- Percent funded by Wagner-Peyser
- Percent in need of additional assistance
- Percent homeless
- Percent offender
- Average weekly wage rate for retail trade workers (for state)
- Average weekly wage for production workers in manufacturing (for state)
- Percent below poverty (for state)
- Average unemployment rate, non-seasonally adjusted (for state).

Regression Analysis Results. Exhibits 7-2 through 7-5 show the coefficients and significance levels for the Ordinary Lease Squares (OLS) and Fixed Effects Models tested for the WIA Adult, Dislocated Worker, and Youth Programs.[89]

- **Exhibit 7-2** shows results for the OLS and the Fixed Effect Models for cost per entered employment for the WIA Adult and Dislocated Worker Programs.

- **Exhibit 7-3** shows results for the OLS and the Fixed Effect Models for cost per reemployment retention for the WIA Adult and Dislocated Worker Programs.

- **Exhibit 7-4** shows results for the OLS and the Fixed Effect Models for cost divided by total program earnings for the WIA Adult and Dislocated Worker Programs.

- **Exhibit 7-5** shows results for the OLS and the Fixed Effect Models for cost per positive outcome (employment or educational) for WIA Youth.

Overall, examination of the regression results reported on each of these four exhibits reveals very few coefficients that are statistically significant, indicating that knowledge of the values of the independent variables does not help much in predicting the efficiency measure results. We would expect to see some significant coefficients simply by random chance, given the number of

[89] An earlier paper prepared under this study contained four additional regressions conducted for alternative efficiency measures. See Burt Barnow, Jonathon Pollak, and John Trutko, *Implementing Efficiency Measures for Employment and Training Programs: Interim Report #3 – Potential Methodologies and Factors for Establishing and Adjusting Efficiency Measure Standards for ETA Programs*, prepared for the U.S. Department of Labor, Employment and Training Administration, prepared by Capital Research Corporation and Johns Hopkins University's Institute for Policy Studies, June 2009.

EXHIBIT 7-2:

Exhibit C-5: Estimated Adjustment Coefficients for Cost per Entered Employment from Common Measure

	WIA Adult		WIA Dislocated Worker	
	OLS *	Fixed Effects **	OLS *	Fixed Effects **
Average Exiters Per WIB	-0.2410507 (0.332)	-0.3926693 (0.344)	-2.11783 (0.025)	-0.5714805 (0.613)
Percent Training	3027.881 (0.342)	-381.4137 (0.920)	11642.46 (0.003)	22847.42 (0.000)
Percent Intensive	9296.053 (0.003)	7647.355 (0.062)	-7361.732 (0.337)	-475.3166 (0.938)
Percent Core (Reference Group)	/	/	/	/
Percent Enrolled in Multiple WIA Programs	-9946.479 (0.107)	-13881.74 (0.100)	-531.4047 (0.895)	-8268.414 (0.070)
Percent Funded by Wagner Peyser Funding Sourse	-157.344 (0.836)	-541.7541 (0.741)	-1002 (0.391)	-2443.783 (0.299)
Percent Age 0 to 21	-6064.433 (0.659)	-9991.389 (0.586)	-77746.79 (0.348)	-13120.87 (0.820)
Percent Age 22 to 29 (Reference Group)	/	/	/	/
Percent Age 30 to 44	-11113.63 (0.503)	-16700.98 (0.270)	10668.43 (0.692)	63820.09 (0.016)
Percent Age 45 to 54	-5590.327 (0.695)	-9038.783 (0.622)	-51822.36 (0.082)	28791.33 (0.206)
Percent Age 55 Plus	11522.61 (0.505)	32690.41 (0.137)	40533.22 (0.121)	58642.68 (0.060)
Percent White (Reference Group)	/	/	/	/
Percent Black	303.6727 (0.861)	6219.461 (0.477)	6768.007 (0.129)	-21733.44 (0.261)
Percent Hispanic	-665.5727 (0.843)	2886.601 (0.815)	4542.773 (0.450)	-23767.59 (0.338)
Percent Other or Multiple Race	3904.474 (0.215)	-21944.76 (0.201)	10802.28 (0.012)	-37719.23 (0.102)
Percent Female	-3328.627 (0.457)	2942.052 (0.706)	-3983.639 (0.648)	-9390.187 (0.427)
Percent Veteran	27150.06 (0.122)	-16716.49 (0.529)	5000.08 (0.809)	3944.235 (0.863)
Percent Working at Registration	7401.894 (0.058)	13777.68 (0.017)	23513.48 (0.004)	6751.104 (0.594)
Percent Non High School Grad	-10026.62 (0.122)	-12819.15 (0.160)	-34688.17 (0.003)	-14352.28 (0.368)
Percent Limited English Proficiency	2358.936 (0.695)	5320.54 (0.678)	13552.74 (0.097)	9434.484 (0.426)
Percent TANF Receipt within 6 months	9222.582 (0.044)	6023.326 (0.614)	/	/
Average Unemployment Rate (non-seasonally adjusted)	135.4183 (0.677)	-50.55264 (0.947)	980.2279 (0.021)	-2943.66 (0.019)
Percent Below Poverty Line	-66.97503 (0.622)	466.0286 (0.334)	591.3577 (0.023)	1117.926 (0.130)
Average Weekly Retail Wage Rate	-1.068796 (0.908)	-25.12525 (0.432)	23.24225 (0.186)	6.483937 (0.897)
Average Wkly Wage Production Workers in Manufacturing	5.790297 (0.095)	5.948339 (0.566)	4.050348 (0.474)	21.55965 (0.163)
Constant	1350.745 (0.893)	10051.07 (0.607)	-5506.852 (0.821)	-46478.33 (0.139)
Observations	153	153	153	153
R-squared / Within State R-squared	0.4973	0.4456	0.4164	0.4121

* P-values from Huber/White Variance Estimator (Robust)
** Standard Fixed Effects P-Value
Source: Combined 2005, 2006, and 2007 WIASRD Public Use Data Files, Authors' Calculations

EXHIBIT 7-3:

Exhibit C-6: Estimated Adjustment Coefficients for Cost per Employment Retention from Common Measure

	WIA Adult		WIA Dislocated Worker	
	OLS *	Fixed Effects **	OLS *	Fixed Effects **
Average Exiters Per WIB	-0.1361559 (0.640)	-0.3924325 (0.418)	-2.627389 (0.017)	-1.06479 (0.528)
Percent Training	726.866 (0.861)	-6540.853 (0.143)	13110.33 (0.005)	29917 (0.001)
Percent Intensive	11822.02 (0.003)	16316.52 (0.001)	-11474.46 (0.236)	-4800.615 (0.600)
Percent Core (Reference Group)	/	/	/	/
Percent Enrolled in Multiple WIA Programs	-10204.53 (0.085)	-17522.89 (0.076)	-1809.781 (0.722)	-8964.194 (0.186)
Percent Funded by Wagner Peyser Funding Sourse	126.9771 (0.881)	-404.4047 (0.833)	-1353.204 (0.351)	-1273.917 (0.716)
Percent Age 0 to 21	-6437.677 (0.648)	-20123.53 (0.349)	-73058.75 (0.547)	-54838.89 (0.524)
Percent Age 22 to 29 (Reference Group)	/	/	/	/
Percent Age 30 to 44	-20241.81 (0.211)	-34263.24 (0.055)	10469.37 (0.733)	90690.44 (0.022)
Percent Age 45 to 54	10890.43 (0.464)	-6866.509 (0.749)	-46984.53 (0.189)	69422.57 (0.042)
Percent Age 55 Plus	-6131.53 (0.743)	14305.58 (0.575)	32796.01 (0.317)	87575.6 (0.060)
Percent White (Reference Group)	/	/	/	/
Percent Black	652.1862 (0.721)	1518.185 (0.882)	7327.739 (0.185)	-26529.47 (0.357)
Percent Hispanic	-3778.893 (0.298)	4487.134 (0.755)	3006.308 (0.712)	-34668.96 (0.348)
Percent Other or Multiple Race	2940.826 (0.382)	-9840.811 (0.622)	11695.66 (0.010)	-22355.86 (0.513)
Percent Female	-5764.002 (0.204)	-2854.158 (0.754)	-2073.045 (0.832)	-21353.73 (0.227)
Percent Veteran	21068.76 (0.243)	-10154.43 (0.744)	2833.824 (0.916)	-3321.681 (0.922)
Percent Working at Registration	-4701.025 (0.216)	-1555.156 (0.814)	11564.89 (0.233)	-11383.2 (0.547)
Percent Non High School Grad	-12086.02 (0.119)	-8430.672 (0.427)	-36678.97 (0.011)	-24406.63 (0.305)
Percent Limited English Proficiency	4520.876 (0.534)	8382.215 (0.576)	20693.93 (0.079)	16165.4 (0.360)
Percent TANF Receipt within 6 months	11204.54 (0.021)	-2780.214 (0.842)	/	/
Average Unemployment Rate (non-seasonally adjusted)	-433.8928 (0.169)	-1243.517 (0.167)	253.1024 (0.626)	-4558.503 (0.015)
Percent Below Poverty Line	79.07242 (0.573)	-173.9185 (0.757)	950.3115 (0.005)	809.2602 (0.459)
Average Weekly Retail Wage Rate	10.09833 (0.315)	36.53447 (0.329)	39.25501 (0.091)	101.1983 (0.178)
Average Wkly Wage Production Workers in Manufacturing	8.453969 (0.028)	12.50665 (0.303)	9.879961 (0.197)	39.40166 (0.088)
Constant	808.6201 (0.940)	2319.972 (0.919)	-13464.71 (0.637)	-105981 (0.025)
Observations	153	153	153	153
R-squared / Within State R-squared	0.4079	0.4484	0.348	0.4492

* P-values from Huber/White Variance Estimator (Robust)
** Standard Fixed Effects P-Value
Source: Combined 2005, 2006, and 2007 WIASRD Public Use Data Files, Authors' Calculations

EXHIBIT 7-4:

Exhibit C-7: Estimated Adjustment Coefficients for Cost per Total Post Program Earnings from Common Measure

	WIA Adult		WIA Dislocated Worker	
	OLS *	Fixed Effects **	OLS *	Fixed Effects **
Average Exiters Per WIB	-0.0000279 (0.281)	-0.000021 (0.651)	-0.0002113 (0.010)	-0.000071 (0.544)
Percent Training	0.1378646 (0.700)	-0.7119615 (0.098)	1.054287 (0.002)	2.107511 (0.001)
Percent Intensive	0.8753246 (0.013)	1.700843 (0.000)	-0.8399887 (0.202)	-0.1892001 (0.765)
Percent Core (Reference Group)	/	/	/	/
Percent Enrolled in Multiple WIA Programs	-1.320245 (0.015)	-2.12791 (0.026)	-0.291317 (0.409)	-0.6976112 (0.138)
Percent Funded by Wagner Peyser Funding Sourse	0.0527718 (0.502)	-0.0875856 (0.635)	-0.0947984 (0.371)	-0.0681167 (0.779)
Percent Age 0 to 21	-0.1965093 (0.886)	-1.643755 (0.426)	-9.406894 (0.274)	-5.710135 (0.339)
Percent Age 22 to 29 (Reference Group)	/	/	/	/
Percent Age 30 to 44	-1.334989 (0.379)	-3.122848 (0.068)	-0.8740823 (0.693)	5.046404 (0.064)
Percent Age 45 to 54	0.9373433 (0.508)	-0.7798212 (0.705)	-5.093376 (0.050)	3.276781 (0.164)
Percent Age 55 Plus	-0.0332746 (0.985)	2.184205 (0.374)	1.852173 (0.420)	5.665247 (0.079)
Percent White (Reference Group)	/	/	/	/
Percent Black	0.0830954 (0.613)	0.0396065 (0.968)	0.5338182 (0.176)	-1.123689 (0.573)
Percent Hispanic	-0.0684893 (0.842)	0.3334352 (0.810)	0.3247373 (0.602)	-2.243995 (0.381)
Percent Other or Multiple Race	0.0981963 (0.738)	-0.8774224 (0.648)	0.9283059 (0.006)	-0.8762359 (0.711)
Percent Female	-0.0861321 (0.829)	0.2950104 (0.736)	0.2778206 (0.690)	-1.475122 (0.229)
Percent Veteran	1.153726 (0.489)	0.6478198 (0.828)	0.5817059 (0.764)	-0.2343555 (0.921)
Percent Working at Registration	-0.876296 (0.009)	-0.4488301 (0.481)	0.4027768 (0.558)	-0.9289011 (0.478)
Percent Non High School Grad	-0.7719485 (0.260)	-0.5423891 (0.595)	-2.353014 (0.020)	-1.504677 (0.361)
Percent Limited English Proficiency	0.4322359 (0.523)	0.7408043 (0.607)	1.408453 (0.079)	1.184009 (0.334)
Percent TANF Receipt within 6 months	1.119706 (0.010)	0.1398994 (0.917)	/	/
Average Unemployment Rate (non-seasonally adjusted)	-0.0231249 (0.404)	-0.1087115 (0.209)	0.0407248 (0.292)	-0.3198244 (0.014)
Percent Below Poverty Line	0.0021129 (0.869)	-0.0163412 (0.762)	0.0721937 (0.003)	0.0966868 (0.204)
Average Weekly Retail Wage Rate	-0.0008236 (0.386)	0.0020394 (0.570)	0.0011286 (0.495)	0.0049983 (0.337)
Average Wkly Wage Production Workers in Manufacturing	0.0010748 (0.005)	0.0007152 (0.539)	0.000765 (0.180)	0.0022067 (0.167)
Constant	0.3998158 (0.704)	0.5906916 (0.788)	0.6859695 (0.730)	-5.790276 (0.075)
Observations	153	153	153	153
R-squared / Within State R-squared	0.4329	0.3918	0.3711	0.4293

* P-values from Huber/White Variance Estimator (Robust)
** Standard Fixed Effects P-Value
Source: Combined 2005, 2006, and 2007 WIASRD Public Use Data Files, Authors' Calculations

EXHIBIT 7-5:

Exhibit C-8: Estimated Adjustment Coefficients for Cost per Youth Positive Outcome

	OLS *	Fixed Effects **
Average Exiters Per WIB	-8.465314 (0.004)	-9.212684 (0.025)
Percent Younger Youth	744.1997 (0.961)	-32380.28 (0.091)
Percent Enrolled in Multiple WIA Programs	5777.041 (0.289)	-1253.009 (0.870)
Percent Funded by Wagner Peyser Funding Sourse	-2025.758 (0.158)	417.9339 (0.892)
Percent White (Reference Group)	/	/
Percent Black	925.854 (0.725)	-16665.42 (0.242)
Percent Hispanic	-354.7738 (0.946)	6725.881 (0.765)
Percent Other or Multiple Race	-2426.525 (0.519)	12553.79 (0.708)
Percent Female	975.4109 (0.952)	16277.3 (0.366)
Percent Pregnant or Parenting	-12167.97 (0.370)	-26612.15 (0.349)
Percent Working at Registration	-3308.572 (0.801)	-12726.73 (0.447)
Percent in School	-34871.56 (0.123)	43267.99 (0.395)
Percent Dropout	-34183.96 (0.169)	22582.18 (0.662)
Percent Non High School Grad	19353.36 (0.437)	-3584.162 (0.938)
Percent Limited English Proficiency	-24987.5 (0.495)	-35004.12 (0.468)
Percent that Need Additional Assistance	4677.243 (0.025)	2942.471 (0.630)
Percent TANF Receipt within 6 months	39341.05 (0.012)	-10997.05 (0.652)
Percent Homeless	-17133.56 (0.257)	12218.57 (0.750)
Percent Offender	10702.54 (0.282)	11168.99 (0.583)
Average Unemployment Rate (non-seasonally adjusted)	-490.9724 (0.224)	-184.0144 (0.889)
Percent Below Poverty Line	334.3872 (0.254)	187.5362 (0.828)
Average Weekly Retail Wage Rate	21.1578 (0.231)	3.805398 (0.948)
Average Wkly Wage Production Workers in Manufacturing	-1.193129 (0.842)	17.02219 (0.368)
Constant	12456.77 (0.481)	-4664.059 (0.883)
Observations	153	153
R-squared / Within State R-squared	0.3751	0.2166

* P-values from Huber/White Variance Estimator (Robust)

** Standard Fixed Effects P-Value

Source: Combined 2005, 2006, and 2007 WIASRD Public Use Data Files, Authors' Calculations

variables and models tested.[90] Because of the small sample size and several other limitations discussed below, extreme caution is required in interpreting the results of each model. In short, the results of the models tested are not useful from the standpoint of identifying variables that statistically are associated with higher or lower efficiency measure results across states. These results suggest that applying a regression adjustment model -- at least one applied at the state level to the WIA program – is not likely to be very useful for setting or adjusting standards for the recommended efficiency measures. It is not known whether the models would be more useful in explaining variation if they were applied at the local workforce investment level (where many more observations would be available) – however, as discussed earlier this would not be possible without expenditure data being reported from the local workforce area to U.S. DOL. These regression results also suggest that statistical adjustment models applied at the state-level for the other programs would similarly be unlikely to explain much in the way of variation in efficiency measure results across states – and therefore, probably not be that useful for setting or adjusting standards.

Additional Discussion of Key Factors Limiting Regression Results. Among the critical factors that constrain the models that were tested for the WIA Program are the following: small sample size, "noisy" cost data, the non-steady-state nature of the programs, and exclusions of exiters from Common Measure outcomes. Apart from recommending analyzing data for more years, or collecting cost data for, and running adjustment models for, smaller areas such as at the local workforce investment areas (which would provide many more observations within a one-year period), there is not much more to be said about the sample size issue. The other issues merit some further discussion.

[90] Some variable, such as service mix and co-enrollment are more consistent across models and are *sometimes* of the expected sign. However, most are un-interpretable, and others, such as percent not a high school graduate, display a sign counter to expectation.

*"Noisy" Cost Data***.** There are two main issues in this category that cause problems for the efficiency measure regression analysis: programmatic linkages and co-enrollment. The first issue arises from multiple programs collaborating and, in some instances, being housed under one roof, as in the case of a One-Stop Career Center. When programs are linked and overhead is shared, it can be very hard to say what funds went to support which programs, and thus, to support which participants. As a result of these linkages and collaboration, the amounts spent to support WIA program participants may not be fully captured or WIA may be paying for costs of serving some customers (e.g., within the One-Stop) but may not have the opportunity to capture these individuals' outcomes.

The reverse side of this is the problem of co-enrollment. Co-enrollment means that a WIA customer is also served by another program, either within WIA or elsewhere (e.g., a dislocated worker customer is co-enrolled in the WIA Adult or Wagner-Peyser Programs). Co-enrollment will make the amount of money spent on an exiter to achieve a particular outcome appear smaller than it actually is. This discrepancy could be controlled for given sufficient data, but local areas are inconsistent in recording co-enrollment of WIA participants into other programs.

*Non-Steady-State Programs***.** Vast programmatic changes can and do occur from year to year in different states, and this can greatly affect efficiency measure results. The most important instance in the data analyzed was the decision of several states to co-enroll all or most of their Wagner-Peyser customers in WIA. For example, WIA Adult Program exiters in New York surged by nearly a factor of 10, from 31,990 to 305,423 in just one year (from PY 2005 to PY 2006), while total expenditures actually *decreased*. This was the direct result of the state automatically enrolling Wagner-Peyser customers in WIA in PY 2006. The result, with regard to

estimating efficiency measure results (and regression adjustment models) are profound -- for instance, in New York in the space of just one program year, the cost per entered employment for WIA Adult exiters plunged by nearly a factor of 10. Moreover, this change in the cost per entered employment is almost entirely driven by the fact that a large number of exiters are actually being mainly served by another program and not likely as a result of increase in the actual efficiency of the WIA program. Unless states develop relatively consistent policies on co-enrollment that remain stable over several years, we believe it will be very difficult to estimate good efficiency measure regression models.

Exclusions of Some Exiters from Common Measure Outcomes. A critical conceptual issue is that while the cost data is for all served within a state, Common Measures outcomes (because of the way in which they are defined) often exclude significant groups of exiters, and the number and proportion of exiters excluded, vary significantly across states. Exclusions, such as excluding exiters who were employed at the time of registration from the entered employment rate, are intended to measure performance based on the extent to which unemployed customers obtain jobs. However, when costs are being counted for all individuals served (regardless of whether they were or were not employed at the time of registration), the cost per entered employment measure overstates how much a state serving incumbent workers spends to have its customers obtain employment. Because the proportion of incumbent workers served varies significantly across states, the cost per entered employment measure will tend to overstate costs in states with a greater share of incumbent workers. For instance, overall, just over 21 percent of all WIA Adult exiters were excluded from the calculation of the entered employment rate from PY 2004 through PY 2006. However, this magnitude varies greatly from state to state, with exclusion rates ranging from 8.4 percent to 65.3 percent of exiters.

E. CONCLUSIONS

This chapter has focused on the prospects for taking a step beyond implementing efficiency measures to implementing performance standards with or without statistical adjustments for each efficiency measure. Such performance standards, if adopted, would parallel the standards used for outcomes under JTPA (using regression-based adjustment models) and currently under WIA (using negotiations). The modeling efforts conducted for this report focusing on the three WIA programs (using WIASRD data) – combined with analyses of aggregate national results on efficiency measures for WIA and the other ETA programs – suggests that great caution and several additional years of results are required before ETA should consider implementing performance standards for states/grantees on the recommended efficiency measures. For reasons discussed in the preceding section and highlighted below, it is unlikely that even with additional years of data that using an adjustment model (similar to what was used under JTPA) to set and adjust state/grantee-level standards for the recommended efficiency measures will be useful. This is not to say such modeling efforts should not be undertaken for other reasons – such as monitoring program performance or informing understanding of factors that are associated with higher or lower costs of serving program participants – or that such modeling efforts would not be successful in generating valid adjustments at a substate level (e.g., adjustment models may provide more significant coefficients for independent variables if conducted at the local workforce investment area level, where many more observations would be available). To summarize, based on experiences to date in applying an adjustment model at the state-level to efficiency measures for the WIA program, the following was found:

- The WIASRD data set provides a rich source of data on participant characteristics, services received, and outcomes to make building such a model feasible. It is necessary to add state-level economic data, as well as cost data, to this dataset to be able to create a

model to potentially adjust efficiency measure results. Similarly, other programs – such as TAA, SCSEP, INA, and others – collect individual participant data that could be used to develop and estimate similar adjustment models.

- While such modeling is feasible, when actually run at the state level for a program, such as for the three WIA programs explored in this report, it does not necessarily yield statistically significant results for most of the independent variables tested (e.g., participant characteristics, services, and environmental factors). Overall, the regression models do not explain (with statistically significant coefficients) variation in the various efficiency measure results across states (such as cost per entered employment) in a way comparable to the models that have been used in the past to understand and adjust for variation on outcome measures (such as entered employment rate) in employment and training programs.

- There are several reasons why in comparison to adjustment models used in the past to explain variance in outcomes (i.e., such as the adjustment models used under JTPA for many years), that the regression models applied to efficiency measures (at least under WIA using WIASRD data) fail to adequately identify factors that account for variation in results across states:

    - One important explanation is the *number of observations* (about 50 per year, slightly more if the Virgin Islands and Puerto Rico are included) *is fairly small* to yield statistically significant estimates.[91] It would be preferable to apply the model at the local workforce investment area level, which would generate many more observations (about 600 observations per year for the WIA program), but cost data are only provided to the DOL at the state level at this time.

    - Second, there are a *host of underlying factors that are difficult or impossible to take into account*, given the current structure of programs and their reporting systems, especially with regard to accounting for cost sharing and co-enrollment across programs. It may not be feasible or cost-effective to collect the data needed to fully incorporate the underlying factors needed in the model – e.g., it may be necessary to introduce time sheets to accurately account for cost sharing related to staff within a One-Stop system.

    - Third, there is a *need to account for customers who result in costs but are not counted in outcomes*. For example, under the WIA Adult and Dislocated Worker programs, individuals who do not receive staff-assisted services but still may use One-Stop resources are not counted for outcomes; similarly, those who are employed at the time of registration for WIA are not included in entered employment counts (yet may consume considerable resources).

    - Finally, the *workforce development system is in a state of flux regarding co-enrollment of customers*. Over the period analyzed, some states co-enrolled

[91] With regard to outcomes, it is possible to estimate models at the individual participant level, workforce investment level, or state level.

substantial numbers of Wagner-Peyser customers in WIA, while others did not. Adding Wagner-Peyser customers to the WIA customer base can increase the number of WIA customers by a factor of 10 or more. Until the system stabilizes, regression analysis cannot meaningfully be used to estimate relationships that are not stable.

While use of an adjustment model for the recommended efficiency measures cannot be ruled out for other programs based solely on experiences to date in testing such adjustment models for WIA, the implications are that such adjustment models are likely to suffer from some or all of the same problems – particularly low numbers of observations (if models are calculated at the state level), difficulties accounting for shared costs, and complications related to accounting for co-enrollment.

CHAPTER 8:

STUDY RECOMMENDATIONS AND CONCLUSIONS

The final chapter provides a set of study recommendations for implementation of specific outcome-based efficiency measures for the 11 ETA programs. It begins with an overview of the views and concerns expressed by the Expert Panel on a range of issues related to identifying and implementing efficiency measures. Building off of the perspectives of the members of Expert Panel and key findings from earlier chapters of this report, nine study recommendations are offered and discussed.

A. OVERVIEW OF EXPERT PANEL VIEWS ON IMPLEMENTATION OF OUTCOME-BASED EFFICIENCY MEASURES BY ETA PROGRAMS

The Expert Panel provided many useful comments at a meeting held November 9, 2009, and the panel also provided written comments, which are contained in Appendix D. The primary message conveyed by the panel is that based on the limited data available, difficult issues on how to deal with factors such as co-enrollment and shared costs, and ETA's prior experience with efficiency measures (where an evaluation indicated that the efficiency measures led to creaming applicants and more use of less expensive services than was warranted), ETA should move very cautiously in adopting efficiency measures. Instead, the panel suggested that ETA track a variety of potential measures before establishing any efficiency measures associated with rewards or sanctions for states.

Dr. Beryl Radin's comments stem from her perspective as a political scientist who has studied and written about performance measurement for many years. Radin's central point is that the change in administrations in Washington has changed the views of OMB managers and

others on how performance management and program evaluation should be implemented. The changes in philosophy have not yet fully worked their way down to agency-specific measures, so she urges caution in continuing to apply the principles established by the prior administration. Moreover, implementation of the stimulus package has changed priorities about the goals of programs, leading to more focus on job creation than was previously the case. Finally, Radin suggests that ETA consider the basic objectives of the performance management system, and she wonders if it is prudent to use the same measures across programs with diverse services and customers.

Dr. Christopher King, a professor and economist who has been involved in performance management issues for workforce investment programs from their inception in the 1970s,, also urges ETA to be cautious in implementing efficiency measures for its programs. He notes that when efficiency measures were first employed, they led to serious problems and resulted in amendments prohibiting their use under JTPA. King also notes that the world is much more complex than it was when efficiency measures were first used because of co-enrollment, leveraged resources, and loose measurement of performance data. He concludes that unintended consequences are all but guaranteed in such an environment. King urges that efficiency measures with rewards and sanctions not be instituted at this time, and he argues that several programs, Apprenticeship and Work Incentive Grants, are so different that they should be excluded from the measures. King makes several other points, and he suggests that while Return on Investment (ROI) be tracked, it should be looked at periodically through evaluations rather than through the performance management system on an annual basis.

Dr. Carolyn Heinrich, a public policy professor, provided detailed comments on all the issues raised for the meeting. While recognizing that it is important for ETA to explore the use

of outcome-based efficiency measures, Heinrich notes that the literature is clear that organizations respond to performance measures, often in unintended ways. She notes that conducting analyses at the state level hides much of the variation in outcomes and explanatory variables, so she recommends that data be collected and analyzed at the sub-state level. Like the other panel members, Heinrich stresses the importance of moving slowly before implementing efficiency standards. Heinrich emphasizes the importance of collecting uniform and accurate data on participants and also trying to collect efficiency data by activity.

Dr. Jeffrey Smith, an economics professor, advised ETA to be careful in interpreting efficiency measures of the type being considered. Smith notes that available research indicates that the outcome measures currently in use are measures of gross outcome only and are weakly, at best, related to program impact. Smith suggests that, in the long run, ETA should substantially modify the performance management system so that random assignment based impact estimates be computed for each state and that program impact be used in place of gross outcomes in performance measures. Smith is optimistic, based on his experience with Canadian workforce programs, that reasonable impact measures can be developed. Like the other panel members, Smith cautions that the WIG and Apprenticeship programs are quite different from the other nine programs and should have different efficiency measures. Smith provided detailed responses to the questions posed to the panel, and he urged ETA to develop accurate, consistent data as an important step in improving the performance management system.

In sum, the panel encourages ETA to move cautiously in adopting outcome-based efficiency standards. The panel encourages ETA to improve the quality of the data and to explore the used of sub-state data and activity-based data. In conjunction with these recommendations, the panel suggests that ETA track a number of measures to better assess

which measures provide the best efficiency measures. The panel members also offered suggestions on how to deal with thorny issues such as co-enrollment, shared costs, and services to customers who are not counted in the outcome measures.

B. STUDY RECOMMENDATIONS ON IMPLEMENTATION OF OUTCOME-BASED EFFICIENCY MEASURES FOR ETA PROGRAMS

This section of the report provides recommendations regarding implementation of outcome-based efficiency measure for the 11 ETA programs that are the focus of this study. These recommendations are based on analysis of available data, as well as input from members of the Expert Panel, interviews with state workforce agencies, ETA program administrators/staff, and the ETA internal work group.[92]

1. Recommendation #1: Use Program Expenditures Rather than Appropriations or Obligations as the Measure of Program Costs in Efficiency Measures

To generate an efficiency or unit cost measure, it is necessary to account for costs in the numerator of the measure and a unit of participation, service delivery, or outcome in the denominator of the measure. Based on discussions with ETA officials (and a review of the literature and available data sources within ETA), three potential types of "cost" data could be considered for the numerator of each efficiency measure:

- **Appropriations/Allotments –** "Appropriations" are defined by the Government Accountability Office as "*Authority given to federal agencies to incur obligations and to make payments from Treasury for specified purposes.*"[93] Appropriations are generally the amount of funding made available by Congress for spending on a given program (such as the TAA program) during a fiscal year. Allotments are the amount of

[92] The recommendations in this report differ to some extent to the recommendations in our earlier reports. The changes are due to additional data analyses and suggestions from ETA staff and the Expert Panel.
[93] See U.S. Government Accountability Office (2004). *Principles of Federal Appropriations Law*, Third Edition, Volume 1. Washington, DC: U.S. Government Accountability Office Report GAO-04-261, SP, p. 2-5.

appropriated funds distributed to a state or grantee based upon a legislative or regulatory formula.[94] Allotments exclude amounts retained by the federal government to administer programs.

- **Obligations –** According to the General Accounting Office (GAO), *"…obligations reflect orders placed, contracts awarded, and other similar transactions during a fiscal year. As an expression of an agency's total financial commitments for a given period, gross obligations portray the relative size of an organization, without regard to the type of underlying budgetary resource or when resulting outlays may occur."*[95] Hence, obligations are funds that have been committed through contracts, grants, and other vehicles.

- **Expenditures –** Expenditures are funds paid or the amount of funds due (depending on whether a cash or accrual basis is used) for provision of goods or services pursuant to a grant or contract agreement.

Use of expenditures rather than appropriations, allocations, or obligations in calculating efficiency measures is recommended because (1) expenditures can vary substantially from what is initially appropriated/allocated, especially at the state level (because of transfers, rescissions, and unexpended funds); and (2) expenditures reflect what is actually spent on delivery of services and capture the underlying notion of efficiency. States interviewed, ETA program offices, and the Expert Panel endorsed the use of expenditures over the other available measures of costs.

2. Recommendation #2: Use Common Measures as Starting Point for Measuring Program Outcomes in Efficiency Measures

If they were to be implemented in the short run (i.e., within three years), efficiency measures should be closely tied to the current outcome performance measures in effect under ETA's Common Measures framework. Data is already being collected at the state and grantee

[94]Although the term "allocation" is used quite often in an interchangeable manner with allotment, in the context of formula programs the appropriate term is allotment.
[95]United States General Accounting Office (GAO), *Federal Budget: Agency Obligations by Budget Function and Object Classification for Fiscal Year 2003*, GAO-04-834, June 2004 (available at http://www.gao.gov/new.items/d04834.pdf).

levels on these outcomes, so the performance data needed to generate efficiency measure results would already be available (for most programs) – reducing costs and start-up time. In addition, though the report highlights some of the challenges of comparing efficiency measure results across programs and there is considerable variability across programs in terms of data quality and comparability, the Common Measures provide common definitions for outcome measures and thus increase the potential for making meaningful comparisons of efficiency measure results within individual programs (e.g., across states/subgrantees) and across at least some of the ETA programs of interest. As discussed in more detail in the report, the following are key features of the current Common Measures performance measurement system across the 11 ETA programs of interest:

- Ten (of the 11) ETA programs currently use the Common Measures: Workforce Investment Act (WIA) Adult, WIA Youth, WIA Dislocate Worker, WIA National Emergency Grants (NEG), Wagner-Peyser/Employment Service, Trade Assistance Act (TAA), Senior Community Service Employment Program (SCSEP), Indian and Native American (INA), National Farmworker Jobs Program (NFJP), and Work Incentive Grant (WIG) Programs. The Apprenticeship program (the 11th program), which has in the past measured program performance in terms of retention and earnings gains for apprentices, is in the process of shifting to tracking and reporting on the three main Common Measure performance outcomes.

- For Common Measures programs (except WIA Youth), outcome measures are entered employment, retained employment, and post-program earnings.[96]

- For WIA Youth, the Common Measures are placement in education or training, credential attainment, and literacy/numeracy.

It is essential that the outcome-based efficiency measures adopted should be sensitive to goals and objectives of each of the 11 programs. There are three potential efficiency measures the 11 ETA program could implement over the short run based on the Common Measure outcomes:

- Cost per entered employment (for the WIA Youth program - cost per placement in employment or education);

[96] See Chapter 6 for detailed definitions of each of these measures.

- Cost per retained employment; and
- Cost divided by post-program earnings.

In addition, although not currently used, cost divided by change in post-program earnings could be used, as this data is being collected by most of the programs currently (as a result of the Common Measures post-program earnings measure) and was formerly a measure that was used by the WIA Adult and Dislocated Worker programs. Because the proposed efficiency measures are based on cost and outcome data already being submitted to ETA (or soon to be reported in the case of the Apprenticeship program) through annual expenditure reports and Common Measures reporting, states and grantees will not have to develop new data systems or submit new cost or outcome data. We recommend that ETA initially focus on monitoring results nationally and at the state/grantee levels on these four outcome-based efficiency measures for several years for most of the ETA programs, as described below. See Exhibit 7-1 for overview of programs for which the four recommended efficiency measures highlighted below should be considered:

- ***Recommendation 2a: <u>Cost per entered employment</u> should be tracked (for monitoring purposes initially) as an efficiency measure for 8 of the 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. The WIA Youth program could use cost per placement in employment or education (as an alternative to cost per entered employment). The WIG program should be excluded from implementing this measure because it does not enroll participants; the Apprenticeship program should be excluded because federal funding is primarily used to promote and monitor apprenticeship programs (i.e., other sources of funding primarily pay for training-related costs) and other factors discussed earlier in this report and summarized in the next recommendation (Recommendation #3).***[97] The main rationale for recommending cost per entered employment (and using cost per placement in education or training for the WIA Youth program) as an efficiency measure is as follows: (1) employment is a high priority for all programs except WIA younger youth; (2) entered employment is the simplest and most direct way to assess whether programs are achieving their goals; (3) data are already being collected on the number of entered employments under the Common Measures

[97] In addition, the WIG program's funding is scheduled to be eliminated in the coming program year, and so, by the time the measure was implemented the program will have ended (see below, Recommendation #3 for additional discussion of WIG and potential suitable efficiency measures).

EXHIBIT 7-1: OVERVIEW OF RECOMMENDED OUTCOME-BASED EFFICIENCY MEASURES FOR TRACKING BY ETA PROGRAMS

PROGRAM	COST PER ENTERED EMPLOYMENT	COST PER RETAINED IN EMPLOYMENT	COST DIVIDED BY POST-PROGRAM EARNINGS	COST DIVIDED BY CHANGE IN EARNINGS
WIA Adult	√	√	√	√
WIA DW	√	√	√	√
WIA Youth	√ (Use cost per placement in employment or education)	X	X	X
NEG	√	√	√	√
TAA	√	√	√	√
Wagner-Peyser	√	√	√	√
SCSEP	√	√	√	√
NFJP	√	√	√	√
INA	√	√	√	√
WIG	X	X	X	X
Apprenticeship	X	X	X	X

Note: "√" denotes that the measure is recommended for implementation as a performance monitoring efficiency measure; "X" indicates measure should not be adopted by the program.

(making this measure feasible and relatively inexpensive to implement); and (4) in comparison to other measures, data are available sooner for entered employment than for post-program earnings and job retention rates.

- ***Recommendation 2b: <u>Cost per retained in employment</u> should be tracked (for monitoring purposes initially) as an efficiency measure for 8 of the 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. The WIA Youth, Apprenticeship, and WIG programs should be excluded from implementing this measure. This is not a Common Measure collected for WIA Youth (and is not applicable to younger youth served by the program) and, should not be applied to the WIG and Apprenticeship program for reasons discussed in Recommendation 2a (note: see Recommendation #3 for additional details on why it is not applicable and potential alternative measures for these two programs).*** The main rationale for recommending cost per retained in employment as an efficiency measure is similar to cost per entered employment and is as follows: (1) job retention is a high priority for all programs except WIA younger youth; (2) participants who are employed at the time of entry into the program are included in this measure (unlike entered employment rate); (3) data are already being collected on the number of retained employments under the Common Measures (making this measure feasible and relatively inexpensive to implement). In comparison to entered employment rate, data on this measure is available later, but this indicator provides a downstream measure (of job retention and longer-term employment) of the effects of training and other employment services. Additionally, this measure is appropriate for incumbent workers, a source of concern that some states expressed about the cost per entered employment efficiency measure, which (as defined under Common Measures) excludes individuals who were working at the time of enrollment.

- **Recommendation #2c: *<u>Cost divided by post-program earnings</u> should be tracked (for monitoring purposes initially) as an efficiency measure in 8 of 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. The WIA Youth, Apprenticeship, and WIG programs should be excluded from implementing this measure. This is not a Common Measure collected for WIA Youth (and it is not applicable to younger youth) and, should not be applied to the WIG and Apprenticeship program for reasons discussed in Recommendation 2a (note: see Recommendation #3 for additional details on why it is not applicable and potential alternative measures for these two programs).*** The rationale for recommending cost divided by post-program earnings as an efficiency measure for implementation by ETA programs is as follows: (1) effective programs should increase earnings as well as employment; (2) omitting earnings might encourage focus on inexpensive labor exchange or core services rather than intensive services and training; (3) participants who are employed at the time of entry into the program are included in this measure (unlike entered employment rate); (4) data are already being collected on the pre- and post-earnings under the Common Measures (making this measure feasible and relatively inexpensive to implement). In comparison to the entered employment rate, data on this measure is available later, but this indicator provides a downstream measure of the earnings effects of training and other employment services that result in job retention and

longer-term employment.

- **Recommendation #2d:** ***Cost divided by change in earnings should be tracked (for monitoring purposes initially) as an efficiency measure in 8 of the 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. The WIA Youth, Apprenticeship, and WIG programs should be excluded from implementing this measure. This is not a Common Measure collected for WIA Youth (and it not applicable to younger youth, and it should not be applied to the WIG and Apprenticeship programs for reasons discussed in Recommendation 2a (note: see Recommendation #3 for additional details on why it is not applicable and potential alternative measures for these two programs).*** The rationale for recommending cost divided by change in earnings as an efficiency measure for implementation by ETA programs is as follows: (1) effective human capital building programs should increase earnings as well as employment; (2) omitting earnings might encourage focus on inexpensive labor exchange or core services rather than intensive services and training; (3) by looking at pre/post earnings change (versus average post-program earnings), programs face fewer incentives for "creaming" those individuals who are likely to have the highest post-program earnings; and (4) although an earnings change measure is not currently used under the Common Measures, data are already being collected on the pre- and post-earnings under the Common Measures (making this measure feasible and relatively inexpensive to implement).

3. Recommendation #3: Carefully Consider Programmatic Differences Before Implementing Efficiency Measures – Among the 11 ETA Programs, WIG, Apprenticeship, and WIA Youth Programs Will Likely Require a Different Set of Efficiency Measures

An often recurring message of ETA program administrators and state program operators – reinforced by the Expert Panel and findings from the literature – is that the 11 ETA programs have varying goals/objectives, target and serve different at-risk populations, offer widely varying types and intensities of services, and have widely differing costs. As a result, efficiency measures need to be cautiously developed and tailored to what programs are attempting to achieve – and great care is needed in comparing results on such measures within programs (i.e., across states, grantees, and local jurisdictions) and across programs. The quantitative analyses of efficiency measure results conducted as part of this study, showed substantial differences on measures such as cost per entered employment both within programs (across states/grantees) and

between programs. Program officials at the state and local levels were concerned about unfair comparisons being made between programs and the possibility that higher cost programs (particularly those providing training services and serving more disadvantaged populations) would be seen in a poor light (e.g., have much higher cost per entered enrollment) – and perhaps, as a result, eventually see funding and services gravitate toward lower intensity, less costly services or have their budgets inappropriately reduced.

As alluded to in Recommendation #2, among the 11 programs included in this study, three programs in particular – the Apprenticeship, WIG, and the WIA Youth programs -- stand out as qualitatively different from the other programs. With regard to these three programs, ETA should be cautious in applying the measures identified in Recommendation #2 and should consider alternative measures carefully tailored to the goals/operations of these programs:

- *Apprenticeship Program* – Several operational aspects of the Apprenticeship program make it quite different from the other 10 ETA programs. First, federal funding is used to support promotion, assessment, and registration of Apprenticeship programs across the country, but federal funding does not pay directly for delivery of services or training costs. The costs of training and serving apprentices are paid by the state, unions, employers, and/or participants. Second, in roughly half the states, these functions are undertaken by the states themselves at their own expense rather than ETA's, and so in those states, there is virtually no federal cost. In addition, the Apprenticeship program encourages sponsors and apprentices to use WIA and other funding sources to cover the cost of training where appropriate – which means that costs of delivery of training is not fully reflected in Apprenticeship expenditures. Finally, because apprentices can be enrolled for up to five years, the costs in the year of completion may be less representative of the total costs when compared with other ETA programs.

- *Work Incentive Grant Program* – Unlike the other ETA programs, the WIG program does not directly enroll or serve individual customers. Rather, the Disability Navigators (DNs) funded under this initiative are responsible for building the capacity of state and local workforce agencies to outreach to and more effectively serve individuals with disabilities. The primary role of DNs is to train staff at the local workforce level on disability issues and effective service delivery for disabled individuals. The grants issued under the WIG program are aimed at systemic change – Disability Navigators funded under the grants provide training to staff that is expected to yield improvements in access and quality of services to disabled

individuals over the length of the grant period (and even after the grant is concluded). There are several other factors that complicate the implementation of measures recommended under Recommendation #2 – (1) funding for this program is scheduled to end shortly – and so it is likely that measures could not be fully implemented prior to the end of the program, (2) the current WIG reporting system relies on the WIASRD data, which only covers WIA customers – which means that the effects of grants are missed for other (non-WIA enrolled) customers of the One-Stop system (e.g., Wagner-Peyser/ES registrants); and (3) the disability status of individuals served under WIA and other ETA programs is not fully captured because some individuals may not view themselves as disabled and/or are reluctant to reveal their disability status.

- *WIA Youth Program* - While employment, job retention, and earnings change are important goals for older youth served under the program, such goals are longer-term objectives for younger youth. Employment may, in fact, be counterproductive to younger participants compared to completing school and earning education credentials. Efficiency measures that capture employment and education/credentialing are more appropriately connected to the underlying multiple purposes of the WIA Youth program component. An additional challenge with regard to the WIA Youth program is that expenditure data are only available at the national level for all youth combined (i.e., so it is not possible to calculate a separate efficiency measure for younger and older youth served by the program).

Reasonable alternatives for measuring efficiency are needed for the these three programs that take into consideration special circumstances with regard to program goals, types of individuals served, and services delivered. While it is important to hold these three programs accountable for their "efficiency," the measures employed need to be carefully linked to purposes and activities on which the federal funding is expended. Alternative efficiency measures for these three programs are the following:

- ***Recommendation #3a: ETA should consider alternative efficiency measures for the Apprenticeship Program linked to the goals of the program and what federal funds are being spent on – for example, increasing the number of apprenticeships offered, building the quality of apprenticeship programs, and registering and monitoring of Apprenticeship programs accurately and in a timely manner. Therefore, ETA should consider applying the following alternative efficiency measures to the Apprenticeship program (all at the national level): cost per additional apprenticeship program registered and timeliness of registration decisions. Specific measures should be adopted after appropriate dialogue and analysis is undertaken.***

- ***Recommendation #3b: ETA should consider alternative efficiency measures for the WIG Program that reflect the training and technical assistance goals of this program. In particular, efficiency of this program should be aimed at measuring how the services of Disability Navigators increase the numbers of disabled individuals served by the One-Stop system (and various ETA programs operating out of the One-Stop system), as well as improvements in identifying individuals served by the workforce system and enhancements to the quality of services provided to disabled individuals. Therefore, ETA should consider applying the following alternative efficiency measure to the WIG program): cost per change in the number of One-Stop customers served with disabilities. As for the Apprenticeship program, efficiency measures for WIG should be adopted after appropriate dialogue and analysis. Because the WIG program may be terminated, it may be appropriate not to develop efficiency measures for this program.***

- ***Recommendation #3c: As discussed in Recommendation #2 above, the efficiency measure that should be applied to the WIA Youth Program is cost per placement in employment or education. In the longer term, the possibility of collecting separate cost and customer data for in-school and out-of-school youth should be investigated so that appropriate separate outcome and efficiency measures can be developed for these disparate groups. For example, if separate cost data were available for these two groups, it would feasible and perhaps appropriate to apply the four measures recommended for the WIA Adult and Dislocated Worker Programs to the older youth served by the WIA Youth Program (i.e., cost per entered employment, cost per retained in employment, cost divided by post-program earnings, and cost divided by pre/post-program earnings).***

There are distinctive characteristics of each program that make it difficult to appropriately compare and contrast efficiency measure results across programs – and hence, ETA should be cautious in making such comparisons, and when direct comparisons are made, care should be taken to note that there are critical differences in program goals, types of individuals served, and types/intensity of services delivered under the various programs.

4. Recommendation #4: Performance Standards for States/Grantees on Recommended Efficiency Measures Should Be Considered Exploratory at This Time -- Do Not Reward or Sanction States/Grantees for Performance on the Recommended Efficiency Measures

It is recommended that ETA track efficiency measure results for ETA programs of interest for several program years for program monitoring purposes only. Several years of

experience are needed with the efficiency measures (perhaps three or more years) to determine if it is appropriate to set standards and apply rewards and sanctions to states and grantees on the efficiency measures (as is currently done for outcome measures). The additional time is needed to identify definitional problems (particularly with respect to expenditures to be included), allow for co-enrollment patterns to stabilize, analyze variation in performance on the efficiency measures across states, and determine if and how the standards should be adjusted to take account of various factors. It is also important to assess factors that account for variation across states/grantees on efficiency outcomes, as well. With the rapid changes in co-enrollment patterns underway in many states, it will be possible to assess how the large increases in participant and exiter counts affect the outcome-based efficiency measures (and outcomes for other Common Measures) over the next few years.

A key finding from this study (based on a careful review of the literature and input from the Expert Panel and our interviews with federal/state program officials) is that it is important in selecting measures, standards, rewards, and sanctions to anticipate the behavioral changes that are likely to be induced by the performance management policies adopted and to structure the system so that the presence of efficiency measures does not result in undesirable behavior by states and grantees.[98] In addition, careful thought needs to be given as to whether outcome-based efficiency measures should be applied only at the national level or whether they should be "drilled-down" from the federal level to states/grantees and/or local workforce investment areas. The application of efficiency measures (and setting of standards on such measures) across states/grantees or local levels could, for example, lead to efforts by states and localities to reduce per-participant costs by either providing less costly services (e.g., reducing the amounts of more

[98]Unlike WIA, targeted programs such as NFJP and INA, have no mandates for sanctions or rewards in their legislation and, thus, it is not clear that sanctions/rewards can and should be considered for programs without such mandates.

costly staff-assisted and training services, in favor of self-service labor exchange services) or bolstering the numbers of individuals enrolled (and co-enrolled) in programs. Therefore, ETA should initially use the efficiency measures recommended above for program monitoring purposes – and only after at least several years of observation consider whether to apply standards (and rewards/sanctions) to some or all of the measures recommended.

5. Recommendation #5: Improve Consistency and Quality of Cost, Customer Characteristics, and Outcome Data

This study has attempted to establish a baseline of efficiency measure results for the 11 ETA programs -- an effort that has not always resulted in success. For some programs (notably the WIA, ES, and TAA programs), there was success in obtaining both the cost and outcome data to generate three years of efficiency measure results both at the national and state levels. Other programs struggled with providing data for the full three-year period and some could not generate the outcome data needed for even one year (in part, because they may have recently transitioned to the Common Measures or were in the process of making this transition). The efficiency measure results for programs that were able to provide three years of data at the state or grantee level revealed substantial variation in results within states from year to year and among states/grantees within a single program year. These variations were sometimes very large, and it is not clear that this variation is a true reflection of the "efficiency" of programs or of other factors – including substantial cross-state differences in co-enrollment patterns and in the ways in which states collect and report on both program costs and outcomes, as well as simply erroneous data. Given the difficulty in obtaining cost and outcome data for programs at the federal and state/grantee levels – and the variable nature of efficiency measure results we suggest that ETA carefully study variation in the ways in which costs and outcome data are being

collected within programs (across states) and across programs and, if consistent with other priorities, require that states and grantees use common definitions, and procedures to report data to ETA and that they be required to assure the quality of the data reported .

6. Recommendation #6: ETA Should Explore Developing Efficiency Models by Activity for Programs That Offer a Range of Activities.

Some programs, such as WIA Adult and Dislocated Worker programs, offer a wide range of activities in terms of the cost per customer. For example, assisted core services may cost well under $100 per customer, but occupational training sometimes costs $10,000 or more per customer. The concept of cost per customer loses much of its meaning when services vary so much within and across states and grantees. More meaningful results are likely to be obtained for programs with a range of activities if separate regression models could be estimated for each major activity. In WIA, for example, separate efficiency models could be estimated for each of the three tiers of service or for training and core assisted and intensive services combined. Unfortunately, it is not a simple matter to develop such models because cost data are currently not collected by activity in most states. In an earlier report, the authors identified only two states that collect costs by activity, Florida and Michigan, and these states do not use the same methods and sub-state areas also use a variety of approaches within the states.[99] To develop statistical models of efficiency measures, ETA would have to mandate that states/grantees and, most likely substate grantees as well, collect cost data by activity. To assure that the data are consistent across states, ETA would also have to require that a specific method be used to allocate joint costs and to deal with co-enrollment. We recognize that this would be a considerable burden, so

[99] Heinberg, John, and J. Trutko, B. Barnow, M. Farrell, and A. Glosser. 2005. Unit Costs of Intensive And Training Services for WIA Adults and Dislocated Workers: An Exploratory Study of Methodologies and Estimates in Selected States and Localities: Final Report. Capital Research Corporation: prepared for the U.S. Department of Labor, Employment and Training Administration.

our recommendation at this time is that ETA explores this issue further rather than immediately begin collecting such data.

7. Recommendation #7: Adjustment Models for Efficiency Measures Are Not Likely to Be Useful at the State-Level for Many Years; They Potentially Could be Useful and Valid at the Local/Grantee Level for Some Programs

The modeling efforts conducted for this report, which focused on the WIA Adult and Dislocated Worker programs (using WIASRD data), suggested that great caution and several additional years of results are required before ETA should consider implementing state-level regression models to adjust performance standards for states/grantees on the recommended efficiency measures. Overall, the regression models tested for the WIA Adult and Dislocated Worker programs did not provide sensible magnitudes and statistically significant coefficients for the regression coefficients in the models. It is possible that once the co-enrollment pattern stabilizes and several years of data after that are available, regression modeling might produce useful results. Other factors that could make such modeling useful include requiring states (and local areas where appropriate) and grantees to use consistently measured and high-quality data (see Recommendation 5) and that activity-level cost data be collected (see Recommendation 6).

8. Recommendation #8: Estimate Return on Investment (ROI) in Conjunction with Impact Studies but Not as Regular Performance Measurement

ROI and the closely related concept of cost-benefit analysis are essential to assess if a program is a worthwhile investment and to compare alternative investments -- we encourage the Department of Labor and states to conduct such analyses on a regular basis. However, it would be very expensive to measure ROI on an annual basis as a performance measure. Other challenges to using ROI on a regular basis as a performance measure are (1) a lack of consensus

about the best methods that should be used to generate appropriate comparison group data (e.g., some analysts believe that the matching methods that are widely used do not provide good comparison groups), (2) the time required to generate reasonable post-program data is too long to provide measures that are useful for annual performance measures, (3) there is a lack of consensus among economists and government agencies about the appropriate discount rate to use, and (4) for programs that provide earnings gains, it is difficult to make reasonable assumptions about how long observed earnings gains will persist. Thus, it is recommended that ROI and cost-benefit analysis should be considered an important tool for periodic program evaluation rather than annual performance assessment.

9. Recommendation #9: Further Study Is Needed on Several Topics Areas Related to and Likely to Affect Efficiency Measure Results – Including Co-Enrollment and Cost Sharing

Through our conversations with ETA officials and states, we identified a number of important issues that must be resolved so that ETA's efficiency measures are consistent. These issues involve policy considerations that can only be made by ETA officials. For example, some programs, such as SCSEP and TAA, provide stipends or other cash payments on a regular basis; whether expenditures on stipends are included as an expenditure would have a major effect on how costs compare across programs. Examples of such issues include:

- Should stipends, supportive services, and need-based payments be counted as expenditures in computing efficiency measures?
- How should co-enrollment be accounted for in efficiency measures?
- How should shared costs such across programs, such as One-Stop Career Center infrastructure costs, be dealt with in efficiency measures?
- How should the efficiency measures deal with customers who remain in the program for more than one program year?

- How should self-service customers be dealt with in programs such as WIA Adult and Dislocated Worker programs where such customers are not counted for outcome measures?

- How should self-service customers be dealt with in programs such as WIA Adult and Dislocated Worker programs where such customers are not counted for outcome measures?

- How should incumbent worker customers be dealt with in programs such as WIA Adult and Dislocated Worker programs where such customers are not counted for outcome measures?

Resolution of these issues is important for making sure that the efficiency measures are consistent within and across programs and to assure that programs and policy officials understand what is and is not being captured by the efficiency measures. As noted above, these issues generally require value judgments and some of them would have major cost implications for data collection.

APPENDIX A:

DISCUSSION GUIDES FOR INTERVIEWS WITH STATE WORKFORCE AGENCIES

DISCUSSION GUIDE FOR EARLY ROUND OF INTERVIEWS WITH SIX STATES

1. Do you have a performance measurement/management system? If so, please briefly describe this system and the measures that are included in the system. If available, please provide additional written documentation about this system.

2. What types of efficiency measures are currently being used by your agency, especially with regard to employment and training programs administered by your agency? By efficiency measures, we mean a performance measure that includes some measure of program cost or resources used; examples include cost per participant, cost per entered employment, and return on investment. With regard to each efficiency measure in use:
   a. How is the measure defined?
   b. Why was this measure selected?
   c. What were the challenges to developing and implementing this measure?
   d. At what program level or levels (federal, state, or local/program levels) is the efficiency measure applied? If the efficiency measure is applied at the state or local/program levels, is the same standard or varying standards applied across states or local/program areas? If varying standards are used, how are the standards developed (e.g., statistical models or through negotiations)?

3. What types of data and data systems are used to generate the necessary participant and cost data required to generate valid, reliable, and appropriate efficiency measures? How burdensome do you think data collection is at the federal, state, and/or local/program levels? Are there types of data that have been particularly difficult to obtain (e.g., costs broken down by discrete service)?

4. How has your agency used efficiency measures to monitor and enhance program performance? Please explain any rewards and/or sanctions that are applied because of performance on the efficiency measures you use.

5. If more than one efficiency measure is used, are all of the measures given the same weight in assessing performance or is greater weight given to certain measures? If different weights are applied, which measures are given more weight and why?

6. How important are the efficiency measures compared to other performance measures you use? Are all of the measures given the same weight in assessing performance or is greater weight given to certain measures? If different weights are applied, which measures are given more weight and why?

7. What have been the effects/consequences of the efficiency measures on the number of people served, they way they are served, and program outcomes, both intended and unintended? Please explain.

8. Are there efficiency measures that your agency used in the past, but are no longer used? If so, what were these earlier efficiency measures and why were they discontinued?

9. Does your agency have plans to implement additional efficiency measures in the future? If yes, what types of measures are being considered and why are they under consideration?

10. Does you agency provide technical assistance, training, and ongoing monitoring to ensure effective implementation of efficiency measures at the state, local, or programmatic levels? If so, what types of technical assistance and training is provided?

11. Does your agency have any additional views about efficiency measures or recommendations with regard to development or implementation of efficiency measures for employment, training, or other human service programs?

12. Please provide any background reports or documents that you have concerning the efficiency measures that your agency has implemented.

DISCUSSION GUIDE FOR LATE ROUND OF INTERVIEWS WITH FIVE STATES

A. Co-Enrollment Policies and Practices

1. What are your state's policies with regard to co-enrollment of participants of ETA-funded programs (particularly policies with regard to WIA, Wagner-Peyser/ES, and TAA participants)?
2. Do co-enrollment policies/practices vary within the state by local workforce area? If yes, to what extent and why?
3. How reliable is your state's data system in capturing patterns of co-enrollment (e.g., for WIA, Wagner-Peyser/ES, and TAA participants)? If there are challenges to tracking co-enrollment, why is this the case?
4. For the past 3 years, have there been any major changes in the number or percentage of participants that are co-enrolled between the programs listed below? And if so, how and why? (Note: if available, please provide actual counts or estimates of the numbers/percentages of participants co-enrolled in each program.)
    a. WIA Adults co-enrolled in WIA Dislocated Worker, WIA Youth, Wagner-Peyser/ES, or TAA programs
    b. WIA Dislocated Workers co-enrolled in WIA Adult, WIA Youth, Wagner-Peyser/ES, or TAA programs
    c. WIA Youth co-enrolled in WIA Dislocated Worker program, WIA Adult, Wagner-Peyser/ES, or TAA programs
    d. ES/Wagner-Peyser participants co-enrolled in WIA Adult, WIA Dislocated Worker, WIA Youth, or, TAA programs
    e. TAA participants co-enrolled in WIA Adult, WIA Dislocated Worker, WIA Youth, or, ES/Wagner-Peyser programs
5. Do you anticipate that patterns of co-enrollment will change for any of these programs over the next three years?
6. How do you suggest that ETA deal with co-enrollment in its outcome and efficiency performance measures?

B. Accounting for Program Costs

1. Does the state receive WIA expenditure data from local workforce areas? If so, could this data be provided to the federal government with little additional cost to the state? If not, please explain.
2. At the local workforce level, do LWIAs collect and disaggregate WIA costs by service level (e.g., core/unassisted, staff-assisted, intensive, and training services under WIA)?
    a. If so, how are costs disaggregated (by what service categories)?
    b. Do LWIAs across the state use the same methodology for disaggregating costs?
    c. Is it challenging for LWIAs to generate this disaggregated data? If so, what makes it difficult?
    d. Are these disaggregated costs reported to the state? And if yes, is the data useful?
3. If disaggregated cost data (by service level) are not collected for the WIA program at the LWIB level, how difficult would it be to do so? What would be the challenges?

4. To what extent are there shared costs across workforce programs, including WIA, Wagner-Peyser/ES, and TAA (e.g., where training costs for an individual are shared by WIA and TAA or where Wagner-Peyser/ES and WIA share the costs of One-Stop operations at the local level)?
    a. For which programs are there the most shared costs?
    b. Do local areas or the state collect any data on the sharing of costs between programs? If yes, please explain.
    c. How do you suggest that ETA deal with shared costs in its efficiency performance measures?

C. Other Issues/Conclusion

1. At what point do self-service customers of the One-Stop Career Center system get enrolled for performance purposes?
    a. Are procedures the same across the state or do they vary by local workforce area or One-Stop Center?
    b. How should these self-service customers be taken into account with regard to outcome and efficiency measures?
2. Does your state have any issues with regard to exclusion of incumbent workers from outcome measures (such as entered employment rate) or efficiency measures (such as cost per entered employment)? Do you have any suggestions on how to deal with incumbent workers in measuring program outcomes and efficiency?
3. In some instances (particularly in programs such as WIA and TAA), program participants are served over more than one program year (e.g., a WIA participant's expenditures on training may be spread across two program years), while for performance and efficiency measurement purposes they are counted as an exiter for just one program year (i.e., the year they exit from the program). Does the spreading of costs across multiple program years pose any challenges with regard to measuring program efficiency?
4. Has your state agency used Return on Investment (ROI) to measure the cost-effectiveness of WIA, Wagner-Peyser/ES, TAA, or other employment and training programs? If yes –
    a. Please discuss your use of and experiences with ROI – for which programs, how were impact results obtained, and who conducted the ROI study?
    b. Do you use ROI measures as part of the annual performance measurement process or in program evaluations?
    c. If your state uses ROI, have the ROI results been useful? If yes, how have the ROI results been used?
5. Do you have any addition thoughts you would like to express about the use of efficiency measures to monitor employment and training programs –
    a. Challenges to gathering outcome or expenditure data to generate efficiency measure results
    b. Potential for agencies being monitored "gaming" results to the detriment of program goals/objectives
    c. Issues concerning comparing performance on efficiency measures across states, local workforce areas, and employment and training programs
    d. Potential benefits of efficiency measures in terms of enhancing program operations or outcomes over the long-term

APPENDIX B:

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APPENDIX B: REFERENCES

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APPENDIX C:

REGRESSION RESULTS FOR FOUR ADDITIONAL EFFICIENCY MEASURE OUTCOMES

Exhibit A-1: Estimated Adjustment Coefficients for Cost per Employed Exiter

	WIA Adult		WIA Dislocated Worker	
	OLS *	Fixed Effects **	OLS *	Fixed Effects **
Average Exiters Per WIB	-0.1450731 (0.449)	-0.2359341 (0.387)	-1.892358 (0.028)	-0.6512025 (0.530)
Percent Training	2052.685 (0.384)	-1359.554 (0.587)	10483.16 (0.003)	20328.4 (0.000)
Percent Intensive	7226.694 (0.002)	6963.288 (0.011)	-8360.84 (0.251)	-2935.347 (0.602)
Percent Core (Reference Group)	/	/	/	/
Percent Enrolled in Multiple WIA Programs	-7512.523 (0.090)	-10273.69 (0.065)	137.6309 (0.972)	-7783.778 (0.063)
Percent Funded by Wagner Peyser Funding Sourse	-1.725425 (0.997)	-235.6306 (0.827)	-1030.882 (0.343)	-1882.616 (0.382)
Percent Age 0 to 21	640.0206 (0.945)	-2619.409 (0.828)	-83382.72 (0.269)	-12737.61 (0.809)
Percent Age 22 to 29 (Reference Group)	/	/	/	/
Percent Age 30 to 44	-1714.479 (0.867)	-7534.465 (0.449)	12146.99 (0.630)	60607.23 (0.013)
Percent Age 45 to 54	-828.56 (0.936)	-5743.269 (0.634)	-41435.46 (0.143)	34227.58 (0.102)
Percent Age 55 Plus	11225.34 (0.372)	26900.95 (0.064)	34001.46 (0.154)	49524.88 (0.083)
Percent White (Reference Group)	/	/	/	/
Percent Black	447.2234 (0.699)	7859.619 (0.174)	7126.506 (0.084)	-22469.57 (0.205)
Percent Hispanic	-777.1583 (0.743)	2273.36 (0.779)	4718.668 (0.402)	-16126.61 (0.477)
Percent Other or Multiple Race	2086.279 (0.373)	-10865.68 (0.335)	10158.98 (0.008)	-22236.07 (0.290)
Percent Female	-2657.746 (0.404)	3704.951 (0.470)	-4934.869 (0.528)	-11580.92 (0.286)
Percent Veteran	14906.98 (0.220)	-12651.13 (0.470)	5600.369 (0.763)	5183.127 (0.805)
Percent Working at Registration	-5431.899 (0.034)	-490.7754 (0.895)	8694.082 (0.219)	-5513.92 (0.635)
Percent Non High School Grad	-7114.708 (0.124)	-10268.56 (0.088)	-30348.54 (0.005)	-10626.48 (0.467)
Percent Limited English Proficiency	3849.221 (0.410)	4926.454 (0.560)	12949.24 (0.082)	9130.558 (0.400)
Percent TANF Receipt within 6 months	6994.897 (0.034)	3609.694 (0.646)	/	/
Average Unemployment Rate (non-seasonally adjusted)	-13.8872 (0.948)	-339.7294 (0.501)	739.249 (0.046)	-3214.073 (0.006)
Percent Below Poverty Line	-35.49007 (0.702)	277.5333 (0.381)	551.3832 (0.023)	977.0194 (0.148)
Average Weekly Retail Wage Rate	-2.606886 (0.680)	-11.34553 (0.590)	18.41033 (0.250)	-0.1377437 (0.998)
Average Wkly Wage Production Workers in Manufacturing	3.344418 (0.156)	-0.5937875 (0.931)	3.270214 (0.527)	11.54599 (0.413)
Constant	1476.348 (0.831)	6508.582 (0.613)	-2290.841 (0.920)	-30354.89 (0.290)
Observations	153	153	153	153
R-squared / Within State R-squared	0.4508	0.4024	0.398	0.3738

* P-values from Huber/White Variance Estimator (Robust)

** Standard Fixed Effects P-Value

Source: Combined 2005, 2006, and 2007 WIASRD Public Use Data Files, Authors' Calculations

Exhibit A-2: Estimated Adjustment Coefficients for Adjusted Cost per Entered Employment from Common Measure

	WIA Adult		WIA Dislocated Worker	
	OLS *	Fixed Effects **	OLS *	Fixed Effects **
Average Exiters Per WIB	-0.1496385 (0.412)	-0.2393657 (0.365)	-1.858962 (0.027)	-0.6565914 (0.516)
Percent Training	1641.056 (0.471)	-1284.741 (0.596)	10266.15 (0.003)	20012.81 (0.000)
Percent Intensive	7038.39 (0.002)	6928.979 (0.009)	-8232.783 (0.252)	-2661.057 (0.627)
Percent Core (Reference Group)	/	/	/	/
Percent Enrolled in Multiple WIA Programs	-7008.421 (0.085)	-10837.75 (0.044)	381.9988 (0.921)	-7542.773 (0.064)
Percent Funded by Wagner Peyser Funding Sourse	14.33322 (0.978)	-103.1592 (0.921)	-999.7519 (0.343)	-1975.971 (0.347)
Percent Age 0 to 21	-1012.787 (0.910)	-733.1558 (0.950)	-75841.06 (0.303)	-3275.234 (0.949)
Percent Age 22 to 29 (Reference Group)	/	/	/	/
Percent Age 30 to 44	-2633.594 (0.791)	-7864.054 (0.414)	15255.6 (0.536)	61363.01 (0.010)
Percent Age 45 to 54	-2758.183 (0.775)	-3436.303 (0.769)	-39607.2 (0.151)	33886.25 (0.097)
Percent Age 55 Plus	8121.733 (0.490)	23183.46 (0.098)	38531.77 (0.103)	51708.19 (0.064)
Percent White (Reference Group)	/	/	/	/
Percent Black	597.2213 (0.602)	7562.116 (0.176)	7331.326 (0.068)	-20615.97 (0.233)
Percent Hispanic	-272.7357 (0.902)	1715.885 (0.827)	4646.275 (0.395)	-16482.6 (0.456)
Percent Other or Multiple Race	2323.307 (0.295)	-11397.72 (0.296)	9871.427 (0.008)	-21829.1 (0.287)
Percent Female	-2457.743 (0.404)	3874.544 (0.436)	-5572.689 (0.464)	-12486.51 (0.238)
Percent Veteran	13768.41 (0.232)	-12011.25 (0.478)	4480.081 (0.806)	3835.389 (0.851)
Percent Working at Registration	-4423.167 (0.077)	135.8916 (0.970)	9005.33 (0.194)	-4641.471 (0.682)
Percent Non High School Grad	-7233.268 (0.106)	-9954.624 (0.087)	-29816.42 (0.005)	-10064.74 (0.479)
Percent Limited English Proficiency	2692.948 (0.528)	5208.405 (0.524)	12903.99 (0.080)	9480.308 (0.370)
Percent TANF Receipt within 6 months	6536.823 (0.041)	3110.306 (0.683)	/	/
Average Unemployment Rate (non-seasonally adjusted)	-0.8387973 (0.997)	-315.9036 (0.518)	686.4986 (0.058)	-3266.112 (0.004)
Percent Below Poverty Line	-40.0346 (0.656)	268.0356 (0.382)	541.9747 (0.021)	896.4433 (0.173)
Average Weekly Retail Wage Rate	-1.894882 (0.754)	-10.79258 (0.596)	17.12215 (0.273)	-0.9207573 (0.984)
Average Wkly Wage Production Workers in Manufacturing	3.558209 (0.117)	-0.3296395 (0.960)	3.572832 (0.479)	11.36247 (0.409)
Constant	2038.036 (0.762)	5609.81 (0.652)	-3969.568 (0.859)	-29337.14 (0.294)
Observations	153	153	153	153
R-squared / Within State R-squared	0.4537	0.4148	0.4012	0.377

* P-values from Huber/White Variance Estimator (Robust)

** Standard Fixed Effects P-Value

Source: Combined 2005, 2006, and 2007 WIASRD Public Use Data Files, Author's Calculations

Exhibit A-3: Estimated Adjustment Coefficients for Cost per Employment Retention Alternative Measure

	WIA Adult		WIA Dislocated Worker	
	OLS *	Fixed Effects **	OLS *	Fixed Effects **
Average Exiters Per WIB	-0.2105902 (0.357)	-0.3236129 (0.340)	-2.456632 (0.011)	-0.9343323 (0.422)
Percent Training	3038.862 (0.293)	-1124.925 (0.717)	11723.83 (0.002)	23209.08 (0.000)
Percent Intensive	8560.389 (0.003)	8051.29 (0.017)	-11115.67 (0.179)	-5116.314 (0.418)
Percent Core (Reference Group)	/	/	/	/
Percent Enrolled in Multiple WIA Programs	-10473.07 (0.059)	-12962.21 (0.061)	586.6261 (0.893)	-7725.39 (0.099)
Percent Funded by Wagner Peyser Funding Sourse	-0.3273392 (1.000)	-183.097 (0.892)	-1082.723 (0.354)	-1914.306 (0.428)
Percent Age 0 to 21	5143.251 (0.648)	-2379.268 (0.874)	-73882.11 (0.359)	-1084.459 (0.985)
Percent Age 22 to 29 (Reference Group)	/	/	/	/
Percent Age 30 to 44	-909.1746 (0.939)	-8054.669 (0.515)	10063.79 (0.717)	68144.74 (0.013)
Percent Age 45 to 54	-277.3029 (0.983)	-7372.969 (0.623)	-43127.02 (0.162)	39949.59 (0.089)
Percent Age 55 Plus	20997.73 (0.187)	44793.45 (0.014)	36962.47 (0.140)	54650.68 (0.088)
Percent White (Reference Group)	/	/	/	/
Percent Black	1425.821 (0.289)	10875.51 (0.131)	9270.387 (0.038)	-22228.27 (0.263)
Percent Hispanic	-1512.532 (0.600)	2363.521 (0.815)	5562.095 (0.360)	-18687.96 (0.463)
Percent Other or Multiple Race	2738.486 (0.340)	-13523.63 (0.335)	11985.57 (0.005)	-27116.07 (0.250)
Percent Female	-5244.098 (0.195)	6097.48 (0.340)	-4662.428 (0.580)	-9304.186 (0.444)
Percent Veteran	19671.51 (0.182)	-14232.17 (0.513)	7407.905 (0.709)	6416.627 (0.785)
Percent Working at Registration	-7454.713 (0.018)	-1283.888 (0.782)	8518.633 (0.268)	-10226.2 (0.433)
Percent Non High School Grad	-6567.596 (0.228)	-12436.72 (0.096)	-32318.37 (0.007)	-11168.98 (0.495)
Percent Limited English Proficiency	5788.697 (0.329)	7165.305 (0.495)	15757.79 (0.060)	9385.012 (0.440)
Percent TANF Receipt within 6 months	9822.337 (0.016)	6499.958 (0.506)	/	/
Average Unemployment Rate (non-seasonally adjusted)	34.42382 (0.895)	-430.7413 (0.493)	872.0695 (0.031)	-3458.574 (0.008)
Percent Below Poverty Line	-76.236 (0.479)	352.3973 (0.371)	584.1576 (0.025)	1141.866 (0.132)
Average Weekly Retail Wage Rate	-3.301931 (0.658)	-18.66472 (0.476)	22.11306 (0.197)	-10.40512 (0.840)
Average Wkly Wage Production Workers in Manufacturing	3.017922 (0.279)	-3.552083 (0.675)	3.729429 (0.497)	12.63215 (0.424)
Constant	1682.387 (0.835)	9209.127 (0.565)	-2383.203 (0.925)	-32092.94 (0.318)
Observations	153	153	153	153
R-squared / Within State R-squared	0.4567	0.4078	0.4265	0.3622

* P-values from Huber/White Variance Estimator (Robust)

** Standard Fixed Effects P-Value

Source: Combined 2005, 2006, and 2007 WIASRD Public Use Data Files, Authors' Calculations

Exhibit A-4: Estimated Adjustment Coefficients for Cost per Total Post Program Earnings Alternative Measure

	WIA Adult		WIA Dislocated Worker	
	OLS *	Fixed Effects **	OLS *	Fixed Effects **
Average Exiters Per WIB	-0.0000223 (0.352)	-0.0000192 (0.652)	-0.000183 (0.016)	-0.0000605 (0.580)
Percent Training	0.0902101 (0.785)	-0.6395018 (0.104)	0.9557113 (0.002)	1.953429 (0.001)
Percent Intensive	0.8320392 (0.010)	1.502651 (0.001)	-0.7713247 (0.215)	-0.1629988 (0.783)
Percent Core (Reference Group)	/	/	/	/
Percent Enrolled in Multiple WIA Programs	-1.176685 (0.019)	-1.903192 (0.029)	-0.2606286 (0.432)	-0.7723066 (0.079)
Percent Funded by Wagner Peyser Funding Sourse	0.0286506 (0.696)	-0.1033871 (0.540)	-0.111083 (0.267)	-0.103475 (0.648)
Percent Age 0 to 21	-0.2725275 (0.833)	-1.515343 (0.422)	-9.095301 (0.274)	-4.75703 (0.393)
Percent Age 22 to 29 (Reference Group)	/	/	/	/
Percent Age 30 to 44	-1.062277 (0.451)	-2.832725 (0.070)	-0.2962484 (0.887)	4.885902 (0.055)
Percent Age 45 to 54	0.7442227 (0.569)	-0.8749846 (0.643)	-4.539023 (0.066)	3.205812 (0.145)
Percent Age 55 Plus	-0.028188 (0.986)	2.022709 (0.368)	1.754984 (0.422)	5.081829 (0.091)
Percent White (Reference Group)	/	/	/	/
Percent Black	0.0448645 (0.770)	0.0398775 (0.965)	0.4348713 (0.242)	-1.309235 (0.482)
Percent Hispanic	-0.1090298 (0.728)	0.2869463 (0.821)	0.222541 (0.698)	-2.202599 (0.357)
Percent Other or Multiple Race	0.0873886 (0.752)	-0.751808 (0.669)	0.8409738 (0.008)	-0.5931302 (0.788)
Percent Female	-0.0688709 (0.851)	0.1790668 (0.823)	0.2984367 (0.648)	-1.615071 (0.159)
Percent Veteran	0.8938205 (0.560)	0.0318955 (0.991)	0.4164445 (0.824)	-0.4140949 (0.851)
Percent Working at Registration	-0.7928779 (0.010)	-0.441624 (0.448)	0.4718814 (0.468)	-0.5453322 (0.655)
Percent Non High School Grad	-0.7251118 (0.255)	-0.5317346 (0.568)	-2.186094 (0.022)	-1.396955 (0.364)
Percent Limited English Proficiency	0.4715261 (0.450)	0.6066981 (0.645)	1.415817 (0.062)	1.250804 (0.275)
Percent TANF Receipt within 6 months	0.9336879 (0.021)	0.0245711 (0.984)	/	/
Average Unemployment Rate (non-seasonally adjusted)	-0.0288937 (0.256)	-0.1072351 (0.176)	0.0319428 (0.370)	-0.3189647 (0.009)
Percent Below Poverty Line	0.0024626 (0.837)	-0.0177057 (0.720)	0.0667353 (0.004)	0.0753364 (0.288)
Average Weekly Retail Wage Rate	-0.0006688 (0.447)	0.0019258 (0.558)	0.0012666 (0.419)	0.0050897 (0.295)
Average Wkly Wage Production Workers in Manufacturing	0.0009119 (0.009)	0.0006445 (0.545)	0.000609 (0.266)	0.0019896 (0.182)
Constant	0.3975948 (0.685)	0.7697051 (0.701)	0.3825446 (0.838)	-5.181015 (0.088)
Observations	153	153	153	153
R-squared / Within State R-squared	0.4224	0.3895	0.3512	0.4277

* P-values from Huber/White Variance Estimator (Robust)

** Standard Fixed Effects P-Value

Source: Combined 2005, 2006, and 2007 WIASRD Public Use Data Files, Authors' Calculations

APPENDIX D:

WRITTEN COMMENTS PROVIDED BY EXPERT PANEL FOLLOWING NOVEMBER 2009 PANEL MEETING

Beryl Radin
American University
Written Comments
ETA Expert Panel Meeting
November 9, 2009

Unlike Chris and Carolyn, I have limited expertise on the detailed process and expectations of creating performance measures in this set of programs.

However, I am somewhat familiar with the pattern of modifications that have occurred in this policy area since the 1960s and the reality that the design of programs has been changed and priorities shifted as changes have occurred in the larger political and policy environment. It seems to me that this evaluation is facing such a transition reality. Its important to acknowledge this because the programs may find themselves trapped in a very different policy context and political expectations particularly from OMB.

First, the policy shifts. We are in the midst of a very different economic climate today than when the project began. I don't think it is productive to proceed with the assumption that things are the same today as when the project started. I'm especially concerned about the relationship between these programs and a range of programs within the stimulus package. A new set of programs and agencies are now charged with job creation. Thus I think that the performance measures should find a way to link the DOL programs with those in other agencies. Actually that linkage may make the 11 programs in this study more visible and relevant.

Second are the shifts in OMB and the current administration. This occurs in two ways. The first deals with policy expectations that may change as a result of the change of administration. Some of the programs (particularly the apprenticeship programs) are likely to provide a different set of values related to the balance between the private sector and unions. There also may be a different approach to the concept of efficiency measures as opposed to effectiveness and equity measures. In addition, there may be more emphasis on the differences between the client groups that are expected to be served by the various programs.

The second deals with the OMB expectations about performance measurement. It is not clear to me how many changes will occur from the past; there are different signals from Orszag and Zients. My sense is that whatever is created is likely to provide more discretion to agencies and programs to define measures that are useful to program managers and to more clearly acknowledge that managers do not always have control over the achievement of real outcomes.

There is likely to be less control over details by OMB than occurred in the past administration. Also I don't know whether there may be more acknowledgement of the importance of outputs and processes as well as outcomes. Is it possible now to emphasize different levels of analysis -- assessment of performance by individuals as well as applicants? I think OMB is less likely to impose a national model as was communicated by PART. Information about the international experience in the report indicates that the past administration's emphasis on efficiency measures is not the international norm.

There are several other issues. It is important to acknowledge differences among the programs (both in terms of clients as well as delivery mechanisms). Should we assume that the same delivery structures are effective across programs? I have been concerned about the incompatibility between some of the performance expectations and the reality of federalism and differences across jurisdictions. Population groups experience problems differently in different political cultures.

Finally, the purpose of the performance measurement activities is not clear to me. The determination of who we expect to use the measures should be a first order issue. Is it envisioned as a way to kill programs? To shift annual budgetary processes? To provide information to congressional oversight efforts? Or to give federal managers (or state and local managers) better information about ways that they can modify their practices? There are different uses depending on the level of government involved.

Christopher T. King
Ray Marshall Center, University of Texas at Austin
Written Comments
ETA Expert Panel Meeting
November 9, 2009

Per your request, I'm offering brief written comments in addition to the ones I provided in yesterday's Expert Panel Meeting in Washington, D.C. My comments are organized into three areas: general comments, recommendations, and suggestions for future research/analysis.

GENERAL COMMENTS

As I mentioned in the Expert Panel Meeting, I think the context for implementing efficiency measures should be carefully considered whether USDOL decides to move forward with standards with "teeth", simple measures rather than standards, or just information guidelines. A few aspects in particular bear noting:

- It has been years since any type of efficiency standard or measure has been used in US workforce development programs, I believe since the 1992 JTPA Amendments that responded to the adverse impact findings from the 1988 SRI study. Implementing them would necessitate a considerable lead time in order to be done right and to avoid large unintended consequences.
- The environment for US workforce development programs has become far more varied and complex since the mid-to-late 1990s, as described in Barnow and King (2005), Grubb et al. (2005) and others. In some states, due to legislative reforms, local WIBS operate comprehensive, highly integrated programs that can offer participants services from WIA, ES and TAA, as well as from TANF, FSE&T and even childcare. In others, WIBS can only offer what WIA provides and supports. Co-enrollment, leveraging and, of course, accurate measurement of all key inputs is far more likely in the former than the latter. This is dicey territory for implementing any type of efficiency measure. Unintended consequences are all but guaranteed.
- WIA also presents an environment that is far more susceptible to "creaming" than JTPA for several reasons, including: universal services eligibility, far more ambiguous data definitions (e.g., of participant, of exiter, of intensive v. training services), coupled with greater consequences for enrolling participants in some services (i.e., staff-assisted core, intensive and training) v. others (unassisted core services).
- In recent decades, US policy in both welfare-employment and workforce development has over-emphasized on-the-cheap, work-first strategies over longer-term or more intensive skill-building (human capital) ones. Funding for these programs has also been on the decline for much of the last decade. Recently, the American Recovery and Reinvestment Act (ARRA) began funding and encouraging states and localities to support longer-term training for participants. Given what happened in the much simpler JTPA program under the efficiency measure (with adjustment models and better data collection and reporting), implementing an efficiency standard (measure) now would

almost certainly lead to both greater "creaming" and reduced emphasis on more costly training strategies, directly countering the current policy thrust/intent.

RECOMMENDATIONS

My recommendations on the various topics of interest are as follows:

- *Efficiency standards should not be implemented for any of USDOL's workforce programs.* If something must be implemented, I recommend going with efficiency measures or even guidelines, with an ample supply of caveats and an extended discussion of program context as referenced above.
- *Expenditures should serve as the basis for any efficiency standard, measure or guideline.* Neither appropriations or obligations accurately and consistently reflect the actual resources invested in a participant; expenditures do.
- *USDOL should review its data definitions, data collection and reporting procedures thoroughly for its workforce development programs with an eye to instituting far more consistent, tighter data systems generally.* Despite the assurances of some who have examined and help to create these data, even a cursory review indicates that the problems with these data are considerable. The range of values, the within- and between-year variation and other aspects of the reported data defy rational explanation. Real improvements need to be made with greater involvement of policy and program as well as the usual technical/IT staff.
- *If efficiency standards/measures/guidelines are to be instituted, several of USDOL's "program" line-up should be explicitly excluded; namely, Workforce Incentive Grants, National Emergency Grants and Apprenticeship.* For various reasons, none of these "programs" would be appropriate for an efficiency measure of any sort. WIGs lack participant services altogether. NEGs are episodic. Apprenticeship is more a marketing effort by USDOL/States and doesn't invest in training services.
- *Return-on-investment (ROI) measures should certainly be considered but only as periodic, evaluative performance measures, not standards.* The *IPI Blueprint Report* (Wilson, 2006) was clear about this as is Washington State's legislation that has required gross outcome measurement for all of its workforce training and education programs since the early 1990s and cost-effectiveness (ROI) analysis based on quasi-experimental impact estimation every four years (see Hollenbeck and Huang 2006). This has worked very well in Washington and gained considerable credibility across their system in ways not seen anywhere else. In Texas, the state association of workforce boards, not the state workforce agency, pushed for and supported the ROI analysis, which we conducted at the state and WIB level (King et al. 2008, available on http://www.utexas.edu/research/cshr).

SUGGESTIONS FOR FUTURE RESEARCH

Areas suggested for future research include:

- USDOL should conduct a study of comprehensive/portfolio v. siloed workforce development policy and program contexts and outline their implications for performance measurement and management.

- USDOL, along with USDOE, USHHS and other affected federal agencies, should also work with OMB to thoroughly revisit the "common measures." The OMB measures were created in a tops-down environment after which they were shared with states for comments. The process would be greatly improved by following the IPI approach of working directly with the states and localities from the outset and consulting with the National Governors Association, Washington State (Bryan Wilson) and others including myself. The Ray Marshall Center was a consultant to the IPI effort from 2003-2006. Several of the issue papers we prepared for NGA and the participating states are still available on our website.

Comments on Reports and Discussion of Implementing Outcomes-Based Efficiency Measures for Employment and Training Programs

Carolyn J. Heinrich, Expert Panel Member

The comments provided below reflect both my review of the reports (interim reports #3 and #4 and the draft final report) and the discussion at the November 9, 2009 meeting at the USDOL. I begin with a set of general comments on the various issues that were raised in the reports and the November 9 meeting, and I subsequently list some more specific comments and recommendations for next steps in the process of designing efficiency measures for USDOL programs.

General comments

First, let me state up front how important I think it is that the USDOL is exploring outcomes-based efficiency measures, at a minimum for internal use. It is clear that the public is interested in accountability for program costs in conjunction with program performance. For example, very large average labor market impacts could likely be produced if employment and training program managers spent their budgets on a very limited number of clients. In this regard, efficiency will always be an important consideration in the effective use of public program resources.

It is also apparent from the November 9 discussion and the wide range of complex issues addressed in the interim and final draft reports that the design and use of efficiency measures should be approached with caution and a thorough, careful investigation and analysis of the existing administrative data and performance measurement systems. This includes both current systems and past performance measurement efforts. For example, a cost per placement measure was used under JTPA, and there is published research and other studies that document the challenges with the use of such an outcomes-based efficiency measure.

One unambiguous generalization that we can make from the existing research is that employment and training program managers and staff will respond to performance measures once they are established by the USDOL, regardless of whether sanctions or rewards are attached to meeting them. "What matters is what is measured" has been the mantra of performance measurement systems across a variety of public program domains. Unfortunately, once a performance measure is activated, those under pressure to meet it will frequently use all means that they can to influence *measured* performance, even if those actions do not benefit the clients. For example, with the introduction of the JTPA cost per placement measure, some local service delivery areas shifted away from providing more costly intensive services or those less likely to produce quick job placements in order to minimize costs and maximize costs per placement. As it is easier for program managers to control costs (than to affect the wage or earnings per entered employment), they are even more likely to manipulate an efficiency measure.

In addition, we know from the analyses conducted by Trutko and Barnow in their reports that there is considerable variation in how program costs are currently calculated at both state

and local service delivery levels. This variation and/or the lack of consistency in how costs are recorded and calculated leaves greater room for states and localities to manipulate an efficiency measure. I would suggest (and I think there was some consensus on this point in the November 9 meeting) that there is considerable more work to be done in determining how states and Workforce Investment Boards (WIBs) are calculating costs and in developing guidelines or directives that would ensure greater consistency in the reporting of program costs. I will outline some specific suggestions on this issue below.

Another important issue to consider in a potential move to the use and reporting of efficiency measures is the appropriate level of analysis. Currently, WIA performance outcomes are reported at the state level, but we know that particularly in the case of efficiency measures (factoring in program costs), there is important and valuable variation in the data that gets lost in aggregation. How does the USDOL want to use these data? There may be less buy-in or interest in doing this right on the part of the states if they see this as just one more reporting requirement. However, for this information to be useful for program management and performance improvement, it is almost essential to look at program costs closer to the point of service delivery (at the WIB level).

In the initial examination of prospective efficiency measures conducted by Trutko and Barnow, we see substantial variation across states in measured (efficiency) performance, and there is also variation across states in the relationship of one measure to another. For example, for some states, there is very little difference in the average cost per entered employment and the average cost per retained employment, while for others, the cost per retained employment is twice or more the cost per entered employment. What explains these variations—are they accounting differences or real differences in the cost of placing people into jobs vs. retaining them in employment in some states? At this time, we do not have the data and analysis in hand that can help us understand these differences in a way that would allow the USDOL to move forward with fair and accurate efficiency measures.

In the November 9 discussion, there was a clear consensus that costs should be measured in the form of expenditures (rather than appropriations, allocations or obligations). Exactly which expenditures should be counted and how they could be accurately accounted for (e.g., by type of service, fixed vs. variable costs, over time, etc.) was a subject of debate (on which I further comment below). However, there was also important discussion about whether the current common performance measures provide the best numerator for these measures across programs, and thus, this should also be given further consideration as the USDOL explores the design and use of efficiency measures.

In my final general comments, I would like to emphasize how important I think it will be for the USDOL to have an adequate period of exploration and learning about possible efficiency measures before moving to implementation across states and/or WIBs. We will get better information on the true program costs and their relationship to other program activity and outcome measures before any performance measures are activated. And even more importantly, before any efficiency measures are placed into use, it will be very important to have the components measured and reported consistently across states and WIBs. The reports by Trutko and Barnow demonstrate that there are currently important inconsistencies and vagaries in the

measures for which we do not have clear explanations, and going forward with such noisy/messy data in efficiency measure calculations could only exacerbate the difficulties already noted above.

Specific comments in response to the reports and November 9 discussion

I am organizing these specific (brief) comments according to the 15 questions that John Trutko and Burt Barnow set forth for discussion at the November 9 meeting.

1. Should ETA implement efficiency measures for all 11 ETA programs?

In the meeting, we discussed why the application of efficiency measures may be different for the various programs, particularly WIG, SCSEP, NEG and Apprenticeship programs. However, at the exploratory stage in which the measurement of costs is further considered, I would recommend looking at these programs, even if it is later determined that efficiency measures for them will tell us little.

2. What specific measures should be implemented and should they be the same or different across the 11 programs?

In principle, fewer measures and common measures may be most desirable. However, if the efficiency measures created are to be of value to program managers and most informative for the USDOL, it may be necessary to have different measures for some of the programs. For example, we discussed the possibility of using earnings change measures for incumbent worker programs in addition to the other common measures.

3. Is it feasible/practical/desirable/cost-effective to calculate efficiency measures at the service activity level?

I think there was some consensus at the meeting that it would be very desirable for program managers and the USDOL to have efficiency measures by program activity, particularly for core, intensive and training activities in the adult program. The feasibility of doing this will require more investigation. Separating out training would be the easiest, given the voucher cost. We also discussed the desirability of measures for self-services. As self-services are frequently not counted by WIBs, the fixed costs of providing these services are distributed across the other programs, inflating those service costs and the overall program cost.

4. What definition of cost should be used in calculating efficiency measures?

There was strong consensus at the meeting that expenditures (rather than appropriations, allocations, or obligations) should be used. Both fixed expenditures (e.g., of the One-Stop Center infrastructure) and variable costs (e.g., personnel time) need to be considered.

5. Should cost of items such as need-based payments, stipends, allowances and subsidized wages be counted as costs when calculating efficiency measures?

Yes, these items are real costs associated with producing outcomes and should be included in efficiency measure calculations. For example, if providing a stipend makes the difference in whether a client completes training and gets a job, it needs to be measured and included. It will be of interest for the USDOL to use such information on these costs (and how they vary across states/WIBs) to assess the value added of these supports to training services and outcomes.

6. How should the ETA account for co-enrollment in implementing efficiency measures?

The analysis by Trutko and Barnow clearly showed that differences across states in co-enrollment practices have important implications for measured program efficiency. The USDOL should conduct further research to better understand the reasons underlying these differences—e.g., whether they are mainly accounting or related to real substantive differences in service approaches—and also wait for these practices to stabilize across states in consistent patterns or approaches.

7. How should the ETA deal with shared costs across programs?

Shared costs are important to factor in as well if the USDOL is to get more accurate estimates of program efficiency. The memorandums of understanding (MOUs) established in the WIBs would provide possibly the best guidance for assessing cost sharing, although this would be at the WIB level, and some of this useful information would be lost in a state-level measure. If the WIB's cost-sharing practices are not in line with the MOUs, this might provide an impetus for modifications to more accurately reflect program cost-sharing.

8. How should ETA deal with the issue of customers being served by programs for longer than one program year?

If efficiency measures are computed annually, the costs contributed by each participant should be incorporated in a given year, even though they won't enter the numerator (of the efficiency measure) until the year the outcome is measured. As long there is not substantial year-to-year variation in these relationships (between the timing of expenditures and outcome measurement), this shouldn't matter greatly in the aggregate.

9. How should self-service customers be taken into account in efficiency measures?

A separate measure for self-services would be useful to reflect the infrastructure investments that also benefit One-Stop and on-line system users (as this group of users is primarily accessing fixed-cost program resources). This would lower the overall program costs and more accurately reflect the services/benefits that are provided through the system.

10. How should ETA deal with incumbent workers in calculating efficiency measures?

A separate earnings change measure should be added to the cost per entered employment efficiency measure (instead of the earnings divided by costs measure). This should more accurately reflect the value added of these programs, but also the tradeoff of allocating resources to those who are already employed (by keeping cost per entered employment).

11. Should statistical models be developed and used to adjust efficiency standards?

Statistical models for making performance adjustments will only be useful if applied to WIB-level data. There simply isn't sufficient variation at the state level to identify the relationships of client, service and environmental factors to efficiency outcomes. In addition, once efficiency measures are activated, these relationships may become stronger as program managers and staff change behavior in response to them. Therefore, one would have to expect to modify these models over time as these relationships change.

12. Are there alternative efficiency measures that ETA should consider?

An earnings change measure that used the fifth quarter of earnings prior to program entry as the pre-program (baseline) measure would be a valuable addition to the set of common measures that are intended to approximate program impacts.

13. Should a return on investment measure be considered a suitable outcome-based efficiency measure?

A ROI measure is really only plausible/justifiable with a rigorous program impact measure, that is, one generated by a randomized experimental evaluation. I would recommend that this be calculated with the currently planned WIA random assignment impact evaluation, and that this be brought to the attention of those evaluation designers now if this has not already been done.

14. Should efficiency measures have some incentive/sanction policies as outcome measures?

There was a strong consensus in the November 9 meeting that we are not ready for incentives or sanctions to be tied to efficiency measures, and for some of the reasons noted above (e.g., the ease with which these measures can be gamed and some of the challenges in accurately accounting for costs), this may never be desirable. There is considerable more research and investigation to be done before further considering policies that would tie consequences to these measures.

15. What additional research should be conducted to develop efficiency measure policies?

My suggestions for additional research have largely been incorporated in the above discussion and include the following:

- How to separately account for costs by program activity;
- Distinguishing fixed, variable and shared (infrastructure and service) costs and taking into account self-service costs;
- What underlies differences in co-enrollment practices (e.g., accounting vs. substantive practices);
- Improving common measures (that are the numerator of efficiency measures), such as a new and improved earnings change measure;
- Performance adjustment models with WIB-level data and applied to a refined set of efficiency measures, and
- Exploration of approaches to encouraging state and WIB "buy-in" and greater use of efficiency measures for program improvements.

APPENDIX E:

WRITTEN COMMENTS PROVIDED BY EMPLOYMENT AND TRAINING PROGRAM OFFICES IN RESPONSE TO THE DRAFT FINAL REPORT AND AUTHORS' RESPONSES TO COMMENTS PROVIDED

APPENDIX E:

WRITTEN COMMENTS PROVIDED BY EMPLOYMENT AND TRAINING PROGRAM OFFICES IN RESPONSE TO THE DRAFT FINAL REPORT AND AUTHORS' RESPONSES TO COMMENTS PROVIDED[100]

PROGRAM	ETA PROGRAM OFFICE COMMENTS	AUTHORS' RESPONSE
Division of Workforce System Support	The Division of Workforce System Support has reviewed the document. It appears that the document is primarily concerned with recipients of evaluated programs and discusses cost per participant around training. The discussed efficiency measures recommended for consideration in this report (cost per entered employment, cost per retained in employment, cost divided by post-program (average) earnings, and cost divided by change in earnings) do not seem to apply to the work we do in our Division.	No change necessary to the Final Report.
Office of Apprenticeship	Quick comments: There is one recommendation specifically regarding apprenticeship. OA suggest minor technical edits to this recommendation. See correction below: *p. 7 -Recommendation #3a: ETA should consider alternative efficiency measures for the Apprenticeship Program linked to the goals of the program and what federal funds are being spent on – for example, increasing the number of apprenticeships offered, building the quality of apprenticeship programs, and registering and monitoring of Apprenticeship programs accurately and in a timely manner. Therefore, ETA should consider applying the following alternative efficiency measures to the Apprenticeship program (all at the national level): cost per additional apprenticeship program registered and timeliness of registration decisions. Specific measures should be adopted after appropriate dialogue and analysis is undertaken.*	*Recommendation #3a in the Executive Summary and Chapter 8 of the Final Report was slightly revised as suggested, replacing certifying with "registering."*
	Three other recommendations also pertain to apprenticeship: p. 5-6 - Recommendations to exclude Apprenticeship from the cost per entered employment, cost per employment retention, and cost per post-program average earnings measures. OA agrees with	No change necessary to the Final Report.

[100]Italics indicates comments that resulted in revisions made to the Final Report (in column 2) and specific revisions that were made to the report (in column 3).

PROGRAM	ETA PROGRAM OFFICE COMMENTS	AUTHORS' RESPONSE
	this recommendation.	
Youth	DYS has reviewed the paper and has no specific comments on the paper itself. It was very thorough and informative. Our one comment, which we have made in the past, is that we do not agree with the recommendation to use an outcome based efficiency measure for the WIA Youth program. Given the long-term nature of services for the WIA youth program, a cost per placement measure does not take into account that youth often participate in the program for greater than one year and does not provide an accurate picture of the program. If this measure were ever implemented beyond the federal level, it would definitely lead to creaming and shorter-term services. A cost per participant measure is a better measure for the WIA youth program.	No change necessary to the Final Report. We recommended using cost per placement in education or training as Youth measure (which is based on the Common Measure outcome applicable to the Youth program). We talk a lot in the report about the potential problem of "creaming" and incentives to provide short-term and less costly services. We do not think cost per participant is a better measure – it is a measure that could be collected, but is not outcome-based.
ONR	ONR agrees with an incremental approach to introducing efficiency measures, introduced to grantees first as only a monitoring tool rather than an outcome measure.	No change necessary to the Final Report.
	ONR shares the concern about unanticipated/unintended behavioral changes on the part of grantees seeking to improve their efficiency measures. NEG participants may include hard-to-serve populations, and for Disaster NEG projects may include long-term unemployed, so there could be a disincentive to provide services to these populations with an efficiency-based measure. Also, because NEGs primarily serve dislocated workers retraining is often required, which is a more costly service than Wagner-Peyser labor exchange or WIA core services. Outcome efficiency measures could influence NEG project operators to provide less costly services than the more intensive and training services NEG participants may require. In addition, to earlier points, Disaster NEGs are not primarily training grants. *A large portion of these funds are used for wages for temporary workers, not training, and should be differentiated from traditional training grants so as not to skew unit costs.*	The authors agree with comment with regard to concerns about efficiency measures potentially resulting in creaming and providing less costly services – which is noted throughout report and reflected in recommendations. *A footnote was added in Chapter 5 of the Final Report acknowledging that a large portion of NEG funds in Disaster NEGS are expended on training and consideration should be given to excluding such costs in calculating efficiency measures for NEG.*
	ONR agrees with recommendations on the use of expenditures rather than appropriations, and on the use of cost per entered employment and cost per retained in employment. However, ONR has concerns with the cost per average earnings, and cost per change in earnings as metrics, at least for NEGs, as the NEG	No change necessary to the Final Report. The authors agree that NEG participants may not do well on the cost per earnings change measure because of the reasons stated

PROGRAM	ETA PROGRAM OFFICE COMMENTS	AUTHORS' RESPONSE
	participants are often well-compensated individuals that were laid-off from declining industries. NEG service interventions result in the program putting people on a new career path, which means they are usually starting over at entry-level positions. As with the broader dislocated worker program, NEGs would probably not look particularly efficient under these efficiency measures, as the individual may not be able to recoup their previous earnings at the point the measurement is taken. Despite this, it may have been a good outcome for the individual, who has better longer-term prospects and/or is better than the alternative of no earnings from being long-term unemployed.	(that is in part why more than one measure has been recommended – some programs will do better on some measures than others). This is more of a standard setting issue (and is one that also a potential issue for the WIA dislocated worker program, which is pointed out in the comment). The authors also caution against making cross-program and cross-state comparisons of efficiency measure results because programs have differing objectives, serve different populations, provide varying services, and a host of other underlying factors (differing patterns of cost sharing, co-enrollment, etc).
	ONR agrees with the recommendation to look at separate efficiency measures for each type of service provided. ONR also shares concerns over additional information collection burdens that may be required by implementing such an outcome efficiency measure; NEG grantees already submit 4 reports to track progress, measure performance, and report fiscal expenditures.	No change necessary to the Final Report. Authors share concerns about information collection burdens (one of the reasons that the Common Measures are at the heart of the recommended measures is to reduce data collection burden on states/local areas.
	Similar to the presentation slides on Improving Measures of Efficiency for Employment and Training Programs, NEG is listed as a program that would require a different set of efficiency measures. However, the explanatory text does not discuss this rationale for NEGs. When we inquired about the discrepancy to John Trutko, he said that this was a typographical error and NEG was not supposed to be included in that list. Instead, the program listed should have been WIA Youth. Please remove "NEG" from Recommendation #3 in the report if it is indeed a typo.	*The text should have read "Youth" program instead of "NEG."A revision was made to the Final Report (in the Executive Summary and Chapter 8) to reflect this change.*
OWI	Attached are OWI/Adult Services' comments on the Efficiency Measures Study. Let me know if you have any questions. Thanks for the chance to comment. The issue of cost comparisons. A higher unit cost in	No change necessary to the Final Report. Authors agree with concerns about cost comparisons across

PROGRAM	ETA PROGRAM OFFICE COMMENTS	AUTHORS' RESPONSE
	one year compared to the previous year does not necessarily denote a less efficient program, nor does a lower unit cost necessarily suggest a more efficient use of funds. I say this because we are at a time when education and training costs are sky rocketing and the model has yet to discuss target setting – do we assume that there is a 'right' cost per entered employment, retention, etc.	programs and highlight this concern in various places in the report. There is no assumed "right" cost.
	The Administration is focused on serving low-skill, low-income and the most disconnected jobseekers. Additional focus has also been given to the benefits of longer term training, support services and increasing credential attainment. These services cost more. After JTPA, we moved away from so-called efficiency targeting because they seemed to discourage providing higher cost services. Measuring 'performance' in these terms puts our performance system at odds with our program design.	No change necessary to the Final Report. Authors agree with concerns and highlight issues throughout report on creaming and being careful not to discourage training where it is appropriate.
	Related to this, there was mention that we would be communicating with states to let them know what the national efficiency goal was and recommend against this. As you know, one of the goals of WIA is to encourage flexibility in serving the various populations of jobseekers that come through the one-stop career centers. Again, having states operate under the umbrella of a cost per (employment or earnings, etc.) may drive perverse performance by providing a disincentive to serve the hardest-to-serve populations.	No change necessary to the Final Report. Authors agree with concerns about having perverse incentives to not serve hardest to serve and potentially cutting down flexibility to provide services needed most by participants. We argue for great caution in making cross-state and cross-program comparisons and in setting either national or state-by-state performance standards. We also suggest that work on statistical adjustment models be pursued.
	We feel strongly that the unit of analysis for tracking results of an efficiency measure should remain at the national level – this should not be a measure imposed on states/grantees. However, the current study recommendations leave open the possibility of having states collect and report these results. We suggest striking that idea as a possibility. "The modeling effort conducted for this report, which focuses on the three WIA programs (emphasis added), suggested that great caution and several additional years of results are required before ETA should consider implementing performance standards for states/grantees on the recommended efficiency measures."]	No change necessary to the Final Report. The authors wanted to provide ETA with some flexibility in determining if and when to set standards on measures for states – but at the same time warn great caution in setting sub-national standards and suggest not doing this for at least several years. We concur that standards probably should not in the end be set, but wanted to preserve flexibility for ETA if it wanted in the future to

PROGRAM	ETA PROGRAM OFFICE COMMENTS	AUTHORS' RESPONSE
		perhaps apply efficiency measures to a subset of the programs considered in this study.
	How will the information be used if we collect and calculate it? During the previous administration, OMB wanted to show reduced training costs over time which was not feasible. Do we have new direction on efficiency measures which should be factored into the report? We feel that it would be better to have more focus on interim measures (e.g., credentials) rather than efficiency. If this is not a priority area of measurement, it is questionable to continuing to fund this project.	No change necessary to the Final Report. The authors concur that it would be problematic to show reduced training costs over time and that given ETA's emphasis on providing training services that it would be even more problematic. The report does not make an argument one way or another about increasing/decreasing training cost over time. The authors have linked efficiency measures to the Common Measure outcomes and do not recommend use across programs of interim measures – though individual programs could develop supplemental interim efficiency measures if they thought they had merit.
	One of the suggested measures was Cost per Entered Employment. We mentioned during the meeting that some of our programs have lower placement rates due to their circumstances (for example, Indian reservations with significant systemic unemployment). In this way, the measure may not be the best way to gauge 'efficiency' since the measure is unable to take into account the differences in the populations being served among different programs.	No change necessary to the Final Report. We highlight throughout the need for care in comparing across programs and within programs across states/grantees and over time.
	How were individual programs' data used to determine the efficiency measure recommendation? Did the researchers take into account that some populations are harder to serve than others?	No change necessary to the Final Report. Throughout the report we highlight that care has to be taken with regard to use of efficiency measures and not discouraging services to the hardest to serve. When we did regressions on the WIA Adult and Dislocated Worker programs, we did take into account some population characteristics; we did not take population characteristics into account in analyzing results

PROGRAM	ETA PROGRAM OFFICE COMMENTS	AUTHORS' RESPONSE
		for other programs, but did highlight that it is important to be very careful in making cross-program comparisons of efficiency measure results.
	The study's authors state in Recommendation #3 that programmatic differences should be carefully considered before implementing efficiency measures – then single out WIG, Apprenticeship, and NEG as requiring different measures. How did they come to the conclusion that the other programs, particularly NFJP, INA, and SCSEP should be considered as similar to WIA Adults, Dislocated Workers, Wagner Peyser, etc.?	No change necessary to the Final Report. The authors singled out WIG, Apprenticeship, and Youth as qualitatively different and in need of a set of different measures. We recognize that there are programmatic differences among the other programs, but these programs are all covered by the Common Measures – so these same problems of comparison exist with regard to the existing performance measurement system. We urge in our recommendations not to make simplistic comparisons of efficiency measure results across programs.
	Recommendation #4 suggests that caution should be taken before applying sanctions and/or rewards. *Targeted programs such as the NFJP and INA, have no mandates for sanctions or rewards in the legislation; how are they suggesting this be developed or applied?*	*We have cautioned strongly about applying sanctions/awards and this applies to all programs, including NFJP and INA. A footnote was added to Recommendation Chapter 8 of the Final Report indicating that the NFJP/INA do not having mandates for sanctions/rewards..*
	Recommendation #9 states that further study is needed on topics related to and likely to affect efficiency measures results, and then lists a series of topics/issues that ETA should resolve before applying efficiency measures. *One omission from the list is the provision of supportive services. For the NFJP, these wraparound services are part of an individual's IEP; its impact on the program (or other programs that routinely provide these services) should be considered as a policy issue that must be resolved.*	*Recommendation #9 in the Final Report (in the Executive Summary and concluding chapter) has been revised to include supportive services as a possible expenditure item to be excluded in costs along with needs-based payments and stipends (the bullet point now read: "Should stipends, supportive services, and need-based payments be counted as*

PROGRAM	ETA PROGRAM OFFICE COMMENTS	AUTHORS' RESPONSE
		expenditures in computing efficiency measures?)
TAA	TAA provided a series of comments to the Executive Summary) The TAA program is fully supportive of this summary of serious challenges for establishing an efficiency measure which would apply to services and benefits provided under TAA. In particular, TAA is concerned with the unintended consequences of reviewing state outcomes in the context of an arbitrary "efficiency measure".	No change necessary to the Final Report. The report covers potential for "unintended consequences" and cautions about applying measures/standards across states.
	The TAA program concurs with the cautions expressed by state workforce officials. In particular, TAA notes that it is a program designed to provide costly retraining for trade affected individuals to return them not just to a job, but to a sustainable job. As such, short term training is not the goal, resulting in a high cost per placement – a cost that does not indicate inefficiency in the program design or administration; but rather reflects congressional intent for the population served. Any efficiency measure established for the TAA program must reflect the congressional intent inherent in the TAA mission. In addition, training costs vary greatly by state making cross state comparisons of little use. Efficient program administration in one state can not be used as a model to establish an efficiency benchmark in another state. TAA tends to look at average cost for training in each state to gauge the amount of funding that is needed per certified individual, and recommends that some consideration be given to developing a model based on a like approach to reflect state differences in training costs.	No change necessary to the Final Report. The authors concur with concerns and emphasis of TAA on providing training and returning workers to sustainable jobs. The report cautions about setting standards for programs/states/ grantees; and warns about making simplistic comparisons of results across programs. Authors agree that training costs can vary greatly across states (as well as participants).
	The TAA program concurs that expenditure data is the correct measure for quantitative analysis, as expenditure data reflect actually cost, while obligations reflect anticipated costs that may or may not materialize. With regard to TAA program data, however, we are pleased to note that the newly instituted TAPR reporting system for the first quarter of FY 2010 is data upon which we believe we can readily rely.	No change necessary to the Final Report
	Recommendation #1: Use Program Expenditures Rather than Appropriations or Obligations as the	No change necessary to the Final Report

PROGRAM	ETA PROGRAM OFFICE COMMENTS	AUTHORS' RESPONSE
	Measure of Program Costs in Efficiency Measures OTAA concurs – see above	
	Recommendation #2: Use Common Measures as Starting Point for Measuring Program Outcomes in Efficiency Measures OTAA concurs.	No change necessary to the Final Report
	Recommendation 2a: Cost per entered employment should be tracked (for monitoring purposes initially) as an efficiency measure for 8 of the 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. OTAA concurs – however, benchmarks established must reflect the high cost of the TAA program which reflects its congressional mission as well as a series of differing goals in the states which reflects the variation required for successful performance in a given state.	No change necessary to the Final Report. Authors agree with OTAA concern, and the report cautions against making simplistic cross-program and cross-state (within program) efficiency measure results. Clearly costs of TAA will be much higher than other programs because of the emphasis on long-term training.
	Recommendation 2b: Cost per retained in employment should be tracked (for monitoring purposes initially) as an efficiency measure for 8 of the 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. OTAA concurs – however, benchmarks established must reflect the high cost of the TAA program which reflects its congressional mission as well as a series of differing benchmarks in the various states which reflects the varying costs required for successful performance in different states.	No change necessary to the Final Report. Authors agree with OTAA concern and the report cautions against making simplistic cross-program and cross-state (within program) efficiency measure results. Clearly costs of TAA will be much higher than other programs because of the emphasis on long-term training.
	Recommendation #2c: Cost divided by post-program (average) earnings should be tracked (for monitoring purposes initially) as an efficiency measure in 8 of 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. OTAA does not believe that post-program average earnings have any particular relevance to the effective delivery of services under the TAA program. Rather, OTAA believes that an efficiency measure reflecting the goals of the TAA program (returning workers to sustainable employment) should look at the cost associated with returning trade affected workers to employment that approaches pre program earnings for those trainees.	No change necessary to the Final Report. Authors agree that care is needed in using post-program average earnings and that this measure should be only one of four measures examined. Also, average post-program earnings is a measure currently reported on by TAA as part of the Common Measures. Cost per earnings change was intended as a second measure that would in some ways better reward training efforts (than post-

PROGRAM	ETA PROGRAM OFFICE COMMENTS	AUTHORS' RESPONSE
		program earnings), though authors acknowledge that trade-affected workers are often not likely to achieve their pre-program earnings.
	Recommendation #2d: Cost divided by change in earnings should be tracked (for monitoring purposes initially) as an efficiency measure in 8 of the 11 ETA programs: WIA Adult, WIA Dislocated Worker, WIA NEG, Wagner-Peyser, TAA, SCSEP, INA, and NFJP. OTAA concurs.	No change necessary to the Final Report
	Recommendation #3: Carefully Consider Programmatic Differences Before Implementing Efficiency Measures – Among the 11 ETA Programs, WIG, Apprenticeship, and NEG Programs Will Likely Require a Different Set of Efficiency Measures OTAA strongly concurs. TAA is a program designed to provide costly retraining for trade affected individuals to return them not just to a job, but to a sustainable job. As such, short term training is not the goal, resulting in a high cost per placement – a cost that does not indicate inefficiency in the program design or administration; but rather reflects congressional intent for the population served. Any efficiency measure established for the TAA program must reflect the congressional intent inherent in the TAA mission.	No change necessary to the Final Report
	Recommendation #4: Performance Standards for States/Grantees on Recommended Efficiency Measures Should Be Considered Exploratory at This Time -- Do Not Reward or Sanction States/Grantees for Performance on the Recommended Efficiency Measures OTAA strongly concurs.	No change necessary to the Final Report
	Recommendation #5: Improve Consistency and Quality of Cost, Customer Characteristics, and Outcome Data Under the provisions of the new TAPR reporting, effective for first quarter of FY 2010, OTAA believes that reliable data exists for the TAA program.	No change necessary to the Final Report