STRONG FOUNDATIONS

The State of State Postsecondary Data Systems

July 2010

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Hans Peter L'Orange
State Higher Education Executive Officers

SHEEO

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CONTENTS

LIST OF TABLES

LIST OF FIGURES

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PREFACE

Strong Foundations: The State of State Postsecondary Data Systems, prepared by the association of State Higher Education Executive Officers (SHEEO), describes existing state postsecondary student-level data systems and provides examples of how they have been used.

State-level data systems serve two primary purposes: 1) they can monitor the progress of individual students as they move from one school to another in our educational system; and 2) they can help assess the effectiveness of policies and practices to promote student success, including transfer policies, admission policies, high school preparation, high school counseling, degree completion, and student financial assistance. These systems provide valuable feedback to both educators and policy makers seeking to improve educational outcomes.

The value of student unit record databases has recently been powerfully demonstrated by an important new book, *Crossing the Finish Line: Completing College at America's Public Universities,* by William G. Bowen, Matthew M. Chingos, and Michael S. McPherson. Their analysis yielded important insights about ways to increase college completion rates for academically talented, low income students, which would have been impossible without employing unit record databases in a number of states.

To provide all the benefits described above, it is necessary to collect and analyze data on individual students, while safeguarding the privacy of individual records. Effective privacy safeguards normally employ several dimensions. First, the databases are secure from non-authorized access, using essentially the same tools and procedures employed in confidential employment, bank, health care, and governmental databases. Second, the databases are used not to study *individuals,* but to analyze the aggregated experience of *groups* of students with similar characteristics. Such analyses frequently use a unique student identifier which has no other function, and other information that might identify individuals is stripped from the records. Third, and most importantly, these databases are not designed to be comprehensive. While they often include many data elements, they are much less comprehensive than the individual student records schools and colleges normally require and retain on individuals.

The more extensive personal data on students contained in the files of schools and colleges are employed by instructors and counselors who work directly with individual students. In order to serve individual students well, teachers and counselors often need access to sensitive personal information that has no relevance to policy development or institutional performance. While it seems clear that the Family Educational Rights to Privacy Act (FERPA) was written primarily to safeguard students from inappropriate disclosure of the sensitive personal records retained by schools and colleges, the safeguards described above hold state level postsecondary data systems to the same high standards of privacy protection.

These data systems can be extremely valuable in helping systems become more effective as policies are designed to help both students and states meet their goals. Longitudinal data are just as necessary for diagnoses on systems and policies as personal information is for diagnoses on individuals. This report is designed to inform states and those

working to develop or enhance these state systems and relevant educational policies. The results show that there is more than one way of building these systems, but we hope the findings encourage the sharing of effective practices and increase dialogue within and among states. These data systems are likely to play a vitally important role as state political and postsecondary leaders search for effective ways to increase educational attainment, and represent the strong foundations our country needs to move forward.

INTRODUCTION

Purpose of the Study

This report addresses the question: What are the characteristics and uses of state-level student unit record (SUR) systems at the postsecondary level across the country? It provides descriptions of 59 state-level postsecondary data systems with SUR data located in 44 of the 50 states and the District of Columbia (hereafter 45 states). The 59 agencies/entities that participated in this study account for at least 93 percent of the nation's full-time equivalents (FTEs) [SHEEO 2010].

The unit of analysis in the study is state coordinating and governing boards of higher education and other state agencies/entities with responsibility for collecting postsecondary data at the unit record level. The report seeks to identify the background, similarities, and differences in data structure and current uses of student-level data in responding to this report's guiding research question. Agencies/entities are the units of analysis due to the complexity of state oversight structures. Ten of the states included in this study have more than one state postsecondary data system, and, therefore, one should use caution when making state-level rather than agency/entity-level generalizations (*see Coverage of SURs in this study)*.

Organizational Context

The study describes state postsecondary data systems, a task made complex by the organizational reality that there is often no single, uniform entity or organization within a state to respond to survey questions associated with state postsecondary data systems. Rather, each state has a unique organization that implements and oversees the collection of its postsecondary data. State postsecondary data systems, then, reflect state oversight differences and are an amorphous group. There is often more than one postsecondary data system per state. They may be within a coordinating or governing board of higher education or another state agency or entity. They may contain data from only one institution of higher education, several institutions, institutions within a defined system, or all institutions in the state. Further, they may contain student data in the aggregate (not explored in this study) or at the unit record level. Ultimately, state constitutions and laws dictate coordinating and governing board missions, duties, and responsibilities, affecting the shape of each state's postsecondary data system. Understanding these differences is critical to the discussions currently taking place in the design, function, and goals of state P-20 data systems.

Methodology

This study was conducted by the State Higher Education Executive Officers (SHEEO), a membership organization of statewide coordinating and governing boards of higher education. It took place in two phases: phase 1 consisted of an online survey (also available in paper format) about the characteristics and goals of state postsecondary data systems and phase 2 consisted of an analysis of data elements listed in the data dictionaries for these systems.

Establishing the universe of postsecondary student unit record systems is difficult because of the organizational realities described above. To develop the initial list of data

systems to be considered for inclusion in this study, SHEEO used Web searches, e-mail, and phone interviews to identify eligible postsecondary data systems in each of the 50 states. From this initial list, SHEEO selected SHEEO members, as well as non-SHEEO members with high percentages of undergraduate enrollments (SHEEO 2010). This two-stage approach resulted in 60 agencies/entities in 45 states being invited to participate in the study using a combination membership list and purposive sample of state data systems.

Fifty-nine of the 60 invited agencies/entities in 45 states participated in phase 1 (survey), corresponding to a 98 percent response rate. Forty-seven of these 59 agencies/entities participated in phase 2 (data elements), corresponding to an 80 percent response rate. **Appendix A** contains a detailed description of study methodology, and associated documents are available in **Appendices B** through **D**.

As a supplement to phase 2, Synergy Enterprises, Inc. (SEI) and the Applied Engineering Management Corporation (AEM) conducted a comparative analysis of specific data element definitions from the 28 available data element dictionaries that respondents provided to SHEEO during the first phase of data collection. The 26 agencies or entities that provided the 28 data element dictionaries represent 44 percent of the study population. SEI-AEM compared the similarity of 39 data elements to their equivalents within the Integrated Postsecondary Education Data System (IPEDS) Data Dictionary (2007), or, when applicable, to definitions from other sources, including those used in the Lumina Foundation report *Following the Mobile Student: Can We Develop the Capacity for a Comprehensive Database to Access Student Progression* (Ewell, Schild, and Paulson 2003). The National Center for Higher Education Management Systems (NCHEMS) conducted the research for this Lumina report, which was its precursor to *Critical Connections: Linking States' Unit Record Systems to Track Student Progress* (Ewell and Boeke 2007). **Appendix E** contains a list of the data elements SEI-AEM used in its comparison as well as the rubric developed for analysis.

Cross-Cutting Issues Related to Student Transitions

While the main focus of this report is on the postsecondary information contained in these state data systems, attention is dedicated to students' movement and progression from school to work, which begins with the student's K–12 education, continues through college, and progresses as the student enters the state workforce. This study therefore examines the postsecondary sector's ability to engage and share information with its state education (K–12) and labor/workforce agencies to explore issues such as remediation and a state's workforce attainment gain when its students remain in the state to work.

Organization of the Report

This report is organized into six sections:

- General characteristics and general information;
- Analysis of data elements spanning from K–12 education through participation in the labor force;
- Ability of state postsecondary SUR systems to inform discussions about P-20 pipeline and student success issues;
- Key findings and observations;
- References; and
- Appendices.

The full report, responses from each participating agency/entity, and other summaries are available online: **http://www.sheeo.org/sspds**.

CURRENT STATUS OF STATE POSTSECONDARY DATA SYSTEMS

General Findings and General Characteristics

- Forty-five states (including the District of Columbia) have at least one student unit record (SUR) system (a total of 59 systems).
- All 45 states collect student demographic and postsecondary enrollment data.
- Nineteen states collect data from independent, nonprofit institutions.
- Thirty-nine states link, share, and/or exchange data with other state agencies/entities.
- Most states release aggregate data, and 27 states consider and approve requests for unit record data that are compliant with the Family Educational Rights and Privacy Act (FERPA).

This section includes general information about state postsecondary data systems in the following categories:

- Number and scope of SUR systems across the country and in this study;
- Types of postsecondary institutions submitting data to the state postsecondary agency/entity (public 2- and 4-year, independent (nonprofit), and for-profit institutions);
- Types of data included in SUR systems, including student-specific data;
- Ability of state postsecondary agencies/entities to expand postsecondary data sets by integrating with those of other agencies/entities within the state, including state education (K–12) and labor/workforce agencies; and
- Information on access to SUR data across the country.

Number and scope of SURs nationwide

Forty-five states (including the District of Columbia) have at least one state-level postsecondary SUR system.[1] Twenty-nine states have between two and five systems, representing the 2- and 4-year sectors and financial aid agencies/entities, among others – for a total of 92 SUR systems identified as of this study. Not surprisingly, the design and capacity of these systems vary considerably across the states.

Coverage of SURs in this study

SHEEO invited 60 of the 92 identified agencies/entities to participate in the study based on SHEEO membership, institutional coverage, and percentages of undergraduates enrolled.[2] These considerations led to the selection of more than one system

[1] As of this study, Delaware, Idaho, Michigan, Nebraska, and New Hampshire do not have state postsecondary SUR systems. The Iowa College Student Aid Commission and the Iowa Department of Education do have such systems containing postsecondary data, but study limitations did not permit including them.

[2] Although study limitations necessitated that SHEEO invite a subset of the 92 identified agencies to participate, the plan for future studies is to invite all identified SURs.

in **California**, **Florida**, **Minnesota**, **New York**, **North Carolina**, **Oregon**, **Pennsylvania**, **Vermont**, **Washington**, and **Wyoming**.[3] The study ultimately collected information from 59 SUR systems across the 45 states (**Appendix G**).

Uses and purposes of SURs

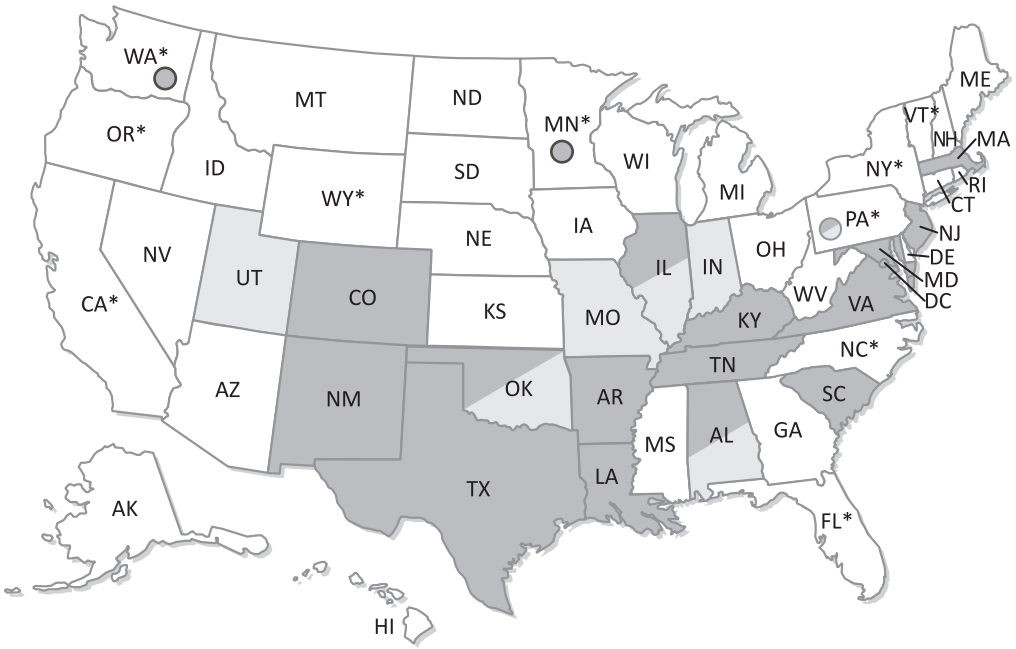
Among the **44 states** for which information was available about uses and purposes of SUR data, the most frequently cited purpose of the SUR system is for generating reports and statistics (58 SURs), followed by decision-/policymaking (57 SURs), and research (56 SURs).

Institutional coverage

In 2006, **17 states** collected data from independent, nonprofit institutions (Ewell & Boeke 2007).

While **39 out of 45 states** collect data from both public 2- and 4-year institutions (the remaining 6 states collect from either public 2- or 4-year institutions), the number collecting data from independent, nonprofit institutions is growing. Currently, 19 SURs in **19 states** contain data from such institutions, 3 additional states are planning to do so in the next 2 years (see **Figure 1**), and 4 of the 19 states plan to increase the number of independent institutions from which they collect data. Seven states collect data from for-profit institutions, 3 more states plan to do so within the next 2 years, and 1 state plans to expand its collection to additional for-profit institutions. Several states collect data from both types of these institutions because state residents are eligible for state financial aid regardless of the institution they attend.

Figure 1:[4] Nineteen SURs in 19 states collect data from independent institutions



	States with more than one agency/entity (*)
Currently collect from independents	MN (MOHE), PA (PDE), WA (HECB)
Plan to collect or expand collection from independents	PA (PDE)

[3] **Appendix F** contains the abbreviations used for the multiple agencies/entities in these 10 states.

[4] Map legends show the applicable agencies/entities for states with multiple SURs.

Types of postsecondary data collected

Fifty-eight SURs[5] in the **45 states** collect student demographic and postsecondary enrollment data, and 54 SURs in **43 states** collect completions data (depending on their responsibilities); however, the data stored vary considerably in terms of postsecondary academic history, specific course-level information, financial aid, and faculty/staff (see **Table 1**).

Table 1: Types of data in state postsecondary SUR systems

Type of data	Number of states	Number of SURs
Demographic	45	58
Postsecondary enrollment	45	58
Completions	43	54
Postsecondary academic history	38	46
Course-level information	37	44
Financial aid	37	45
Academic program inventory	37	43
Noncredit instructional activity	33	37
Faculty/staff	24	29
Finance	21	24
Facilities/capital projects	20	21
Adult Basic Education	17	17
Institutional characteristics	15	17

There are two reasons that the study team selected 13 types of data and associated data elements. Many of these data types were included in the *Critical Connections* report (Ewell & Boeke 2007) that this study aims to update and expand. Data on academic program inventory, faculty/staff, facilities/capital projects, and institutional characteristics were included because of their relationships to students' progression through the education pipeline and what students learn.

Types of nonpostsecondary data collected

In the 45 states, 37 SURs in **32 states** collect and store K–12 academic history data, and 15 SURs in **15 states** collect and store labor, workforce, and/or Unemployment Insurance (UI) wage record data. However, some or all of the K-12 data may be collected from the student during the admissions process. In many states, formal linkages, data sharing, and data exchanges with other state agencies further increase their capacity to better understand their student population via access to additional data elements (see *Linkages*). The term link is used broadly to refer to these various relationships between agencies/entities.

The Social Security Number (SSN) is the primary identification number used for matching student data with those of other state agencies/entities, but when matching to the state

[5] The types of data for the New York State Education Department Office of Higher Education were unavailable during data collection because this agency is currently building its SUR system. As such, the number of SURs in **Table 1** is 58, not 59.

education agency (K–12) data, the K–12 identification number is almost always used along with SSN.[6] To legally enable these relationships, the vast majority use memoranda of agreement and, fewer states, legislation, with a handful of states relying on executive mandates, administrative rules or regulations, and attorney general opinions or statements. Concerns about FERPA, resources, and a lack of common identifiers/crosswalks are the most commonly cited barriers to the linking of data.

Linkages

Forty-six SURs in **39 of the 45 states** have a formal relationship within which data are linked, shared, and/or exchanged with another state agency or entity (see **Table 2**).[7]

In 2006, **19 states** occasionally linked postsecondary SUR data with other SUR systems (Ewell & Boeke 2007). This SHEEO study broadened the potential lists of external links.

Linkages with other state data systems are expanding as sharing becomes more feasible and valuable (see text box). In 8 states, linking arrangements exist with: several other state postsecondary agencies/entities[8] (**California**, **Oregon**, **Wisconsin**, and **Washington**), an institution of higher education (**Illinois**), a city K–12 agency (**New York**), a state bank (**North Dakota**), a state tax commission (**Oklahoma**), and an entity within a governor's office (**Washington**). In **Florida**, the Florida Department of Education is the only agency with linking arrangements to foster care and juvenile detention agencies. **Alaska**[9] is the only state with a linking arrangement to a health agency (via the University of Alaska Statewide System). **Florida** and **Virginia** are the only states with links to state correctional agencies.

Table 2: Extent of linking, sharing, and/or exchanging data with other state agencies

State Agencies Link, share, and/or exchange with:	Number of states	Number of SURs
One or more agencies/entities within state	39	46
State labor/workforce agency	26	27
State education agency (K–12)	23	27
State financial aid agency	14	16
Other agency/entity	8	10
Motor vehicle division/department	4	4
Human services agency	3	4
Pre-K/early childhood agency	3	3
Corrections	2	2
Foster care agency	1	1
Health agency	1	1
Juvenile detention	1	1

[6] In addition, 38 SURs in **33 states** use the SSN as an internal primary key, but in 6 states, 8 SURs plan to discontinue use of the SSN as an internal primary key, even though those agencies/entities will continue collecting SSNs.

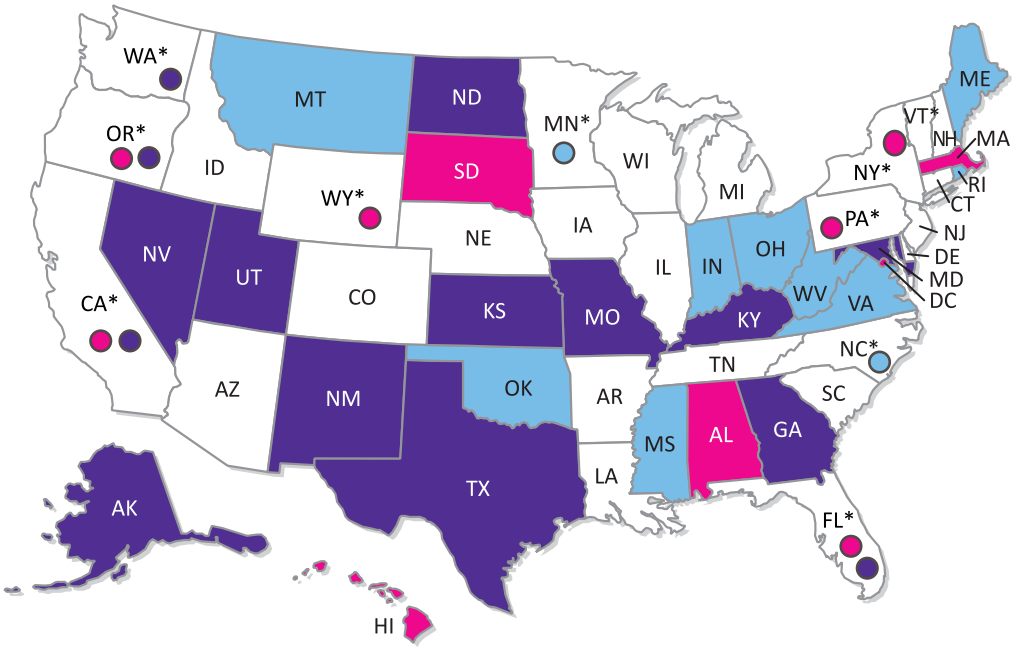
[7] No states currently link, share, and/or exchange data with child protective services.

[8] As the questionnaire did not ask explicitly about linkages with other state postsecondary systems, the number of states responding that they had such linkages may be higher than reported. However, see the text below **Table 5** on financial aid agencies.

[9] In December 2009, the state education agency (K–12) in Alaska submitted an application for a U.S. Department of Education *State Longitudinal Data Systems* grant that will include the University of Alaska Statewide System and the Alaska Commission on Postsecondary Education (a state postsecondary entity currently without an SUR). The goal is to link these systems with labor data, and to use the unit record database of the Alaska Permanent Fund to match and validate labor data. The Alaska Permanent Fund Dividend was established in the late 1970s as a way to redistribute a percentage of Alaska's oil and mineral profits to each eligible Alaskan, including college students within and outside the state who retain their Alaskan residency (State of Alaska 2010).

Among all types of linkages, those between postsecondary and K–12 agencies, on the one hand, and postsecondary and labor/workforce agencies, on the other, have been in the spotlight of federal legislative and grant efforts. Looking at these linkages more closely, this study found that 11 SURs in **11 states** have linking arrangements with the state education agency (K–12), 11 SURs in **11 states** with state labor/workforce agencies, and 16 SURs in **15 states** with both. **Figure 2** shows all 34 states with these linking arrangements.

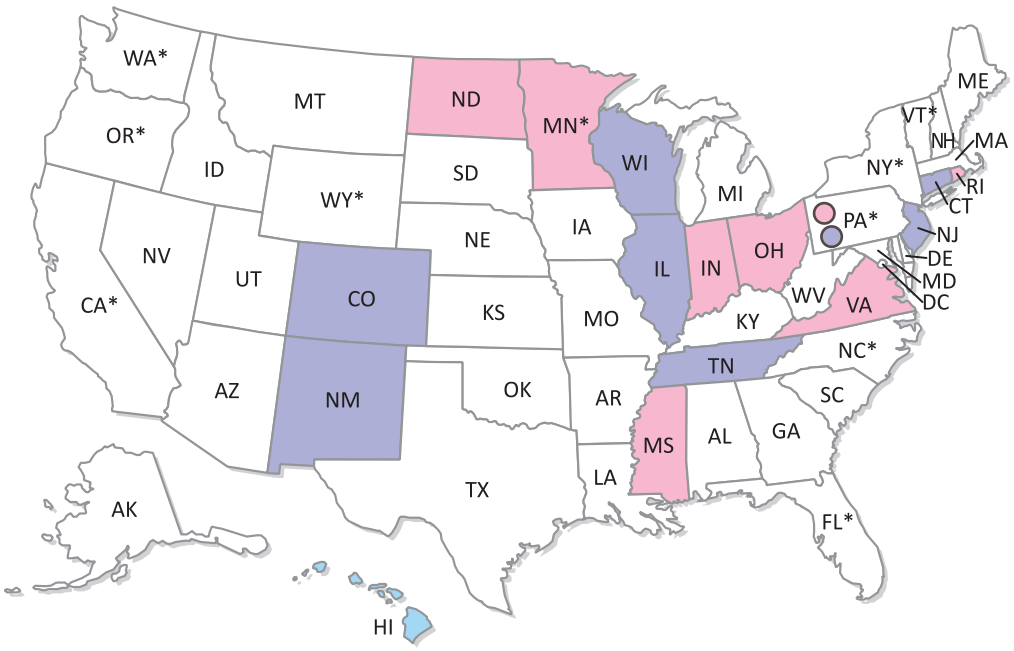
Figure 2: Thirty-four states with existing linking arrangements to K–12, labor, or both



	States with more than one agency/entity (*)
K-12 only	CA (UCS), FL (BOG), NY (CUNY), OR (OUS), PA (PASSHE), WY (UWYO)
Labor only	MN (MNSCU), NC (NCCCS)
Both	CA (CCC), FL (DOE), OR (ODCC), WA (OFM, SBCTC)

SUR systems in **16 states** are currently establishing or expanding their linking arrangements to K–12, labor, or both types of agencies (see **Figure 3**). Nine SURs in **8 states** are establishing or expanding links to K–12 data, 1 SUR in **1 state** is expanding its ability to link to labor data, and 8 SURs in **8 states** are establishing or expanding their ability to link with both types of agencies.

Figure 3: Sixteen states working to establish or expand linking arrangements to K–12, labor, or both



	States with more than one agency/entity (*)
K-12 only	MN (MOHE, MNSCU), PA (PASSHE)
Labor only	No states with multiple SURs
Both	PA (PDE)

Accessibility and protection of SUR data

A separate study on the protection and accessibility of postsecondary SUR data[10] revealed that states tend to closely protect access to their SUR data. By and large, states provide aggregated data to governors, legislators, state coordinating boards, K–12 district or state representatives, higher education institution representatives, other state agencies, the media, higher education faculty and researchers, and the general public. Of the 31 states that participated in this related study, 7 agencies/entities in **7 states** do not release unit record data; 32 in **27 states** consider and approve requests for unit record data from requestors (including representatives from institutions) on an individual basis; and among these 27 states, 8 agencies/entities in **8 states** provide only de-identified data. **Appendix H** contains the required documentation for outside researchers requesting unit record data. All data provided to external requestors are FERPA compliant.

[10] SHEEO subcontracted with University of Michigan researchers Molly Ott and Stephen DesJardins to conduct this study. The full report is available on the SHEEO website, www.sheeo.org.

It is standard for states to generate a formal memorandum of understanding or data-sharing agreement with each requestor, regardless of whether a formal data request process exists. While not every state could provide its formal process, the approaches used in **Florida** (Florida Department of Education and the Board of Governors of the State University System of Florida), **Maryland**, and **Kansas** represent diverse ones. The Florida Department of Education's process is the most extensive (see **Appendix I**).

The five main challenges of providing access while protecting the privacy of SUR records are as follows:

- Managing relationships with external requestors of data;
- Devising interfacing and data-sharing practices;
- Ensuring FERPA compliance;
- Assuring adequate resources to meet demand and assure security; and
- Implementing or upgrading public reporting capabilities.

Data Element Analysis

- Two states collect all 36 postsecondary data elements examined in this study.
- Of the 23 states that collect K–12 data elements, 20 have access to them via a relationship with the state education agency (K–12) and 3 provide postsecondary data to this agency but do not have access to these elements via this agency.
- Of the 26 states that have a relationship with the state labor/workforce agency, 23 have access to this agency's data elements and 3 provide postsecondary data to this agency, but do not have access to these elements via this agency.
- There is wide similarity in data element definitions and code structures for 15 data elements.

As explained in **Appendix A**, responses from the first and second phases of data collection were used in this analysis. While SHEEO compiled the original list of elements from the 2003 and 2007 Lumina/NCHEMS studies and from its own analysis, SHEEO's *State Data System Expert Advisory Panels* assisted in finalizing the data elements selected for this study.[11] These elements focus primarily on student progression through the education pipeline and student success.

This section begins with a detailed analysis of 64 data elements in state postsecondary SUR systems that are grouped in three categories:

- Postsecondary data: 36 elements, including placement scores and credits earned;
- Historical high school data: 13 elements, including high school and course grades; and
- Labor data: 15 elements, including wages earned and hours worked.

Overall, no state collects all 64 data elements;[12] however, **Florida** (Florida Department of Education) collects 51 elements; **Kentucky** and **Minnesota** (Minnesota State Colleges and Universities) collect 48 elements each; **Indiana** and **Washington** (State Board for Community and Technical Colleges) collect 45 elements each; **Georgia, Montana, New York** (City University of New York), and **Wyoming** (University of Wyoming) collect 44 elements each; and **Hawai'i** and **North Carolina** (North Carolina Community College System) collect 43 elements each. **Appendix J** contains a listing of the data elements by category and subcategory contained in each state SUR system.

This section concludes with a comparative analysis of data element definitions and code structures. As mentioned in the *Methodology*, SEI and AEM (SEI-AEM) conducted this research based on the information from the 28 data element dictionaries that respondents provided to SHEEO during the first phase of data collection. Of these 28 dictionaries, SEI-AEM used 26 in their analysis, which included **Arkansas's** and **Kentucky's** separate dictionaries for independent institutions. **Alabama, Illinois,**

[11] *Recommendations for State Postsecondary Data Systems: A Report from State Data Experts* is a publication available from SHEEO based on input from the Expert Advisory Panels: http://www.sheeo.org/network/State%20Data%20System%20Advisory%20Panel%20Report%20-%2011-23-09.pdf.

[12] Complete data element information was not available for every agency/entity and, as a result, the numbers of those who did not participate in the more detailed data element phase of this study are artificially low.

Maryland, Minnesota (Minnesota Office of Higher Education), **New Mexico, Pennsylvania** (Pennsylvania Department of Education Office of Postsecondary and Higher Education), **South Carolina**, and **Texas** collect data from independent institutions but do not have separate dictionaries. As mentioned earlier, **Appendix E** contains SEI-AEM's methodology.

Postsecondary student data

There is great variability across and within the 45 states with regard to the postsecondary data stored in these state data systems. This section takes a closer look at the extent to which 36 data elements exist within six categories (see **Table 3**).

Overall, **Minnesota** (Minnesota State Colleges and Universities) and **Pennsylvania** (Pennsylvania Department of Education Office of Postsecondary and Higher Education) each collect all 36 postsecondary data elements in their respective SURs, followed by **Georgia, Hawai'i, Pennsylvania** (Pennsylvania State System of Higher Education), and **Wyoming** (University of Wyoming) with 35 elements each; **Montana, New York** (City University of New York), and **Vermont** (Vermont State Colleges) with 34 elements each; **California** (California Community Colleges and University of California System), **Florida** (Board of Governors of the State University System of Florida), **Kentucky**, and **Oregon** (Oregon University System) with 33 elements each; and **Colorado, Massachusetts**, and **Oklahoma** with 32 elements each.

Table 3: Thirty-six postsecondary data elements

Category	Data Elements
Demographic	Student name, date of birth, gender, race/ethnicity, SSN, K–12 ID, institution (IHE) ID, student ID, citizenship, state residency status
Postsecondary academic history	Admissions scores, placement scores, prior college(s) attended, transfer credit(s)
Enrollment status	Degree-seeking status, full-/part-time status, first term of academic history, program/major
Financial aid	Dependency status, family income, federal, state, institutional, other, merit-based, and need-based financial aid, Free Application for Federal Student Assistance (FAFSA) fields
Academic activity	Course title, course mode of instruction, course grade, term student credit hours (SCH) attempted, term SCH earned
Academic attainment	Degree awarded, degree date, cumulative SCH earned, cumulative GPA

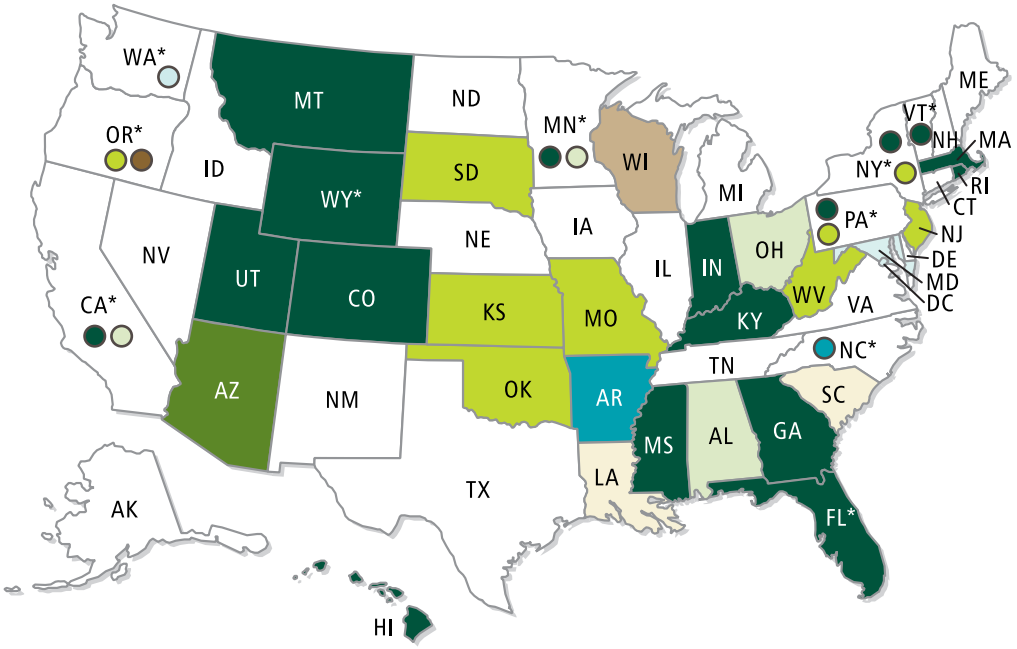
Fifteen SURs in **12 states** contain all 10 demographic data elements. **Table 4** lists the 36 states that collect demographic elements.

Table 4: Forty-six SURs in 36 states with demographic data elements

States and agencies/ entities	Student name	Date of birth	Gender	Race/ethnicity	SSN	K-12 ID	IHE ID	Student ID	Citizenship	State residency status	Total number of elements
AL, CA (UCS), FL (DOE), GA, LA, MN (MOHE, MNSCU), MT, NV, OR (OUS), PA (PDE, PASSHE), UT, WY (UWYO, WCCC)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10
CO, IN		♦	♦	♦	♦	♦	♦	♦	♦	♦	9
CA (CCC), HI, MA, NY (SUNY), NC (NCCCS), RI, SD, VT (VSC), WA (SBCTC)	♦	♦	♦	♦	♦		♦	♦	♦	♦	9
MO	♦	♦	♦	♦	♦	♦	♦		♦	♦	9
KS, KY	♦	♦	♦	♦	♦	♦	♦	♦		♦	9
MS, OH, WI		♦	♦	♦	♦		♦	♦	♦	♦	8
NJ		♦	♦	♦	♦	♦	♦		♦	♦	8
AZ, FL (BOG)	♦	♦	♦	♦	♦			♦	♦	♦	8
CA (CSU), NY (CUNY), OK, WV	♦	♦	♦	♦	♦		♦		♦	♦	8
OR (ODCC), WA (OFM)	♦	♦	♦	♦	♦		♦	♦		♦	8
MD, SC		♦	♦	♦	♦		♦		♦	♦	7
AR, WA (HECB)	♦	♦	♦	♦	♦		♦			♦	7
DC	♦	♦			♦				♦	♦	5

Twenty SURs in **17 states** contain all four elements associated with postsecondary academic history data in the form of admissions and placement scores, prior college(s) attended, and transfer credit(s). **Figure 4** shows the 35 states that collect these elements.

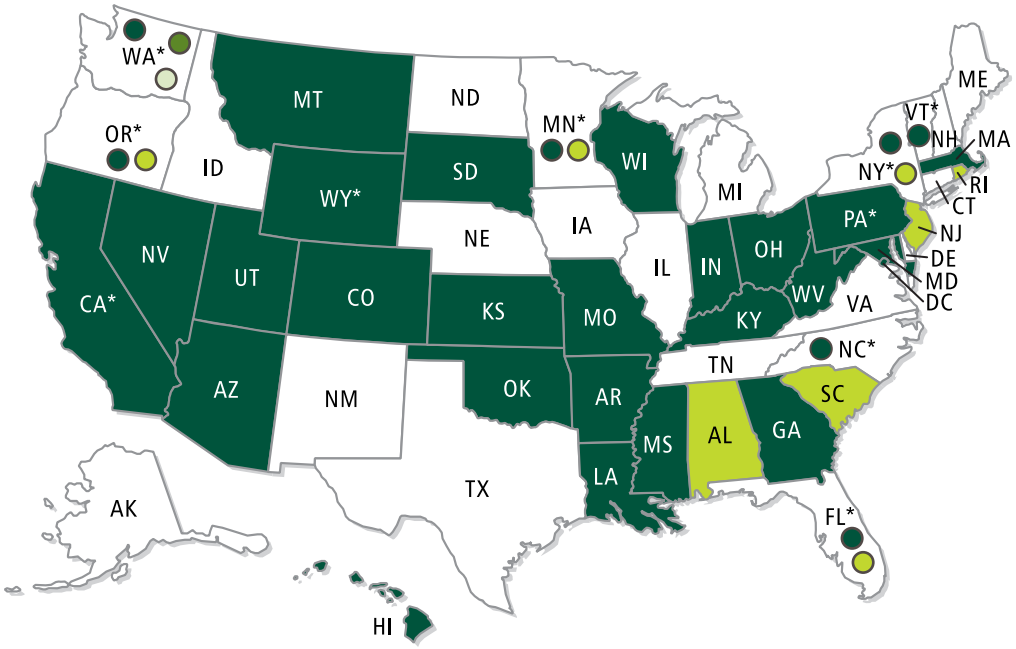
Figure 4: Forty-four SURs in 35 states contain postsecondary academic history elements



	States with more than one agency/entity (*)
Admissions scores, placement scores, prior colleges attended, transfer credits	CA (CSU, UCS), FL (BOG, DOE), MN (MNSCU), NY (CUNY), PA (PDE), VT (VSC), WY (UWYO, WCCC)
Placement scores, prior colleges attended, transfer credits	No states with multiple SURs
Admissions scores, prior colleges attended, transfer credits	NY (SUNY), OR (OUS), PA (PASSHE)
Prior colleges attended, transfer credits	CA (CCC), MN (MOHE)
Placement scores, prior colleges attended	OR (ODCC)
Admissions scores, prior colleges attended	No states with multiple SURs
Admissions scores	No states with multiple SURs
Placement scores	NC (NCCCS)
Prior colleges attended	WA (OFM, SBCTC)

Thirty-six SURs in **32 states** contain all four enrollment status data elements. **Figure 5** shows the 36 states that collect these elements.

Figure 5: Forty-six SURs in 36 states contain enrollment status elements



	States with more than one agency/entity (*)
Degree-seeking status, FT/PT status, 1st term of academic history, program major	CA (CCC, CSU, UCS), FL (BOG), MN (MNSCU), NY (CUNY), NC (NCCCS), OR (OUS), PA (PDE, PASSHE), VT (VSC), WA (SBCTC), WY (UWYO, WCCC)
FT/PT status, 1st term of academic history, program major	WA (OFM)
Degree-seeking status, FT/PT status, program major	FL (DOE), MN (MOHE), NY (SUNY), OR (ODCC)
Degree-seeking status, FT/PT status	WA (HECB)

Thirteen SURs in **11 states** contain all nine financial aid data elements, including some or all elements from the FAFSA form such as data on family income, expected family contribution, and Pell Grant information. **Table 5** lists the 31 states that collect these elements.

In 2006, **25 of 47 SURs** contained detailed financial aid data (Ewell & Boeke 2007). This SHEEO study broadened the list of financial aid detail.

Table 5: Thirty-eight SURs in 31 states contain financial aid elements

States and agencies/ entities	Dependency status	Family income	Federal financial aid	State financial aid	Institutional financial aid	Other financial aid	Merit-based financial aid	Need-based financial aid	FAFSA fields	Total number of elements
CA (CCC, UCS), CO, HI, KY, MD, MN (MNSCU), NY (CUNY), OH, PA (PDE, PASSHE), WA (HECB), WI	♦	♦	♦	♦	♦	♦	♦	♦	♦	9
GA, WY (UWYO)		♦	♦	♦	♦	♦	♦	♦	♦	8
CA (CSU), NC (NCCCS), VT (VSC)	♦		♦	♦	♦	♦	♦	♦	♦	8
FL (BOG, DOE), IN, OK, WA (SBCTC)	♦	♦	♦	♦	♦	♦	♦	♦		8
MA		♦	♦	♦	♦	♦	♦	♦		7
MS, MT, OR (ODCC)	♦		♦	♦	♦	♦	♦	♦		7
WV	♦		♦	♦	♦		♦	♦	♦	7
OR (OUS)	♦	♦	♦	♦	♦	♦			♦	7
LA	♦		♦	♦	♦	♦			♦	6
DC	♦	♦	♦	♦	♦				♦	6
AR			♦	♦	♦	♦			♦	5
MO	♦	♦		♦					♦	4
SC				♦			♦	♦		3
AZ			♦			♦				2
RI			♦							1
WY (WCCC)				♦						1
NV						♦				1

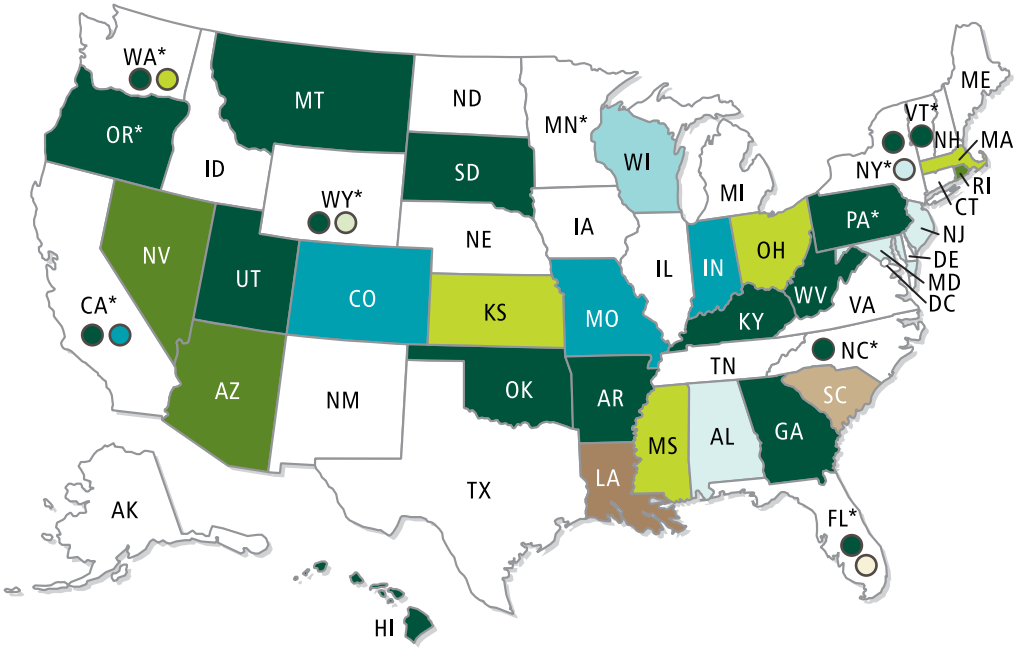
The 16 designated state financial aid agencies in **Arkansas, Colorado, District of Columbia, Florida** (Florida Department of Education), **Hawai'i, Maryland, Massachusetts, Mississippi, Missouri, Montana, Ohio, Oklahoma, South Carolina, Washington** (Higher Education Coordinating Board), **West Virginia**, and **Wyoming** (Wyoming Community College Commission) are included in **Table 5**, but it is evident that this designation is not a prerequisite to having a high level of detail on financial aid. Twenty-four SURs in **24 states** serve as the designated financial aid agency. There are 16 agencies/entities in **14 states** with linking arrangements with the designated financial aid agency; 6 of these agencies/entities in **Florida, Kansas, Minnesota, Mississippi, Oklahoma**, and **Washington** were included in this study. **Alaska, Georgia, Kentucky, New Jersey, Oregon, Pennsylvania, Vermont**, and **Wisconsin** are the **8 states** with separate financial aid agencies that were not included due to study limitations.[13]

[13] States with separate financial aid agencies where the responding agency/entity did not specify a linking arrangement are not included in this tally.

It is important to note that the existence of FAFSA data in state postsecondary data systems is driven by agency mission and responsibility in administering student aid programs; 24 SURs in **21 states** collect some or all of the data from the FAFSA form.[14] Twenty-four SURs in **20 states** collect family income data. In some cases, a FAFSA field is the origin for this data element, and it is either captured directly at the state postsecondary agency/entity or indirectly at the institutional level before being reported to the state.

Twenty-one SURs in **19 states** contain information on all five student academic activity elements. **Figure 6** shows the 35 states that collect these elements.

Figure 6: Forty-three SURs in 35 states contain academic activity elements

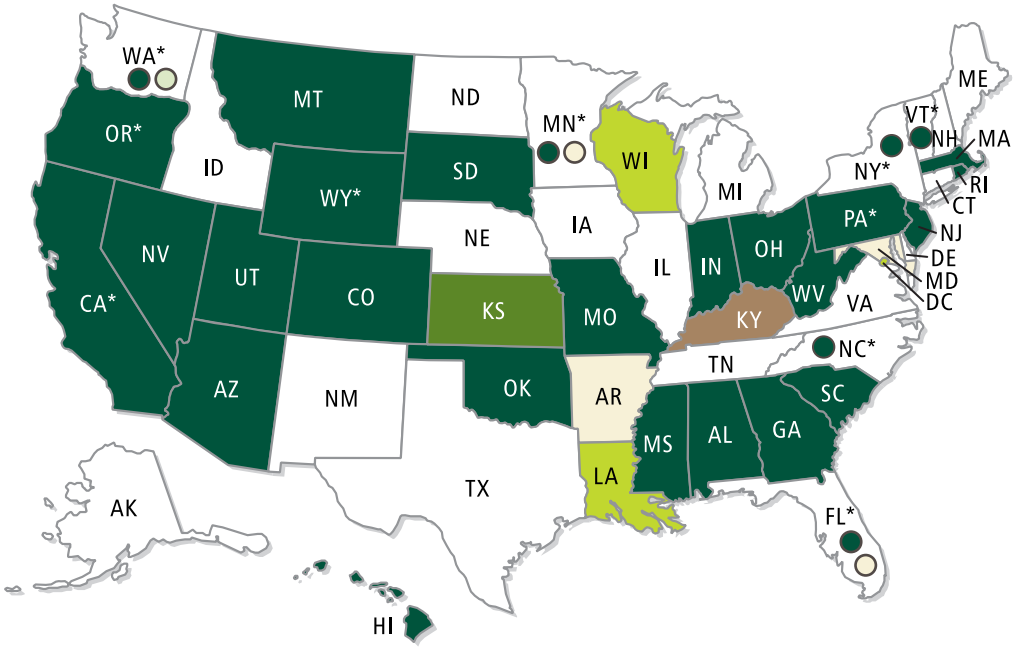


	States with more than one agency/entity (*)
Course title, mode of instruction, course grade, term SCH attempted, term SCH earned	CA (CCC), FL (BOG), MN (MNSCU), NY (CUNY), NC (NCCCS), OR (ODCC, OUS), PA (PDE, PASSHE), VT (VSC), WA (SBCTC), WY (UWYO)
Course title, course grade, term SCH attempted, term SCH earned	No states with multiple SURs
Course title, mode of instruction, term SCH attempted, term SCH earned	WA (OFM)
Mode of instruction, term SCH attempted, term SCH earned	WY (WCCC)
Course title, course grade, term SCH earned	No states with multiple SURs
Course title, mode of instruction, term SCH attempted	No states with multiple SURs
Course title, mode of instruction, course grade	FL (DOE)
Term SCH attempted, term SCH earned	CA (CSU, UCS)
Mode of instruction, term SCH attempted	No states with multiple SURs
Term SCH attempted	NY (SUNY)

[14] In **Kentucky**, the Council on Postsecondary Education has access to all the FAFSA fields.

Finally, 35 SURs in 29 states contain all four data elements associated with academic attainment. **Figure 7** shows the 36 states that collect these elements.

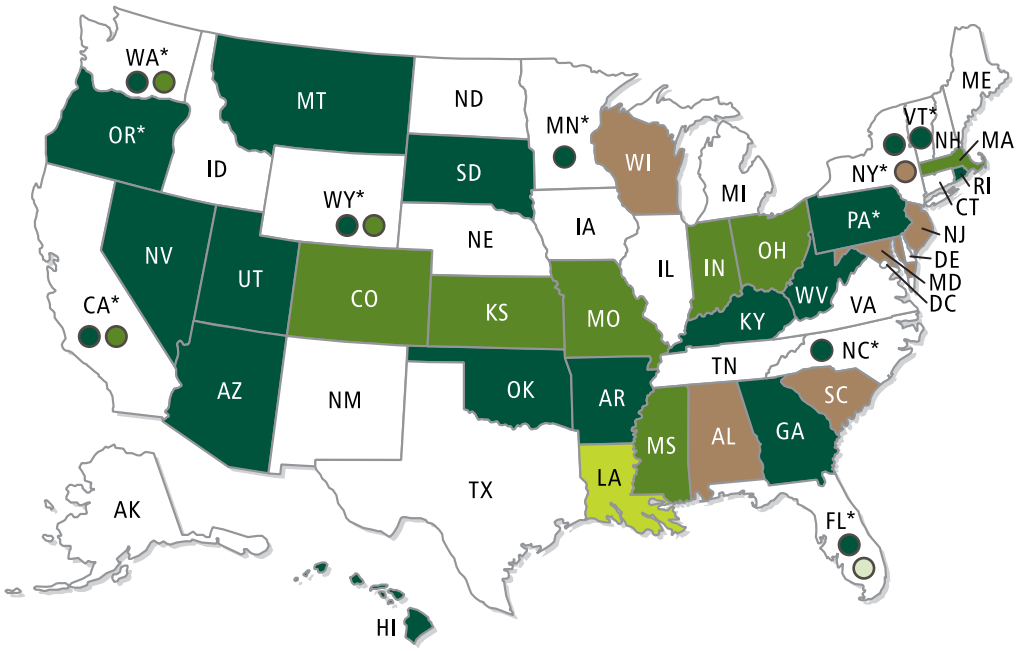
Figure 7: Forty-five SURs in 36 states contain academic attainment elements



	States with more than one agency/entity (*)
Degree awarded, degree date, cumulative SCH earned, cumulative GPA	CA (CCC, CSU, UCS), FL (BOG), MN (MNSCU), NY (CUNY, SUNY), NC (NCCCS), OR (ODCC, OUS), PA (PDE, PASSHE), VT (VSC), WA (SBCTC), WY (UWYO, WCCC)
Degree awarded, cumulative SCH earned, cumulative GPA	No states with multiple SURs
Degree awarded, degree date, cumulative GPA	No states with multiple SURs
Degree awarded, degree date, cumulative SCH earned	WA (OFM)
Degree awarded, cumulative SCH earned	No states with multiple SURs
Degree awarded, degree date	FL (DOE), MN (MOHE)

While **Table 1** shows that there are 44 SURs in 37 states that contain course-level data, this section highlights the data elements associated with course completion. Twenty-four SURs in **22 states** collect course grades, credits attempted, and credits earned, and 11 SURs in **10 states** collect credits attempted and earned (see **Figure 8**). These states are better positioned to track student progress because these data elements can serve as both early warning and student success indicators.

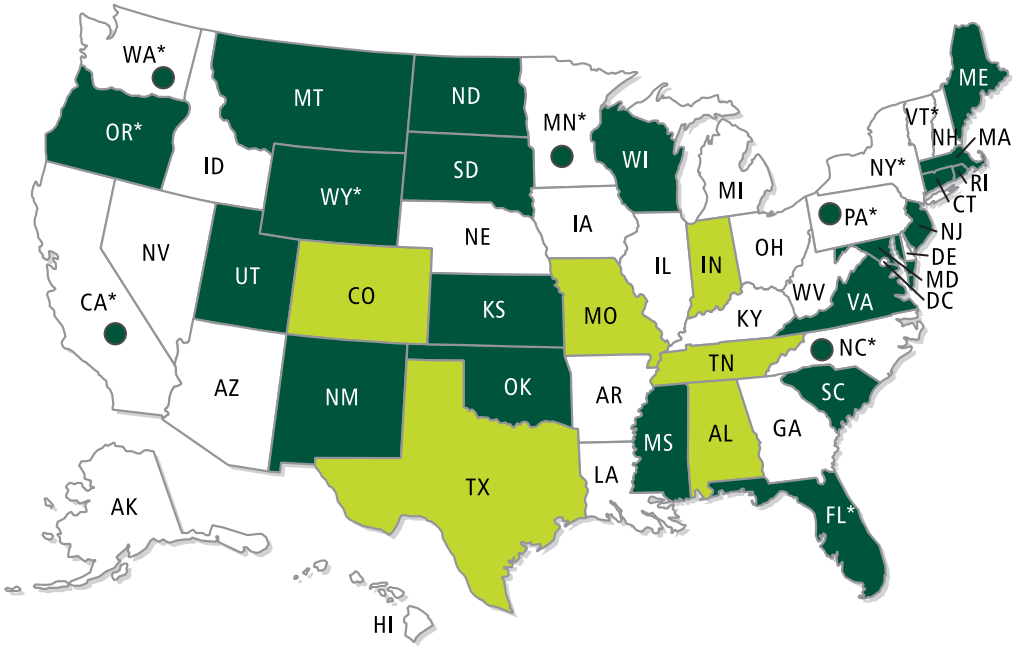
Figure 8: Forty-three SURs in 35 states with the ability to track student progress at the course level



	States with more than one agency/entity (*)
Course grade, term SCH attempted, term SCH earned	CA (CCC), FL (BOG), MN (MNSCU), NY (CUNY), NC (NCCCS), OR (ODCC, OUS), PA (PDE, PASSHE), VT (VSC), WA (SBCTC), WY (UWYO)
Term SCH attempted, term SCH earned	CA (CSU, UCS), WA (OFM), WY (WCCC)
Course grade, term SCH earned	No states with multiple SURs
Course grade	FL (DOE)
Term SCH attempted	NY (SUNY)

Additionally, 29 SURs in **25 states** that collect course-level data can identify which students are enrolling in specific remedial and/or developmental courses (see **Figure 9**). However, 6 states that do not collect course-level data do have a "flag" that indicates whether a student has taken remedial and/or developmental courses. These states are **Alabama, Colorado, Indiana, Missouri, Tennessee**, and **Texas**.

Figure 9: Twenty-nine SURs in 25 states with course-level data on remedial courses



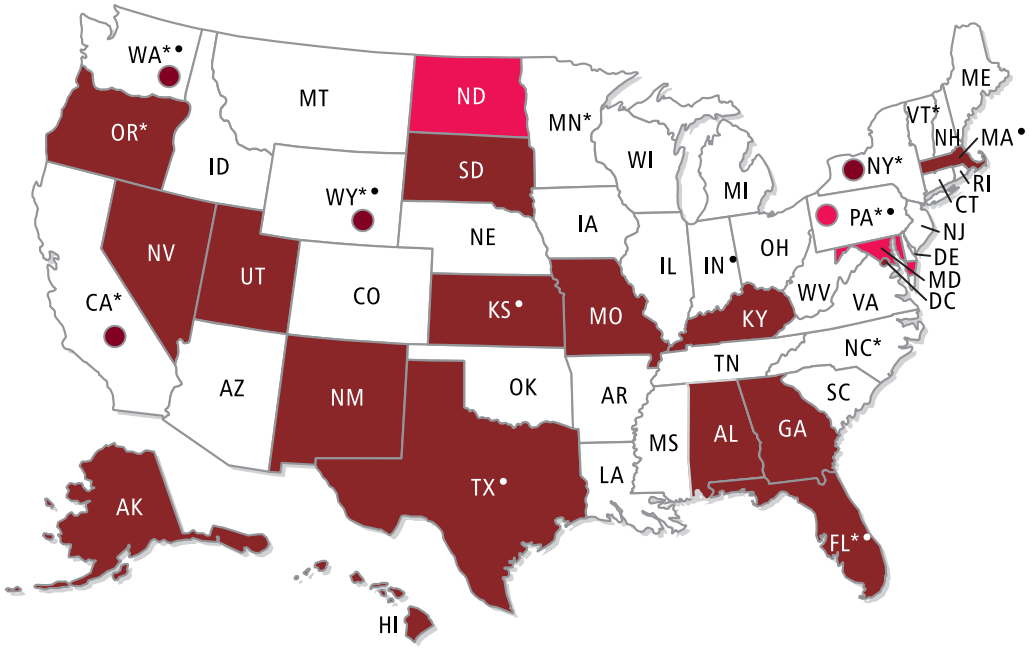
	States with more than one agency/entity (*)
Course level info on remedial/ developmental courses	CA (CCC), FL (BOG, DOE), MN (MNSCU), NC (NCCCS), OR (ODCC, OUS), PA (PASSHE), WA (OFM, SBCTC), WY (UWYO, WCCC)
Flag remedial/developmental courses but do not collect course level info	No states with multiple SURs

In 2006, **11 states** linked college data with high school records (Ewell & Boeke 2007).

Historical high school data

Many of the 32 states that collect K–12 academic history obtain this information from the student during the admissions process. There are, however, 24 SURs in **20 states** that are better positioned to understand their entering student population because they have direct access to additional K–12 data elements through links to their state education agency (K–12) (see **Figure 10**). **Maryland, Pennsylvania** (Pennsylvania State System of Higher Education), and **North Dakota** do not have access to additional K–12 elements from the K-12 agency but do provide postsecondary data to this agency.

Figure 10: Twenty-four SURs in 20 states with access to additional K–12 data elements from K–12 agency



	States with more than one agency/entity (*)
Access to K-12 agency data elements	CA (CCC, UCS), FL (BOG, DOE), NY (CUNY), OR (ODCC, OUS), WA (OFM, SBCTC), WY (UWYO)
Link to K-12, but no access to K-12 agency elements	PA (PASSHE)
● State with P-20 data warehouse	

However, among the 20 states with direct K–12 data linkages, access to the data elements is not equal. Respondents indicated varying degrees of access to the 13 data elements listed in **Table 6**.

Table 6: Thirteen K-12 data elements

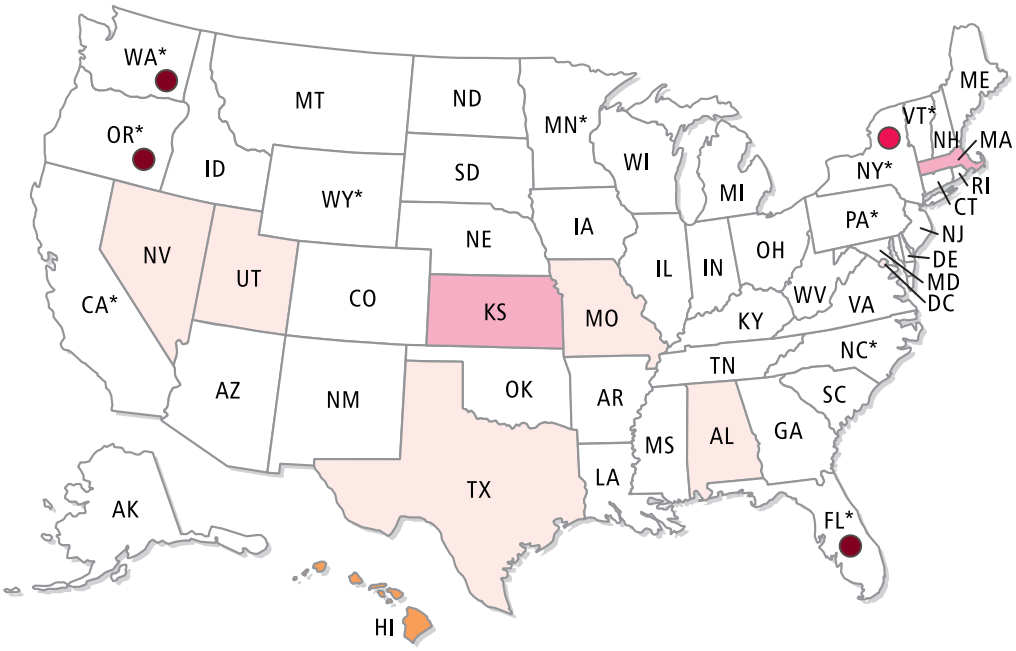
Category	Data elements
Demographic*	Free and reduced-price lunch eligibility, disability status, language spoken at home
High school background information	High school attended, district/ school code, student resident county-district code
High school academic activity	Date student enrolled, course type (regular, honors, AP, etc.), course title, course grade
High school completion information	High school GPA, high school graduation date, K–12 assessment scores

*The K–12 identification number is not included within the demographic elements because there are state postsecondary agencies/entities without links to the K-12 agency that collect this number. This element was treated in the previous section on postsecondary data.

Overall, **Washington** (Office of Financial Management) is the only state that collects all 13 K–12 data elements. **Florida** (Florida Department of Education) collects 12 elements, **New York** (City University of New York) collects 10 elements, **Kansas, Massachusetts**, and **Wyoming** (University of Wyoming) each collect 9 elements, and **Hawai'i** and **Oregon** (Oregon University System) each collect 8 elements.

All three demographic data elements are collected in **Florida** (Florida Department of Education), **Oregon** (Oregon University System), and **Washington** (Office of Financial Management). **Figure 11** shows all 13 states that have access to these elements via a linking arrangement with the state education agency (K–12).

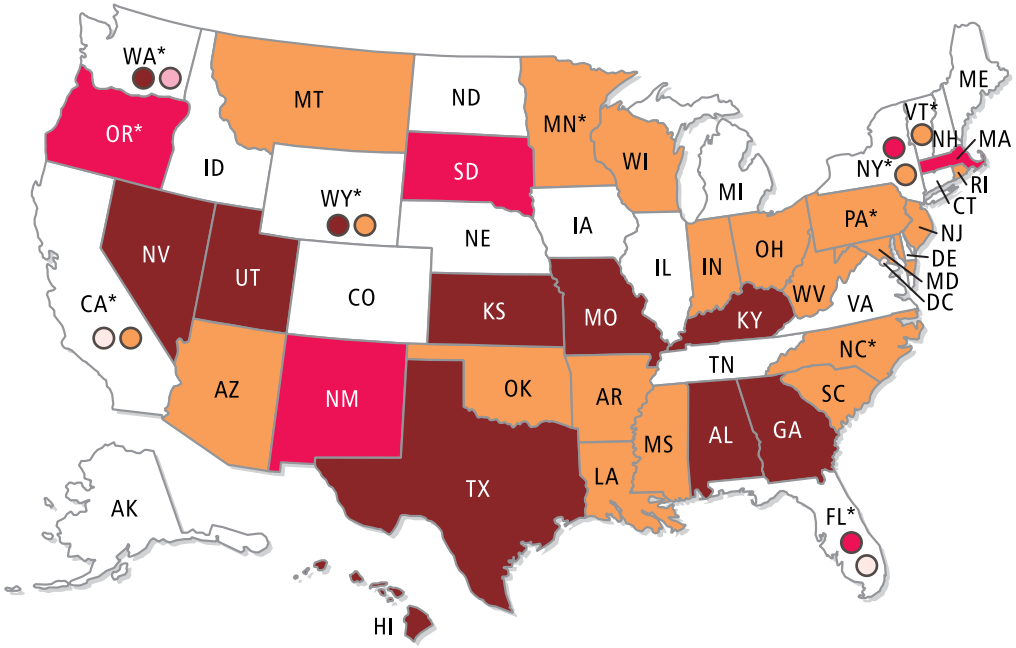
Figure 11: Thirteen SURs in 13 states have access to K-12 demographic data elements



	States with more than one agency/entity (*)
Free/reduced-price lunch eligibility, language spoken at home, disability status	FL (DOE), OR (OUS), WA (OFM)
Free/reduced-price lunch eligibility, language spoken at home	NY (CUNY)
Free/reduced-price lunch eligibility, disability status	No states with multiple SURs
Free/reduced-price lunch eligibility	No states with multiple SURs
Language spoken at home	No states with multiple SURs

High school attended, district/school code, and student resident county-district code are all collected in 11 SURs in **11 states**: **Alabama, Georgia, Hawai'i, Kansas, Kentucky, Missouri, Nevada, Texas, Utah, Washington** (Office of Financial Management), and **Wyoming** (University of Wyoming). **Figure 12** shows the 19 states that have access to these high school background data elements as well as the 21 states without access that collect high school attended.

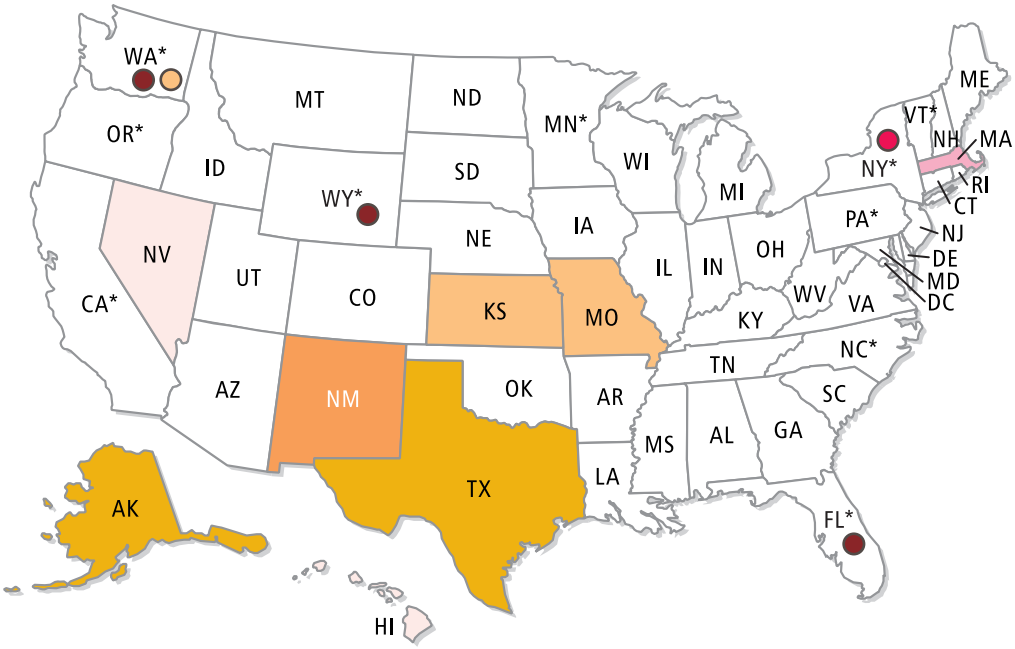
Figure 12: Twenty-three SURs in 19 states have access to high school background data elements



	States with more than one agency/entity (*)
High school attended, district/school code, student resident county code	WA (OFM), WY (UWYO)
High school attended, district/school code	FL (DOE), NY (CUNY), OR (ODCC, OUS)
High school attended, student resident county code	WA (SBCTC)
High school attended	CA (CCC, UCS), FL (BOG)
High school attended **without access to K-12 agency elements**	CA (CSU), MN (MOHE, MNSCU), NY (SUNY), NC (NCCCS, UNC), PA (PDE, PASSHE), VT (VSC), WY (WCCC)

Florida (Florida Department of Education), **Washington** (Office of Financial Management), and **Wyoming** (University of Wyoming) are the 3 states that collect all four high school academic activity data elements. **Figure 13** shows the 12 states with access to these elements.

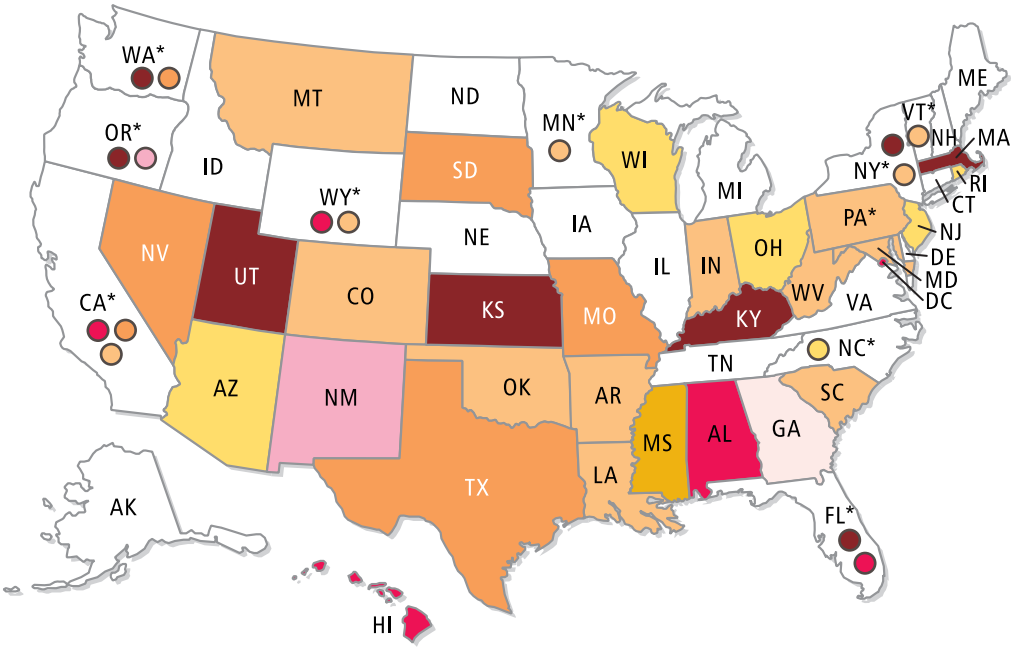
Figure 13: Thirteen SURs in 12 states have access to high school academic activity elements



	States with more than one agency/entity (*)
Date student enrolled, course type, course title, course grade	FL (DOE), WA (OFM), WY (UWYO)
Date student enrolled, course title, course grade	NY (CUNY)
Date student enrolled, course type	No states with multiple SURs
Course title, course grade	No states with multiple SURs
Course type, course title	No states with multiple SURs
Date student enrolled	WA (SBCTC)
Course type	No states with multiple SURs

Last, 8 SURs in **8 states** collect all three of the high school completion elements: **Florida** (Florida Department of Education), **Kansas, Kentucky, Massachusetts, New York** (City University of New York), **Oregon** (Oregon University System), **Utah**, and **Washington** (Office of Financial Management). **Figure 14** shows the 19 states that have access to these elements as well as the 19 states without access that collect high school GPA and high school graduation date.

Figure 14: Twenty-three SURs in 19 states have access to high school completion elements



	States with more than one agency/entity (*)
High school GPA, date student graduated, assessment scores	FL (DOE), NY (CUNY), OR (OUS), WA (OFM)
High school GPA, date student graduated	CA (UCS), FL (BOG), WY (UWYO)
Date student graduated, assessment scores	OR (ODCC)
High school GPA	No states with multiple SURs
Date student graduated	CA (CCC), WA (SBCTC)
High school GPA, date student graduated **without access to K-12 agency data**	CA (CSU), MN (MNSCU), NY (SUNY), PA (PDE, PASSHE), VT (VSC), WY (WCCC)
High school GPA **without access to K-12 agency data**	No states with multiple SURs
Date student graduated **without access to K-12 agency data**	NC (NCCCS)

Table 7 lists the 19 SURs in **17 states** that have access to seven less common K–12 agency data elements: free/reduced-price lunch eligibility, language spoken at home, date student enrolled (in high school), course type, course title, course grade, and assessment scores.

Table 7: Nineteen SURs in 17 states with access to less common K–12 data elements

States and agencies/ entities	Free/reduced-price lunch eligibility	Language spoken at home	Date student enrolled	Course type	Course title	Course grade	Assessment scores	Total
FL (DOE), WA (OFM)	♦	♦	♦	♦	♦	♦	♦	7
NY (CUNY)	♦	♦	♦		♦	♦	♦	6
MA	♦		♦	♦			♦	4
WY (UWYO)			♦	♦	♦	♦		4
HI		♦			♦	♦		3
KS	♦		♦				♦	3
NV	♦				♦	♦		3
NM				♦	♦		♦	3
OR (OUS)	♦	♦					♦	3
MO	♦		♦					2
TX	♦			♦				2
UT	♦						♦	2
AL, DC	♦							1
WA (SBCTC)			♦					1
AK				♦				1
KY, OR (ODCC)							♦	1

While 8 of the 20 states with direct K–12 agency data access have a P-20 data warehouse[15] (**Florida, Indiana, Kansas, Massachusetts, Pennsylvania, Texas, Washington**, and **Wyoming**), this represents less than half of those with access to K–12 agency data elements. Similarly, 6 of the 17 states with access to the less common K–12 agency data elements have such warehouses. Not surprisingly, the states with higher proportions of these less common elements have data warehouses (**New York** [City University of New York] is the exception).

There are 10 SURs in **9 states** with no existing linking arrangements to the state education agency (K–12) that collects the K–12 agency identification number: **Colorado, Connecticut, Indiana, Louisiana, Minnesota** (Minnesota Office of

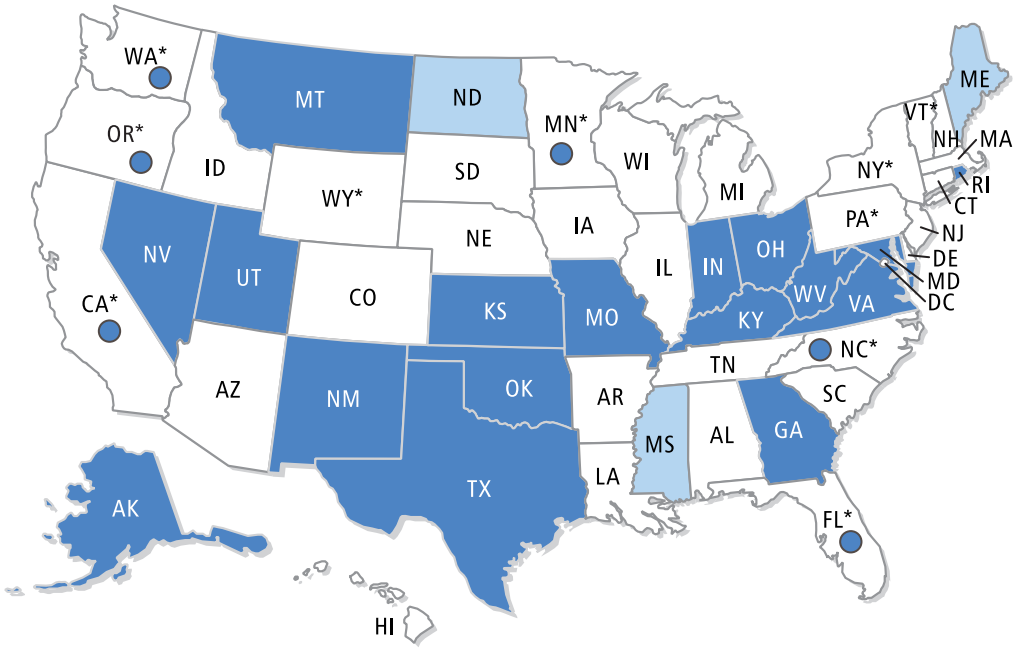
[15] The state education agency (K–12) is a contributor in each state, and manages and hosts the warehouse in five of the states (**Florida, Kansas, Pennsylvania, Texas**, and **Wyoming**). **Indiana** and **Pennsylvania** are in the process of adding K–12 agency data elements.

Higher Education and Minnesota State Colleges and Universities), **Montana**, **New Jersey**, **Pennsylvania** (Pennsylvania Department of Education Office of Postsecondary and Higher Education), and **Wyoming** (Wyoming Community College Commission). These states are one step closer to linking with their public education counterparts, and **Colorado, Connecticut, Indiana, Minnesota, New Jersey**, and **Pennsylvania** (Pennsylvania Department of Education Office of Postsecondary and Higher Education and Pennsylvania State System of Higher Education) are all developing direct links to the K–12 agency data system in their states. **Sixteen states**, including those without state postsecondary SUR systems, have yet to begin developing any linking arrangements with the state education agency (K–12), but this is likely to change given the latest round of U.S. Department of Education *State Longitudinal Data Systems* grants and the *Race to the Top* Fund.

Student labor data

Many states are measuring student success in broader terms by supplementing their postsecondary academic attainment data with labor data. Twenty-four SURs in **23 states** have access to labor data elements through linking arrangements with the state labor/workforce agency (see **Figure 15**). **Maine, Mississippi,** and **North Dakota** provide postsecondary data to their state labor agency, but do not have access to labor/workforce data elements.

Figure 15: Twenty-four SURs in 23 states with access to labor elements from labor agency



	States with more than one agency/entity (*)
Access to labor agency elements	CA (CCC), FL (DOE), MN (MNSCU), NC (NCCCS), OR (ODCC), WA (OFM, SBCTC)
Link to labor agency, but no access to labor agency elements	No states with multiple SURs

As with high school historical data, access to labor agency data elements is not equal. Respondents indicated varying access to the 15 labor/workforce data elements listed in **Table 8**.

Table 8: Fifteen labor/workforce data elements

Data elements
Employer ID number
Employer size (number of employees, monthly)
Employer county
Wages earned
Wage type code
Hours worked
Employment quarter code
Employment year
Date student/employee applied for Unemployment Insurance (UI)
Date student first received UI check
Other agencies providing services to student receiving UI
U.S. Census North American Industry Classification System (NAICS) code
U.S. Census NAICS title
U.S. Department of Labor Standard Occupational Classification (SOC) code
U.S. Department of Labor SOC title

No state has all 15 labor agency elements, but **Indiana** has 11 out of 15 of them. In addition, **New Mexico, North Carolina** (North Carolina Community College System), and **Washington** (State Board for Community and Technical Colleges) each have 10 elements; **Florida** (Florida Department of Education), **Kentucky**, and **Minnesota** (Minnesota State Colleges and Universities) each have 9 elements; **Nevada** and **Virginia** each have 8 elements; and **Montana, Ohio, Utah,** and **Washington** (Office of Financial Management) each have 7 elements. As mentioned earlier, both **Indiana** and **Washington** have state P-20 data warehouses, and in **Indiana**, the Indiana Commission for Higher Education manages the warehouse, while the Indiana Business Research Center at the Indiana University-Bloomington Kelley School of Business hosts the warehouse.

As shown in **Table 9**, all 24 SURs in **23 states** with access to labor agency data have access to student/employee wages earned. More states collect the U.S. Census NAICS code than the U.S. Department of Labor SOC code (but 5 states use both: **Florida** [Florida Department of Education], **Kentucky, New Mexico, North Carolina** [North Carolina Community College System], and **Oregon** [Oregon Department of Community Colleges and Workforce Development]). **Oklahoma** only uses the Occupational Safety and Health Administration Standard Industrial Classification code.

Table 9: Twenty-four SURs in 23 states with varying access to labor elements

States and agencies/ entities	Employer ID number	Employer size; number of employees (monthly)	Employer county	Wages earned	Wage type code	Hours worked	Employment quarter code	Employment year	Date student/employee applied for UI	Date student first received UI check	Other agencies providing services to student receiving UI	U.S. Census NAICS code	U.S. Census NAICS title	U.S. Department of Labor SOC code	U.S. Department of Labor SOC title	Total number of elements
IN	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦					11
WA (SBCTC)	♦	♦	♦	♦	♦	♦	♦	♦				♦	♦			10
NM	♦		♦	♦	♦	♦	♦					♦	♦	♦	♦	10
NC (NCCCS)	♦		♦	♦			♦	♦	♦	♦	♦	♦		♦		10
MN (MNSCU)	♦	♦	♦	♦		♦	♦	♦				♦	♦			9
KY		♦	♦	♦	♦	♦						♦	♦	♦	♦	9
FL (DOE)				♦	♦	♦	♦	♦				♦	♦	♦	♦	9
VA	♦	♦	♦	♦	♦		♦	♦						♦		8
NV			♦	♦	♦	♦	♦	♦						♦	♦	8
MT	♦	♦	♦	♦			♦	♦				♦				7
OH, UT	♦		♦	♦			♦	♦				♦	♦			7
WA (OFM)			♦	♦	♦	♦	♦	♦				♦				7
MO	♦		♦	♦			♦	♦				♦				6
TX			♦	♦			♦	♦				♦	♦			6
OR (ODCC)				♦		♦	♦	♦				♦		♦		6
GA	♦			♦			♦	♦						♦		5
RI				♦			♦	♦				♦	♦			5
WV	♦			♦			♦	♦								4
OK			♦	♦			♦	♦								4
AK				♦				♦						♦	♦	4
KS				♦			♦	♦				♦				4
MD				♦			♦									2
CA (CCC)				♦												1

Indiana and **North Carolina** (North Carolina Community College System) are the only two states with detailed Unemployment Insurance (UI) data. Both states are aware of the date that a student applied for UI, when she/he received the first check, and whether any other state agencies are providing services to the student while she/he is receiving these checks.

There are 23 SURs in **20 states** with no existing linking arrangements to the labor/workforce agency that collects an unencrypted or encrypted Social Security Number: **Alabama, Arizona, Arkansas, Colorado, Connecticut, District of Columbia, Hawai'i, Illinois, Louisiana, Massachusetts, New Jersey, New Mexico, New York** (City University of New York and The State University of New York), **Pennsylvania** (Pennsylvania Department of Education Office of Postsecondary and Higher Education), **South Carolina, South Dakota, Tennessee, Vermont** (University of Vermont and Vermont State Colleges), **Wisconsin**, and **Wyoming** (University of Wyoming and Wyoming Community College Commission). These states are one step closer to developing links with their labor counterparts, and **Colorado, Connecticut, Hawai'i, Illinois, New Jersey, New Mexico, Pennsylvania, Tennessee,** and **Wisconsin** are developing or expanding these links. **Seventeen states**, including those without state postsecondary SUR systems, have yet to begin developing any linking arrangements with the state labor/workforce agency, but this is likely to change with the latest round of *SLDS* grants.

Comparison of data element definitions

This section focuses on definitions and code structures for the data elements examined in this study.

Table 10 shows the similarity rankings for 30 data elements[16] present in 26 data element dictionaries in **23 states**. Elements ranked **High** have identical definitions and code structures; those ranked **Medium** have identical definitions and similar, yet compatible code structures. Those ranked **Low** indicate elements whose definitions differ from the source definition, which was either the Integrated Postsecondary Education Data System (IPEDS) Data Dictionary or the Lumina Foundation for Education (Ewell, Schild, & Paulson 2003). See **Appendix E**.

There is wide similarity among the data elements presented in **Table 10**. Excluding the data elements not found in existing dictionaries, these results show that at least half of the data elements collected are ranked **High** or **Medium**. Without trivializing the effort necessary to technically revise the code structures of the elements ranked Medium, the results point to the homogeneity of 15 data element definitions: gender, SSN, date of birth, race/ethnicity, student name, citizenship, state residency status, program/major, degree-seeking status, dependency status, term student credit hours (SCH) attempted, term SCH earned, cumulative Grade Point Average, cumulative SCH earned, and degree date. However, the demographic data elements are by far the most homogeneous, and the financial aid elements are least homogeneous.

[16] Similarity rankings were unavailable for admissions scores, placement scores, prior college(s) attended, transfer credit(s), family income, course title, course mode of instruction, and course grade. This analysis was not applicable to "FAFSA fields," because this term constitutes more than one data element that was not specified in the SHEEO study.

Table 10: Similarity ranking of data element definitions and code structures

Category	Data element	High (%)	Medium (%)	Low (%)	Not able to locate (%)
Demographic	Gender	82	18	0	0
	SSN	79	21	0	0
	Date of birth	75	25	0	0
	K–12 ID	68	11	21	0
	Race/ethnicity	50	46	4	0
	Student name	39	36	4	21
	Citizenship	36	21	4	39
	State residency status	25	57	7	11
	Institution ID	4	4	50	43
Enrollment status	Program/major	68	25	7	0
	Full-time/part-time status	36	7	14	43
	First term of academic history	21	46	21	11
	Degree-seeking status	18	50	7	25
Financial aid	Total price of attendance*	29	4	7	61
	Dependency status	21	21	0	57
	Credit hours*	18	7	29	46
	Campus residency status*	14	14	4	68
	Financial aid-federal	7	32	25	36
	Financial aid-need	7	7	29	57
	Financial aid-institutional	4	36	25	36
	Financial aid-state	0	39	25	36
	Financial aid-other	0	32	32	36
	Financial aid-merit	0	39	25	36
	Tuition and fees*	0	7	21	71
Academic activity	Term SCH attempted	43	14	4	39
	Term SCH earned	32	18	4	46
Academic attainment	Cumulative GPA	50	18	0	32
	Cumulative SCH earned	46	32	4	18
	Degree awarded	36	46	11	7
	Degree date	36	21	4	39

Note: Data elements not examined in the SHEEO study are denoted by an asterisk (*).

State Postsecondary Data Systems Vis-à-Vis Two Broad Policy Debates

This section reports on the ability of state postsecondary SUR systems to inform two broad public policy debates:

- P-20 pipeline issues, such as student progression from high school to college, college to college, and college to workforce; and
- Factors influencing student success, such as financial aid, remediation, and course performance.

There is wide variability within and across states when examining the ability of state postsecondary data systems to inform these two policy areas. This section includes specific examples of reports that states generate on these topics making use of the data in their postsecondary SUR systems (for a full listing of all reports, see **Appendix K**).

Overall, **Minnesota** (Minnesota State Colleges and Universities) is the only state that generates all 12 report types listed in **Table 11**. **Pennsylvania** (Pennsylvania Department of Education Office of Postsecondary and Higher Education) generates 11 reports; **Alabama, Alaska**, and **North Dakota** each generate 10 reports; **California** (California Community Colleges), **Kentucky, Ohio, Washington** (Washington State Board for Community and Technical Colleges), and **Wisconsin** each generate 9 reports; and **California** (University of California System), **Missouri**, and **Rhode Island** each generate 8 reports.

Table 11: P-20 pipeline and student success reports generated using SUR data

Type of report	Number of states	Number of SURs
Retention	40	51
Transfer	39	51
Remediation	38	44
Financial aid	33	40
High school feedback	31	34
Tuition/fees/college costs	24	28
Mobility/migration	17	19
Economic impact/jobs	16	16
Articulation	12	15
Course cost analysis	15	15
Course taking patterns	14	15
Student learning	12	13

P-20 pipeline issues

This section examines a sample of states that produce reports on high school feedback, transfer, and workforce "attainment gain."[17] **Table 12** contains the results of a content analysis used to identify data elements collected to generate these reports.

The content analyses described within this and the subsequent section were performed on available reports that were either provided by respondents or retrieved online. The data element lists are limited to the elements examined in this study. These lists exclude demographic elements and institution identifiers. Due to their limited availability, content analyses were not performed on articulation, economic impact/jobs, mobility/migration, or retention reports.

Links to sample reports are available at the end of each subsection.

[17] Reports generated to determine how many of a state's graduates remain in state to work.

Table 12: SUR elements used in P-20 pipeline reports

Report	Data elements
High school feedback	High school identifier (e.g., high school attended, district-school code)
	High school student resident county-district code
	High school course type (e.g., honors, Advanced Placement, dual credit)
	High school GPA
	Date student graduated from high school and/or 1st term of academic history
	Admissions and/or placement scores
	Degree-seeking status
	Attendance status (full-/part-time)
	Program/major
	Financial aid (various elements)
	Course title
	Course grade
	Term student credit hours (SCH) attempted
	Term SCH earned
	Cumulative GPA
	Degree awarded
Transfer	State residency status
	Prior college(s) attended
	Transfer credit(s)
	Attendance status (full-/part-time)
	Program/major
	Cumulative SCH earned
	Cumulative GPA
	Degree awarded
Attainment gain	Citizenship
	State residency status
	Degree-seeking status
	Program/major
	State financial aid
	Degree awarded
	Number of employees
	Employer county
	Wages earned
	Hours worked
	U.S. Census NAICS code or U.S. Department of Labor SOC code
	U.S. Census NAICS title or U.S. Department of Labor SOC title

High school feedback

Detailed data element information available for 25 of the 31 states that generate high school feedback reports reveals that every state collects six of the data elements listed in **Table 12**: high school identifier; date student graduated from high school and/or 1st term of academic history; degree-seeking status; attendance status (full-/part-time); program/major; and degree awarded.

The **Kentucky** report for the high school Class of 2004 was produced by the Council on Postsecondary Education (CPE) with data from the Council, the Kentucky Department

of Education, the Kentucky Higher Education Assistance Authority (KHEAA), ACT, Inc., and The College Board. It uses detailed high school student course and performance data and postsecondary admissions scores, placement scores, financial aid, course, and attainment data. The information is organized by high school, district, and state.[18] The CPE currently has ad-hoc linking arrangements with the state education agency (K–12) and state financial aid agency (KHEAA).

The **Minnesota** report for the high school Class of 2005 was produced by the Minnesota State Colleges and Universities (MNSCU) and University of Minnesota (UMinn) and delivered to the Minnesota Department of Education and district superintendents. Superintendents receive applicable high school reports, which provide detailed postsecondary admissions scores, placement scores, course, and attainment data. The information is organized by higher education system (MNSCU and UMinn), higher education sector, and high school. Minnesota (Minnesota State Colleges and Universities) is currently establishing linking arrangements with the state education agency (K–12).

The **South Dakota** high school feedback report was produced by the South Dakota Board of Regents (BOR) and ACT, Inc. and delivered to principals, superintendents, and school board presidents. The report initially documented the first-year performance of high school graduates, but was expanded to include information on college completion for the Classes of 1999 and 2000 after the BOR implemented a statewide information system in 1999. The information is organized by institution and uses detailed postsecondary admissions scores, placement scores, and attainment data. The report is unique in that it incorporates the ACT College Readiness Benchmarks as an organizing principle. The BOR currently has linking arrangements with the state education agency (K–12), but does not have access to high school course information.

Links to sample high school feedback reports
Kentucky: http://cpe.ky.gov/info/hsfr/default.htm
Minnesota: http://www.mnscu.edu/media/publications/pdf/gettingprepared08.pdf
South Dakota: http://www.sdbor.edu/publications/documents/Report.pdf

Transfer

Detailed data element information available for 33 of the 38 states that generate transfer reports reveals that every state collects four of the data elements listed in **Table 12**: state residency status; attendance status (full-/part-time); program/major; and degree awarded. Surprisingly, not all states that generate these reports collect prior college(s) attended or transfer credit(s).

In **Florida**, the Florida Department of Education (DOE) generates an accountability report that includes, among other things, the number of community college graduates with an associate's degree who transfer to a 4-year institution within the State University System of Florida (Florida Board of Governors, or BOG) and maintain at least a 2.5 GPA. The accountability report includes transfer figures as one of five success measures (high

[18] High school feedback reports for each high school will be available on the CPE website in 2010. The CPE also publishes a guide on how to use the reports: http://cpe.ky.gov/NR/rdonlyres/16C6F557-6B96-4CD6-9497-25531CAE5AB2/0/HSFeedback_interpretation_Presentationversion_01.pdf. And, in addition to a free webinar for high school counselors on using and accessing these reports, **California** (University of California System) has one for community college counselors: https://cc.readytalk.com/cc/playback/Playback.do?id=bo9y48.

school to college enrollment and job placement of vocational program completers are among the other measures). The DOE relies on the BOG's SUR system to provide cumulative GPA.

In **Kentucky**, the Council on Postsecondary Education's *Double the Numbers* plan includes a transfer strategy geared toward increasing the number of citizens applying to the state's 2-year colleges by 2020. The transfer pipeline report used cumulative SCH and degrees awarded to demonstrate the likelihood that transfer students taking more or less than 60 credits attain a bachelor's degree. It also used transfer credit(s) to highlight the high percentage of credits accepted at the transfer institution, disaggregated by the type of postsecondary credential the student obtained. The report featured institutional strategies to increase transfer, such as guaranteed admissions programs and institutional transfer advisors. Kentucky also publishes an annual Transfer Feedback Report with information on how well students attending individual community colleges perform after transferring to a 4-year institution.

In **Oregon**, the Oregon University System and Oregon Department of Community Colleges and Workforce Development matched their respective data sets to produce a report on the transfer activity of admitted transfer students that captures not only traditional transfer patterns (2- to 4-year), but also students attending more than one institution. In addition to program/major, the data used to generate this report are similar to those used in Kentucky. However, one unique aspect is that the report compares the rates at which Oregon's admitted community college students transfer to 4-year institutions with the rates in California and Washington.[19]

Links to sample transfer reports

Florida: http://www.fldoe.org/cc/OSAS/FastFacts/pdf/2009-03.pdf
Kentucky (1): http://cpe.ky.gov/NR/rdonlyres/E4B94D2C-6181-4F1B-A3C0C953D71C0613/0/TransferPolicyBriefFINAL93008.pdf; **(2)** http://cpe.ky.gov info/transfer/default.htm
Oregon: http://www.ous.edu/dept/ir/reports/OregonTransfer02.pdf

Workforce attainment gain

Although this study did not capture the number of states and agencies/entities that produce workforce attainment gain reports, there are at least **5 states** that can do so.[20] Detailed data element information available for 18 of the 23 states with direct access to labor data elements reveals that every state collects four of the data elements listed in **Table 12**: state residency status; program/major; degree awarded; and wages earned. And while **Alabama** does not have any links to the state labor/workforce agencies, it has cultivated its relationship with the state chamber of commerce to produce its Potential Workforce reports[21] by county and institution.

In **Florida**, the Board of Governors of the State University System of Florida (BOG) has produced an attainment gain report that focuses on teachers. The data source is the Florida Department of Education (DOE). The report features the percentage of BOG

[19] Data sources are the California Postsecondary Education Commission and the Washington State Board for Community and Technical Colleges, respectively.
[20] The South Carolina Commission on Higher Education does not currently have access to labor data elements, but the Florida Board of Governors has access to these elements via the SUR housed at the Florida Department of Education.
[21] Available online at: http://www.ache.alabama.gov/workforce/.

teacher graduates disaggregated by education and other degrees. In addition, the report highlights the percentage of existing teachers who undergo professional development at BOG institutions by focusing on nondegree and continuing education enrollees. The BOG both provides data and has access to the DOE data warehouse and is represented in warehouse governance; this translates into a type of ownership of the data, whereby the BOG has access to labor/workforce data.

In **Kentucky**, the Council on Postsecondary Education's report focuses on in-state, out-of-state, and international graduates who are still living in Kentucky 5 years later. The report relied on CPE's ad-hoc links to the state Transportation Cabinet, and data from driver's license and state picture identification cards were used to determine whether the student continued to live in-state.

In **South Carolina**, the South Carolina Commission on Higher Education replicated the Kentucky study, but also included state financial aid data to determine whether this aid contributed to the state's attainment gain. In addition, its report contained information on graduates living in the state 5 years after obtaining their postsecondary credential.

In **Montana**, the Montana University System (MUS) report provides the percentage of graduates employed in the state by postsecondary credential obtained as well as the average salary by credential. In addition, the report lists the top 10 jobs in the state that not only have average salaries above $50,000, but also have at least 20 openings per year. Also included are the top 10 MUS degrees ranked by annual average starting salary.

In **Washington**, the State Board for Community and Technical Colleges (SBCTC) produced a unique kind of attainment gain report focused on the state's Worker Retraining Program created for residents who had lost their jobs due to the recession or industry restructuring. Benefiting from the SBCTC's link to the state labor/workforce agency, the report used wages earned and hours worked to determine whether retrained workers' salaries were higher or lower than they had been before the training, and uses U.S. Census NAICS codes/titles to find out whether retrained workers changed employment fields.

Links to sample workforce attainment gain reports

Florida: http://www.flbog.org/resources/_doc/factbooks/quickfacts/2007_03_07TeachersandSUS.pdf
Kentucky: http://cpe.ky.gov/NR/rdonlyres/AB5B141D-9439-4C0F-B91686210C1F36CD/0/SpecialReport071_final.pdf
Montana: http://mus.edu/data/briefs/Workforce_Development.pdf
South Carolina: http://www.che.sc.gov/Finance/CHEMIS/CHE_SpecialReport_110207.pdf
Washington: http://www.sbctc.ctc.edu/docs/data/research_reports/resh09-4annual_wrkr_retrng_acctability_report.pdf

Factors influencing student success

This section examines the states that produce reports on financial aid and remediation.

Table 13 contains the results of a content analysis used to identify data elements collected to generate these reports. Due to their limited availability, content analyses were not performed on reports related to tuition, course cost analysis, course-taking patterns, or student learning.

Table 13: SUR elements used in reports associated with factors that influence student success

Report	Data elements
Financial aid	State residency status
	Prior college(s) attended
	Attendance status (full-/part-time)
	1st term of academic history
	Program/major
	Dependency status
	Family income
	Federal aid
	State aid
	Institutional aid
	Other aid
	Merit-based aid
	Need-based aid
	FAFSA fields
	Course title
	Course grade
	Term student credit hours (SCH) attempted
	Cumulative SCH earned
	Degree awarded
Remediation	Admissions scores
	Placement scores
	Degree-seeking status
	Attendance status (full-/part-time)
	1st term of academic history
	Course title
	Course grade
	Term SCH attempted
	Term SCH earned
	Cumulative GPA

Financial Aid

Detailed data element information available for 26 of the 33 states that generate financial aid reports reveals that every state collects four of the data elements listed in **Table 13**: state residency status; attendance status (full-/part-time); program/major;and degree awarded. All but 3 states collect federal financial aid, and all but 2 states collect state financial aid.[22]

In **Florida**, the Board of Governors of the State University System of Florida (BOG) entered into an agreement with the Florida Department of Revenue (that was authorized and facilitated by the U.S. Internal Revenue Service) to obtain information from the 2005 federal income tax returns, which includes adjusted gross income, a field also included in the FAFSA form. The report focused on identifying students who would have qualified for a Pell Grant but had never applied for federal aid. The BOG also produced a report showing student reliance on several types of aid, including federal, state, and other sources, that incorporates wage data from the Florida Department of Education's *Florida Education and Training Placement Information Program* (FETPIP).

[22] Because the purpose of providing this information is to provide national trends, the state names have been omitted.

In **Missouri**, the Missouri Department of Higher Education produces statistics that show the numbers and percentages of students who file (or don't) for FAFSA on time and qualify (or don't) for state financial aid. FAFSA fields, such as the expected family contribution and adjusted gross income, are used to generate these statistics.

In **Washington**, the State Board for Community and Technical Colleges created a report that measured the impact of a state, need-based financial aid program on student retention and completion. The report used family income to determine unmet need, and program/major to identify which students were enrolled in high-demand fields.

In **West Virginia**, the West Virginia Higher Education Policy Commission conducted a study to measure the impact of two state financial aid programs (one need-based and one merit-based) on the dropout and graduation rates of first-time college students over a 6-year period. The study was also designed to measure whether the time period in which students received the aid had any effect on their retention and graduation.

Links to sample financial aid reports

Florida (1): http://www.flbog.org/resources/_doc/factbooks/quickfacts/2009_01_14%20opportunity%20for%20more%20federal%20aid.pdf; **(2):** http://www.flbog org/resources/_doc/factbooks/quickfacts/2007_02FinAidInfoBr.pdf

Missouri: http://www.sheeo.org/misc/MO-MDHE_Financial_Aid_Statistics_Using_SUR Data.xls

Washington: http://www.sbctc.ctc.edu/college/education/resh_rpt_08_4opportunity grants.pdf

Remediation

Although the majority of high school feedback reports contain remediation data, this section focuses on the reports that exclusively address the topic. Detailed data element information available for 30 of the 38 states that generate remediation reports reveals that every state collects three of the data elements listed in **Table 13**: degree seeking status; attendance status (full-/part-time); and term SCH attempted. All but 3 states collect cumulative GPA, all but 4 states collect first term of academic history, and all but 5 states collect term SCH earned. Surprisingly, not all states that generate these reports collect admissions and placement scores.

In **Alabama**, the Alabama Commission on Higher Education produces math and English remedial maps that represent the percentage of undergraduates taking these courses by county. ACHE's SUR does not contain course-level information, but it flags students enrolled in these courses.

In **Florida**, the Florida Department of Education generates a remediation report that uses degree-seeking status and placement exam information, including scores. The report is based on the year the student was "first-time-in-college" (FTIC) taking a college placement test. The placement test covers three areas of competency: math, reading, and writing. The report is organized by institution and year of student high school graduation, and it includes the number of students not requiring remediation, the number of students who failed each of the placement competencies, the percentage who enrolled in remedial courses, and the percentage who successfully exited remedial work.

In **Kentucky**, the Council on Postsecondary Education produced its 2006 report to determine the extent to which institutions had implemented the statewide placement policy created 2 years earlier. The report compared the success of students who placed out of remedial/developmental courses with two groups of students who did not place out of these courses: those who needed remediation and took it, and those who did not take the recommended courses. The report presented an analysis of the rates at which students took developmental courses and were retained in the second year, and their GPAs at the end of the first year. Several data elements were used to compile this report: placement scores, admissions scores, attendance status, course title, course grade, and term SCH earned.

In **North Carolina**, the North Carolina Community College System produces a performance measures report that contains remediation measures by institution on student pass rates in remedial/developmental courses, as well as subsequent pass rates in college-level courses for students who complete a developmental course sequence. Pass rates are provided for students obtaining a grade of C or better in both types of courses.

Links to sample remediation reports

Alabama (1): http://www.ache.alabama.gov/PK20/a%20Layered%20map%2of%2%20FA%202008%20and%20FA%202007%20Math.pdf **(2):** http:/www.ache.alabamagov/PK20/a%20Layered%20map%20of%20%20FA%22008%20and%20FA%22007%20English.pdf

Florida: http://www.fldoe.org/articulation/perfCPT/default.asp?varAction=psi

Kentucky: http://cpe.ky.gov/NR/rdonlyres/7222A231-ACF5-403F-A8ED-1F9A809E11B//2004DevEdReport11306.pdf

North Carolina: http://www.nccommunitycolleges.edu/Publications/docsPublicationscsf2009.pdf

While the examples in this section are worthy of consideration, these reports by no means capture the wide variety available. Many reports were unavailable for analysis, but the research team is optimistic that this study will encourage the sharing of the report types presented at the beginning of this section and will help stimulate state discussion on the value of collecting certain data elements.

KEY FINDINGS AND OBSERVATIONS

Key Findings

The **key findings** in this study of 59 state postsecondary SUR systems in 45 states are as follows:

General characteristics

- Between 56 and 58 SURs in 44 states were created for **three purposes**: generating reports and statistics, decision-/policymaking, and conducting research;
- A growing proportion of state postsecondary SUR systems are collecting data from **independent, nonprofit** institutions (19 states, compared with 17 states in 2006);
- **Demographic**, postsecondary **enrollment**, and **completions** data are the most common types of data in SUR systems (between 43 and 45 states);
- Due to agency/entity mission and responsibilities, the types of data stored vary considerably in terms of their **postsecondary academic history**, such as placement scores and prior college(s) attended (38 states); **course-level information**, such as term student credit hours (SCH) attempted and course grades (37 states); **financial aid**, such as family income, federal aid, and state aid (37 states); **K–12 academic history**, such as course type and course grades (32 states); and **labor/workforce/Unemployment Insurance (UI)**, such as hours worked (15 states);
- The **Social Security Number** is the primary identification number used as the postsecondary internal primary key and in the matching process with other agencies/entities;
- Most states **currently link, share, and/or exchange data** with one or more state agencies/entities (39 states, compared with 19 states in 2006);
- Eleven of the 45 states currently have **formal data-linking arrangements** with the state education agency (K–12), 11 have arrangements with the state labor/workforce agency, and 15 have arrangements with both;
- In 16 of the 45 states, 8 are working to **establish or expand data-linking arrangements** with the K–12 agency, 1 with the state labor agency, and 8 with both agencies;
- With regard to formally documented data request processes for external requestors that **protect SUR data while providing access**, the processes in **Florida, Maryland**, and **Kansas** represent diverse approaches; and
- Managing relationships with external requestors of data and devising interfacing and data-sharing practices are among the **challenges** reported by states in **providing SUR data**.

Data element analysis

- No state postsecondary SUR system contains all 64 data elements examined in this study, but the top three are in **Florida** (51 elements), **Kentucky** (48), **Minnesota** (48), **Indiana** (45), and **Washington** (45);
- Once data elements are broken down by category and subcategory, there is great variation among the states;
- SUR systems in **Minnesota** (36 elements), **Pennsylvania** (36), **Georgia** (35), **Hawai'i** (35), **Wyoming** (35), **Montana** (34), **New York** (34) and **Vermont** (34) contain the highest proportion of the 36 postsecondary data elements;
- SUR systems in **Washington** (13 elements), **Florida** (12), and **New York** (10) contain the highest proportion of the 13 K–12 data elements;
- SUR systems in **Indiana** (11 elements), **New Mexico** (10), **North Carolina** (10), **Washington** (10), **Florida** (9), **Kentucky** (9), and **Minnesota** (9) contain the highest proportion of the 15 labor data elements; and
- Fifteen of the 30 data elements examined in this study are rather homogeneous in their **definition sources** and **code structures/formats**. Most are demographic elements.

Ability to contribute to P-20 pipeline and policy discussions about student success

- Depending on the mission and responsibilities of each state, several states offer different approaches to designing reports related to **P-20 pipeline issues** and **factors influencing student success**;
- A high proportion of states generate **retention, transfer**, and **remediation reports** with the SUR data collected;
- Many states use a variety of data elements for high school feedback, transfer, and workforce attainment gain reports:
  - high school feedback reports: **Kentucky, Minnesota**, and **South Dakota**
  - transfer reports: **Florida, Kentucky**, and **Oregon**
  - attainment gain reports: **Florida, Kentucky, Montana, South Carolina**, and **Washington**
- Many states use a variety of data elements for financial aid and remediation reports:
  - financial aid: **Florida, Missouri, Washington**, and **West Virginia**
  - remediation: **Alabama, Florida, Kentucky, North Carolina**
- Due to report availability, not much is known about the data elements commonly used to generate articulation, economic impact/jobs, mobility/migration, retention, tuition, course cost analysis, course-taking patterns, or student learning reports.

Enabling Data Elements

Several **"enabling" data elements** emerged from this study. These elements enable leaders to make more effective policy decisions that result from a deeper understanding of specific issues. They also serve to demonstrate the value of data to decision makers.

High school course-related elements

Course type, course title, course grade, and **high school GPA** provide more information about the population of students entering college than admissions and/or placement exam scores alone. Both high school course type and course title are collected in 7 states, and 6 states (not the same states) collect course grade, but these elements may or may not be used to generate high school feedback or other reports. **Kentucky**, which does not have access to detailed high school course data elements from the state education agency, obtained this information from ACT, Inc.

Postsecondary course-related elements

Course type, course title, course grade, and **term SCH attempted** and **earned** not only serve as potential early warning/student success indicators, but also, in many cases, serve to enrich high school feedback reports, particularly on remediation needs and patterns.

Financial aid elements

Three sets of data elements – **family income, state financial aid**, and **Free Application for Federal Student Assistance** (FAFSA) fields – are useful for creating reports on financial aid and high school feedback.

Family income is used in **Florida** to identify students who are eligible for federal financial aid (but did not apply for it) and state financial aid. There are 20 states that collect the family income data element, and some use adjusted gross income (AGI) from the FAFSA as the source. These state agencies/entities don't necessarily have access to FAFSA fields, but in some states, institutions supply this information to the state agency/entity by using the AGI from the FAFSA form to populate this data element.

Missouri uses **expected family contribution** (an element not specifically examined in this study) to determine student eligibility for a state need-based aid program.

In **Kentucky**, the high school feedback report uses the **state financial aid data element** to compute the average amount awarded to the high school graduating class that is entering college and to help interpret postsecondary retention rates. SURs in 21 of the 31 states that produce this report contain this data element, but it may or may not be used to generate these reports.

Transfer elements

SURs that contain **transfer credit(s)**, such as **Kentucky**, can gauge the effectiveness of statewide articulation agreements. SURs in 27 of the 39 states that produce transfer reports contain this data element, but it may or may not be used to generate these reports.

Labor/workforce elements

Hours worked, wages earned, and **U.S. Census** or **U.S. Department of Labor employment codes/titles** all serve to highlight higher education's return on investment. All 23 of the states that have access to labor/workforce/UI data elements obtain wages earned through this arrangement, 8 of these states collect hours worked, 13 states collect either the U.S. Census or U.S. Department of Labor codes/titles, and 5 states collect both types of codes/titles. **Washington** has developed a procedure for calculating hourly wage from hours worked and wages earned. States without linking arrangements to state labor/workforce agencies (e.g., **South Carolina**) have been able to match student records with driver's license records as a proxy to determine whether students have remained in-state.

Summary

Identifying, collecting, storing, and using data at the state level is a complex enterprise that varies considerably across states. State higher education agencies/entities must accommodate the data needs of many stakeholders, including the legislature, the federal government, and private foundations. Serving multiple "masters" leads to variations in data element definitions and sources, and the existence of data elements will almost always be tied to reporting requirements. Despite these challenges, the 59 systems currently in place in 45 states can serve as a resource for states and the nation. This report presents a first glance of what states will be able to accomplish as these resources continue to mature.

REFERENCES

Ewell, P. T., Schild, P.R. and K. Paulson. (2003). *Following the Mobile Student: Can We Develop the Capacity for a Comprehensive Database to Access Student Progression*. Indianapolis: Lumina Foundation for Education.

Ewell, P. and M. Boeke. (2007). *Critical Connections: Linking States' Unit Record Systems to Track Student Progress*. Indianapolis: Lumina Foundation for Education.

National Center for Education Statistics. (2007). *IPEDS data dictionary*. Washington, DC: Author.

State Higher Education Executive Officers. (2010). *State Higher Education Finance FY 2009*. Boulder: Author.

State of Alaska. (2010). *Historical Information*. Juneau: Permanent Fund Dividend Division.

APPENDICES

Appendix A: Methodology

This descriptive study was designed to increase the overall knowledge base of state postsecondary SUR systems. Further, its aim was to delve deeper into areas of existing knowledge and explore new areas where the research was limited or absent.

The State Higher Education Executive Officers (SHEEO) used web searches, an online data collection instrument (also available in paper format), e-mail, and phone interviews to gather the information necessary to achieve the goals of the study.

Table 14: Open-ended questions modified to facilitate data analysis

Original open-ended question	Modified question options
Who has authority to change data elements and definitions?	▶ Agency/entity staff ▶ Group that includes institutional/campus personnel ▶ Legislature ▶ Other agency/entity
Which agencies/entities contribute data to the P-20 warehouse?	▶ Agency/entity within governor's office ▶ State education agency (K–12) ▶ Higher education coordinating board(s) ▶ Higher education governing board(s) ▶ State labor/workforce agency ▶ Other state agency/entity/program
Which agency/entity has primary responsibility for managing the P-20 warehouse?	▶ Same as directly above
Which agency/entity has primary responsibility for hosting the P-20 warehouse?	▶ Same as directly above
What office/division is responsible for entering data?	▶ n/a ▶ Office/division within agency/entity ▶ Appropriate institutional/campus personnel ▶ Other group
What office/division is responsible for checking/verifying data?	▶ Same as directly above

Research question and units of analysis

The study's main research question is: *What are the characteristics, functions, and uses of state-level SUR systems at the postsecondary level across the country?* The units of analysis are state boards of higher education and other state agencies/entities with responsibility for collecting postsecondary data at the unit record level.

Identification and selection of study population

Between February and May 2009, SHEEO conducted web searches and sent e-mail requests to the appropriate persons to determine which agencies/entities had postsecondary data systems with SUR-level data. SHEEO identified 92 agencies/entities that fit this description, representing state boards of higher education (representing both 2- and 4-year sectors), state boards of education, state financial aid agencies/entities, state budget agencies, and state labor/workforce agencies.

SHEEO invited 60 of the 92 identified agencies/entities to participate in the study. Selection was based on SHEEO membership, institutional coverage, undergraduate enrollment percentages, and consideration of the time required to meet contract deadlines.[23]

Design of data collection instrument

Several activities informed the design of the data collection instrument:

[23] Even though many of the invited agencies/entities collect data from both 2- and 4-year public institutions, several states have a separate agency/entity for the 2-year sector. The omission of these separate agencies/entities is not intended to indicate that the invited agency/entity fully represents the range of data collected in the separate sector.

- Communication with NCHEMS staff members following a detailed review of the 2006 NCHEMS instrument;
- Communication with Data Quality Campaign staff members following a detailed review of the 2008 DQC annual survey;
- Feedback from four meetings that took place between December 2008 and April 2009 with over 100 colleagues asked to serve on SHEEO's *State Data System Expert Advisory Panels* to provide advice on the characteristics and functionality of ideal state postsecondary data systems;
- April and June 2009 communications with a metadata expert at the Florida Department of Education;
- May 2009 pilot with respondents from the North Carolina Community College System, South Carolina Commission on Higher Education, State Council of Higher Education for Virginia, and the Utah State Board of Regents;
- May 2009 presentation of the data collection instrument at the SHEEO/NCES Data Conference in New Orleans, Louisiana;
- May 2009 presentation of the data collection instrument to the SHEEO/NCES Network Steering Committee; and
- June 2009 feedback from RTI International staff members with responsibility for postsecondary studies.

The final data collection instrument was organized into seven sections:

- Background Information;
- Data Collected, Data Elements, and Metadata;
- Using Student Unit Record Data;
- Linking Postsecondary Student Unit Record System Data to Other Systems;
- Mechanisms to Ensure Data Quality;
- Sustaining Student Unit Record Systems; and
- Suggestions for Improvement (optional).

Appendix B contains the final data collection instrument. Many multiple-choice questions were designed to allow more than one selection.

Tools and software used in data collection and analysis

SHEEO used Question Pro software as the primary data collection instrument. This software contained all the functionality sought for this study, featuring advanced logic, file upload, and *Microsoft Excel* data download options. E-mail and phone communication were the primary means of following up. SHEEO used *Microsoft Excel* for data analysis.

Data collection was divided into two phases. The data collection instrument was used in the first phase. For the second phase, respondents were asked to select data element definition sources for 12 data elements and identify whether their SUR system contained an additional 30 elements. SHEEO compiled the original list of elements from the 2003 Lumina study (Ewell et al 2003) and from its own analysis of additional elements of interest. SHEEO's *State Data System Expert Advisory Panels* assisted in finalizing the data elements selected for this phase.

Response rate

Out of the 60 invitees, 59 responded to the first phase, corresponding to a 98 percent response rate. There was an 80 percent response rate for the second phase; 47 of the 59 invitees participated. **Appendix C** lists the responding agencies/entities and respondent names.

All responding agencies/entities were given an opportunity to review responses prior to publication of this report. About 20 agencies/entities submitted modifications to their original response.

Data analysis

The nature of the study and the design of the data collection instrument limit interpretation of the responses to qualitative, rather than quantitative descriptive analyses.

SHEEO designed many multiple-choice questions in order to highlight certain features of state postsecondary data systems within the report. For example, in the question asking the reasons why the agency/entity SUR was established, SHEEO offered respondents 12 reasons,[24] but this list was not meant to be exhaustive. SHEEO is fully aware that agencies/entities may have reasons beyond the options provided; some indicated these other reasons in the open-ended portions of each question.

The data collection instrument contained both open-ended and multiple-choice questions. SHEEO performed a content analysis of six open-ended questions; responses were subsequently recoded into specific question options to facilitate data analysis (see **Table 14**).

Additionally, SHEEO recoded responses to certain multiple-choice questions that required specification of an "other" category. For example, for the question asking how often the agency/entity provides professional development training to institutional research personnel, appropriate responses in the "other frequency" were standardized as follows:

- "As changes are made and/or specific requests are received" and "When personnel turn over or when a data quality problem emerges" were recoded as "as needed"; and
- Responses such as "training is scheduled throughout the year" were recoded as "ongoing."

For the analysis portion in the report, data element responses from both the first and second phases were combined into one spreadsheet. In some cases, responses from the first phase were used to populate unavailable responses from the second phase. For example, if respondents indicated in the first phase that Social Security Number (SSN) was an internal primary key, this response was reflected appropriately within the instrument used in the second phase. This revised spreadsheet was one of the sources used for the content analysis. In addition, SHEEO sent informal requests to all respondents to provide examples of either ad-hoc or formal reports, analytical studies, or other documents generated from student unit record (SUR) data that highlight the utility of those data and that have helped state agendas move forward. Together, these sources yielded the data element lists featured in Table 12 and Table 13. Appendix D contains the final data element list.

Study limitations

More study on the Integrated Postsecondary Education Data System (IPEDS) is needed to fully understand the relationship between postsecondary agencies/entities and the respective institutions they coordinate or govern. The categories in the data collection instrument on IPEDS verification and reporting did not fully capture the essence of these relationships. Specifically, some state agencies/entities were not involved in either category, but did assist institutions with various IPEDS surveys.

[24] Legislative compliance, audit compliance, institutional resource allocation/funding formula, awarding financial aid, IPEDS reporting, increasing student achievement, tracking student retention/graduation, tracking students across institutions, federal civil rights compliance, other federal mandates, and other reason.

Appendix B: Final Data Collection Instrument

SECTION ONE: BACKGROUND INFORMATION

Agency/Entity Information

1 What is the **name** of your agency/entity's student unit record system? *Please spell out or indicate N/A*.

2 **When** was your agency/entity's student unit record system first established? *Please indicate **four-digit** year.*

3 **Why** was your agency/entity's student unit record system originally established? *Select all that apply*.

Legislative mandate
Audit compliance
Institutional resource allocation/funding formula
Awarding financial aid
IPEDS reporting
Increasing student achievement
Tracking student retention/graduation
Tracking students across institutions
Federal civil rights mandates
Other federal mandates
Other reason, please specify:

Please identify the **other federal mandates** selected in the previous question.

4 What **legal authority** assigns your agency/entity data collection and reporting responsibilities? *Select all that apply*.

n/a – data collection occurs on a voluntary basis
State law creating coordinating or governing board
State law creating data system
State law requiring the collection of student unit record data
Executive branch mandate
Administrative regulations/rules issued to interpret state law(s)
Coordinating or governing board policy interpreting state law(s)
Coordinating or governing board policy interpreting executive branch mandate
Memorandum of understanding
Attorney general opinion/statement
Other legal authority, please specify:

Please provide the citation for **each legal authority selected**, including the URL where applicable:

5 Feel free to comment on the questions or your responses in SECTION ONE: BACKGROUND INFORMATION

SECTION TWO: DATA COLLECTED, DATA ELEMENTS, AND METADATA

Institutional Coverage

6 Please select the **types of postsecondary institutions** from which your agency/entity currently collects student unit record data. *Select all that apply.*

n/a
2-year public
4-year public
Independent (private, non-profit)
Proprietary (private, for-profit)
Tribal
Other institution type, please specify:

7 **Within the next two years**, does your agency/entity plan to expand the institutional coverage of student unit data in your state?

No
Yes

8 Please select which types of postsecondary institutions your state plans to include. *Select all that apply*.

n/a
2-year public
4-year public
Independent (private, non-profit)
Proprietary (private, for-profit)
Tribal
Other institution type, please specify:

9 What role does your agency/entity play with regard to institutional **IPEDS verification**? *Select all that apply*.

n/a
Coordinator
Keyholder
Other role, please specify:

10 What role does your agency/entity play with regard to institutional **IPEDS reporting**? *Select all that apply*.

n/a
Coordinator
Keyholder
Other role, please specify:

11 Please select the IPEDS surveys your agency/entity **verifies or reviews** on behalf of the institutions in your state. Select all that apply.

n/a
Institutional Characteristics (IC)
12-month Enrollment (E12)
Completions (C)
Human Resources (Employees by Assigned Position (EAP), Fall Staff (S), and Salaries (SA))
Fall Enrollment (EF)
Graduation Rate (GRS)
Finance (F)
Student Financial Aid (SFA)
Other, please specify:

Data Collected

12 What **types of data** are included in your agency/entity's student unit record system? *Select all that apply*.

K-12 academic history (high school, admissions test scores)
Postsecondary academic history (placement test scores, transfer)
Demographic
Postsecondary enrollment
Course-level information
Finance (tuition, fees, fiscal management)
Financial aid
Completions
Non-credit instructional activity
Academic program inventory
Faculty/staff
Institutional characteristics
Facilities/capital projects
Adult Basic Education (GED, Adult Basic Education, English as a Second Language)
Labor/workforce/Unemployment Insurance
Other type of data, please specify:

13 Which of the following **non-credit instructional activities** are contained in your agency/entity's student unit record system. *Select all that apply*.

Pre-college courses (remedial, developmental)
Continuing education courses
Other, please specify:

14 Please indicate if any of the types of data selected above are located **separately** from the main student unit record database.

n/a
K-12 academic history (high school, admissions test scores)
Postsecondary academic history (placement test scores, transfer)
Demographic
Postsecondary enrollment
Course-level information
Finance (tuition, fees, fiscal management)
Financial aid
Completions
Non-credit instructional activity
Academic program inventory
Faculty/staff
Institutional characteristics
Facilities/capital projects
Adult Basic Education (GED, Adult Basic Education, English as a Second Language)
Labor/workforce/Unemployment Insurance
Other type of data

15 **When** are the following types of data collected? *Select all that apply*.

Type of data	Census Date	End of Term	Annual	Other collection period
K-12 academic history (*high school, admissions test scores*)				
Postsecondary academic history (*placement test scores, transfer*)				
Demographic				
Postsecondary enrollment				
Course-level information				
Finance (*tuition, fees, fiscal management*)				
Financial aid				
Completions				
Non-credit instructional activity				
Academic program inventory				
Faculty/staff				
Institutional characteristics				
Facilities/capital projects				
Adult Basic Education (*GED, Adult Basic Education, English as a Second Language*)				
Labor/workforce/Unemployment Insurance				
Other type of data				

Please identify the **other collection period** selected in the previous question for the following type of data.

Data Elements

16 Who has authority to change data elements and definitions?

17 Which of the following **sources** does your agency/entity use to define data elements? *Select all that apply*.

IPEDS
U.S. Census
SPEEDE/ExPRESS
Agency staff/workgroup
Other, please specify:

18 What is your agency/entity's **internal primary key** to build longitudinal records within your student unit record system? *Select all that apply*.

Social Security Number
K-12 student identifier
Statewide student identifier
Internally generated student identifier
Other, please specify:

19 Does your agency/entity have any plans to discontinue use of the Social Security Number as an **internal primary key**?

No
Yes

Metadata – Documents and Procedures Supporting and Governing the Use of Student Unit Record Systems

20 Does your agency/entity have metadata beyond a data element dictionary?

No
Yes

21 What **types of metadata** does your agency/entity currently maintain? Select all that apply.

Business procedures (*data element dictionary, data submission/reporting procedure, data certification forms*)
Technical procedures (*data validation mechanism, data audit mechanism, statistical checks*)
Other, please specify:

22 What types of **business procedures** does your agency/entity currently maintain? *Select all that apply*.

Data element dictionary (*data element characteristics, file formats layouts*)
Data submission/reporting procedure
Data certification forms
Other, please specify:

23 What types of **technical procedures** does your agency/entity currently maintain? Select all that apply.

Data validation/data checking procedure (*to increase reliability of data*)
Data audit procedure (*to increase validity of data*)
Statistical mechanisms used to alert institutional user of successful or unsuccessful data validation
Statistical mechanisms used to alert institutional user of successful or unsuccessful data audit
Other, please specify:

24 Feel free to comment on the questions or your responses in SECTION TWO: DATA COLLECTED, DATA ELEMENTS, AND METADATA

SECTION THREE: USING STUDENT UNIT RECORD SYSTEM DATA

Data Use/Purposes

25 For what **purpose(s)** does your agency/entity currently use student unit record data? *Select all that apply*.

Decision-/policymaking
Generating reports and statistics (internal and external)
Consumer information for prospective students
Research
Cross-sector collaboration (k-12, labor, etc.)
Other purpose, please specify:

26 How does your agency/entity **present** the data collected? Select all that apply.

n/a
In the aggregate to a wide audience
At the unit record level to appropriate stakeholders
Other, please specify:

27 What **types of reports** does your agency/entity routinely generate to **meet formal reporting requirements** using the student unit record data collected? *Select all that apply*.

Articulation
Completions
Course cost analysis
Course taking patterns
Distance education
Dual credit/dual enrollment
Economic impact/jobs
Enrollment (age, gender, ethnicity)
Facilities utilization
Financial aid
High school feedback
Institutional finance
Institutional profile, public
Institutional profile, private
Mobility/migration
Non-credit instructional activity
Performance measures
Remediation
Retention
Student learning
Transfer
Tuition/fees/college costs
Other reports, please specify:

28 What **types of institutions** are included in each formal report selected in the previous question? *Select all that apply*

	n/a	2-yr public	4-yr public	Independent (private, non-profit)	Proprietary (private, for-profit)	Tribal	Other institution type
Articulation							
Completions							
Course cost analysis							
Course taking patterns							
Distance education							
Dual credit/dual enrollment							
Economic impact/jobs							
Enrollment (age, gender, ethnicity)							
Facilities utilization							
Financial aid							
High school feedback							
Institutional finance							
Institutional profile, public							
Institutional profile, private							
Mobility/migration							
Non-credit instructional activity							
Performance measures							
Remediation							
Retention							
Student learning							
Transfer							
Tuition/fees/college costs							
Other reports							

Please identify the **other institution type** selected in the previous question for the following type of formal report.

29 For which **audience(s)** does your agency/entity routinely generate the following formal reports using the student unit record data collected? *Select all that apply*.

	Governor's office	Legislature	Coordinating or governing board	K-12 agency, districts, schools	Other state agencies	Federal agencies	General public	Other audience
Articulation								
Completions								
Course cost analysis								
Course taking patterns								
Distance education								
Dual credit/dual enrollment								
Economic impact/jobs								
Enrollment (age, gender, ethnicity)								
Facilities utilization								
Financial aid								
High school feedback								
Institutional finance								
Institutional profile, private								
Institutional profile, public								
Mobility/migration								
Non-credit instructional activity								
Performance measures								
Remediation								
Retention								
Student learning								
Transfer								
Tuition/fees/college costs								
Other reports								

Please identify the **other audience type** selected in the previous question for the following type of report.

30 Feel free to comment on the questions or your responses in SECTION THREE: USING STUDENT UNIT RECORD SYSTEM DATA.

SECTION FOUR: LINKING POSTSECONDARY STUDENT UNIT RECORD SYSTEM DATA TO OTHER SYSTEMS

Existence of State P-20 Data Warehouse

31 Does your state have a P-20 data warehouse?

No
Yes

32 Which agencies/entities contribute data to the P-20 data warehouse?

33 Of the agencies/entities listed above, which has the primary responsibility for managing the warehouse? *Indicate N/A where applicable.*

34 What agency/entity **hosts** the P-20 data warehouse?

Your agency/entity
Other agency/entity, please specify:

35 Does your agency/entity **provide** data to this warehouse?

No
Yes

Linking to Other Agencies, States, and External Organizations

36 Does your agency/entity **currently** link to other agencies/entities within your state, other states, or external organizations?

No
Yes

37 Does your agency/entity link to other agencies/entities within your state?

No
Yes

38 With which of the following agencies/entities within your state does your agency/entity currently link? *Select all that apply*.

State financial aid agency/entity
State education agency (K-12)
Labor/workforce
Pre-k/early childhood
Child protective services
Foster care
Health
Human services
Motor vehicle division/dept
Juvenile detention
Corrections
Court system
Other agency/entity, please specify:

39 Which **primary ID number(s)** are used to **match** your agency/entity's student unit record data to unit record data from other agencies/entities within your state? *Select all that apply*.

	Social Security Number	K-12 ID	State ID	Other ID
State financial aid agency/entity				
State education agency (K-12)				
Labor/workforce				
Pre-k/early childhood				
Child protective services				
Foster care				
Health				
Human services				
Motor vehicle division/dept				
Juvenile detention				
Corrections				
Court system				
Other agency/entity				

Please identify the **other ID** selected in the previous question for the following agency/entity within your state.

40 Does your agency/entity collect **demographic data elements** to **match** student unit record data to unit record data from other agencies/entities within your state (e.g., name, date of birth, gender, race/ethnicity, address)?

No
Yes

41 Which **demographic data element(s)** are collected to **match** your agency/entity's student unit record data to unit record data from other agencies/entities within your state? *Select all that apply*.

	Name	Date of birth	Gender	Race/ ethnicity	Address	Other data element
State financial aid agency/entity						
State education agency (K-12)						
Labor/workforce						
Pre-k/early childhood						
Child protective services						
Foster care						
Health						
Human services						
Motor vehicle division/dept						
Juvenile detention						
Corrections						
Court system						
Other agency/entity						

Please identify the **other data element** selected in the previous question for the following agency/entity within your state.

42 Which **K-12 data elements** does your agency/entity have access to by virtue of the linking arrangements? *Select all that apply*.

Student name
Student date of birth
Student gender
Student race/ethnicity
Student resident county-district code
Date student enrolled
Language spoken at home
Student free and reduced lunch eligibility
District/school code
Disability status
Course type (regular, honors, AP, dual credit)
Course title
Course grade
High school grade point average
Assessment scores
Date student graduated
Other K-12 data element, please specify:

43 Which **labor/workforce data elements** does your agency/entity have access to by virtue of the linking arrangements? *Select all that apply*.

Employee name
Employee address
Employer ID number
Employer size; number of employees (monthly)
Employer county
Wages earned
Wage type code
Hours worked
Employment quarter code
Employment year
Date student/employee applied for unemployment insurance
Date student/employee received first unemployment insurance check
Other agencies/entities providing student/employee services during period individual is in receipt of Unemployment Insurance
North American Industry Classification System code
North American Industry Classification System title
Standard Occupational Classification code
Standard Occupational Classification title
Other labor/workforce data element, please specify:

44 Does your agency/entity link to other states?

No
Yes

45 With which other states does your agency/entity **currently** link? Select all that apply.

Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Hawai'i
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming

46 Does your agency/entity link to the National Student Clearinghouse?

No
Yes

47 Does your agency/entity link to other external organizations (e.g., Southern Regional Education Board, Western Interstate Commission for Higher Education)?

No
Yes, please specify:

48 Which of the following **currently** allow your agency/entity to link to other unit record systems? *Select all that apply*.

n/a
Legislative mandate
Executive mandate
Attorney general opinion/statement
Memorandum of agreement/understanding
Administrative rule/regulation
Other, please specify:

49 *If applicable*, please describe how your agency/entity modified its student unit record system to allow linking to other data systems (e.g., adding new data fields, creating new file structures).

50 Is your agency/entity charged with reporting on **performance measures** that require linking to other state agencies entities?

No
Yes, please provide examples:

51 Is your agency/entity **in the process** of linking to any of the following agencies/entities within your state (***do not*** *select based on whether your agency/entity* ***has plans*** *or is* ***thinking about*** *linking to those below)? Select all that apply.*

n/a
State financial aid agency/entity
State education agency (K-12)
Labor/workforce
Pre-k/early childhood
Child protective services
Foster care
Health
Human services
Motor vehicle division/dept
Juvenile detention
Corrections
Court system
Other agency/entity, please specify:

Barriers to Linking

52 Which of the following **barriers** prevent your agency/entity from linking to any unit record systems **or** further inhibit your agency/entity from linking to other unit record systems? *Select all that apply*.

n/a
Legislation
Attorney general opinion/statement
Resources
Lack of common identifiers/crosswalks
Coordination with other state authorities/administrators
Incompatible systems
Data quality concerns
FERPA concerns
Lack of interest from other agencies
Other barrier, please specify:

53 Please identify which describes the barrier associated with **legislation**:

Lack of legislation
Legislation prohibiting linking
Other legislative barrier, please specify:

54 Please identify which describes the barrier associated with **attorney general opinion/statement**:

Lack of attorney general opinion/statement
Attorney general opinion/statement prohibiting linking
Other attorney general barrier, please specify:

55 Please describe the steps your agency/entity is taking to **facilitate** and/or **minimize** barriers to **linking**. *Indicate N/A if necessary*.

56 Feel free to comment on the questions or your responses in SECTION FOUR: LINKING POSTSECONDARY STUDENT UNIT RECORD SYSTEM DATA TO OTHER SYSTEMS

SECTION FIVE: MECHANISMS TO ENSURE DATA QUALITY

Controls for Data Quality

57 What office/division within or outside your agency/entity is responsible for **entering data** in your agency/entity's student unit record system?

58 What office/division within or outside your agency/entity is responsible for **checking/verifying** data in your agency entity's student unit record system, including institutional data?

59 How does your agency/entity **inform** the appropriate institutional personnel that they must reconcile data submission inconsistencies? Select all that apply.

n/a
Notification (e.g., email, phone call) from agency/entity staff person
Web-based data error report
Other mechanism, please specify:

60 Does your agency/entity conduct **on-site** institutional data verification?

n/a
No
Yes; please specify how often:

61 Does your agency/entity provide professional development training to institutional data personnel?

n/a
No
Yes; please specify if training is mandatory:

62 **How often** does your agency/entity provide professional development training to institutional data personnel?

Annually
Twice a year
Three times a year
Four times a year
Ongoing
As needed
Other frequency, please specify:

63 Feel free to comment on the questions or your responses in SECTION FIVE: MECHANISMS TO ENSURE DATA QUALITY

SECTION SIX: SUSTAINING STUDENT UNIT RECORD SYSTEMS

Local Support for State Data Systems

64 When was the last time your agency's/entity's data system was significantly upgraded or modified?

Since 2000
Between 1990 and 1999
Prior to 1990

65 Did your agency/entity receive **start up funds** for this upgrade or modification?

n/a
No
Yes

66 Did your agency/entity receive **recurring funds** for this upgrade or modification?

n/a
No
Yes

67 Feel free to comment on the questions or your responses in SECTION SIX: SUSTAINING STUDENT UNIT RECORD SYSTEMS

OPTIONAL SECTION: SUGGESTIONS FOR SURVEY IMPROVEMENT

68 Approximately how many hours did it **collectively** take your agency/entity to complete this survey?

0-2 hours
3-5 hours
6-8 hours
9+ hours
Other, please specify:

69 Is there anything that you would like to add that we have not addressed?

Appendix C: Respondent Directory

ALABAMA
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Appendix D: Final Data Element List

Postsecondary data elements

Demographic

- student name
- date of birth
- gender
- race/ethnicity
- Social Security Number
- K–12 ID
- institution ID
- student ID
- citizenship
- state residency status

Postsecondary academic history

- admissions scores
- placement scores
- prior college(s) attended
- transfer credit(s)

Enrollment status

- degree-seeking status
- attendance status (full-/part-time)
- first term of academic history
- program/major

Financial aid

- dependency status
- family income
- federal financial aid
- state financial aid
- institutional financial aid
- other financial aid
- merit-based financial aid
- need-based financial aid
- Free Application for Federal Student Assistance (FAFSA) fields

Academic activity

- course title
- course mode of instruction
- course grade
- term student credit hours (SCH) attempted
- term SCH earned

Academic attainment

- degree awarded
- degree date
- cumulative SCH earned
- cumulative GPA

K–12 data elements

Demographic

- free and reduced-price lunch eligibility
- disability status
- language spoken at home

High school background information

- high school attended
- district/school code
- student resident county-district code

High school academic activity

- date student enrolled
- course type (regular, honors, AP, etc.)
- course title
- course grade

High school completion information

- high school grade point average (GPA)
- high school graduation date
- K–12 assessment scores

Labor/workforce data elements

- employer ID number
- employer size (number of employees, monthly)
- employer county
- wages earned
- wage type code
- hours worked
- employment quarter code
- employment year
- date student/employee applied for Unemployment Insurance (UI)
- date student first received UI check
- other agencies providing services to student receiving UI
- U.S. Census North American Industry Classification System (NAICS) code
- U.S. Census NAICS title
- U.S. Department of Labor Standard Occupational Classification (SOC) code
- U.S. Department of Labor SOC title

Appendix E: SEI-AEM Methodology

Synergy Enterprises, Inc. and the Applied Engineering Management Corporation (SEI-AEM) used previously available research from NCES and the Lumina Foundation, as well as preliminary information from SHEEO, to identify 74 initial data elements. From these 74 elements, SEI-AEM selected 39 based on their inclusion in the IPEDS Data Dictionary (2007) as well as the frequency with which they appeared in the three sources just mentioned (see **Figure 16**). Of these 39 elements, 30 were specifically examined in this SHEEO study.

Figure 16: Thirty-nine data elements SEI-AEM identified for analysis

Data Elements		
Dependency status	Level*	Financial aid-institutional
Gender (sex)	Attendance intensity*	Financial aid-merit
ITIN* or SSN	First term of academic history	Financial aid-state
Race/ethnicity	Attendance status (full-time/part-time)	Financial aid-other
Student name	Program length*	Financial aid-need
Citizenship	Ready for transfer*	Tuition and fees*
State of residence	Credit hours*	Cumulative GPA
Permanent address*	IPEDS Institution UNITID	Cumulative SCH earned
Exclusion flag*	High school GPA	Term SCH attempted
Program/major	High school graduation date	Term SCH earned
State residency status	High school attended	Degree date
Degree-seeking status	Total price of attendance*	Degree granted/awarded
Note: Elements with asterisks were not examined in SHEEO study		

For each of the 28 data dictionaries that SHEEO obtained from phase 1 of data collection, SEI-AEM compared the definitions and code structures of each data element in **Figure 16** with those in the IPEDS Data Dictionary (2007). If the data element was not included in IPEDS, SEI-AEM selected the most appropriate definitions from one of the following sources: the National Postsecondary Student Aid Study, Postsecondary Electronic Standards Council, Common Data Set, Lumina Foundation for Education, or Free Application for Federal Student Aid. In the end, SEI-AEM used the Lumina Foundation for Education (2003) definitions as the alternate source.

SEI-AEM then categorized each data element according to the following rubric:

- Elements were categorized as having a **High** level of similarity to the identified source if both the data element definition and code structures were identical;
- Elements were categorized as having a **Medium** level of similarity to the identified source if the data element definition was identical and the code structure was sufficiently compatible but not identical; and
- Elements were categorized as having a **Low** level of similarity to the identified source if the data element definition was inconsistent with the identified source.

Appendix F: Abbreviations Used Within Report for States with Multiple Agencies/Entities

State	Agency/Entity	Abbreviation
California	California Community Colleges	CCC
	California Postsecondary Education Commission	CPEC
	The California State University and Colleges	CSU
	University of California System	UCS
Florida	Board of Governors, State University System of Florida	BOG
	Florida Department of Education	DOE
Minnesota	Minnesota Office of Higher Education	MOHE
	Minnesota State Colleges and Universities	MNSCU
New York	City University of New York	CUNY
	New York State Education Department Office of Higher Education	NYSED
	The State University of New York	SUNY
North Carolina	North Carolina Community College System	NCCCS
	University of North Carolina	UNC
Oregon	Oregon Department of Community Colleges and Workforce Development	ODCC
	Oregon University System	OUS
Pennsylvania	Pennsylvania Department of Education Office of Postsecondary and Higher Education	PDE
	Pennsylvania State System of Higher Education	PASSHE
Vermont	University of Vermont	UVM
	Vermont State Colleges	VSC
Washington	Washington Higher Education Coordinating Board	HECB
	Washington Office of Financial Management	OFM
	Washington State Board for Community & Technical Colleges	SBCTC
Wyoming	University of Wyoming	UWYO
	Wyoming Community College Commission	WCCC

Appendix G: Student Unit Record Systems Included in this Study by State (2009)

State	Number of SURs	Agency/Entity
Alabama	1	Alabama Commission on Higher Education
Alaska	1	University of Alaska Statewide System
Arizona	1	Arizona Academic Program Articulation Steering Committee
Arkansas	1	Arkansas Department of Higher Education
California	4	California Community Colleges
		California Postsecondary Education Commission
		The California State University and Colleges
		University of California System
Colorado	1	Colorado Department of Higher Education
Connecticut	1	Connecticut Department of Higher Education
District of Columbia	1	District of Columbia Office of the State Superintendent of Education-Higher Education Financial Services
Florida	2	Board of Governors, State University System of Florida
		Florida Department of Education
Georgia	1	Board of Regents of the University System of Georgia
Hawai'i	1	The University of Hawai'i System
Illinois	1	Illinois Board of Higher Education
Indiana	1	Indiana Commission for Higher Education
Kansas	1	Kansas Board of Regents
Kentucky	1	Kentucky Council on Postsecondary Education
Louisiana	1	Louisiana Board of Regents
Maine	1	University of Maine System
Maryland	1	Maryland Higher Education Commission
Massachusetts	1	Massachusetts Department of Higher Education
Minnesota	2	Minnesota Office of Higher Education
		Minnesota State Colleges and Universities
Mississippi	1	Mississippi Board of Trustees of State Institutions of Higher Learning
Missouri	1	Missouri Department of Higher Education
Montana	1	Montana University System
Nevada	1	Nevada System of Higher Education
New Jersey	1	New Jersey Commission on Higher Education
New Mexico	1	New Mexico Higher Education Department
New York	3	City University of New York
		New York State Education Department Office of Higher Education
		The State University of New York
North Carolina	2	North Carolina Community College System
		University of North Carolina
North Dakota	1	North Dakota University System
Ohio	1	Ohio Board of Regents
Oklahoma	1	Oklahoma State Regents for Higher Education
Oregon	2	Oregon Department of Community Colleges and Workforce Development
		Oregon University System
Pennsylvania	2	Pennsylvania Department of Education Office of Postsecondary and Higher Education
		Pennsylvania State System of Higher Education
Rhode Island	1	Rhode Island Board of Governors for Higher Education
South Carolina	1	South Carolina Commission on Higher Education
South Dakota	1	South Dakota Board of Regents
Tennessee	1	Tennessee Higher Education Commission
Texas	1	Texas Higher Education Coordinating Board
Utah	1	Utah State Board of Regents
Vermont	2	University of Vermont
		Vermont State Colleges
Virginia	1	State Council of Higher Education for Virginia
Washington	3	Washington Higher Education Coordinating Board
		Washington Office of Financial Management
		Washington State Board for Community & Technical Colleges
West Virginia	1	West Virginia Higher Education Policy Commission
Wisconsin	1	University of Wisconsin System
Wyoming	2	University of Wyoming
		Wyoming Community College Commission
total = 45*	**59**	

**Total number of states includes the District of Columbia.*

Appendix H: Required Documentation for Outside Researchers Requesting Unit Records

State	Agency/Entity responsible	Unit Record extract	Required documentation at time of request
Alabama	Alabama Commission on Higher Education	No extracts of unit record level data	N/A
Alaska	University of Alaska Statewide System	Considered and approved on an individual basis (though requests are very infrequent)	IRB documentation; Data-Sharing Agreement
Arkansas	Arkansas Department of Higher Education	No extracts of unit record level data	N/A
California	California Community Colleges	Considered and approved on an individual basis	Requestor must submit formal written proposal outlining the research and the data requested
	The California State University and Colleges	Considered and approved on an individual basis (in the past, researchers have only been affiliated with other CA public colleges or universities)	Memorandum of Understanding
	University of California System	Considered on an individual basis and may be approved for de-identified data only	FERPA Researcher Agreement
Colorado	Colorado Department of Higher Education	Considered on an individual basis and may be approved for de-identified data only	Researcher Contract
District of Columbia	District of Columbia Office of the State Superintendent of Education	Considered and approved on an individual basis (has occurred one time)	Memorandum of Understanding
Florida	Board of Governors, State University System of Florida	Considered and approved on an individual basis	Data-Sharing Agreement
	Florida Department of Education	Considered and approved on an individual basis	Unit Record Data Request packet
Kansas	Kansas Board of Regents	Considered and approved on an individual basis	Standardized data request documents
Kentucky	Kentucky Council on Postsecondary Education	Considered on an individual basis and may be approved for de-identified data only	Data Request packet including cover letter, detailed description of the data requested, signed data use agreement, and for student requests, a letter of reference from a faculty member or advisor
Maine	University of Maine System	No extracts of unit record-level data	N/A
Maryland	Maryland Higher Education Commission	Considered on an individual basis and may be approved for de-identified data (very few cases where identifiable data was provided)	Memorandum of Understanding
Minnesota	Minnesota Office of Higher Education	No extracts of unit record-level data	N/A
	Minnesota State Colleges and Universities	Considered and approved on an individual basis	Enter into a contract with the researcher
Missouri	Missouri Department of Higher Education	Considered and approved on an individual basis	Memorandum of Understanding
Montana	Montana University System	Considered and approved on an individual basis	Memorandum of Understanding
Nevada	Nevada System of Higher Education	Considered on an individual basis and may be approved for de-identified data (although this is very infrequent)	Memorandum of Understanding
New Jersey	New Jersey Commission on Higher Education	No extracts of unit record-level data	N/A
New Mexico	New Mexico Higher Education Department	Considered and approved on an individual basis	Data Request Form (in the process of being developed)

(continued on next page)

State	Agency/Entity responsible	Unit Record extract	Required documentation at time of request
New York	City University of New York	Considered and approved on an individual basis	Memorandum of Understanding
	The State University of New York	Considered on an individual basis and may be approved for de-identified data (only one case of identifiable)	Memorandum of Understanding
North Carolina	North Carolina Community College System	Considered and approved on an individual basis	Memorandum of Understanding
Ohio	Ohio Board of Regents	Considered on an individual basis and may be approved for de-identified data only	Memorandum of Understanding
Oregon	Oregon Department of Community Colleges and Workforce Development	Considered and approved on an individual basis	Data-Sharing Agreement
	Oregon University System	Considered on an individual basis from researchers affiliated with the Oregon University System and may be approved for de-identified data only	Memorandum of Understanding
Pennsylvania	Pennsylvania Department of Education Office of Postsecondary and Higher Education	Considered and approved on an individual basis	Data Request Form
	Pennsylvania State System of Higher Education	No extracts of unit record level data	N/A
South Carolina	South Carolina Commission on Higher Education	Considered and approved on an individual basis	Data Request Form
South Dakota	South Dakota Board of Regents	Considered and approved on an individual basis	Memorandum of Understanding
Utah	Utah State Board of Regents	Considered from researchers affiliated with the agency or with one of the data providers only and approved on an individual basis	Depends on the circumstance as to what documentation is required
Vermont	Vermont State Colleges	Considered and approved on an individual basis by each college's IRB	IRB documentation
Virginia	State Council of Higher Education for Virginia	Considered and approved on an individual basis	Depends on the circumstance as to what documentation is required
Washington	Washington Higher Education Coordinating Board	Considered and approved on an individual basis (though requests are very infrequent)	Depends on the circumstance as to what documentation is required
West Virginia	West Virginia Higher Education Policy Commission	Considered and approved on an individual basis	Data Usage Agreement
Wisconsin	University of Wisconsin System	Considered and approved on an individual basis	Memorandum of Understanding
Wyoming	University of Wyoming	Considered and approved on an individual basis	Confidentiality agreement
	Wyoming Community College Commission	No extracts of unit record level data	N/A

Appendix I: Florida Department of Education Unit Record Data Request Packet

The Florida Department of Education has one of the most comprehensive procedures for requesting unit record data, consisting of six sections (available online at http://www.fldoehub.org/research).

- Project information, which includes basic facts such as the requestor name, affiliation, project title, and project funding;
- Project description, which includes more details about the purpose of the research, research questions, methodology, and data needed;
- Timeline, which must specify estimates of the timeframe for the Data Collection Phase, Data Analysis Phase, Report Writing Phase, and Final Report/Publication of the research;
- Statement of benefit, which asks the requestor to describe how the state of Florida might use and benefit from the research;
- Data element crosswalk, which specifies the technical data elements requested; and
- Security and access agreement, which details the protection and use of the data.

Appendix J: Existence of and Number of Data Elements by State SUR System

	POSTSECONDARY															
	Demographic											Academic history				
Agency/entity	Student name	Date of birth	Gender	Race/ethnicity	SSN	K-12 ID	IHE ID	Student ID	Citizenship	State residency status	Total demographic (10)	Admissions scores	Placement scores	Prior college(s) attended	Transfer credit(s)	Total academic history (4)
Alabama Commission on Higher Education	♦	♦	♦	♦		♦	♦	♦	♦	♦	9			♦	♦	2
University of Alaska Statewide System*	♦	♦			♦						3					0
Arizona Academic Program Articulation Steering Committee	♦	♦	♦	♦	♦			♦	♦	♦	8		♦	♦	♦	3
Arkansas Department of Higher Education	♦	♦	♦	♦	♦		♦			♦	7		♦			1
California Community Colleges	♦	♦	♦	♦	♦		♦	♦	♦	♦	9			♦	♦	2
California Postsecondary Education Commission*											0					0
The California State University and Colleges	♦	♦	♦	♦	♦		♦		♦	♦	8	♦	♦	♦	♦	4
University of California System	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦	♦	♦	♦	4
Colorado Department of Higher Education		♦	♦	♦	♦	♦	♦	♦	♦	♦	9	♦	♦	♦	♦	4
Connecticut Department of Higher Education*					♦	♦					2					0
District of Columbia Office of the State Superintendent of Education	♦	♦			♦				♦	♦	5			♦		1
Board of Governors, State University System of Florida	♦	♦	♦	♦	♦			♦	♦	♦	8	♦	♦	♦	♦	4
Florida Department of Education	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦	♦	♦	♦	4
Board of Regents of the University System of Georgia	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦	♦	♦	♦	4
University of Hawaii System	♦	♦	♦	♦	♦		♦	♦	♦	♦	9	♦	♦	♦	♦	4
Illinois Board of Higher Education*					♦						1					0
Indiana Commission for Higher Education		♦	♦	♦	♦	♦	♦	♦	♦	♦	9	♦	♦	♦	♦	4
Kansas Board of Regents	♦	♦	♦	♦	♦	♦	♦	♦		♦	9	♦		♦	♦	3
Kentucky Council on Postsecondary Education	♦	♦	♦	♦	♦	♦	♦	♦		♦	9	♦	♦	♦	♦	4
Louisiana Board of Regents	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦				1
University of Maine System*					♦						1					0
Maryland Higher Education Commission		♦	♦	♦	♦		♦		♦	♦	7			♦		1
Massachusetts Department of Higher Education	♦	♦	♦	♦	♦		♦	♦	♦	♦	9	♦	♦	♦	♦	4
Minnesota Office of Higher Education	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10			♦	♦	2
Minnesota State Colleges and Universities	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦	♦	♦	♦	4
Mississippi Board of Trustees of State Institutions of Higher Learning		♦	♦	♦	♦		♦	♦	♦	♦	8	♦	♦	♦	♦	4
Missouri Department of Higher Education	♦	♦	♦	♦	♦	♦	♦		♦	♦	9	♦		♦	♦	3
Montana University System	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦	♦	♦	♦	4
Nevada System of Higher Education	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10					0
New Jersey Commission on Higher Education		♦	♦	♦	♦	♦	♦		♦	♦	8	♦		♦	♦	3
New Mexico Higher Education Department*	♦	♦	♦	♦	♦	♦					6					0
City University of New York	♦	♦	♦	♦	♦		♦		♦	♦	8	♦	♦	♦	♦	4
New York State Education Department Office of Higher Education*											0					0
The State University of New York	♦	♦	♦	♦	♦		♦	♦	♦	♦	9	♦		♦	♦	3
North Carolina Community College System	♦	♦	♦	♦	♦		♦	♦	♦	♦	9		♦			1
University of North Carolina*			♦	♦	♦				♦	♦	5					0
North Dakota University System*	♦	♦			♦						3					0
Ohio Board of Regents		♦	♦	♦	♦		♦	♦	♦	♦	8			♦	♦	2

Asterisk (*) denotes incomplete data element information. Therefore, number of data elements are artificially low. Red diamond (♦) denotes existence of data element derived from

POSTSECONDARY																											
Enrollment status						Financial aid										Academic activity						Academic attainment						
Degree-seeking status	FT/PT status	1st term academic history	Program/major	Total enroll status (4)	Dependency status	Family income	Federal financial aid	State financial aid	Institutional financial aid	Other financial aid	Merit-based financial aid	Need-based financial aid	FAFSA fields	Total financial aid (9)	Course title	Course mode of instruction	Course grade	Term SCH attempted	Term SCH earned	Total academic activity (5)	Degree awarded	Degree date	Cumulative SCH earned	Cumulative GPA	Total academic attainment (4)	Total postsecondary (36)	Total data elements (64)
♦	♦		♦	3										0				♦		1	♦	♦	♦	♦	4	19	25
				0										0						0					0	3	8
♦	♦	♦	♦	4			♦			♦				2	♦		♦	♦	♦	4	♦	♦	♦	♦	4	25	27
♦	♦	♦	♦	4			♦	♦	♦	♦			♦	5	♦	♦	♦	♦	♦	5	♦	♦			2	24	27
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	33	36
				0										0						0					0	0	0
♦	♦	♦	♦	4	♦		♦	♦	♦	♦	♦	♦	♦	8				♦	♦	2	♦	♦	♦	♦	4	30	33
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9				♦	♦	2	♦	♦	♦	♦	4	33	36
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9				♦	♦	2	♦	♦	♦	♦	4	32	35
				0										0						0					0	2	2
♦	♦	♦	♦	4	♦	♦	♦	♦	♦				♦	6						0	♦	♦		♦	3	19	23
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦		8	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	33	36
♦	♦		♦	3	♦	♦	♦	♦	♦	♦	♦	♦		8	♦	♦	♦			3	♦	♦			2	30	51
♦	♦	♦	♦	4		♦	♦	♦	♦	♦	♦	♦	♦	8	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	35	44
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	35	43
				0										0						0					0	1	1
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦		8				♦	♦	2	♦	♦	♦	♦	4	31	45
♦	♦	♦	♦	4										0	♦	♦		♦	♦	4	♦		♦	♦	3	23	36
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9	♦	♦	♦	♦	♦	5	♦		♦		2	33	48
♦	♦	♦	♦	4	♦		♦	♦	♦	♦			♦	6	♦		♦		♦	3	♦	♦		♦	3	27	30
				0										0						0					0	1	1
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9				♦		1	♦	♦			2	24	29
♦	♦	♦	♦	4		♦	♦	♦	♦	♦	♦	♦		7	♦	♦		♦	♦	4	♦	♦	♦	♦	4	32	41
♦	♦		♦	3										0						0	♦	♦			2	17	18
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	36	48
♦	♦	♦	♦	4	♦		♦	♦	♦	♦	♦	♦		7	♦	♦		♦	♦	4	♦	♦	♦	♦	4	31	33
♦	♦	♦	♦	4	♦	♦		♦					♦	4				♦	♦	2	♦	♦	♦	♦	4	26	38
♦	♦	♦	♦	4	♦		♦	♦	♦	♦	♦	♦		7	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	34	44
♦	♦	♦	♦	4						♦				1	♦		♦	♦	♦	4	♦	♦	♦	♦	4	23	38
♦	♦		♦	3										0				♦		1	♦	♦	♦	♦	4	19	21
				0										0						0					0	6	22
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	34	44
				0										0						0					0	0	0
♦	♦		♦	3										0				♦		1	♦	♦	♦	♦	4	20	23
♦	♦	♦	♦	4	♦		♦	♦	♦	♦	♦	♦	♦	8	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	31	43
♦	♦		♦	3										0						0	♦	♦			2	10	11
				0										0						0					0	3	3
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9	♦	♦		♦	♦	4	♦	♦	♦	♦	4	31	40

response to question within the original data collection instrument.

Agency/entity	POSTSECONDARY (continued)															
	Demographic											Academic history				
	Student name	Date of birth	Gender	Race/ethnicity	SSN	K-12 ID	IHE ID	Student ID	Citizenship	State residency status	**Total demographic (10)**	Admissions scores	Placement scores	Prior college(s) attended	Transfer credit(s)	**Total academic history (4)**
Oklahoma State Regents for Higher Education	♦	♦	♦	♦	♦		♦		♦	♦	8	♦		♦	♦	3
Oregon Department of Community Colleges and Workforce Development	♦	♦	♦	♦	♦		♦	♦		♦	8		♦	♦		2
Oregon University System	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦		♦	♦	3
Pennsylvania Department of Education Office of Postsecondary and Higher Education	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦	♦	♦	♦	4
Pennsylvania State System of Higher Education	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦		♦	♦	3
Rhode Island Board of Governors for Higher Education	♦	♦	♦	♦	♦		♦	♦	♦	♦	9	♦	♦	♦	♦	4
South Carolina Commission on Higher Education		♦	♦	♦	♦		♦		♦	♦	7	♦				1
South Dakota Board of Regents	♦	♦	♦	♦	♦		♦	♦	♦	♦	9	♦		♦	♦	3
Tennessee Higher Education Commission*					♦						1					0
Texas Higher Education Coordinating Board*	♦	♦	♦		♦						4					0
Utah State Board of Regents	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦	♦	♦	♦	4
University of Vermont*											0					0
Vermont State Colleges	♦	♦	♦	♦	♦		♦	♦	♦	♦	9	♦	♦	♦	♦	4
State Council of Higher Education for Virginia*	♦	♦	♦		♦						4					0
Washington Higher Education Coordinating Board	♦	♦	♦	♦	♦		♦			♦	7					0
Washington Office of Financial Management	♦	♦	♦	♦	♦		♦	♦		♦	8			♦		1
Washington State Board for Community and Technical Colleges	♦	♦	♦	♦	♦		♦	♦	♦	♦	9			♦		1
West Virginia Higher Education Policy Commission	♦	♦	♦	♦	♦		♦		♦	♦	8	♦		♦	♦	3
University of Wisconsin System		♦	♦	♦	♦		♦	♦	♦	♦	8	♦		♦		2
University of Wyoming	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦	♦	♦	♦	4
Wyoming Community College Commission	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10	♦	♦	♦	♦	4

Asterisk (*) denotes incomplete data element information. Therefore, number of data elements are artificially low. Red diamond (♦) denotes existence of data element derived from

POSTSECONDARY (continued)																										
Enrollment status					Financial aid									Academic activity						Academic attainment						
Degree-seeking status	FT/PT status	1st term academic history	Program/major	**Total enroll status (4)**	Dependency status	Family income	Federal financial aid	State financial aid	Institutional financial aid	Other financial aid	Merit-based financial aid	Need-based financial aid	FAFSA fields	**Total financial aid (9)**	Course title	Course mode of instruction	Course grade	Term SCH attempted	Term SCH earned	**Total academic activity (5)**	Degree awarded	Degree date	Cumulative SCH earned	Cumulative GPA	**Total academic attainment (4)**	**Total postsecondary (36)**	**Total data elements (64)**
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦		8	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	32	39
♦	♦		♦	3	♦		♦	♦	♦	♦	♦	♦		7	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	29	39
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦			♦	7	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	33	41
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	36	39
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	35	38
♦	♦		♦	3			♦							1	♦		♦	♦	♦	4	♦	♦	♦	♦	4	25	32
♦	♦		♦	3				♦			♦	♦		3	♦	♦		♦		3	♦	♦	♦	♦	4	21	24
♦	♦	♦	♦	4										0	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	25	28
				0										0						0					0	1	1
				0										0						0					0	4	16
♦	♦	♦	♦	4										0	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	27	41
				0										0						0					0	0	0
♦	♦	♦	♦	4	♦		♦	♦	♦	♦	♦	♦	♦	8	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	34	37
				0										0						0					0	4	12
♦	♦			2	♦	♦	♦	♦	♦	♦	♦	♦	♦	9						0					0	18	18
	♦	♦	♦	3										0	♦	♦		♦	♦	4	♦	♦	♦		3	19	39
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦		8	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	31	45
♦	♦	♦	♦	4	♦		♦	♦	♦		♦	♦	♦	7	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	31	38
♦	♦	♦	♦	4	♦	♦	♦	♦	♦	♦	♦	♦	♦	9		♦		♦		2	♦	♦		♦	3	28	30
♦	♦	♦	♦	4		♦	♦	♦	♦	♦	♦	♦	♦	8	♦	♦	♦	♦	♦	5	♦	♦	♦	♦	4	35	44
♦	♦	♦	♦	4				♦						1		♦		♦	♦	3	♦	♦	♦	♦	4	26	29

response to question within the original data collection instrument.

Agency/entity	K-12																		
	Demographic				High school background				Academic activity					High school completion					
	Student free & reduced lunch eligibility	Language spoken at home	Disability status	Total demographic (3)	High school attended	District/school code	Student resident county-district code	Total high school background (3)	Date student enrolled	Course type	Course title	Course grade	Total academic activity (4)	High school GPA	High school graduation date	Assessment scores	Total # high school completion (3)	Total K-12 (13)	State education agency (K-12) linkages
Alabama Commission on Higher Education	♦			1	♦	♦	♦	3					0	♦	♦		2	6	+
University of Alaska Statewide System*				0				0		♦			1				0	1	+
Arizona Academic Program Articulation Steering Committee				0	♦			1					0		♦		1	2	
Arkansas Department of Higher Education				0	♦			1					0	♦	♦		2	3	
California Community Colleges				0	♦			1					0		♦		1	2	+
California Postsecondary Education Commission*				0				0					0				0	0	
The California State University and Colleges				0	♦			1					0	♦	♦		2	3	
University of California System				0	♦			1					0	♦	♦		2	3	+
Colorado Department of Higher Education				0	♦			1					0	♦	♦		2	3	
Connecticut Department of Higher Education*				0				0					0				0	0	
District of Columbia Office of the State Superintendent of Education	♦			1	♦			1					0	♦	♦		2	4	+
Board of Governors, State University System of Florida				0	♦			1					0	♦	♦		2	3	+
Florida Department of Education	♦	♦	♦	3	♦	♦		2	♦	♦	♦	♦	4	♦	♦	♦	3	12	+
Board of Regents of the University System of Georgia				0	♦	♦	♦	3					0	♦			1	4	+
University of Hawaii System		♦		1	♦	♦	♦	3			♦	♦	2	♦	♦		2	8	+
Illinois Board of Higher Education*				0				0					0				0	0	
Indiana Commission for Higher Education				0	♦			1					0	♦	♦		2	3	
Kansas Board of Regents	♦		♦	2	♦	♦	♦	3	♦				1	♦	♦	♦	3	9	+
Kentucky Council on Postsecondary Education				0	♦	♦	♦	3					0	♦	♦	♦	3	6	+
Louisiana Board of Regents				0	♦			1					0	♦	♦		2	3	
University of Maine System*				0				0					0				0	0	
Maryland Higher Education Commission				0	♦			1					0	♦	♦		2	3	+
Massachusetts Department of Higher Education	♦		♦	2	♦	♦		2	♦	♦			2	♦	♦	♦	3	9	+
Minnesota Office of Higher Education				0	♦			1					0				0	1	
Minnesota State Colleges and Universities				0	♦			1					0	♦	♦		2	3	
Mississippi Board of Trustees of State Institutions of Higher Learning				0	♦			1					0	♦			1	2	
Missouri Department of Higher Education	♦			1	♦	♦	♦	3	♦				1		♦		1	6	+
Montana University System				0	♦			1					0	♦	♦		2	3	
Nevada System of Higher Education	♦			1	♦	♦	♦	3			♦	♦	2		♦		1	7	+
New Jersey Commission on Higher Education				0	♦			1					0		♦		1	2	
New Mexico Higher Education Department*				0	♦	♦		2		♦	♦		2		♦	♦	2	6	+
City University of New York	♦	♦		2	♦	♦		2	♦		♦	♦	3	♦	♦	♦	3	10	+
New York State Education Department Office of Higher Education*				0				0					0				0	0	
The State University of New York				0	♦			1					0	♦	♦		2	3	
North Carolina Community College System				0	♦			1					0		♦		1	2	
University of North Carolina*				0	♦			1					0				0	1	

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Agency/entity	LABOR																
	Employer ID number	Employer size; # of employees (monthly)	Employer county	Wages earned	Wage type code	Hourse worked	Employment quarter code	Employment year	Date student/employee applied for UI	Date student first received UI check	Other agencies providing services to student	U.S. Census NAICS code	U.S. Census NAICS title	U.S. Department of Labor SOC code	U.S. Department of Labor SOC title	Total Labor (15)	Labor/workforce agency linkages	Total data elements (64)
Alabama Commission on Higher Education																0		25
University of Alaska Statewide System*				♦				♦						♦	♦	4	+	8
Arizona Academic Program Articulation Steering Committee																0		27
Arkansas Department of Higher Education																0		27
California Community Colleges				♦												1	+	26
California Postsecondary Education Commission*																0		0
The California State University and Colleges																0		33
University of California System																0		36
Colorado Department of Higher Education																0		35
Connecticut Department of Higher Education*																0		2
District of Columbia Office of the State Superintendent of Education																0		23
Board of Governors, State University System of Florida																0		36
Florida Department of Education				♦	♦	♦	♦	♦				♦	♦	♦	♦	9	+	51
Board of Regents of the University System of Georgia	♦			♦			♦	♦						♦		5	+	44
University of Hawaii System																0		43
Illinois Board of Higher Education*																0		1
Indiana Commission for Higher Education	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦					11	+	45
Kansas Board of Regents				♦			♦	♦				♦				4	+	36
Kentucky Council on Postsecondary Education		♦	♦	♦	♦	♦						♦	♦	♦	♦	9	+	48
Louisiana Board of Regents																0		30
University of Maine System*																0	+	1
Maryland Higher Education Commission				♦			♦									2	+	29
Massachusetts Department of Higher Education																0		41
Minnesota Office of Higher Education																0		18
Minnesota State Colleges and Universities	♦	♦	♦	♦		♦	♦	♦				♦	♦			9	+	48
Mississippi Board of Trustees of State Institutions of Higher Learning																0	+	33
Missouri Department of Higher Education	♦		♦	♦			♦	♦				♦				6	+	38
Montana University System	♦	♦	♦	♦			♦	♦				♦				7	+	44
Nevada System of Higher Education			♦	♦	♦	♦	♦	♦						♦	♦	8	+	38
New Jersey Commission on Higher Education																0		21
New Mexico Higher Education Department*	♦		♦	♦	♦	♦	♦					♦	♦	♦	♦	10	+	22
City University of New York																0		44
New York State Education Department Office of Higher Education*																0		0
The State University of New York																0		23
North Carolina Community College System	♦		♦	♦			♦	♦	♦	♦	♦	♦		♦		10	+	43
University of North Carolina*																0		11

response to question within the original data collection instrument.

Agency/entity	K-12 (continued)																	
	Demographic				High school background				Academic activity					High school completion				
	Student free & reduced lunch eligibility	Language spoken at home	Disability status	Total demographic (3)	High school attended	District/school code	Student resident county-district code	Total high school background (3)	Date student enrolled	Course type	Course title	Course grade	Total academic activity (4)	High school GPA	High school graduation date	Assessment scores	Total # high school completion (3)	Total K-12 (13)	State education agency (K-12) linkages
North Dakota University System*				0				0					0				0	0	+
Ohio Board of Regents				0	♦			1					0		♦		1	2	
Oklahoma State Regents for Higher Education				0	♦			1					0	♦	♦		2	3	
Oregon Department of Community Colleges and Workforce Development				0	♦	♦		2					0		♦	♦	2	4	+
Oregon University System	♦	♦	♦	3	♦	♦		2					0	♦	♦	♦	3	8	+
Pennsylvania Department of Education Office of Postsecondary and Higher Education				0	♦			1					0	♦	♦		2	3	
Pennsylvania State System of Higher Education				0	♦			1					0	♦	♦		2	3	+
Rhode Island Board of Governors for Higher Education				0	♦			1					0		♦		1	2	
South Carolina Commission on Higher Education				0	♦			1					0	♦	♦		2	3	
South Dakota Board of Regents				0	♦	♦		2					0		♦		1	3	+
Tennessee Higher Education Commission*				0				0					0				0	0	
Texas Higher Education Coordinating Board*	♦			1	♦	♦	♦	3		♦			1		♦		1	6	+
Utah State Board of Regents	♦			1	♦	♦	♦	3					0	♦	♦	♦	3	7	+
University of Vermont*				0				0					0				0	0	
Vermont State Colleges				0	♦			1					0	♦	♦		2	3	
State Council of Higher Education for Virginia*				0				0					0				0	0	
Washington Higher Education Coordinating Board				0				0					0				0	0	
Washington Office of Financial Management	♦	♦	♦	3	♦	♦	♦	3	♦	♦	♦	♦	4	♦	♦	♦	3	13	+
Washington State Board for Community & Technical Colleges				0	♦		♦	2	♦				1		♦		1	4	+
West Virginia Higher Education Policy Commission				0	♦			1					0	♦	♦		2	3	
University of Wisconsin System				0	♦			1					0		♦		1	2	
University of Wyoming				0	♦	♦	♦	3	♦	♦	♦	♦	4	♦	♦		2	9	+
Wyoming Community College Commission				0	♦			1					0	♦	♦		2	3	

Asterisk (*) denotes incomplete data element information. Therefore, number of data elements are artificially low. Red diamond (♦) denotes existence of data element derived from

Agency/entity	LABOR (continued)																	
	Employer ID number	Employer size; # of employees (monthly)	Employer county	Wages earned	Wage type code	Hourse worked	Employment quarter code	Employment year	Date student/employee applied for UI	Date student first received UI check	Other agencies providing services to student	U.S. Census NAICS code	U.S. Census NAICS title	U.S. Department of Labor SOC code	U.S. Department of Labor SOC title	Total Labor (15)	Labor/workforce agency linkages	Total data elements (64)
North Dakota University System*																0	+	3
Ohio Board of Regents	♦		♦	♦			♦	♦				♦	♦			7	+	40
Oklahoma State Regents for Higher Education			♦	♦			♦	♦								4	+	39
Oregon Department of Community Colleges and Workforce Development				♦		♦	♦	♦				♦		♦		6	+	39
Oregon University System																0		41
Pennsylvania Department of Education Office of Postsecondary and Higher Education																0		39
Pennsylvania State System of Higher Education																0		38
Rhode Island Board of Governors for Higher Education				♦			♦	♦				♦	♦			5	+	32
South Carolina Commission on Higher Education																0		24
South Dakota Board of Regents																0		28
Tennessee Higher Education Commission*																0		1
Texas Higher Education Coordinating Board*			♦	♦			♦	♦				♦	♦			6	+	16
Utah State Board of Regents	♦		♦	♦			♦	♦				♦	♦			7	+	41
University of Vermont*																0		0
Vermont State Colleges																0		37
State Council of Higher Education for Virginia*	♦	♦	♦	♦	♦		♦	♦						♦		8	+	12
Washington Higher Education Coordinating Board																0		18
Washington Office of Financial Management			♦	♦	♦	♦	♦	♦				♦				7	+	39
Washington State Board for Community & Technical Colleges	♦	♦	♦	♦	♦	♦	♦	♦				♦	♦			10	+	45
West Virginia Higher Education Policy Commission	♦			♦			♦	♦								4	+	38
University of Wisconsin System																0		30
University of Wyoming																0		44
Wyoming Community College Commission																0		29

response to question within the original data collection instrument.

Appendix K: Full Listing of Types of Reports Generated Using SUR Data

Type of report	Number of states	Number of SURs
Enrollment	42	54
Retention	40	51
Transfer	39	51
Completions	39	49
Performance measures	35	45
Remediation	38	44
Financial aid	33	40
Distance education	30	36
Dual credit/dual enrollment	31	35
High school feedback	31	34
Institutional profile, public	28	33
Tuition/fees/college costs	24	28
Facilities utilization	19	22
Institutional finance	19	22
Noncredit instructional activity	21	22
Mobility/migration	17	19
Economic impact/jobs	16	16
Articulation	12	15
Course cost analysis	15	15
Course-taking patterns	14	15
Student learning	12	13
Institutional profile, private	8	8
Other reports	5	5

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