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**False or Fitting Recognition? The Use of High Performance Bonuses
in Motivating Organizational Achievements**

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Abstract

This research undertakes a theoretical and empirical examination of “high performance bonus” systems in government, that is, incentive payments awarded by the federal government to state organizations or statewide programs to motivate and recognize high performance achievements. The paper begins with an overview of basic compensation and incentive structure issues and draws from a multidisciplinary literature on incentives in organizations to derive implications for the design and implementation of high performance bonus systems. An empirical analysis of the Workforce Investment Act performance bonus system and its effectiveness in recognizing and rewarding performance follows. The results of the theoretical and empirical investigation suggest that high performance bonus systems are more likely to encourage misrepresentation of performance and other strategic behaviors than to recognize and motivate exceptional performance or performance improvements.

Introduction

Lamenting the lack of public confidence in government and calling for the “revitalization” of the public service, the 2003 Report of the National Commission on the Public Service identified ineffective or perverse incentive systems as a deep cause of government underperformance. Incentive systems in government, including financial schemes (such as performance bonuses) and other performance-contingent pay structures or nonmonetary forms of recognition, are generally designed with the intent to align the interests of government employees with organizational goals that reflect the public interest. Quoting a federal government employee, the National (Volcker) Commission report conveyed the strong criticism that “there is no incentive structure, no recognition of hard work...” to effectively motivate employees and organizational achievements in the public sector (p. 9, Report of the National Commission on the Public Service).

This critique is not new, of course, and in fact, research and public attention to efforts to restructure government compensation systems and strengthen incentives for performance in the public sector are decades old. Looking back more than a century ago, Woodrow Wilson (1887) deliberated civil service reform issues of the time and argued:

“Public attention must be easily directed, in each case of good or bad administration, to just the man deserving of praise or blame.” (p. 213)

In more modern terms, Wilson urged that good (and poor) performance should be recognized and rewarded (or penalized), with public opinion playing “the part of authoritative critic” (p. 214). At the same time, he suggested that civil service reform should not only be directed at improving personnel systems, but should also be concerned with the performance of the organization as a whole. The more recent initiatives to measure government performance that

make entire organizations and their employees accountable to the public for results embody these tenets of Wilson's early arguments for improving incentives in government.

In this research, I focus on "high performance bonuses" (as they are commonly known), which are incentive payments awarded by the federal government to state organizations or statewide programs to encourage and recognize high performance achievements. Currently, states have the opportunity to compete for high performance bonuses each year in the Food Stamps, Temporary Assistance for Needy Families (TANF), and Workforce Investment Act (WIA) programs; the total amount of bonuses awarded in these programs in fiscal/program year 2003 was \$48 million, \$200 million and \$16.6 million, respectively. The rules and criteria for eligibility, distribution and use of the bonuses differ across these programs, although each offers flexibility to program administrators in determining how these performance bonuses are used to motivate employees and improve program performance. For example, the Oklahoma Department of Human Services recently awarded a one-time \$1,000 bonus to every permanent and probationary employee, paid for entirely with federal funds received for fiscal year 2003 performance achievements.¹ In the WIA program, states may use the bonuses to implement "any one or more innovative programs under titles I or II of WIA or the Carl D. Perkins Vocational and Technical Education Act" (Part 666.210 of the Workforce Investment Act).

As the use of high performance bonuses has expanded, however, concerns are growing about the design and implementation of these systems, the incentives they create for bureaucratic behavior, and their effectiveness in improving program administration and outcomes. In his study of the TANF high performance bonus, Wiseman (2004), for example, questioned the

¹ High performance bonuses were awarded to Oklahoma in 2003 by the U.S. Department of Agriculture for timely processing of food stamp applications (\$2.92 million) and by the U.S. Department of Health and Human Services Administration for Children and Families for increases in finalized adoptions (\$1.06 million), for TANF recipients' success in the workforce (\$1.72 million), and for improved family formation (\$1.31 million) (Goff-Parker, 2004).

reliability of data used in calculating performance, the absence of adjustments to performance standards, and the type of behavior that is rewarded when measures do not take into account client population characteristics. Although considerable research exists on performance measurement systems and other performance-contingent pay arrangements in the public sector, this more recent shift toward the use of large monetary bonuses to recognize performance at higher levels of government organization calls for renewed attention to both theory and practical issues that underlie the development and implementation of these incentive systems.

This paper begins with an overview of basic compensation and incentive structure issues relevant to the design of performance bonus systems and some brief background information on recent efforts to improve public sector incentive systems. Drawing from the multidisciplinary literature on incentives in organizations, the implications of theory for the design of key elements and attributes of performance bonus systems are considered next. This theoretical discussion is used to frame an empirical analysis that investigates the effectiveness of a current high performance bonus system, the WIA performance bonus system, in recognizing and rewarding performance. The paper concludes with a summary of findings and a discussion of whether the federal government should continue to use high performance bonus systems to motivate organizational achievements. In general, the results indicate that high performance bonus systems are more likely to encourage misrepresentation of performance and other strategic behaviors than to recognize and motivate exceptional performance or performance improvements.

Basic design issues and background on public sector incentive systems

Although this research is primarily concerned with performance bonuses awarded to whole (state-level) organizations, the potential for their distribution to individual employees and the administrative intention to use them to motivate both individual and organizational performance improvements merits attention to incentive structure issues at multiple levels of organization. In the wide-ranging literature that investigates how the structure of compensation systems influences employee motivation and organizational performance, an intuitive but perhaps superficial consensus is that employees perform better when their pay or other compensation is more closely tied to performance. The underlying (agency theory) logic is that the principal determines what is an efficient or competitive level of effort on the part of agent (employees) and then shares some portion of the organizational surplus (in the form of compensation or bonuses) with those employees who supply this level of effort or more (see, for example, Miller, 1992, or Dixit, 2002, for a more extensive discussion). With effort rationally tied to rewards, employees have an incentive to work harder to achieve organizational goals; and with employees working harder, organizational performance should also improve.

Another broad finding in this literature is that *higher-powered* incentives attract higher quality employees who are more productive. Incentive power is commonly defined as the ratio of performance-contingent pay to fixed pay, where a stronger link between performance and total compensation is expected to produce a greater incentive to work hard. If more talented, highly productive individuals privately know that they can achieve greater compensation under a performance-contingent pay structure, they will be attracted to organizations that offer higher-powered incentives. In fact, Asch (2005) and Bouwens and van Lent (2004) offer empirical evidence suggesting that a more efficient approach to improving organizational performance is to

develop policies that attract better workers rather than designing a compensation system intended to make average employees work harder. In their empirical study of employee compensation in Dutch firms, Bouwens and van Lent found that the only effect of incentive power on organizational performance was through its impact on employee selection.

In the public sector, legislative and bureaucratic efforts to improve incentive systems and performance have embodied both of these strategies—devising incentives to increase effort and to attract higher quality employees. The Civil Service Reform Act of 1978 was considered the most far-reaching reform legislation since 1883. It abolished the Civil Service Commission and increased flexibility in determining compensation, allowing the pay of senior and mid-level employees to be tied to performance (whereas previously it was based only on length of service). In 1993, the Office of Personnel Management abolished the Federal Personnel Manual and further delegated down most human resource responsibilities, increasing managers' latitude for recognizing and rewarding performance. As Kellough and Nigro (forthcoming:4) explain, reformers made the case that "higher levels of government performance will be within our reach only when 'outmoded' and 'counterproductive' civil service rules and procedures are swept away." In addition, the Government Performance and Results Act (GPRA) of 1993 demanded greater attention to organization-level performance, requiring federal agencies to establish performance goals and measures, evaluate their performance annually against standards, and make their performance results known to the public.

Civil service and performance management reforms have been generally described, however, as "unfinished business" (Report of the National Commission on the Public Service, 2003). Despite these new allowances for flexibility in pay systems, the use of performance-contingent compensation and bonuses in public organizations has been limited. Appropriations

to fund performance bonuses have been insufficient, and federal performance requirements and evaluation systems have been judged by some to be of limited effectiveness (Radin, 2000; Schick, 2001; Grizzle, 2002). In addition, in circumstances where performance bonus funds have been awarded to entire organizations, managers have been more likely to allocate bonuses as compensation supplements for large numbers of employees instead of using them as incentives or rewards for top performers, as in the case of the Oklahoma Department of Human Services. Furthermore, discussion in a recent Government Accounting Office (GAO) forum (December, 2004) suggested that few agencies have credible performance management systems (<http://www.gao.gov/new.items/d0569sp.pdf>).

Implications of theory for performance bonus system design and implementation

Although recent public sector experiences with performance bonus systems convey some discouraging evidence about their efficacy, the large body of research on incentives in organizations—in economics, business and public administration literatures—offers useful insights on how these incentive systems might be more effectively designed and managed. Agency theory has dominated as a theoretical frame in this research, although other theories—including stewardship theory and public-service motivation—also make noteworthy contributions to our efforts to understand employee motivation and its link with organizational performance. For example, distinct from agency theory’s emphasis on self-serving, individualistic motives, stewardship theory emphasizes collective goals and public managers who highly value cooperative behavior even when their interests and those of the principal diverge (Davis, Schoorman and Donaldson, 1997). Public-service motivation diverges from agency theory in asserting that individuals act to contribute to the public good in order to satisfy

their personal needs and goals, rather than in response to incentives offered by organizations for performance (Wise 2004; Perry and Porter 1982; Rainey 1982).

In the discussion that follows, these three theoretical perspectives are applied in considering the design of some key elements and attributes of performance bonus systems, including: incentive power; performance measures and their relative informational value (or noise); risks or distortion (e.g., gaming responses) associated with design choices and decisions made in implementation; and monitoring, verification and other activities related to the management of performance bonus systems.

Incentive power

A simple concept that emerges from agency theory is that incentives will be low-powered if bonuses (typically financial) are spread across many employees, and even more so if individual performance has little bearing on one's share of the bonus award (that is, the ratio performance-contingent pay to fixed pay is very low). In addition, in some incentive systems, bonuses awarded for organizational achievements may have *no* implications for individual pay. Does this make a compensation system with low-powered incentives (or little performance-contingent pay) unambiguously less effective in motivating performance achievements?

From a stewardship theory perspective², how the bonuses are used or distributed *within* organizations may have little influence on employees' individual motivations to work hard toward organizational goals. As Davis, Schoorman and Donaldson (1997:25) explain, "a pro-organizational steward is motivated to maximize organizational performance" because the steward places higher value on organizational objectives and perceives that his/her personal needs are met by achieving these goals. In other words, the employee would willingly forego an

² The origins of stewardship theory are in psychology and sociology.

individual \$1,000 bonus if he/she believed that the funds could be better used in other ways to collectively achieve organizational goals.

In fact, monetary incentives are viewed by some as antithetical to public service motives (of duty and moral obligation), and the growing use of performance bonuses and the emphasis on “careerism” and rewards over idealism and service have been identified as contributing to, rather than ameliorating, incentive or motivational problems in the public sector (Frederickson and Hart, 1985). At the same time, Perry and Wise (1990) argue that individual utility maximization may not be entirely inconsistent with public service motives, as some employees may be motivated to achieve high levels of performance by other rational motives such as their personal identification with an organizational goal or program, their advocacy of a special interest, or simply by their desire to participate in policy formation processes.³ An important implication of this theory for incentive power, however, is that organizations whose employees are motivated by public-service ethics and norms are likely to be less responsive to “utilitarian” incentives such as monetary rewards (be they low-powered or high-powered) for achieving high performance.

Performance measures, risk and distortion

The effectiveness of a performance incentive system is also critically dependent, of course, on the performance measures used. There is a strong consensus in the literature that powerful incentives are only optimal when performance can be readily measured in a straightforward way (Baker, 1992; Miller, 1992; Prendergast, 1999; Dixit, 2002). In fact, agency theory suggests that this is even more important in a high performance bonus system with aggregate (e.g., state-level) measures of performance, where there are fewer competing agents by which to assess effort levels and more distinctive organizational or environmental contexts. The

³ In this line of thinking, the differences between stewardship theory and public-service motivation begin to blur, as commitment and identification with an organization are described as components of a steward’s “psychological structure” (Davis, Schoorman and Donaldson, 1997).

more difficult and costly it is to directly measure performance outcomes—or the greater noise or imprecision in the measures used—the less informative the measures will be and the greater likelihood that their use will result in unintended consequences.

As demonstrated in the literature (Baker, 1992; Holmstrom and Milgrom, 1994; Ittner et al., 1997), the informational value of a performance measure depends on the extent of noise, or how clear a signal or how precise the information it provides about a manager's actions. Noisy performance measures may impose undue risk in the principal-agent relationship, as they make it difficult to determine whether variations in organizational performance are due to poor managerial performance or factors outside managers' control. And greater risks also make it less likely that a stewardship relationship will form with employees, as principals will be more inclined to expect opportunism and other self-serving behavior on the part of agents and modify their management strategies accordingly (Davis, Schoorman and Donaldson, 1997). Thus, the efficacy of incentives may be reduced with noisy measures, as compensation may not be commensurate with effort and performance, and employee motivation (in response to monetary incentives or opportunities for cooperative benefits) is likely to be dampened.

Theory and empirical evidence also submit that incentive or performance bonus systems should place greater relative emphasis on performance measures with greater informational value. At the same time, this research suggests that there should be some weight on *any* performance measure that provides incremental information about the dimensions of managerial action that the principal desires to motivate. Incentives or rewards based only on partial measures of the impact of agents' actions may contribute to distortions that may misdirect employee efforts. Dixit (2002) observed that the neglect of quality measures and an overemphasis on reduced costs or efficiency is one of the most common ways that incentive

systems fail, i.e., rewarding an easily observed outcome to the neglect of a desirable but less readily observed goal, particularly in the public sector where problems in observing quality are sometimes severe.

Another type of distortion in performance bonus systems that is more likely to occur with noisy performance measures involves behavior that is intended to insure against the loss of compensation (or to limit the variability in pay). These behavioral responses have been described as “entrenching practices” (Bloom and Milkovich, 1998) or “gaming”—the misrepresentation of outcomes by the agent and participation in activities that influence measured performance but do not increase value. In public organizations with many employees who exhibit or share a public-service ethic (i.e., a commitment to serve the public interest) or who act as stewards in working toward organizational goals, behavior that diverts organizational resources to such unproductive uses or harms the collective organizational interest should be less likely to occur. Yet evidence of gaming activities in public sector performance incentive systems is extensive, including practices such as cream-skimming and the strategic management of client inventories, restrictions on access to services, performance data manipulation and others (Bevan and Hood, forthcoming; Barnow and Smith, 2004; Courty and Marschke, 2004; Heinrich, 2004; Heckman, Heinrich and Smith, 2002; Koretz, 2002).

Agency and stewardship theories both suggest that these types of negative behaviors will be more likely under conditions of higher risk to employees or organizations. For example, risks are typically greater in situations where managers or employees feel that they are held accountable for factors beyond their control in performance appraisals. Bloom and Milkovich’s (1998) study of managerial compensation in more than 700 firms, for example, showed that organizations facing greater risk or greater volatility in organizational performance (in terms of

income streams) typically placed less rather than more emphasis on incentive pay, and higher-risk firms that relied heavily on incentive pay exhibited poorer performance than higher-risk firms that did not emphasize incentive pay. Echoing an earlier observation of Lazear (1989), it seems that weak incentives—e.g., small monetary bonuses or low-profile non-monetary rewards or recognition—may at times be a better approach to organizational efforts to motivate performance than high-powered incentives that may engender more dysfunctional behavior.

Monitoring and verification

Monitoring and verification activities—also essential to the effective functioning of performance bonus systems—are frequently carried out at multiple levels of government or organization and require substantial management capacity, including accurate and accessible data for tracking organizational processes and computing performance; standardized procedures for compiling and analyzing this information, and overt processes for addressing problems or irregularities that might be uncovered in audits and other assessments. These tasks may be accomplished through the use of internal and/or external mechanisms or governance structures. External mechanisms (such as an audit bureau or firm) tend to involve higher costs (financial) and other costs/risks (e.g., political) in terms of the information and control of its use that is ceded to auditors or other authorities. Reliance primarily on internal mechanisms, however, requires a considerable level of trust and cooperation between principals and agents to create appropriate expectations for performance, discourage information withholding or data manipulation, and to deter coercive use of institutional or personal power (Gibson, Ivancevich and Donnelly, 1991; Miller, 1992).

Stewardship theory asserts that if employees in a public organization are stewards who can be fully trusted to act in the best interests of the organization, monitoring through internal

mechanisms is more likely to be effective and will also reduce the costs of these activities.

Davis, Schoorman and Donaldson (1997) argue that the autonomy and authority of steward-like employees in performing these tasks should be increased, and that external control mechanisms may be counter-productive by reducing the stewards' motivation or undermining their pro-organizational actions.

Dewatripont, Jewitt and Tirole (1999) likewise suggest that more autonomy should be granted to employees who are motivated by career concerns; that is, those who care about how their current performance influences their future employment (and rewards) within or outside the organization. As with stewardship and public-service motives, these employees are expected to demonstrate greater commitment to the organization, although this is likely to depend on the strength of the link between current performance and future rewards (a less altruistic motive.) Finally, career and reputational concerns may also apply to whole organizations, which may acquire good or poor reputations based not only on how they perform, but also on how they treat and compensate their employees, which, in turn, may affect their ability to hire high-performing workers and achieve high performance in the future (Gibbons, 1998).

A clear implication of this discussion of key elements of performance bonus systems is that choices in incentive system design have to be made with careful attention to the distinctive characteristics, goals and context of public organizations, including employee culture and relations, the nature of services produced or delivered, the ease and effectiveness with which performance is measured and monitored, and the extent to which environmental factors influence organizational achievements. In effect, the high performance bonuses that are the focus of this research may not be optimal in many government settings. Miller (1992:716) suggests that in some organizations, "micromanagement, although detested, may be a less costly or unavoidable

way of coping” with incentive problems. In the next section, important attributes of the WIA high performance bonus system are first described, followed by an empirical investigation of how effectively the system appears to be working to recognize and motivate performance.

The design and effectiveness of the WIA performance bonus system

The WIA performance bonus system became operational in the first year of the WIA program, PY 2000 (July 1, 2000-June 30, 2001), although performance standards and incentives were not new to public employment and training programs, having been introduced in the Job Training Partnership Act (JTPA) of 1982. A series of Training and Employment Guidance Letters (TEGLs) issued by the U.S. Department of Labor (USDOL) in March of 2000 provide detailed information on the design and operation of the performance bonus system and guidance for states regarding their roles and responsibilities in its implementation. The description of the WIA performance bonus system included here is intended to highlight some key features of the performance bonus system, particularly those relevant to its motivational functions, and to inform the empirical analysis of states’ performance and the allocation of WIA bonus awards.⁴

The total amount of bonuses (or performance-contingent compensation) and the rules or guidelines for how bonus funds are allocated and used are fundamental in establishing incentive power and structures in performance bonus systems. In the WIA performance bonus system, the U.S. Department of Labor (USDOL) has set a minimum and maximum amount for performance bonuses awarded to qualifying states—\$750,000 to \$3,000,000—contingent on the availability of performance bonus funding. If every state/territory was awarded the maximum bonus in a given year, the total bonus allocation would be \$156 million, which is less than 5 percent of the

⁴ See TEGL 7-99, 8-99 and 6-00 for more detailed information of the design and operation of the WIA performance bonus system. In addition, Heinrich (2004) includes a discussion of how the WIA performance bonus system differs from the performance standards system in its predecessor program, JTPA.

total WIA program funding in program year (PY) 2003. In fact, only \$16.6 million in performance bonuses were awarded in PY 2003, or less than 0.5 percent of the total training grants (\$3,369 million) to states. The amount of performance bonus funding made available in WIA is comparable to that of the TANF high performance bonus system, which limits performance bonuses to no more than 5 percent of a state's TANF block grant; in addition, Wiseman (2004) reported that the \$200 million in annual performance bonus funding amounts to less than 1 percent of annual TANF expenditures.

The WIA performance bonus system differs from the TANF and Food Stamps systems, however, in that it does not specify in advance a fixed amount of performance funding that is allocated in a given year.⁵ In effect, the size of a WIA state's performance bonus does not depend on how many other states qualify for an award, unless the performance bonus program is underfunded. Alternatively, in the Food Stamps program, states qualify for awards in seven different categories of high or most improved performance, and after base awards of \$100,000 are made to each state winner in each category, the remaining funds are divided among the winning states according to their caseload size (so that with fewer winners and more clients, state bonuses are bigger).⁶ The WIA performance bonus system also differs in that it does not *explicitly* account for the size of the participant or exiting population⁷ in making awards. For example, in PY 2002, the exiting participant population size in California was 83,997, implying a maximum possible bonus of about \$35 per exiter; at the same time, Wyoming, with just 914 exiting participants, had the opportunity to earn up to \$3282 per exiter in bonus funds (or almost

⁵ Currently, the TANF and Food Stamp programs award \$200 million and \$48 million (respectively) each fiscal year in performance bonuses

⁶ See the "Final Rule: High Performance Bonuses for States," Federal Register Volume 70, February 7, 2005.

⁷ The WIA program distinguishes between participants and exiters, and only exiters are included in the performance calculations. Individuals who receive only self-services do not count in the performance calculations. All exiters have a formal case closure and/or exit date determined by the last date in which they received WIA services.

100 times as much as California). Clearly, this suggests that incentive power will depend at least in part on the size of a state's exiting participant population.

In addition to the total funding or size of the performance bonus awards, how states choose to spend or invest the performance bonuses is also important in determining the power of these incentives to motivate employees and affect organizational performance. In the process of making the WIA performance bonus awards, states are asked to indicate how they plan to spend the performance bonus monies that they receive. A review of these proposals for performance bonus uses in the first few years of the WIA program shows that most states propose to invest the funds in making program improvements, either through new initiatives or enhancements to current program infrastructure and services. Examples of proposed uses include: to develop learning programs that engage former dropouts, at-risk youth and disadvantaged adults; develop entrepreneurship curricula; develop and operate an intensive re-employment demonstration project; define and create career ladders in local labor markets; target high school dropouts for tutoring and instruction leading to a diploma or GED; expand incumbent worker training; improve outreach activities, and many more (see <http://www.doleta.gov/performance>). Thus, although the proposals are brief and very general in their descriptions, and states are not strictly bound to use the performance bonus funds as proposed, it seems apparent that states do not create any expectations that the bonuses will be used to increase individual employee compensation.

To sum up, the ratio of performance-contingent funding to total program funding (incentive power) is fairly low overall in the WIA program, although for some states with small participant populations, the converse may be true. Analysis of the PY 2000-2002 data shows that the average bonus per program exiter was \$108, with a range of \$0 to \$1016 per exiting

participant.⁸ It also appears that the individual performance of WIA program employees likely bears little or no relationship to how bonus funds are expended by the states. This suggests that WIA employees would probably have to possess a strong public-service ethic or a steward-like interest in achieving the organization's performance goals—or possibly a desire for public recognition related to their own career concerns or ambitions—if the prospect of high performance bonus awards were to have any direct influence on their behavior.

As discussed earlier, high-powered incentives are not always desirable, particularly if performance measures are “noisy” and do not clearly distinguish the contributions of the agents (public employees) to performance outcomes from factors outside their control. In other words, low-power incentives or low pressure to perform may be preferable in the case of noisy or partial performance measures that do not accurately or adequately characterize organizational outcomes. The discussion and analyses that follow consider how performance is measured and calculated in the WIA performance bonus system, what factors influence states' measured performance, and what determines which states receive bonuses and the size of the bonuses awarded.

WIA program processes for assessing performance and determining bonus awards

There are three major tasks involved in the implementation of the WIA performance bonus system: (1) the determination of performance standards (or expected levels of performance) for each of 17 required performance measures; (2) the calculation of states' performance for a given program year using administrative and survey data, and (3) the verification of states' eligibility for incentive grants (performance bonuses) and allocation of the bonuses. Appendix A provides more detailed information on how these tasks are accomplished in the WIA program. In addition, Table A-1 in this appendix describes the 17 WIA performance

⁸ If states with no performance bonus are excluded from this calculation, the average bonus per program exiter was \$332.

measures that are used to evaluate the labor market outcomes and education or skills attained by program participants, including: entry into employment, job retention, earnings changes and education/skills credentials (evaluated separately for adults, dislocated workers and older and younger youth) and employer and participant customer satisfaction measures that are new to the WIA performance bonus system.

The first of these tasks, the determination of performance standards, is critical in establishing expectations for performance both for employees of WIA programs and the larger public (including bureaucrats and legislators with power to influence appropriations for the program). The WIA program introduced a new method for setting these standards—intended to promote “shared accountability”—that involves the negotiation of performance targets (U.S. DOL-ETA, 2001). States are required to negotiate with the USDOL, their Regional Offices and local workforce investment areas to determine appropriate expectations for performance, using data on past performance and other information about state economic conditions, participant population characteristics, and more. Since there is no common adjustment model that is used by the states to account for factors outside program managers’ control, it is incumbent upon the parties involved in these negotiations to remove the “noise” associated with factors such as economic conditions and population characteristics in setting performance expectations. Once a final agreement on these standards has been endorsed by the Governor and Secretary of Labor, states commit to the application of incentives and sanctions based on their performance relative to these negotiated standards.

States calculate performance for the 17 measures shown in Appendix A using administrative (Unemployment Insurance-UI) data and survey data according to the specific guidelines provided by the USDOL in its TEGs. The requirement to use UI data to measure

outcomes was new to the WIA program, and a Government Accounting Office (GAO) report (2002) indicated that some states experienced difficulties in getting access to these records and developing or modifying data systems to produce the required performance information. States are required to submit their data on program participants, in addition to quarterly performance reports, to the USDOL, which archives these data in the WIA Standardized Record Data (WIASRD) system. Furthermore, beginning in PY 2002, the USDOL instituted new procedures to perform independent verifications of data submitted by states, in effect, adding an external mechanism for monitoring and verification activities. The results of these data verification activities have been kept confidential, however, and concerns persist that there are problems with using these data to produce accurate information on program performance.⁹

Following the performance calculations, two major criteria determine whether or not states qualify for a performance bonus. First, states must achieve at least 80 percent of the negotiated (expected) performance levels on each of the 17 performance measures. Second, states are required to achieve a cumulative program area score (described in Appendix A) of at least 100 percent for each of the major performance measure groups (adults, dislocated workers, youth and the customer satisfaction measures). States satisfying these criteria may apply for a performance bonus, and the USDOL subsequently determines the amount of performance bonuses awarded. TEGL 8-99 indicates that the following criteria “may” be used to determine the size of the state bonuses: (1) the extent to which goals were exceeded, (2) the extent of

⁹ States are required to submit a validated performance report and appropriate WIASRD data files to the USDOL. The USDOL provides a handbook and data validation software to guide states in the data validation process (see Training and Employment Guidance Letter 3-03, July 15, 2005). In addition, the USDOL has contracted with Mathematica Policy Research to perform external validations of states’ WIASRD data files. A request to the USDOL from the author for access to information and results about the external data validation process is currently pending.

improvements from previous years, and (3) the relationship of actual performance levels to performance levels in other states.

Although these processes and criteria for evaluating state WIA program performance appear to be explicit and uncomplicated in the guidelines published by the DOL, the lack of standardization in processes for establishing performance expectations and lingering doubts about the quality/accuracy of data and methods used in making performance calculations have contributed to risks (or perceptions thereof) that the system will not fairly appraise states' performance. The GAO (2002) reported findings from interviews with state program administrators that indicated they lacked confidence in the performance bonus system and that employees were already engaging in gaming or entrenching practices (e.g., screening out applicants for whom they thought it would be difficult to achieve a high performance outcome). These issues, critical to the effectiveness of the WIA performance bonus system in motivating employees and recognizing organizational achievements, are examined empirically below.

Empirical analysis of states' performance and WIA bonus award determinations

The period of this analysis is July 1, 2000-June 30, 2003, covering the first three WIA program years (PY 2000-2002).¹⁰ As the WIA performance bonus system is concerned with state-level performance, the unit of analysis in this study is the state (the 50 U.S. states, the District of Columbia and Puerto Rico), yielding a total of 156 observations over three years. All of the data used are publicly available, and most were extracted from the USDOL Employment and Training Administration's (ETA) website, <http://www.doleta.gov/performance>. The WIASRD data, submitted annually by the states to the ETA, include information on WIA client demographics, types of services received and participant outcomes. The Federal Research and

¹⁰ PY 2003 WIASRD data are also available, although some of these data fields still have information missing, in part due to lags in data acquisition or updates in WIASRD system.

Evaluation Database (FRED), also available through this web link, is a tool that facilitates analysis of the WIASRD data. There are also national “Data Books” that include summaries of performance information available in the WIASRD.¹¹ Other sources of data for this research included the Bureau of Labor Statistics (for state unemployment rates) and public documents indicating state governors’ affiliations with the Democratic or Republican parties during the period of analysis. The data used in the analysis are further described in Appendix B.

Table 1 shows which states received bonuses in PY 2000-2002, the sizes of these bonuses and some basic summary statistics. The number of bonuses awarded increased in each program year (from 12 in PY2000 to 23 in PY 2002), although the average size of these bonuses correspondingly declined. A simple analysis of the state WIA program performance data confirmed the strict application of rules governing states’ eligibility for performance bonuses. In all but two cases, states that received a performance bonus met both of the eligibility criteria¹²; that is, they achieved at least 80 percent of the expected performance levels on all 17 performance measures and achieved cumulative program area scores of at least 100 percent for all of the performance measure groups. Since failure to meet these criteria is almost perfectly correlated with failure to receive a performance bonus, it is not very useful to predict in a multivariate analysis what factors influence states’ receipt of a performance bonus. However, it is of interest to take a step back and predict what factors influence the probability that states meet these eligibility criteria (or what factors influence states’ measured performance).

Factors influencing states’ measured performance and eligibility for bonuses. A major input into workforce development programs is the client, and it has long been a concern that

¹¹ Perhaps attesting to some of the database management problems in the WIA system, I found slight discrepancies in some of the data fields based on the link or tool used to extract data from this website, even though all of these sources are supposedly drawing from the same information that states submitted to the WIASRD system.

¹² The exceptions were Wisconsin in PY2000 and Illinois in PY2002. Both states met all minimum standards and were less than one-half percent short of achieving the required cumulative program score in one program area.

program employees are able to influence measured performance by controlling who gets access to program services (Barnow and Smith, 2004; Heckman, Heinrich and Smith, 2002; Craig, 1997; Anderson et al., 1993) Although WIA allows universal access to its self-directed services (which are not monitored or included in performance calculations), individuals' access to intensive or training services (comprehensive assessment and case management, vocational or on-the-job training) is controlled by case workers. The USDOL's instructions to states to take into account participant characteristics and the services provided¹³ in setting performance expectations (or the negotiated standards) are intended to discourage strategic behavior or the manipulation of client access to increase measured performance. The USDOL also supports states' access to labor market information to use in adjusting performance expectations for economic conditions.

If the processes states used in establishing expected performance levels adequately adjusted for participant characteristics, service mix and economic conditions, then these factors should not predict states' success in meeting the two performance bonus criteria (both of which are a function of the expected performance levels, as described in Appendix A). Table 2 presents the results of logistic regressions predicting the probability that: (1) states achieved at least 80 percent of the expected performance levels on all 17 performance measures, and (2) achieved cumulative program area scores of at least 100 percent for all four performance measure groups. The results show that race and/or education levels and a few other characteristics of program participants significantly influenced the probability that states would meet these bonus criteria. For example, the log odds ratio of 0.754 on the variable measuring the percent of participants who were high school dropouts (in the first model) indicates that a one percent increase in high school dropouts among participants would reduce the probability of a state achieving its

¹³ States are instructed to use administrative data from previous program years to take into account these factors.

cumulative program scores by about 25 percent. In effect, these results suggest that states might be able to increase their measured performance by enrolling fewer high school dropouts and minorities, or alternatively, by enrolling a greater number of veterans or individuals who had recently exhausted their unemployment insurance benefits.

States could also use the performance standard negotiation process to improve the odds that they would satisfy the bonus criteria by setting lower expectations for their performance than might be justified by their participant characteristics, service mix or economic conditions. In fact, the negotiation process includes a provision that allows the Secretary of Labor to mandate higher expected performance levels for any state that is identified as having set standards too low, and a few states were directed to raise their standards at the start of the WIA program (see Heinrich, 2004, for details). To investigate this possibility empirically, a variable was first created that measures how many standard deviations above or below the mean expected performance level a given state's standards were set; this is a composite measure, based on standardized measures for each of the 17 performance standards. This variable was added to the logistic regression models shown in Table 2, and the results of this estimation are presented in Table 3.

The results from this analysis clearly show that states that negotiated higher standards (relative to other states) were significantly less likely to achieve the required cumulative program scores; a state with negotiated standards one standard deviation higher than other states was nearly 85 percent *less* likely to meet this performance bonus criterion. States with higher negotiated standards were also less likely to achieve at least 80 percent of their expected performance levels, although this result was significant only at the 10 percent level. The addition of this variable to the models noticeably increased their explanatory power (pseudo R^2)

and did not change the results showing that participant characteristics are also significant determinants of states' performance and satisfaction of the bonus criteria.

In order to explore whether the negotiation of lower expected performance levels may have involved some strategic behavior on the part of states, however, it is necessary to take another step back to investigate what factors influenced (or were taken into account) in setting these standards. The composite, standardized measure of the relative level of performance expectations set by the states was used as the dependent variable in this analysis, and participant characteristics, service mix, the unemployment rate and other controls were included as predictors. It is also important to note that states were required to set expected performance levels for PY 2000-2002 before the WIA program began, and they were encouraged to build into them expectations for "continuous performance improvements" to promote high performance (U.S. DOL-ETA, 2001).¹⁴

Reflecting the states' responsiveness to the new administrative emphasis on continuous performance improvement, Table 4 shows that the most important determinant of the relative level of performance expectations set by the states (i.e., states' standards relative to the average of all states) was the program year. Performance standards were more than a third of a standard deviation higher in 2001 than 2000, and more than two-thirds of standard deviation higher in 2002, and these two variables together account for more than two-thirds (or about 16 percent) of the explained variation in performance standards. In addition, states with larger Hispanic populations negotiated significantly lower standards than average, and those that delivered more intensive and training services also set relatively lower performance expectations, although these variables account for a very small percentage of the total variation. Interestingly, the results in

¹⁴ Although states were allowed to request modification to their negotiated standards over this period, few states did so.

Table 3 showed that even with states' apparent adjustment for Hispanic populations in the performance standard negotiation process, a higher percentage of Hispanics among participants still reduced the probability that states achieved the 100% cumulative program area score criterion by about 7.6 percent on average.

Overall, Table 4 shows that more than three-fourths of the variation in (standardized) levels of performance expectations set by the states is not accounted for by factors the USDOL instructs are important. Some indeterminate part of this unexplained variance could be the result of strategic behavior, or it could also just reflect uncertainty or random noise in the performance standard negotiation process. In general, though, the findings of these analyses confirm that the processes for setting expected levels of performance did not fully adjust for factors such as participant characteristics that are (or should be) outside program operators' control, and that these factors do influence states' performance and their eligibility for performance bonuses.

Determinants of the size of performance bonus awards. Factors influencing the size of the bonuses awarded (which in theory affects their incentive power) were also examined using linear regression analysis. Table 1 confirms that bonuses (if awarded) were within the specified range of \$750,000-\$3,000,000. As noted above, the USDOL stipulated three criteria that might be used in determining the amount of the performance bonus: (1) the extent to which goals were exceeded, (2) the extent of improvements from previous years, and (3) the relationship of actual performance levels to performance levels in other states.

The first set of analyses that examines the determinants of performance bonus size uses all observations (that is, including those with zero dollar awards). Thus, the variables indicating whether or not the two basic bonus criteria were met are included in the regressions, in addition to participant characteristics; controls for the number of local workforce investment areas within

states, the number of exiting participants, the unemployment rate and program years; a measure of political influence (if the state governor's party was Republican), and measures of the criteria for determining bonus size.

Table 5 presents the results of two regressions, one that includes measures of the extent to which goals were exceeded (using the cumulative score measures for the four performance groups), and a second that includes standardized measures of the states' actual performance (the performance levels states' achieved relative to the average for all states) for five groups of participants/measures (adults, dislocated workers, older youth, younger youth and customer satisfaction). These results suggest that once states met the bonus criteria, only a few factors influenced the size of bonuses awarded, and they were *not* related to the states' performance. The size of bonuses was significantly smaller in PY 2002, most likely because there were more states qualifying and less money was allocated for bonuses. In addition, one of the models suggests that states with larger numbers of participants served received significantly higher bonuses, possibly indicating an implicit adjustment for participant population size. The finding that the governor's party had no influence on the size of the bonus awards is an encouraging one, suggesting that politics probably did not play a role in the allocation of these funds.

A third linear regression analysis was performed to assess whether the extent to which states improved their performance from previous years influenced the size of their bonuses. Because PY 2000 was the first year of the WIA program, this analysis focuses only on the PY 2001 and PY 2002 bonus awards, as measures of improvement in states' performance were constructed by taking the difference between measures of performance in PY 2000 and PY 2001 and in PY 2001 and PY 2002. These measures of changes in performance were based on the states' cumulative score measures for the four performance groups; a larger difference would

indicate that a state had exceeded its performance goals to a greater extent in the subsequent program year. The results of this analysis are reported in Table 6, and they are very similar to those shown in Table 5. Once the criteria for qualifying for a bonus were satisfied, states' performance improvements had no influence on the size of the bonuses they received.

A final regression was estimated including only the states that received a bonus in the years PY 2000-2002 (N=51). With the exception of the two variables indicating that the bonus criteria were met (which are excluded because all but two of the states met both of them), this model included the same variables as the first model in Table 5 (that used cumulative score measures for states' performance). For sake of brevity, these results (available from the author) are not presented, as they likewise show that one of the strongest predictors of bonus size was the program year (2002), and the extent to which states exceeded their performance goals had no bearing on the size of bonuses awarded.

Finally, to illustrate these findings with some specific examples, Table 7 presents information on states' relative performance achievements (based on their actual performance levels for five participant/performance standards groups) and their corresponding bonuses for four states: (1) California, which did not receive any bonuses, (2) Maryland, which received bonuses two of three years in varying amounts, (3) Kentucky, which received bonuses each year but in declining amounts, and (4) Texas, the only state to receive the maximum achievable bonus each year. In PY 2000, although it is clear that California was below average in its performance in all areas and did not merit a bonus, Maryland performed as well or better than Texas and/or Kentucky, and yet it received no bonus, while Texas and Kentucky received the maximum bonuses. In PY 2001, California was slightly above average in all but one area of performance, while Kentucky was below average in four of five areas, Texas was below average in two areas,

and Maryland excelled in every area. Yet in PY 2001, California still received no bonus, while Kentucky was awarded more than \$2 million (more than Maryland) and Texas received \$3 million. And lastly, in PY 2002, Kentucky and Texas performed comparably and Maryland again was an exceptional performer, but Kentucky and Maryland receive the minimum bonus award, while Texas received the maximum bonus. This simple illustration of the lack of correlation between state performance achievements and the amount of bonus funds states received is alone enough to call into question how this system could be seen as motivating or rewarding *high* performance.

Summary and Conclusions

Both theory and the empirical findings of this study suggest that the design and implementation of the WIA performance bonus system is far from ideal, and that it has likely done little to improve the incentive system and performance of this program (at either individual or organizational levels). The incentive power of the system—in terms of the ratio of performance-contingent funding made available to total funding—is low and declining, and states proposed uses of the funds do not include bonuses for individual employees, such as increases in compensation or other rewards for exceptional employee efforts or achievements. In addition, empirical analyses showed that participant characteristics affected states' measured performance, such that states serving more disadvantaged individuals (e.g., high school dropouts) were less likely to qualify for a performance bonus. And furthermore, the sizes of the bonuses received by states that did satisfy the basic performance bonus criteria bore no relationship to their performance levels relative to other states, to the extent to which they exceeded their performance goals, or to improvements in their performance over time.

At the same time, theory also suggests that low-powered incentives may be still be functional or even desirable in systems where performance is measured with less precision or greater noise, as they may reduce pressures to perform that encourage strategic or “gaming” behavior intended to increase measured performance (rather than the value or impact of the program). In addition, state organizations and their employees might still be motivated to achieve the public recognition associated with being identified as a “high performer,” whether due to individual employee career concerns or reputational interests of the organization, which could in turn influence its ability to attract high-performing workers and achieve high performance in the future. It is also possible that although states propose to use bonus funds for program investments rather than individual bonuses, some employees might be motivated by their personal identification with a particular organizational goal or program or their advocacy of a special interest that is supported with the funds (i.e., by public-service motives).

In this regard, probably the most discouraging finding of this study is that public employees can influence states’ measured performance by engaging in strategic behaviors such as limiting individuals’ access to WIA program services. Findings of other studies (GAO, 2002; Heinrich, 2004) indicate that WIA program administrators are aware of (and have acted on) the risks to their organization’s performance created by the failure of performance standard negotiation processes to adequately adjust for factors such as client population characteristics and economic conditions. The GAO (2002) reported that in its interviews with WIA program administrators in 50 states, many states indicated that “the need to meet performance levels may be the driving factor in deciding who receives WIA-funded services at the local level” (p. 14).

Partly in response to these problems, federal officials have introduced stronger internal monitoring and verification procedures and an external data verification process to address data

quality and management problems that could undermine the validity of performance reports and the recognition given to high performers. In addition, the USDOL recently deliberated changes to performance measures—particularly the earnings change measure—that they suggest has created a disincentive to serve individuals with higher earnings histories.¹⁵ Ironically, the earnings change measure was new to WIA and a response to the concern that using measures of post-program earnings only (as now alternatively proposed) discouraged services to individuals with poorer earnings histories (who ostensibly would be less likely to achieve high earnings levels following the program). The persistence of these risks, gaming responses, and management expectations for opportunistic behavior unfortunately also make it unlikely (at least in theory) that steward-like relationships will develop (or a public-service ethic will prevail) among employees and motivate them to identify with and work hard toward organizational performance goals.

Other research on high performance bonus systems confirms that these experiences are not unique to the WIA performance bonus system. Wiseman (2004), noting that TANF performance results submitted to the Department of Health and Human Services by the states were not audited, identified discrepancies in the performance calculations. Doubts about their reliability were further stirred when one state (Indiana) was awarded a large bonus for performance that exceeded the states' average by more than three standard deviations. In addition, although in the WIA system an attempt was at least made to adjust for factors affecting performance that were outside the control of program operators, in the TANF system, no adjustments are made for economic conditions, the characteristics of adult participants or other circumstances affecting families' level of need. Wiseman (2004: 17) moreover lamented that the

¹⁵ Common Earnings Increase Performance Measure Federal Partners Meeting, Frances Perkins Building, August 4, 2005.

performance outcomes are “largely irrelevant to management strategy”; that is, despite the considerable investments made in developing the performance bonus and measurement systems, they are failing to give program administrators or employees a better understanding of how performance can be improved.

Evidence of these problems in public performance incentive systems is also not limited to U.S. government programs. Bevan and Hood (forthcoming) describe the gaming of performance targets in the English public health care system—what they refer to as “hitting the target and missing the point” (p. 7)—which has resulted in consequences as serious as the death of patients. In the effort to achieve hospital Accident and Emergency waiting time targets, for example, hospitals cancelled operations and required patients to wait in ambulance queues outside the hospital until they were confident the patients could be seen within the targeted (four hour) time. Bevan and Hood also found discrepancies between official reported levels of performance and those from independent surveys of patients. And like the U.S. TANF system, there was no systematic audit of English health care performance information, despite the growing evidence of gaming and measurement problems.

The consequences of these performance bonus systems and comparable public sector incentive systems that unintentionally encourage misrepresentation of performance and other strategic behaviors—for fairness and equity in access to services and the achievement of true organizational objectives (i.e., increases in program impacts or service value)—arguably make the strongest case for their discontinuation. The implications of these problems are that recognition and rewards are probably too often (or more often) false than fitting; that is, they are not linked to exceptional performance or performance improvements and are probably not commensurate with sincere efforts to achieve organizational goals. As currently designed and

implemented, the incentives generated by high performance bonus systems appear more likely to be “ineffective or perverse,” and thus, I conclude that they are not (in their present form) the solution to the public sector motivation and performance problems identified by the 2003 Report of the National Commission on the Public Service.

At the same time, I do not think that ongoing efforts to improve public sector incentive systems through the use of performance bonuses or other performance-contingent compensation should be discouraged entirely. One important step toward advancing these systems would be to develop better measures of performance, possibly through more testing of alternative measures in the context of experimental evaluations and through continuing investments in data management systems and data monitoring and verification processes. In addition, performance evaluation and subsequent recognition and reward of performance achievements should occur as close to the point of service delivery as possible to make them more meaningful for employees and their organizations. For example, under the JTPA program, incentive grants were awarded to local job training organizations that exceeded performance standards rather than to states, and uses for the bonuses were determined locally (albeit with constraints). Furthermore, public organizations might consider developing incentive schemes that reward exceptional individual contributions to performance while at the same time giving broader recognition to employees for organization-wide achievements. In conjunction with any of these strategies for improving incentive systems, it will be important for governments to be open in their use of performance information and firm in their commitments to allocating resources for performance-contingent compensation if these systems are to gain credibility and be consistent with stewardship motives for cooperative behavior toward the achievement of organizational goals.

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Table 1: Descriptive information on WIA performance bonus awards, PY2000-PY2002

WIA Performance Bonus Awards			
State	PY 2000	PY 2001	PY 2002
Alabama	0	0	809,399
Alaska	0	0	0
Arizona	0	0	0
Arkansas	0	0	0
California	0	0	0
Colorado	0	1,138,334	750,000
Connecticut	1,652,500	0	0
Delaware	0	0	0
District of Columbia	0	0	0
Florida	3,000,000	3,000,000	1,855,967
Georgia	0	0	971,730
Hawaii	0	0	0
Idaho	975,500	0	0
Illinois	3,000,000	3,000,000	3,000,000
Indiana	2,896,500	0	0
Iowa	0	0	750,000
Kansas	0	0	0
Kentucky	3,000,000	2,074,242	750,000
Louisiana	0	3,000,000	1,082,170
Maine	819,700	0	0
Maryland	0	1,944,845	750,000
Massachusetts	2,887,400	0	0
Michigan	3,000,000	0	1,368,484
Minnesota	0	0	750,000
Mississippi	0	0	750,000
Missouri	0	0	750,000
Montana	0	750,000	750,000
Nebraska	0	750,000	750,000
Nevada	0	0	0
New Hampshire	0	0	750,000
New Jersey	0	0	0
New Mexico	0	0	0
New York	0	0	0
North Carolina	0	0	1,061,154
North Dakota	750,000	750,000	750,000
Ohio	0	0	0
Oklahoma	0	1,382,134	750,000
Oregon	0	0	750,000

Table 1, continued		WIA Performance Bonus Awards		
State	PY 2000	PY 2001	PY 2002	
Pennsylvania	0	0	0	
Puerto Rico	0	0	0	
Rhode Island	0	0	0	
South Carolina	0	1,866,263	0	
South Dakota	0	750,000	750,000	
Tennessee	0	2,604,604	811,127	
Texas	3,000,000	3,000,000	3,000,000	
Utah	0	0	0	
Vermont	0	0	0	
Virginia	0	0	0	
Washington	0	3,000,000	0	
West Virginia	0	0	0	
Wisconsin	2,599,000	0	0	
Wyoming	0	750,000	0	
Sum of awards	27,580,600	29,760,422	24,460,031	
Average size of awards	2,298,383	1,860,026	1,063,480	
Number of awards	12	16	23	

Table 2: Predicting states' success in meeting performance bonus criteria				
Predictor variables	Dependent variables			
	Achieved 100% cumulative program area score criterion		Achieved 80% of expected performance levels	
	Odds ratio	P> z 	Odds ratio	P> z
N=150				
Percent age 22-24 yrs	1.225	0.293	0.891	0.516
Percent age 25-34 yrs	0.930	0.534	1.041	0.708
Percent age 35-44 yrs	1.079	0.518	0.892	0.304
Percent age 45-54 yrs	0.789	0.076	0.886	0.315
Percent age 55+ yrs	1.249	0.136	1.331	0.052
Percent female	1.057	0.171	1.001	0.976
Percent disabled	0.890	0.220	1.078	0.323
Percent Hispanic	0.955	0.111	1.026	0.378
Percent Asian	0.815	0.174	0.894	0.081
Percent black	0.969	0.052 *	0.982	0.164
Percent veteran	1.261	0.048 *	0.994	0.950
Percent limited English speaking	1.231	0.075	0.929	0.506
Percent unemployed at registration	1.043	0.223	1.045	0.159
Percent low income	1.018	0.311	1.045	0.160
Percent UI exhaustee	1.156	0.023 *	1.038	0.565
Percent UI referral	0.984	0.375	1.014	0.457
Percent TANF	0.952	0.070	1.003	0.900
Percent H.S. dropout	0.754	0.000 *	0.858	0.023 *
Pre-program earnings	1.000	0.331	1.000	0.218
Percent training service	0.976	0.284	1.021	0.233
Percent intensive service	0.988	0.637	1.035	0.135
Unemployment rate	0.771	0.375	1.046	0.873
Number of WIA areas	0.969	0.057	0.975	0.110
Log(exiting participants)	4.916	0.000 *	2.212	0.031 *
Program Year 2001	2.549	0.103	1.470	0.478
Program Year 2002	1.028	0.969	4.190	0.042 *
Pseudo R-squared	27.34%		20.39%	
*Statistically significant at $\alpha=0.05$				

Table 3: Negotiated standards and states' success in meeting performance bonus criteria

Predictor variables	Dependent variables				
	Achieved 100% cumulative program area score criterion		Achieved 80% of expected performance levels		
	Odds ratio	P> z	Odds ratio	P> z	
N=149					
Percent age 22-24 yrs	1.210	0.363	0.875	0.461	
Percent age 25-34 yrs	0.944	0.644	1.046	0.681	
Percent age 35-44 yrs	1.144	0.285	0.899	0.346	
Percent age 45-54 yrs	0.721	0.023	0.847	0.184	
Percent age 55+ yrs	1.344	0.066	1.371	0.037 *	
Percent female	1.043	0.360	0.983	0.673	
Percent disabled	0.858	0.148	1.073	0.365	
Percent Hispanic	0.924	0.016 *	1.013	0.677	
Percent Asian	0.845	0.245	0.901	0.069	
Percent black	0.967	0.050 *	0.983	0.198	
Percent veteran	1.223	0.100	0.959	0.666	
Percent limited English speaking	1.297	0.036	0.956	0.687	
Percent unemployed at registration	1.043	0.298	1.043	0.200	
Percent low income	1.021029	0.291	1.047	0.130	
Percent UI exhaustee	1.191687	0.009 *	1.060	0.353	
Percent UI referral	0.9848094	0.406	1.016	0.429	
Percent TANF	0.9519869	0.103	1.005	0.858	
Percent H.S. dropout	0.7543166	0.001 *	0.854	0.025 *	
Pre-program earnings	0.9999238	0.454	1.000	0.286	
Percent training service	0.9577148	0.082	1.014	0.440	
Percent intensive service	0.96768	0.226	1.030	0.221	
Unemployment rate	0.7019349	0.266	1.019	0.947	
Number of WIA areas	0.9711928	0.132	0.975	0.132	
Log(exiting participants)	5.199862	0.001 *	2.327	0.027 *	
Program Year 2001	5.431628	0.011 *	1.894	0.273	
Program Year 2002	4.302207	0.098	7.885	0.010 *	
Standardized value of negotiated standards	0.156	0.002 *	0.464	0.103	
Pseudo R-squared	34.15%		23.09%		

*Statistically significant at $\alpha=0.05$

Table 4: Determinants of states' negotiated standards (composite standardized measure)			
	Dependent variable		
Predictor variables	Composite (standardized) measure of negotiated performance standards		
N=149	Coefficient	Std. error	p value
Percent age 22-24 yrs	-0.037	0.036	0.302
Percent age 25-34 yrs	0.028	0.022	0.205
Percent age 35-44 yrs	0.018	0.022	0.428
Percent age 45-54 yrs	-0.023	0.024	0.342
Percent age 55+ yrs	0.024	0.028	0.385
Percent female	-0.009	0.008	0.237
Percent disabled	-0.016	0.015	0.299
Percent Hispanic	-0.018	0.005	0.001 *
Percent Asian	0.002	0.007	0.822
Percent black	-0.001	0.003	0.732
Percent veteran	-0.023	0.019	0.238
Percent limited English speaking	0.027	0.019	0.152
Percent unemployed at registration	-0.002	0.006	0.702
Percent low income	0.001	0.003	0.722
Percent UI exhaustee	0.006	0.011	0.604
Percent UI referral	0.000	0.004	0.968
Percent TANF	0.003	0.005	0.577
Percent H.S. dropout	0.016	0.012	0.167
Pre-program earnings	0.000	0.000	0.564
Percent training service	-0.008	0.003	0.016 *
Percent intensive service	-0.012	0.004	0.008 *
Unemployment rate	-0.032	0.055	0.562
Number of WIA areas	0.003	0.003	0.330
Log(exiting participants)	-0.044	0.070	0.533
Program Year 2001	0.366	0.108	0.001 *
Program Year 2002	0.681	0.130	0.000 *
Constant	0.921	1.544	0.552
Adjusted R-squared	22.82%		
*Statistically significant at $\alpha=0.05$			

Table 5: Determinants of performance bonus size							
Predictor variables	Dependent variable						
	Size of performance bonus awarded						
	N=144	Coefficient	Std. error	p value	Coefficient	Std. error	p value
Percent age 22-24 yrs	82630	58951	0.164	94870	60754	0.121	
Percent age 25-34 yrs	3932	34815	0.910	-2274	35376	0.949	
Percent age 35-44 yrs	29358	37056	0.430	21178	37616	0.575	
Percent age 45-54 yrs	49587	37918	0.194	49473	38631	0.203	
Percent age 55+ yrs	-63345	45399	0.166	-57035	46223	0.220	
Percent female	-1492	12529	0.905	-2321	12811	0.857	
Percent disabled	-33431	24702	0.179	-35811	24553	0.148	
Percent Hispanic	2756	8788	0.754	2720	9404	0.773	
Percent Asian	-11644	11592	0.317	-14778	11717	0.210	
Percent black	1070	4194	0.799	1968	4288	0.647	
Percent veteran	-32161	32679	0.327	-37574	32436	0.249	
Percent limited English speaking	3860	33188	0.908	15475	34659	0.656	
Percent unemployed at registration	-4090	10312	0.692	-7940	10424	0.448	
Percent low income	4581	5535	0.410	3870	5732	0.501	
Percent UI exhaustee	10365	6064	0.090	12012	6151	0.053	
Percent UI referral	-15848	18523	0.394	-13054	19945	0.514	
Percent TANF	14658	7763	0.062	15495	7882	0.052	
Percent H.S. dropout	10896	20568	0.597	6836	20946	0.745	
Pre-program earnings	14	28	0.611	16	29	0.587	
Republican governor 01	-346412	225980	0.128	-359596	228104	0.118	
Republican governor 02	293292	227834	0.201	277064	232591	0.236	
Unemployment rate	-2083	86486	0.981	7993	87593	0.927	
Number of WIA areas	270	4854	0.330	-268	5390	0.960	
Log(exiting participants)	237173	109758	0.533	255768	113771	0.027	*
Program Year 2001	-61262	227854	0.789	-20196	233195	0.931	
Program Year 2002	-759410	265851	0.005	-747797	278184	0.008	*
Achieved 80% expected performance levels	962212	189750	0.000	961557	183056	0.000	*
Achieved 100% cumulative area score	199320	220415	0.368	255568	202955	0.211	
Adult cumulative score	55338	786692	0.944				
Dislocated worker cumulative score	1002558	948159	0.293				
Youth cumulative score	-127127	717480	0.860				
Customer satisfaction cumulative score	-487183	804183	0.546				
Adult standardized performance level				8386	184617	0.964	
Dislocated worker standardized performance level				-36378	218021	0.868	
Older youth standardized performance level				927	135682	0.995	
Younger youth standardized performance level				57545	132792	0.666	
Customer satisfaction standardized performance level				21762	89734	0.809	
Constant	-4350903	2901239	0.137	-3444010	2439226	0.161	
Adjusted R-squared	45.26%			44.00%			

*Statistically significant at $\alpha=0.05$

Table 6: Determinants of performance bonus size in PY2001 and PY2002			
	Dependent variable		
Predictor variables	Size of performance bonus awarded		
N=96	Coefficient	Std. error	p value
Percent age 22-24 yrs	-1348	100472	0.989
Percent age 25-34 yrs	22702	57795	0.696
Percent age 35-44 yrs	-68355	64357	0.292
Percent age 45-54 yrs	72394	55853	0.200
Percent age 55+ yrs	-78440	73692	0.291
Percent female	-12209	16117	0.451
Percent disabled	-31264	28431	0.276
Percent Hispanic	5158	9801	0.600
Percent Asian	-1124	13255	0.933
Percent black	12508	4771	0.011 *
Percent veteran	-68515	40443	0.095
Percent limited English speaking	38030	36010	0.295
Percent unemployed at registration	-7925	14240	0.580
Percent low income	2155	6378	0.737
Percent UI referral	14613	5911	0.016 *
Percent UI exhaustee	-20366	24548	0.410
Percent TANF	17323	10494	0.104
Percent H.S. dropout	6395	25213	0.801
Pre-program earnings	45	31	0.152
Republican governor	-104549	153376	0.498
Unemployment rate	95262	104235	0.364
Number of WIA areas	1420	5830	0.808
Log(exiting participants)	-11599	132599	0.931
Program Year 2002	-335989	164384	0.045 *
Achieved 80% expected performance levels	787319	194682	0.000 *
Achieved 100% cumulative area score	863972	213852	0.000 *
Change in adult cumulative score	-445432	609788	0.468
Change in dislocated worker cumulative score	813126	799060	0.313
Change in youth cumulative score	-889372	511653	0.087
Change in customer satisfaction cumulative score	-1235683	936705	0.192
Constant	664785	4574429	0.885
Adjusted R-squared	52.09%		
*Statistically significant at $\alpha=0.05$			

Table 7: A comparison of performance and bonus awards for four states

State and program year	Size of bonus	Adult standardized performance	Older youth standardized performance	Dislocated worker standardized performance	Younger youth standardized performance	Customer satisfaction standardized performance
<i>PY 2000</i>						
California	0	-.582	-.514	-.708	-.523	n.a.
Maryland	0	.395	.568	.444	-.046	1.603
Kentucky	3,000,000	-.682	.147	-.404	.246	.428
Texas	3,000,000	.625	.824	.522	.095	-.405
<i>PY 2001</i>						
California	0	.074	-.164	.105	.016	.034
Maryland	1,944,845	1.941	0.276	1.572	.470	1.413
Kentucky	2,074,242	.432	-.436	-.003	-.126	-.391
Texas	3,000,000	.403	.449	-.007	.151	-.366
<i>PY 2002</i>						
California	0	-.221	.035	-.023	.199	-.243
Maryland	750,000	1.364	1.016	.948	.632	1.472
Kentucky	750,000	.776	-.003	.055	.210	.559
Texas	3,000,000	.535	.467	.186	.402	-.342

Note: In terms of the states' negotiated standards, Maryland is .132 standard deviations above the mean of all states, while California is .723 standard deviations below, Kentucky is .647 standard deviations below and Texas is .108 standard deviations below the mean of all states.

Appendix A: Description of the Workforce Investment Act (WIA) High Performance Bonus System Procedures for Determining Performance and Incentive Awards

The WIA program performance bonus system involves three major steps: (1) the determination of performance standards (or expected levels of performance) for each of 17 required performance measures; (2) the calculation of performance using administrative and survey data, and (3) the verification of eligibility for incentive grants (performance bonuses) and the application/award of the bonuses. These three tasks are further described below, and additional details are also available in the USDOL's Training and Employment Guidance Letters, TEGL7-99, 8-99 and 6-00.

Determination of expected levels of performance

Table A-1 describes the 17 required performance measures that are used in the WIA performance bonus system to evaluate the labor market outcomes and education/skills attainment of four participant groups: adults, dislocated workers, older youth and younger youth. States have to develop standards or expected levels of performance for each of these measures, a process that begins with the development of State Plans, in which states propose performance standards for the forthcoming three program years. The Regional Office and state officials subsequently enter negotiations to determine the performance standards. The Secretary of Labor and the Governor must confirm agreement on these performance levels, with the commitment that incentives and sanctions provided under the law will be based on states' performance relative to these negotiated levels.

In establishing proposed expected levels of performance, states are instructed to take into account: (1) economic conditions (unemployment, job creation/loss, new business start-ups), (2) participant characteristics (education, work history, welfare dependency, basic skills deficiency, age, disability and other "hard-to-serve" attributes), (3) services to be provided, and (4) other factors such as availability of transportation and child care and policy initiatives (e.g., pursuit of partnerships or pilot programs). Unlike the Job Training Partnership Act program (WIA's predecessor), states are not provided with performance standards adjustment models that give detailed guidance on how to account (or adjust) for these differing conditions and characteristics, and thus, states have adopted very different approaches. (See TEGL 8-99 or Heinrich, 2004 for more details on how states come up with their proposed expected levels of performance).

Performance calculations

Most of the performance calculations can be made using Unemployment Insurance (UI) data along with some supplemental data sources (e.g., administrative data from other government agencies). Again, the USDOL TEGL 7-99, 8-99 and 6-00 documents offer very specific guidance on how to compute performance, including which clients are counted in making these calculations; which measures are exit-based and how a program exit is defined; the time periods to be used for measurement; the "operational parameters" and rationale for each of the 17 measures; and the data sources and methods used to collect the data. States have more flexibility in calculating credential attainment, in part because there are no standardized data sources (like

the UI data) to use in making these calculations (case management and written documentation of credentials, participant surveys, etc.).

In addition, the customer satisfaction measures require states to survey their participant populations and obtain a minimum of 500 completed surveys for each program year. For smaller states with less than 1000 individuals exiting the program in a given year, the entire population must be surveyed. In August 2002, the Office of Management and Budget changed the required sample response rate from 50 percent to 70 percent for the customer satisfaction measures. A survey is considered completed when valid answers are provided by respondents for each of three core questions mandated by the USDOL (see TEGL 6-00).

Determination of eligibility for incentive grants

The WIA high performance bonus system includes both incentive grants and sanctions. In order to become eligible for an incentive grant (or performance bonus), states must achieve at least 80 percent of the negotiated performance levels on each performance measure. In addition, a second criterion requires that states achieve at least a 100% cumulative program area score for each of the program areas (adults, dislocated workers and youth) and the customer satisfaction measures. For example, if a state negotiates a 70% entered employment rate standard and then achieves actual entered employment rate performance of 75%, it will have a score of 107% for that measure. If it does less well on its adult employment retention rate, say achieving 60% instead of the 62% standard, its score of only 96.8% on this measure will be offset by its exceptional achievement on the entered employment rate measure (or possibly one of the other two adult measures as well). Among these four adult measures, the cumulative score must be 100% (determined “by simple or weighted averaging”). There are also four performance measures for dislocated workers that are used in computing the cumulative program area score, seven for older and younger youth, and two customer satisfaction measures.

Among those states that are eligible for an incentive grant, the Department of Labor specifies the following criteria for determining the amount of the performance bonus: (1) the extent to which goals were exceeded, (2) the extent of improvements from previous years, and (3) the relationship of actual performance levels to performance levels in other states. Eligible states must formally apply for the funds, although an eligible state cannot be denied the grant. Incentive grants are not expected to be less than \$750,000 or more than \$3 million, unless there are insufficient funds.

If a state fails to achieve at least 80% of its target performance levels on each performance measure in a given year, a technical assistance grant may be awarded to help the state develop a performance improvement plan. If a state fails to achieve these minimum expected performance levels for two consecutive years, monetary sanctions (from 1% to up to 5% of the state’s WIA allocation) may be imposed. Sanctions are determined on a case by case basis, and they may also be applied if a state fails to submit its annual performance progress report.

Table A-1: WIA Performance Measures

Performance Measure	Description
Adults	
Entered employment rate	The percentage of adults who obtained a job by the end of the first quarter after program exit (excluding participants employed at registration).
Employment retention rate at 6 months	Of adults who had a job in the first quarter after exit, percentage with a job in the third quarter after exit.
Average earnings change in 6 months	Of those who had a job in the first quarter after exit, the post-program earnings increases relative to pre-program earnings.
Employment and credential rate	Of those adults who received WIA training services, the percentage who were employed in the first quarter after exit and received a credential by the end of the third quarter after exit.
Dislocated workers	
Entered employment rate	The percentage of dislocated workers who obtained a job by the end of the first quarter after program exit (excluding those employed at registration).
Employment retention rate at 6 months	Of those who had a job in the first quarter after exit, the percentage of dislocated workers who have a job in the third quarter after exit.
Earnings replacement rate in 6 months	Of those who had a job in the first quarter after exit, the percentage of pre-program earnings that are earned post-program.
Employment and credential rate	Of those dislocated workers who received WIA training services, the percentage who were employed in the first quarter after exit and received a credential by the end of the third quarter after exit.
Older youth (19-21)	
Entered employment rate	The percentage of older youth who were not enrolled in post-secondary education or advanced training in the first quarter after program exit and obtained a job by the end of the first quarter after exit (excluding those employed at registration).
Employment retention rate at 6 months	Of those who had a job in the first quarter after exit and were not enrolled in post-secondary education or advanced training in the third quarter after program exit, the percentage of older youth who have a job in the third quarter after exit.
Average earnings change in 6 months	Of those who had a job in the first quarter after exit and were not enrolled in post-secondary education or advanced training, the post-program earnings increases relative to pre-program earnings.
Older Youth Employment/education/training and credential rate	The percentage of older youth who are in employment, post-secondary education, or advanced training in the first quarter after exit and received a credential by the end of the third quarter after exit.
Younger Youth	
Retention rate	In employment, post-secondary education, advanced training, apprenticeships in third quarter after exit

Table A-1, continued

Performance Measure	Description
Skill attainment rate	Attain at least two goals relating to basic skills, work readiness, skill attainment, entered employment and skill training
Diploma rate	Earn a secondary school diploma or its recognized equivalent (GED)
Customer satisfaction	
Participant satisfaction	The average of three statewide survey questions, rated 1 to 10 (1=very dissatisfied to 10=very satisfied), asking if participants were satisfied with services, if services met customer expectations, and how the services compared to the “ideal set” of services
Employer satisfaction	The average of three statewide survey questions, rated 1 to 10 (1=very dissatisfied to 10=very satisfied), asking if employers were satisfied with services, if services met customer expectations, and how the services compared to the “ideal set” of services

Appendix B:					
Description of data used in empirical analyses					
Variable	Obs	Mean	Std. Dev.	Minimum	Maximum
Percent age 22-24 yrs	156	8.98	2.76	3.84	17.11
Percent age 25-34 yrs	156	27.41	4.36	15.61	41.67
Percent age 35-44 yrs	156	28.54	2.87	17.64	34.40
Percent age 45-54 yrs	156	20.67	4.74	9.83	33.17
Percent age 55+ yrs	156	7.77	2.75	2.09	17.19
Percent female	156	55.62	8.03	25.60	78.32
Percent disabled	156	5.89	3.38	0.00	17.27
Percent Hispanic	156	10.64	16.56	0.12	100.00
Percent Asian	156	2.89	6.26	0.00	47.18
Percent black	156	23.25	21.22	0.00	94.51
Percent veteran	155	8.55	3.53	0.00	18.20
Percent limited English speaking	156	4.64	9.80	0.00	74.08
Percent unemployed at registration	156	82.55	8.10	47.30	97.62
Percent low income	156	76.70	14.27	33.96	99.00
Percent UI referral	156	9.49	12.23	0.00	66.02
Percent UI exhaustee	156	3.80	4.03	0.00	26.14
Percent TANF	156	12.72	10.19	0.00	72.80
Percent H.S. dropout	154	11.99	5.11	2.68	33.08
Pre-program earnings	156	6415.54	2989.13	0.00	13374.36
Percent training service	156	27.33	13.75	0.00	57.57
Percent intensive service	156	59.03	19.15	4.24	98.50
Unemployment rate	153	4.62	1.13	2.20	8.40
Number of WIA areas	156	14.85	17.72	1.00	107.00
Log(exiting participants)	156	8.38	1.10	5.68	11.34
Program Year 2001	156	0.33	0.47	0.00	1.00
Program Year 2002	156	0.33	0.47	0.00	1.00
Republican governor	156	0.54	0.50	0.00	1.00
Adult entered employment rate	156	74.11	8.18	38.51	96.40
Adult retention rate	156	81.56	5.81	51.20	96.80
Adult earnings change	156	3378.47	1152.92	-523.00	9297.55
Adult credential rate	156	55.65	16.43	0.27	87.80
Dis. worker ent. emp. rate	156	80.52	8.94	21.53	95.40
Dis. worker retention rate	156	87.27	6.85	46.09	98.10
Dis. worker earn. replacement	156	100.48	21.37	72.60	207.19
Dis. worker credential rate	156	59.81	16.89	0.15	100.00
Older youth ent. emp. rate	156	70.11	10.31	28.04	100.00
Older youth retention rate	156	78.27	8.00	41.50	100.00
Older youth earn. change	156	2998.71	948.56	787.00	5619.00
Older youth credential rate	156	43.92	16.47	0.00	81.20
Younger youth skill attainment	156	79.92	14.46	5.34	100.00
Younger youth diploma rate	156	54.53	19.41	1.09	100.00
Younger youth retention rate	156	55.82	16.88	0.00	100.00
Participant cust. satisfaction	151	77.61	5.77	55.86	100.00
Employer cust. satisfaction	150	74.68	6.82	57.40	100.00

Variable	Obs	Mean	Std. Dev.	Minimum	Maximum
Standardized value of negotiated standards	155	-0.0008	0.5630	-2.2030	1.4519
Achieved 80% expected performance levels	156	0.5128	0.5014	0.0000	1.0000
Achieved 100% cumulative area score	156	0.5321	0.5006	0.0000	1.0000
Adult cumulative score	156	1.0764	0.1571	0.6858	1.7240
Dislocated worker cumulative score	156	1.0860	0.1119	0.6812	1.3803
Youth cumulative score	156	1.0938	0.1630	0.6757	1.7754
Customer satisfaction cumulative score	150	1.1167	0.0936	0.8847	1.4929
Adult standardized performance level	156	0.0000	0.6575	-2.3569	1.9409
Dislocated worker standardized performance level	156	0.0000	0.5931	-2.8699	1.5716
Older youth standardized performance level	156	0.0000	0.6688	-2.1005	1.8738
Younger youth standardized performance level	156	0.0000	0.7411	-3.5980	1.4784
Customer satisfaction standardized performance level	150	0.0027	0.8874	-2.5496	3.7960
Change in adult cumulative score	104	0.0105	0.1764	-0.6306	0.4683
Change in dislocated worker cumulative score	104	0.0249	0.1319	-0.3055	0.3990
Change in youth cumulative score	104	0.0308	0.1698	-0.4460	0.4647
Change in customer satisfaction cumulative score	98	-0.0242	0.0806	-0.4769	0.1713