Improving the Ability to Track Education and Employment Outcomes of Career and Technical Education Students

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Executive Summary

The *Carl D. Perkins Career and Technical Education Act of 2006* (Perkins IV) supports career and technical education (CTE) as a means for developing the academic and technical skills of secondary and postsecondary students. The law requires federal fund recipients to report data for a set of performance indicators that include measures of student placement following program completion. These measures are intended to hold state education agencies and local grant recipients accountable for their use of federal funds, to motivate continuous improvement in CTE programs and to assist Congress in assessing its return on investment in CTE.

*Existing Data Collection Practices*

States are required to report placements for secondary concentrators (i.e., those achieving a threshold level of CTE course credit) who pursue advanced education or training at a public or private less-than-2-year college, 2-year college, or 4-year college or university. In addition, states must report on the number of secondary, postsecondary, and adult concentrators who secure employment or who enlist in the military. And at the postsecondary level, states must further target concentrators who are retained within postsecondary education, who transfer to a baccalaureate degree program, or who enter an apprenticeship program.

To assist states in designing accountability systems, the U.S. Department of Education (USDOE), in March 2008, issued nonregulatory guidance detailing preferred approaches for identifying concentrator populations and constructing measures. Although states consulted these recommendations, existing law provides states with considerable flexibility in designing their accountability systems.

Substantial variability continues to exist in how states define CTE populations, construct performance measures, and collect and analyze placement data. Variability in the manner in which student placement data are collected is a key concern. In some instances, states rely on school districts or colleges to document outcomes using locally developed procedures. More often, states conduct standardized statewide surveys—using mail, telephone, or web-based tools—to collect information from all concentrators exiting a program. These survey efforts are often labor intensive, costly to administer, and plagued by low response rates and inaccurate reports.
While assessing student outcomes is critical to determining the return on federal investment in the CTE enterprise, current statistics on student placement into postsecondary education, employment, and the military are at best incomplete, and often misleading. Absent new guidance and direction in forthcoming legislation, the information provided to Congress and the public will fail to capture the value of CTE and its contribution to the education and career success of those who choose to concentrate in it.

**An Alternative Approach**

States conducting computerized follow-ups avoid many of the cost, logistical, and validity burdens associated with traditional survey efforts. Administrative record matching entails electronically tracking concentrators across different state agencies or national data repositories. To conduct matches, states use either a unique state identifier assigned to all youth enrolling in a publicly funded education institution, publicly accessible data contained with an individual’s education record, or a federal Social Security Number (SSN). However, because state education identifiers are not incorporated into individuals’ Unemployment Insurance (UI) wage records, use of the SSN is required to assess employment outcomes.

State education agencies have a number of record-matching options available to them to assess placement outcomes of CTE concentrators. These include:

- **State UI Wage Records Data**—Quarterly wage reports used to verify individuals’ eligibility for, and amount of, unemployment benefit payments should they become unemployed.

- **Federal Employment Data Exchange System (FEDES)**—Federal and postal civilian employment and military enlistment records maintained by the Office of Personnel Management, the United States Postal Service, and the Defense Manpower Data Center of the Department of Defense.

- **National Student Clearinghouse (NSC)**—Longitudinal student enrollment and degree attainment data for more than 3,300 public and private 2- and 4-year postsecondary institutions.

Federal efforts to promote the development of state longitudinal data systems may also improve state opportunities for assessing placement outcomes using administrative record matching. In particular, the American Recovery and Reinvestment Act (ARRA) provides resources to support states in designing and implementing statewide P—20 education data systems. While it will take time for new state data systems to be created and implemented, these infrastructure investments form the backbone of what will eventually become a decentralized, yet
seamless, nationwide information system that can be used to improve the sharing of educational data within and across high schools and postsecondary agencies and between the education and workforce sectors.

**Policy Options for Improving Placement Data**

Improving the validity and use of CTE data begins with giving states guidance about how to design and administer statewide data systems, along with clear direction in protecting individuals’ privacy when compiling information. It also requires that Congress consider states’ reporting capacities and limitations during reauthorization hearings to ensure that future legislative directives are fiscally practical, technically feasible, and capable of producing useful data for evaluating and improving CTE programs.

To improve the collection of placement data on CTE students, this paper offers five policy options:

**Policy Option 1: Integrate CTE into State Longitudinal Data Systems**

Federal grants awarded through ARRA and Race to the Top promise to revolutionize how student data are collected, administered, and shared within and across educational sectors. As states begin to develop these systems, it is critical that definitions of CTE concentrators and measures of program performance are considered in planning discussions.

Although preparations have already begun for Perkins IV’s reauthorization, by the time legislation is finalized it may be too late for states to make significant changes to their education databases. For this reason, USDOE staff, working in collaboration with states and national stakeholder associations, could begin to identify the core elements that should be integrated into states’ developing systems. Staff may also wish to consult with Congressional liaisons to determine the types of information that federal policymakers will require.

**Policy Option 2: Establish Regulations Governing Placement**

The collection of valid and reliable nationwide data on concentrators’ educational progress and outcomes could be improved if USDOE were to issue regulations governing how state CTE accountability systems are constructed and administered. This binding guidance should clearly define key terms and measurement criteria to ensure that states produce comparable data at a high level of accuracy and precision.
While specific direction will be required for all measures, for placement purposes, regulations should address:

- Populations—who is eligible for inclusion in the measure.
- Measure construction—how numerators and denominators are specified.
- Data collection methodology—how data are to be gathered.
- Timeline—when data are to be collected and reported.

Given the 2012 sunset of Perkins IV, USDOE may wish to defer issuing accountability regulations until new CTE legislation is authorized. To prepare for reauthorization hearings, USDOE administrators could begin consulting with state staff and other stakeholder groups to identify appropriate populations and measures to be used in subsequent legislation and to build field support for anticipated changes.

**Policy Option 3: Reassess the Collection of Secondary Employment Data**

Collecting information on the post-high school labor market participation of CTE concentrators can provide important information on the outcomes of CTE program involvement. State interpretations of federal legislation, however, limit the ability of some states to collect SSN numbers for secondary students or to use these numbers to access UI wage record data.

Congress could consider amending its Perkins IV secondary performance measure to either exclude secondary student placement into employment, limiting follow-up to CTE concentrators placed in postsecondary education or advanced training, or provide states with practical alternatives for tracking employment placement. For example, it may be possible to expand states’ collection of SSNs at the secondary level by clarifying federal guidance on student privacy issues. Another option would be permit states to survey samples of their pool of eligible CTE concentrators if expanding SSN collection should prove infeasible.

Congress also could consider allocating additional resources to support states in collecting placement data. One option would be to establish a set-aside for the development of state accountability systems, similar to the provision in Section 6111 of the *Elementary and Secondary Education Act*, which provides for grants to assist states in designing assessment systems.

**Policy Option 4: Promote State Access to National Data Repositories**

Secure data repositories currently offer states access to nationwide data on post-secondary matriculation, civilian and federal employment, and military enlistments. Federal staff could consult with representatives of these national data
clearinghouses to identify material supports and training opportunities that are available and consider sponsoring regional or national meetings, featuring hands-on practical applications, to train state staff in database merging and analysis.

Federal staff could also encourage states to use the NSC so they can access post-secondary placement data and consider negotiating with the Clearinghouse, on behalf of state secondary and postsecondary agencies, to establish a favorable access rate. In addition, representatives from the USDOE could initiate discussions with the U.S. Department of Labor to assess the potential for linking Perkins IV to the Wage Record Interchange System (WRIS), which functions as a nationwide clearinghouse for state UI wage record data. This will entail drafting an amendment to the current agreement governing state access to the clearinghouse.

**Policy Option 5: Provide Clear Guidance on the Uses of SSNs**

Expanding states’ use of administrative record matching will require clarifying the acceptable uses of SSNs for educational purposes, in general, and Perkins, in particular. A first step would be for the USDOE to complete its review of federal education privacy regulations and issue updated regulations and guidance for linking education and non-education data.

Once an overarching framework is established, federal attorneys could reevaluate guidance issued relating to Perkins IV placement issues and, where necessary, re-issue directives to legally protect state staff using SSNs for authorized accountability requirements. The USDOE might wish to consult with U.S. Department of Labor administrators, who will need to support this effort by requiring that their state counterparts cooperate with education administrators and provide written guidance as to how this process should occur.
Introduction

The *Carl D. Perkins Career and Technical Education Act of 2006* (Perkins IV) supports career and technical education (CTE) as a means for developing the academic and technical skills of secondary and postsecondary students. The law requires federal fund recipients to report data for a set of performance indicators that measure student education and employment outcomes. These measures are intended to hold state education agencies and local grant recipients accountable for their use of federal funds, to motivate continuous improvement in CTE programs and to assist Congress in assessing its return on investment in CTE.

Although accountability for results is an overarching theme in Perkins IV, many states are unable to collect accurate data for all performance measures. A primary problem for many states is their inability to track CTE students as they enter postsecondary education and employment.

Since 2001–02, the U.S. Department of Education (USDOE) has documented reporting challenges for performance measures in its annual reports to Congress, which note that states’ continuing inability to track placements invalidate state and local comparisons of student performance currently and over time (USDOE, 2004). The continuing poor quality of CTE data has been cited as one of the primary reasons that the Office of Management and Budget rated the 1998 Perkins legislation as “ineffective” and may explain, in part, the previous Administration’s efforts to eliminate categorical funding for CTE.

This paper examines options for improving the collection of placement data for students completing a threshold level of CTE coursework. It opens with a description of the placement measures contained within the Perkins IV legislation and identifies current obstacles to collecting quality data. Next, it profiles national data-sharing repositories to illustrate existing capacities for tracking student transitions across education sectors and into employment and the military. The next section presents a discussion of ongoing federal efforts to promote the development of state longitudinal data systems, which offer opportunities to expand follow-up reporting to other education and workforce training sectors. The paper closes with policy options to improve the collection of placement data that federal legislators may wish to consider during reauthorization hearings.
Perkins Accountability Requirements

In its 2006 reauthorization of the Perkins Act, Congress strengthened the accountability requirements introduced in earlier legislation. Most notably, Congress created separate performance indicators for secondary and postsecondary education to improve measure alignment within education sectors and to enhance the validity of state reporting. At the secondary level, states are now required to use the same measures of academic achievement and high school graduation as those contained in the 2001 reauthorization of the Elementary and Secondary Education Act (ESEA). New postsecondary measures call for measuring student retention in education or transfer to a baccalaureate degree program.

Congress also extended accountability for CTE program performance to the local level. In addition to negotiating statewide performance targets with USDOE, state education agencies must now establish individual performance targets for each local secondary and postsecondary grantee. Providers failing to achieve 90 percent of their negotiated state target face progressive sanctions, beginning with the development of a program improvement plan to address identified deficiencies and culminating in the loss of some or all of their federal Perkins IV funding.

Student Populations

The Perkins IV legislation holds states accountable for reporting outcome data for all students who achieve a threshold level of CTE course credit. These individuals, termed “CTE concentrators,” serve as the reference population for most performance measures. To assist states in designing accountability systems, USDOE, in March 2008, issued nonregulatory guidance detailing preferred approaches for identifying CTE concentrators and constructing measures of their performance. At the secondary level, states are encouraged to define concentrators as those earning 3 or more credits in a single CTE program area, and at the postsecondary level, those completing at least 12 academic or technical credits within a single program sequence that terminates in the award of an industry-recognized credential, certificate, or degree.¹

¹ Concentrator status may also be conferred on secondary students who earned 2 credits in a single CTE program area where 2-credit sequences are recognized by the state, and for postsecondary students who complete a short-term CTE program sequence of less than 12 credit units that terminates in the award of an industry-recognized credential,
Although states considered USDOE suggestions when developing their accountability systems, concentrator thresholds vary across states. Some states, for example, establish course-taking thresholds early in students’ CTE program enrollment (for as little as one course), while others defer until students are nearing completion of their programs. Differences in how states assign credit for course participation also complicate comparisons. As such, the education and skill levels of concentrator populations often differs across states, which has implications for both the number of concentrators included in measures and the relative levels of performance achieved.

**Placement Measures**

States are required to report placements for secondary CTE concentrators who pursue advanced education or training at a public or private less-than-2-year college, 2-year college, or 4-year college or university. In addition, states must report the number of secondary, postsecondary, and adult concentrators who secure employment or who enlist in the military. Postsecondary measures also target concentrators who are retained within postsecondary education, who transfer to a baccalaureate degree program, or who enter an apprenticeship program.

In addition to reporting aggregate results, states are required to disaggregate student populations by race/ethnicity, gender, special population status, and Tech Prep participation. Special populations include individuals with disabilities; those from economically disadvantaged families, including foster children; individuals preparing for nontraditional fields; single parents, including single pregnant women; displaced homemakers; and individuals with limited English proficiency.

To standardize reporting, USDOE’s nonregulatory guidance calls for states to report unduplicated placements for concentrators in the 2nd quarter following the program year in which they left education, but is ambiguous on whether follow-up should be limited to those who graduated. In most cases, states are reporting on concentrators who recorded an on-time graduation from high school or certificate, or degree. This guidance may be downloaded from the federal Perkins IV website (http://cte.ed.gov/perkinsimplementation/nrg.cfm).

2 Tech Prep describes sequenced courses encompassing two or more years of secondary and postsecondary education that articulate across sectors. Such programs offer integrated academic and technical skill instruction, work-based learning opportunities, and lead to technical skill proficiency, an industry recognized credential, a certificate, or a degree in a specific career field.
lege (i.e., in or before June of the academic year), with placement status assessed between October 1st and December 31st of the subsequent academic year.

Although methodology governing the collection of employment data is fairly straightforward, states’ capacity to track student transitions into further education varies. For example, some states are unable to distinguish postsecondary concentrators who transfer among institutions from those who depart prior to achieving their program goal. This means that a CTE concentrator who transitioned among 2-year colleges or from a 2-year to a 4-year college or university prior to obtaining a recognized credential, certificate, or degree would be counted as an “exiter” (i.e., a false negative) in states that cannot link their community college records with other in-state or out-of-state postsecondary data repositories. This inability often inflates the number of individuals included in state measure calculations, because once enrolled, CTE concentrators should not legitimately be counted until they exit the postsecondary sector.

Moreover, because students may leave college at any time, existing postsecondary placement data combine outcomes for CTE concentrators who spent differing periods of time in the workforce. To illustrate, a concentrator who left education early in the fall semester may spend as many as four quarters at work, compared with just two quarters for an individual who exited at the end of the traditional academic year. This “mixed cohort” approach was adopted by USDOE because some state administrators believed that it would be easier to conduct a one-time analysis using a fixed exit date than it would be to collect data on a rolling cohort of exiters. There also is no requirement that students obtain and keep a job for an extended period of time, meaning that an individual is considered positively placed if reported as enrolled or employed—part-time or full-time—at any point in the 2nd quarter following the end of the program year.

Collection Instruments

States track CTE student education and employment outcomes using either surveys or administrative records, with some using a hybrid approach (i.e., surveying at the secondary level and record matching at the postsecondary). Survey collection strategies are notoriously varied. In some instances, states rely on school districts or colleges to document placement outcomes using locally developed procedures. For example, high school teachers or college faculty may individually conduct follow-ups on students using their own telephone or mail survey, document student intent while enrolled, conduct exit interviews, or glean anecdotal information from conversations with family or friends. More often,
states perform their own follow-ups or contract with third-party agencies to conduct standardized statewide surveys—using mail, telephone, or web-based tools—to collect comparable information from all concentrators.³

Survey efforts are often plagued by low response rates. One reason is that mail, telephone, or online notifications are usually sent to the last known address or contact of the identified recipient. In many instances, eligible respondents fail to receive survey notifications because they have moved without leaving a forwarding mail/e-mail address or telephone number, or because parents or others neglect to communicate the information to the intended recipient. Low response rates are prevalent for those who withdraw from their postsecondary program or who fail to find employment, perhaps because it is easier to ignore a survey than to publicly voice a personal failure.⁴

Survey costs are often prohibitively high because of the expense of conducting mail or telephone follow-ups. A local program provider or state agency faces expenses associated with survey printing and postage, which includes mailing an instrument and pre-paid return envelope and conducting follow-up calls or mailings to boost response rates. Telephone surveys require hiring callers to administer surveys and to enter data for analysis. And though online surveys can offer some savings and improve data accuracy, because information is automatically entered by respondents into electronic spreadsheets, states still incur costs in creating and administering survey websites, responding to respondents’ technical questions, and locating nonrespondents.

States using administrative records for tracking student outcomes can absorb many of the costs and logistical burdens associated with traditional student surveys, while providing data that are generally more accurate. To the extent that administrative data are available for use, logistical burdens for Perkins IV reporting fall largely on state administrators, who are responsible for conducting matches and, where necessary, paying for record matching with state UI wage record administering agencies.

⁴ For example, in assessing the feasibility of using Unemployment Insurance (UI) wage record data to assess JTPA programs, Baj, Trott, and Stevens (1991) found that response rates for traditional surveys were 70.2 percent for those employed at program termination versus 49.6 percent for those who were not employed at that time, leading them to conclude that UI data were more representative than corresponding survey-based information.
Administrative record matching entails electronically tracking CTE concentrators across different state agencies or national data repositories. States use either a unique state identifier, assigned to all youth enrolling in a public school or college, or an individual’s federal Social Security Number (SSN). To date, states have had little success using state-assigned education identifiers to track concentrators across state lines because these numbers are state-specific. Accurate matching using state education identifiers is a challenge even within a state if these numbers are assigned and used only at the K-12 level, and not incorporated within the administrative databases of postsecondary institutions. State identifiers also are not incorporated into individuals’ Unemployment Insurance (UI) wage records, which are the only means to assess employment outcomes using administrative record matching.5

States’ capacity to perform effective administrative record matching rests largely on their access to CTE concentrators’ SSNs, which is governed by administrators’ interpretations of federal Family and Educational Rights and Privacy Act (FERPA) regulations and state law. To clarify state administrators’ use of SSNs contained in students’ education records, in January 2003, the U.S. Department of Education released guidance on the application of FERPA to Perkins legislation, and acceptable procedures for matching students’ SSNs with state UI data. Attorney generals in a number of states also have issued restrictive legal interpretations of the law that prohibits educators from using, or in some instances, even asking students to voluntarily disclose their SSNs.

Possessing CTE concentrators’ SSNs does not automatically assure that data matching can occur. The process of tracking records across agencies can be cumbersome, with administrators required to adopt a formal Memorandum of Understanding with in-state agencies or with other states that are willing to share data. Complying with FERPA data matching also requires that state education agencies assign an individual to directly monitor the UI record-matching process, which can be costly and time consuming. There are also limitations on the information contained in state UI databases. For example, record coverage excludes individuals who are self-employed, who are in the Armed Forces, or who work in jobs not covered by UI, including some agricultural, government, and domestic

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5 Several states have made progress in incorporating secondary education identifiers into student records maintained by in-state public postsecondary institutions. However, this only accounts for recent high school graduates enrolling within state and does not work well in the community college environment, where open-entry, open-exit enrollment policies can complicate the transfer of identifiers.
fields. A description of the type of job that an individual holds is also missing. Reporting errors, including the use of duplicate SSNs, also may occur; in addition, some employers report information late or do not report required information, even though legally compelled to do so. And while some states have negotiated record sharing with neighboring states, the lack of a national UI wage record system precludes tracking of individuals who find UI-covered employment outside the state, an issue discussed below.

Weaknesses of Existing State Data

All states and territories currently report placements of CTE concentrators into education and employment, but they vary considerably in terms of their definitions of CTE populations, the calculation of state measures, and the methodologies used to collect student data. The most current data on concentrator placements available are for the 2006–07 program year, the final one of the Perkins III legislation. Given that the placement measures across the two Acts have remained unchanged, as have most state data collection approaches, these data can provide reasonable insight into how state reporting under Perkins IV is likely occurring.

As illustrated in the table below, nearly three-quarters of states and territories (39) reported secondary placement rates of at least 85 percent of all concentrators for the 2006–07 academic year, with more than one-third (19) reporting rates at or exceeding 95 percent. Based on the percentages alone, it would appear that concentrators graduating from high school are achieving remarkable results after exiting their programs.

6 Studies of UI wage record data suggest that undercoverage may be particularly high for employers with casual or part-time workers, as well as independent contractors employed within a firm. Compensation reports may also underreport tips, bonuses, and other forms of irregular compensation (Burgess, Blakemore, and Low, 1998).

7 Even with the potential for reporting errors, the accuracy of earnings data collected from UI data is higher than that obtained by survey self-reports, and the use of electronic pay-roll processing and cross-matching data provides some level of quality control. Legal penalties for misstating earnings also help to assure data quality (Baj, Trott, and Stevens, 1991). Further, because the data are extensively used in state and federal labor market information products and publications, there is a significant statistical audit process used by state agencies to assure minimum levels of accuracy.

8 Since states were not required to report placement data for the 2007–08 program year (the first under Perkins IV), 2008–09 is the first program year that it is possible to identify program placements. Since these data were not reported until December 2009, the earliest these data will be publicly available is in spring 2010.
What is left unexplained, however, is that these student placement rates do not include all concentrators exiting a state CTE program the preceding program year but often, include only those who responded to survey requests or who were located through administrative record matching. One means of assessing the validity of state-reported placement rates is to compare the number of concentrators followed up in a given program year (i.e., the denominator of the placement measure) with the number of concentrators who were identified as earning a high school diploma or equivalency certificate the preceding program year (i.e., the numerator of the prior year’s high school completion measure).

Review of state follow-up data suggests that states are struggling to collect CTE student placement data. As an extreme case, consider Minnesota, which reported a 96 percent placement rate for the 2006–07 program year—based on the 622 individuals who returned a follow-up survey. Given that the state identified 38,749 concentrators graduating in the 2005–06 program year, the state is reporting only a fraction of the population for which it might be expected to report. Applying this logic to other states’ follow-up data reveals that roughly one-fifth of states (11) based their reporting on less than 60 percent of the eligible concentrator population, with two—the District of Columbia and the Virgin Islands—not reporting any follow-up data.

Of some concern is that nearly one-fifth of states (10) reported conducting follow-ups on a greater number of students than graduated the preceding program year. For example, New Mexico reported conducting follow-ups on 14,694 individuals in the 2006–07 program year, even though the state reported just 8,576 concentrators graduating from high school the previous year.

Given such extensive variation in reported outcomes, many wonder why more attention has not been paid to methodological shortcomings surrounding the placement measure. The answer is that, in the absence of federal regulations, states retain considerable flexibility in how they design their performance measures. Simply put, states may construct their own measures and reporting frameworks irrespective of USDOE guidance and can, and often do, change these definitions over time, invalidating year-to-year performance comparisons.

Another explanation is that some states’ legal interpretations of FERPA regulations limit access to education and employment data, some of which are only reliably available by conducting an administrative record match using the SSN as a unique identifier. And with reported concentrator placement rates approaching 100 percent in many states, Perkins data have elicited little attention from federal
or state policymakers, because it appears the legislation is achieving its desired effect.

This review suggests that state Perkins IV data on CTE concentrator placements are currently incomplete, inconsistent across states, and in many instances, seriously flawed. Little is known about the validity of the data reported, and only anecdotal information is available about why some states are either unable to locate or significantly over-report concentrators eligible to be included in the placement measure. Moreover, where administrative record matching does occur, little or nothing is documented about how that process unfolds or which agencies participate in record exchanges.
## Reported Placement Rate 2006–07

<table>
<thead>
<tr>
<th>State</th>
<th>2005–06</th>
<th>2006–07</th>
<th>Percentage of Eligible CTE Concentrators Followed Up</th>
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<tbody>
<tr>
<td>Alabama</td>
<td>92%</td>
<td>2005–06</td>
<td>34%</td>
</tr>
<tr>
<td>Alaska</td>
<td>86%</td>
<td>2006–07</td>
<td>84%</td>
</tr>
<tr>
<td>Arizona</td>
<td>70%</td>
<td>2006–07</td>
<td>68%</td>
</tr>
<tr>
<td>Arkansas</td>
<td>95%</td>
<td>2006–07</td>
<td>93%</td>
</tr>
<tr>
<td>California</td>
<td>86%</td>
<td>2006–07</td>
<td>61%</td>
</tr>
<tr>
<td>Colorado</td>
<td>97%</td>
<td>2006–07</td>
<td>101%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>94%</td>
<td>2006–07</td>
<td>84%</td>
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<td>Delaware</td>
<td>98%</td>
<td>2006–07</td>
<td>72%</td>
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<tr>
<td>District of Columbia</td>
<td>NA</td>
<td>2006–07</td>
<td>—</td>
</tr>
<tr>
<td>Florida</td>
<td>82%</td>
<td>2006–07</td>
<td>108%</td>
</tr>
<tr>
<td>Georgia</td>
<td>73%</td>
<td>2006–07</td>
<td>100%</td>
</tr>
<tr>
<td>Guam</td>
<td>93%</td>
<td>2006–07</td>
<td>—</td>
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<tr>
<td>Hawaii</td>
<td>100%</td>
<td>2006–07</td>
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<td>Idaho</td>
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<td>Nebraska</td>
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<td>2006–07</td>
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<tr>
<td>Wyoming</td>
<td>96%</td>
<td>2006–07</td>
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NA: South Carolina uses a rolling 3-year average. These data are not available on-line.

— Missing

Options for Collecting Data on Education and Employment Outcomes

Administrative record matching can offer states access to consistent, valid, and reliable data on CTE student progress from secondary to postsecondary education and into the workforce. Recent national efforts to promote the development of state longitudinal data systems are expanding state access to this technology, breaking down bureaucratic and technical impediments that have, to date, limited state capacity to engage in electronic data sharing.

State education agencies have a number of options available to assess the placement outcomes of CTE concentrators. These include accessing Unemployment Insurance (UI) wage record data administered by state or national agencies; federal employment and military enlistment data managed by the Federal Employment Data Exchange System (FEDES); and postsecondary education or advanced training data maintained by the National Student Clearinghouse (NSC). Another option not presently in use is the Wage Record Interchange System (WRIS). The following section provides a summary of the alternatives available to states and briefly describes the types of information and access requirements associated with each system.

State UI Wage Record Data

The national system of unemployment compensation is authorized by state and federal laws. A mainstay resource in all states is the quarterly UI wage report, which is used by employers to calculate their tax obligations and by state agencies to verify individuals’ eligibility for, and amount of, unemployment benefit payments should they become unemployed. Quarterly wage reports account for all wages and salaries paid by an establishment to its employees during a particular quarter. Reported elements include an abbreviated name for each person and employer, the employee’s SSN, and the total wages or salary paid during the quarter. Because state UI laws are comprehensive in defining covered employers, the wage report is a near census of all wage and salary workers within a state.

States can access an individual’s UI wage record data for Perkins IV reporting purposes without a CTE concentrator’s prior consent, so long as appropriate steps are taken to safeguard personally identifiable information. Doing so entails
executing a Memorandum of Agreement between the state UI agency and state or local education agencies that spells out the acceptable uses and constraints associated with data use.⁹

The matching process is relatively straightforward. One option allows the state UI wage record agency to transfer individuals’ data directly to the state education agency, where it can be matched against CTE concentrator data files. A second option permits the state education agency to transfer a list of concentrator SSNs to the UI agency for matching against quarterly wage record data, with results returned in aggregate form (i.e., individual student level data is not provided). A third option permits the release of SSN for students who have provided prior written consent for the disclosure. In either case, security measures and disclosure regulations detailed within FERPA and governing the use of UI records must be carefully observed (U.S. Department of Education, 2003).

Because UI wage records are state specific, educators cannot obtain employment information for CTE concentrators who find employment out of state. To expand wage record reporting, a handful of states have created reciprocal data-sharing agreements that permit them to trade employment data, though to date this system has not been used for Perkins reporting purposes. One such undertaking, the Administrative Data Research and Evaluation (ADARE) alliance, consists of nine states—California, Florida, Georgia, Illinois, Maryland, Missouri, Ohio, Texas, and Washington—that have negotiated data-sharing agreements to permit controlled access to state data for authorized research and evaluation purposes.

Federal Employment Data Exchange System (FEDES)

Funded through a grant by the U.S. Department of Labor, FEDES is an initiative to assist states in identifying individuals employed by federal agencies for performance-reporting purposes. The system allows states to access federal and postal civilian employment and military enlistment records maintained by the Office of Personnel Management (OPM), the United States Postal Service (USPS), and the Defense Manpower Data Center (DMDC) of the Department of Defense. Because employment records in these databases are not included in state UI wage record systems, states must either use FEDES or establish relationships with each agency to find individuals in federal employment.

⁹ Specific requirements associated with conducting matching are detailed in the U.S. Department of Education’s memo of January 30, 2003, which clarifies the application of FERPA legislation to reporting under the Perkins Act.
The FEDES system operates as a secure pass-through service, with states funneling data requests to a centralized portal through which information is exchanged with federal agencies. Administrative management of FEDES is handled by Maryland’s Department of Labor Licensing and Regulation, which provides guidance and legal support to participating states and serves as the liaison between state and federal agencies. The Jacob France Institute at the University of Baltimore oversees technical operations and manages the data exchange process.

There is no cost to states seeking to participate in FEDES. To join, states simply execute a data-sharing agreement with the Maryland Department of Labor Licensing to clarify the terms of the exchange. Matches are conducted on a quarterly basis, with states submitting records electronically to a secure, password-protected server.\textsuperscript{10} Data transmission occurs using secure file transfer protocol (SFTP), or for states that lack the technical capacity, via a password-protected CD routed by Federal Express. To conduct matches, states must supply each concentrator’s SSN, state ID, and optional program code, and an indication of whether the record is permissible for matching with DMDC records.\textsuperscript{11}

The matching process occurs over a five-week period, with states submitting data during the first week of each quarter. State data files are downloaded by Institute staff, bundled into a single file, which is zipped, password-protected, encrypted, and transferred to participating federal agencies. Federal staff match the file with personnel data and return the data to the Institute within three weeks of receipt. During the fourth week, Institute staff unbundle and load the data into each state’s mailbox on the secure server. States have one week to download matched files before they are permanently deleted.

Quarterly matches cover the eight most recent quarters, subject to a three-month reporting lag. Returned fields include information on the individuals’ geographical location, wages, occupation, and period of employment.

\textsuperscript{10} In some instances, states execute a specific agreement to use FEDES for Perkins reporting purposes, while in others, the state Department of Employment or Labor has the agreement—covering all uses for the state.

\textsuperscript{11} The OPM and USPS allow states to conduct matches for federal and state performance measurement, consumer reporting, and evaluation research activities required by federal law or regulation, state law or regulation, or the United States Office of Management and Budget (OMB). The DMDC restricts the use of military data to federal performance measurement, consumer reporting, and evaluation research activities required by federal law or regulation, or the OMB. However, in either instance, states may use FEDES data for Perkins IV reporting purposes.
National Student Clearinghouse (NSC)

The NSC maintains student enrollment and degree attainment data for more than 3,300 public and private 2- and 4-year postsecondary institutions located throughout the United States. With longitudinal data covering more than 92 percent of college students, the NSC is the only national repository containing student-level data. Originally formed to help the higher education community verify student enrollment for loan administration purposes, the Clearinghouse has evolved to provide a variety of services that allow state agencies, institutions, and researchers to track students who enroll anywhere in the country and who transfer among institutions.

Clearinghouse matches for secondary students may be performed with a student’s SSN serving as a unique student identifier, which is the preferred matching key, or by conducting a probabilistic match using a student’s directory information, which includes a student’s name, high school attended, birth date, and/or graduation date. Since postsecondary institutions are prohibited from using SSN without a student’s prior consent for disclosure, probabilistic matching is the sole approach for tracking students at the college level. According to Clearinghouse staff, this latter approach usually yields between a 60 and 70 percent match rate.

Record queries occur through a batch file exchange, with inquiring agencies forwarding secure electronic files to the NSC containing identifiers for individual students. Once the match process is completed, the NSC returns a batch file containing student-level data for identified records. This includes information on the institutions an individual attended; institutional location, affiliation, and type (i.e., less-than-2-year, 2-year, or 4-year-or-higher institution); the person’s current enrollment status (e.g., full-time, half-time, less than half-time); and attendance dates. Information on degree title, graduation date, degree title, and major.

Longitudinal data maintained within the repository also permit states to track concentrators’ college placement beyond the two quarters following high school graduation. For example, it is possible to assess individuals’ postsecondary persistence and time to graduation, which allows educators to gauge whether CTE students who entered college had the skills necessary to persist and complete their studies.
Wage Record Interchange System (WRIS)

The WRIS was established by the federal government to support states in responding to performance reporting requirements contained in the Workforce Investment Act of 1998 (WIA) and programs authorized under the Wagner-Peyser Act. The WRIS functions as a nationwide clearinghouse for state UI wage record data, allowing states to track the employment outcomes of individuals who participated in a state workforce investment program and who subsequently left the state. States joining the WRIS agree to share UI wage record data with other states, and in return, gain access to wage record data from participating members. As of January 2010, all states and the District of Columbia were members.

To participate in the WRIS, a state must execute a contract with the Employment and Training Administration, U.S. Department of Labor, which specifies the conditions governing data access. Subsequently, each state submits data to the WRIS clearinghouse for all individuals with employer-reported wages for a specified time period. State data are entered into a repository that contains wage record data for up to eight quarters. Only three elements are maintained: an individual’s SSN; the quarter for which wages have been reported; and the name of the state holding the wage record information.

When wage record data are needed, a state transmits a request file to the clearinghouse containing the SSNs of individuals for whom employment data are needed. WRIS staff match these identifiers against the centralized database to determine whether wage data exist and, where matched records are found, forward the request to the state holding the requested data. Upon receiving a query, a state attempts to match the SSN in the file against that held in its own database. A response file containing requested wage record data is returned to the WRIS clearinghouse, where staff extract the data and aggregate them before transmitting them to the sending state agency. Once a request has been fulfilled, a state has two weeks to download the information before it is automatically purged from the clearinghouse server.

Although the WRIS can serve as an excellent tool to track concentrators’ placement outcomes with a high degree of validity and coverage, states are currently prohibited from accessing the WRIS for Perkins IV reporting purposes.\(^\text{12}\) Adding

\(^{12}\) WRIS record access may only be used for the following federal programs: Job Corps Program, Senior Community Service Employment Program, Migrant and Seasonal Farm Worker Program, Native American Program, Veterans Workforce Investment Program, Youth Build Program, Registered Apprenticeship Program, Prisoner Reentry Initiative
Perkins IV to the list of acceptable programs requires proposing an amendment to the data-sharing agreement, which must be approved by a majority of states. Past efforts to add the legislation have met with resistance, due to state concerns about expanding nationwide access to students’ SSN; as such, states may not legally access the WRIS for Perkins IV accountability purposes.

State Longitudinal Data Systems

Federal efforts to promote the development of state longitudinal data systems have the potential to improve state opportunities for assessing placement outcomes. In particular, the American Recovery and Reinvestment Act (ARRA) provides resources to support states in designing and implementing statewide P–20 education data systems. These new or enhanced systems will enable state education agencies to trace student transitions within and across high schools and postsecondary agencies and between the education and workforce sectors. These systems, which contain information on students’ demographics and their educational progress, also will permit record associations to be made with other state or federally administered databases. This will allow researchers to identify the characteristics of individuals who participate in or receive benefits from other programs (e.g., Temporary Assistance for Needy Families [TANF], foster care, workforce, adult education, and correctional education).

This initiative builds on previous efforts by the U.S. Department of Education’s Institute of Education Sciences to promote the design of statewide longitudinal data systems for use in improving data-driven decision making to improve student learning and research. While it will take time for new state data systems to be created and implemented, these infrastructure investments form the backbone of what will eventually become a decentralized, yet seamless, nationwide information system, one that can be used to improve the sharing of educational data across public and private agencies and sectors.

Grant Program, H-1B Technical Skills Training Grant Program, and the Community-Based and High-Growth Job Training Initiative Grant Program.

To date, representatives of the CTE community have not been actively involved in state development efforts, which may have measurement implications if new state systems are not designed with CTE reporting needs in mind.
Policy Options

While assessing student outcomes is critical to determining the return on federal investment in the CTE enterprise, to date, statistics on CTE student placement into postsecondary education, employment, and the military are at best incomplete, and often misleading. As such, the information currently provided to Congress and the public fails to tell the value of CTE or its contribution to the education and career success of those who choose to concentrate in it.

Improving the validity and use of CTE data begins with giving states guidance about how to design and administer statewide data systems, along with clear direction in protecting individuals’ privacy when compiling information. It also requires that Congress consider states’ reporting capacities and limitations during reauthorization hearings to ensure that future legislative directives are fiscally practical, technically feasible, and capable of producing useful data for evaluating and improving CTE programs.14

Policy Option 1: Integrate CTE into State Longitudinal Data Systems

The federal government is investing substantial resources to support states and local education agencies in building education information systems to measure student growth and success. State grants awarded through ARRA and Race to the Top promise to revolutionize how student data are collected, administered, and shared. As states begin to develop these systems, it is critical that those measures of CTE student and program performance contemplated for future Perkins legislation are considered in planning discussions.

Although preparations have already begun for Perkins IV’s reauthorization, it is unlikely that Congress will draft performance measures before the end of the 2011 fiscal year. By the time legislation is finalized, it may be too late for states to

14 Past criticisms have included that Perkins legislation imposes an unfunded mandate on states, particularly as it relates to the collection of technical skill attainment and placement data. Complaints of excessive data burden have also surfaced during National Assessment of Career and Technical Education (NACTE) case study visits, and administrators report that, in some instances, local providers are considering turning down federal resources because the amount of funds received is more than offset by administrative costs associated with collecting data.
make significant changes to their database components. For this reason, USDOE staff, working in collaboration with states and national stakeholder associations, including the Association for Career and Technical Education, Council of Chief State School Officers, Data Quality Campaign, National Governors Association, and the National Association of State Directors of Career and Technical Education Consortium, could begin to identify the core elements that should be integrated into states’ developing systems. Staff also could consult with Congressional liaisons to determine the types of information that federal policymakers will seek to evaluate CTE performance.

To communicate federal intentions, USDOE could decide to circulate policy guidance to state longitudinal data system developers, detailing the capacities that systems should have to accommodate future reporting needs. If CTE concentrations are to be the unit of analysis for student and program assessment in future legislation, then it is imperative that states can identify students completing a threshold level of coursework and those who are making a transition between the secondary and postsecondary levels of a CTE program sequence.

Equally important, Congressional staff must understand the capacities and limitations of state education data systems when drafting future CTE legislation. While most accountability measures and placement, in particular, offer useful information for gauging the effects of CTE, states continue to face serious obstacles to collecting some forms of data. Mandating that states collect information that is fiscally or technically impractical or for which they lack sufficient training and material supports places administrators in a difficult position. To address this concern, Congress also might consider attaching resources to future legislation to support USDOE in providing technical assistance to states, and for regulating state adoption of identified measures.

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15 For example, to support states in moving their Perkins IV reporting from the Consolidated Annual Reporting system to the EDFacts/EDEN system, the EDFacts team issued a communication to their state liaisons about the need for including CTE data in EDEN reporting.

16 Congress should also ensure that legislated data requirements are feasible. For example, Congress has mandated performance indicators that require states to report on program outcomes or student populations, such as “single pregnant women” and “displaced homemakers,” for which data are not available or cannot be collected due to conflicts with federal and state laws or policies.
Policy Option 2: Establish Regulations Governing Placement

Collecting valid and reliable nationwide data on concentrators’ educational progress and outcomes could require that the USDOE issue regulations governing how state CTE accountability systems are constructed and administered. This binding guidance would clearly define key terms and measurement criteria to ensure that states produce comparable data, at a high level of accuracy and precision. While specific direction will be required for all measures, for placement purposes, regulations should address:

- Populations—who is eligible for inclusion in the measure.\(^1\) This includes stipulating a threshold level of coursework or credits attained, as well as any special considerations, such as restricting follow-up to individuals who graduated in the preceding academic year.\(^2\)

- Measure construction—how numerators and denominators are specified.

- Data collection methodology—how data are to be gathered, including the instruments used to collect information, data sources to be consulted, minimum expectations for rates of student coverage and response, and how duplicated outcomes (e.g., enrolled and employed) are to be reported.

- Timeline—when data are to be collected and reported.

Given the 2012 sunset of Perkins IV, USDOE could wish to defer issuing accountability regulations until new CTE legislation is authorized. This will enable states and local communities to avoid incurring substantial costs to modify their accountability systems and collection procedures in the final years of the Act. To prepare for reauthorization hearings, USDOE administrators could begin consulting with state staff and other stakeholder groups to identify appropriate populations and measures to be used in subsequent legislation and to build field support for anticipated changes.

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\(^{1}\) Though also could be given to which populations are included in different measures. Currently, states are reporting different student populations in different Perkins measures, which can complicate interpretation of state results.

\(^{2}\) USDOE could choose to clarify additional issues associated with identifying CTE populations. For instance, some states report on all secondary students participating in CTE, regardless of whether their school district receives Perkins funds, while others report on only those districts obtaining grants. These and other issues will be addressed in subsequent reports being produced for the NACTE study.
Policy Option 3: 
Reassess the Collection of Secondary Employment Data

Collecting information on the post-high school labor market outcomes of CTE concentrators can provide important information on the effects of CTE program involvement. For example, data on the employment rates and earnings of youth completing a sequence of secondary CTE coursework can be used to assess the relative economic advantage that CTE confers, in addition to supporting statewide or local program improvement efforts. Given that a substantial number of secondary CTE concentrators enter the workforce upon graduation, either full-time or in combination with advanced education, the collection of employment data is clearly warranted.\(^{19}\)

Practical considerations, however, limit the ability of states to collect data on employment placement at the secondary level using administrative record matching, because of restrictions on the use of SSNs for accessing UI wage records. In its annual survey of states’ progress in implementing comprehensive longitudinal education systems, the Data Quality Campaign reported that just 6 states use the SSN as secondary students’ primary identifier for program participation. Remaining states are either forbidden by state law from collecting the SSNs of secondary students (20 states) or make some effort to collect the numbers, though they either have no functionality or are not used as a primary identifier (Data Quality Campaign, 2010).

In the absence of employment information based on UI wage record data, states have been directed to conduct a universe survey of all high school CTE concentrators completing their program, an undertaking that, to date, has not yielded valid or reliable information. Absent additional resources and technical supports, it is unlikely that states will improve the survey response rates they currently achieve.

Congress could consider amending its Perkins IV secondary performance measure to either exclude secondary student placement into employment, limiting follow-up solely to CTE concentrators placed in postsecondary education or

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\(^{19}\) Given that the measurement of high school graduates’ employment is confounded by a youth labor market that that restricts opportunities for youth, regardless of their preparation, immediate post program employment measures may not fully capture the long term benefits that CTE coursework can provide. While legislative time limits make it impractical for states to collect multi-year data on youth employment, Congress may wish to consider authorizing longer term studies to assess the benefits that CTE may confer for high school concentrators who graduate and forgo postsecondary education to enter the workforce.
advanced training, or provide states with practical alternatives for tracking placement in employment.

As detailed below, it may be possible to expand states’ collection of SSNs at the secondary level by providing clearer federal guidance on student privacy issues. Such action would potentially increase student coverage in states already collecting SSNs, making administrative record matching feasible, though it is unlikely to have such an effect in all states, and particularly in those where SSN collection is prohibited. Another option would be permit states to survey samples of their pool of eligible CTE concentrators. Regulations governing survey administration, including minimum response rates and population coverage, also should apply. And if politically feasible, USDOE could negotiate a timeline for each state to make the transition from surveys to electronic data collection.

Although tracking military enlistments and individuals entering federal employment also is desirable, it is currently difficult, though not impossible, for states to collect this information without a concentrator’s SSN. Accordingly, USDOE may wish to consult with administrators from appropriate federal agencies to assess the potential for linking records using probabilistic matching based on directory information contained within secondary students’ education records (e.g., name, sex, birth date, high school).

While state administrators recognize the shortcomings associated with their placement data, lack of sufficient resources and a collective, systemic, national approach to resolving these issues has hampered their improvement efforts. Indeed, Congress has essentially flat-funded Perkins over the past decade, leaving states to choose between investing increasingly limited resources to collect accountability data or provide necessary student services. As new legislation is contemplated, Congress could consider allocating additional resources to support states in collecting placement data. One option would be to establish a set-aside for the development of state accountability systems, similar to the provision in Section 6111 of the ESEA, which provides for grants to assist states in designing assessment systems.

Surveying will make it difficult for states to identify statistically representative samples for all Perkins IV special populations, as well as for all districts within the state. An alternative would be for Congress to legislate USDOE to conduct a national sample survey to produce statistically significant estimates for all populations. A sample permitting state-level estimates would likely be prohibitively expensive, however.

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Policy Option 4:  
Promote State Access to National Data Repositories

Our nation’s existing technological capacities outstrip our bureaucratic structures. Secure data repositories currently offer states access to nationwide data on postsecondary matriculation, civilian and federal employment, and military enlistments. While issuing regulations and clarifying acceptable uses of students’ SSNs will help remove reporting obstacles, states must still overcome significant resource issues before they can make full use of these opportunities.

One challenge lies in training state staff to use nationwide clearinghouses. This task includes teaching state administrators how to compile, secure, and electronically transfer student records, as well as how to apply appropriate statistical techniques to interpret and use results. As a first step, USDOE staff could consult with national data clearinghouses and the Employment Training Agency of the U.S. Department of Labor (USDOL) to identify material supports and training opportunities that are available. USDOE also could consider sponsoring regional or national meetings, featuring hands-on practical supports, to train state staff in database merging and analysis. Other options include drafting examples of Memorandum of Understanding between record-sharing agencies (e.g., state education and UI wage record-administering agencies) and providing onsite, individualized technical assistance to support states in conducting administrative matches.

Completing these steps should enable most states to identify postsecondary CTE concentrators working in-state (via state UI wage records), as well as those in federal employment or the military (via FEDES), and to do so at modest, if any cost. Unfortunately, states are currently precluded from matching records against nationwide UI wage records maintained in the WRIS because Perkins IV, to date, has not been identified as legislation qualifying for clearinghouse use. Accordingly, the USDOE may wish to initiate discussions with the USDOL or

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21 While this paper focuses on the uses of follow-up data for Perkins, states could benefit from improved information on student progress across the educational continuum. For this reason, Congress may wish to consider expanding follow-up requirements to other legislation and providing resources to promote state access to this technology.

22 As part of its national activities effort, USDOE has provided technical assistance to assist states in improving the quality of their Perkins accountability systems. More than 25 states have benefited from services since the program’s inception in 2005. Details on this initiative are available at http://cte.ed.gov/.

23 This excludes time that state staff must invest conducting administrative record matching and interpreting results. Some states are charged a fee for conducting matches with their state UI wage record agency, with costs varying by state.
WRIS member states to add Perkins IV to the list of included legislation. This will entail drafting an amendment to the current agreement governing state access to the clearinghouse.

States seeking to identify students who are progressing from secondary to an out-of-state postsecondary institution, making a lateral transfer to an out-of-state postsecondary institution, or advancing from a 2- to 4-year college or university located out-of-state often can do so only by matching records with the NSC.\textsuperscript{24} This service is available on a fee basis, offered at a standard rate of 54¢ per record for Clearinghouse non-members. At this price, the average state in 2006–07 would have had to invest less than $15,000 to follow up on all of its CTE concentrators, although states may be able to negotiate lower costs for bulk processing.\textsuperscript{25} One drawback with conducting such special studies is that requesting agencies are only provided one-time access to Clearinghouse data, meaning that match files must be complete and accurate at the time the request is made.\textsuperscript{26}

A second option would be for USDOE to contract directly with the NSC on behalf of state secondary and postsecondary agencies. Establishing such a nationwide contract with the Clearinghouse would entail negotiating an access rate for each state.

**Policy Option 5:**

**Provide Clear Guidance on the Uses of SSNs**

As state longitudinal data systems take form, it is imperative that CTE data collections be integrated into the operation of these systems. When this occurs, state CTE policymakers will be able to link their data across education sectors to de-

\textsuperscript{24} Postsecondary institutions that provide extra data in addition to core data record elements to the NSC may qualify for cost discounts or free access to NSC’s StudentTracker reporting system. As such, it is possible that participating colleges could individually conduct their own matches against NSC records and forward outcomes to the state for compilation. This introduces coverage and reliability concerns, because all postsecondary institutions would need to conduct matches, and all would need to identify comparable CTE populations and time periods for analysis. Because school districts do not contribute data to the NSC, they are not eligible for cost discounts.

\textsuperscript{25} Complete data for secondary and postsecondary placement are last available for the 2006–07 program year; at that time, states averaged 15,660 secondary and 8,860 postsecondary concentrators.

\textsuperscript{26} It should be noted that postsecondary institutions that contribute data to the NSC have unlimited access to the database, and may use it to track students for free or at a discounted rate, depending upon their membership status. Thus, it may be possible for states to require that their postsecondary Perkins grantees conduct their own Clearinghouse matches for Perkins reporting purposes.
termine if students are progressing in their educational program. To take advantage of this opportunity, placement data could be collected through electronic record linkages within and across the education and workforce sectors. Both options require that state agencies maintain sets of common data elements in order to link data resources.

For the former, a number of data elements can be used to link CTE data across high schools and postsecondary institutions. These elements include a concentrator’s name, statewide education identifier, SSN, birth date, gender, race/ethnicity, and a local indicator (a home address and/or a specific high school or institution attended). These elements can be used in various combinations to achieve a highly reliable match between education data sets. Further, even without a particular element, reasonable links can be achieved among data sets.

When certain key elements such as SSNs are unavailable, however, the reliability of making successful linkages declines, particularly when individuals move to out-of-state institutions. States have less flexibility in tracking individuals across the education and workforce sectors, because the most reliable resource for employment data is the state-level UI wage report. And to access these wage reports, states must have access to an individual’s SSN.

To date, some state education agencies have been unwilling, and in a few instances at the secondary level, legally prohibited from incorporating concentrators’ SSNs as a supplemental element within state education records. Without this number, it is impossible for states to use administrative record matching to track student transitions into employment (in-state or out-of-state), to achieve maximum coverage when conducting secondary matches with the NSC, or to identify individuals securing federal employment or enlisting in the military.

Federal efforts to guide states on the interplay between FERPA and Perkins accountability requirements have shifted with administration changes. Guidelines issued in 2001, at the end of the Clinton Administration, were countermanded by guidance issued in 2003, soon after the Bush Administration took office. Current guidelines are perceived by some state administrators as placing substantial administrative obstacles on the use of SSNs for Perkins reporting purposes. Of particular concern is the admonition that computer matching of personally identifiable information at an outside facility, such as a state UI agency or other location, be physically conducted by an employee of the state educational authority (or a party under its direct control). The requirement that postsecondary institutions releasing protected personally identifiable information to a state edu-
cation agency record this disclosure about a student’s education also has had a chilling effect.27

Although many states are hesitant to use SSNs for secondary Perkins IV-reporting purposes, some are willing to use SSN at the postsecondary level to track individuals’ participation in other federal programs. For example, all states are using SSNs to access the WRIS clearinghouse to track student employment outcomes for WIA-reporting purposes.28 Discussions with state staff suggest that states’ unwillingness to engage in administrative record matching at the secondary (and in some instances postsecondary) level for Perkins IV-reporting purposes is due to confusion on the acceptable uses of SSNs, concerns about legal challenges, a lack of understanding about how matches may be conducted, a shortage of skilled staff to carry out matches, or an unwillingness of state labor agencies to participate in the exchange.

Expanding states’ use of administrative record matching will require clarifying the acceptable uses of SSNs for educational purposes, in general, and Perkins, in particular. A first step would be for USDOE to complete its review of FERPA regulations, in light of the ARRA requirements, and issue updated regulations and guidance for linking education and non-education data. Once an overarching framework is established, USDOE attorneys could reevaluate FERPA requirements vis-à-vis Perkins and reissue guidance to legally protect state staff using SSNs for authorized accountability requirements. The USDOE also could consult with USDOL administrators, who will need to support this effort by requiring that their state counterparts cooperate with education administrators and provide written guidance as to how this process should occur.

In either case, the agencies must provide guidelines to states that outline legal requirements pertaining to the collection of SSNs and acceptable procedures for collecting them from students, for encrypting SSNs during transmission from local education agencies and states, and for encrypting SSNs stored in state longitudinal data systems. There are new technologies available to states and local

27 Although controls to protect individuals’ privacy are warranted, to date there have been no documented breaches of confidentiality associated with the matching of student data between state education and labor agencies.
28 This is primarily due to the differing legislative purposes of the two Acts. For example, WIA has eligibility criteria that entail verifying participants’ income and benefits, something that requires an SSN as a condition to participate. This use also applies primarily to programs serving adult learners. While WIA does provide funding for youth activities, these services are often provided outside the authority of a public school district and do not fall under the same administrative requirements as a public school district. As such, it may be that WIA youth providers can use SSNs in ways that school districts cannot.
education agencies that provide a secure means of handling and deidentifying such data. The guidelines also must address common elements of these systems.\textsuperscript{29}

\textsuperscript{29} Oracle, for example, in May 2007, began working on an SSN use audit for postsecondary institutions and a management architecture that protects SSNs in an offline lock vault where they can be accessed for certain prescribed, limited purposes. Other possible options also exist.
Bibliography


