# SHEEO

State Higher Education
Executive Officers Association

# Strong Foundations 2023

## STATE POSTSECONDARY DATA: EVOLVING SYSTEMS, IMPROVING INSIGHTS, AND ENDURING VALUE

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# TABLE OF CONTENTS

# INDEX OF FIGURES

# INTRODUCTION

For more than 50 years, state agencies have used postsecondary student unit record systems (PSURSs) to inform policy and decision-making. Over that time, PSURSs have proliferated and evolved to allow greater collection, storage, sharing, linking, and communication of data. While these evolving systems and their data vary across states, they provide universal value and play a vital role in improving state postsecondary goals and student outcomes.

Since 2010, the State Higher Education Executive Officers Association's (SHEEO) Strong Foundations survey has reported on PSURSs evolution and value by illuminating the state of state[1] postsecondary data in the U.S. SHEEO has documented the content and capacity of PSURSs to provide insight into what data state agencies collect and store within their PSURSs and how they use, share, and link those data and systems. Accordingly, in the *Strong Foundations 2023* survey, SHEEO asked about the numbers of PSURSs existing in states, the types of data state postsecondary agencies are collecting in their PSURSs, their connections to other state agency data systems and state longitudinal data systems (SLDSs), and the value of those data to inform and improve state goals and student outcomes.

*Strong Foundations 2023* was developed in the fall of 2022 in partnership with an advisory board composed of SHEEO staff, survey respondents from SHEEO member agencies, and postsecondary data experts. The survey was administered from February through March of 2023. Seventy-three SHEEO member and non-member agencies[2] from all 50 states and the District of Columbia responded to the survey. Information on the *Strong Foundations 2023* survey instrument, respondent list, and data can be found here. For more information on Strong Foundations, including past survey instruments, data downloads, and reports from current and past survey administrations, go to the Strong Foundations website.

In *Strong Foundations 2023*, SHEEO asked which state partner agencies PSURSs data were linked to or shared with and what barriers and incentives exist related to that linking and sharing. As expected, PSURSs connections with K-12 and workforce agency data systems were among the most reported connections; yet there are growing connections with other state agencies, including health and human services, foster care, and corrections agencies. The most commonly reported barriers to efficient data sharing between agencies included data privacy concerns, coordination with other state authorities and administrators, lack of time for agency staff to link and analyze shared data, a lack of common identifiers and crosswalks, and a lack of fiscal resources.

SHEEO also asked about data disaggregation and the collection of data elements, beyond traditional demographic data (*e.g.*, gender, race, ethnicity, and age), tied to access, opportunity, and success efforts. Results indicate that state agencies continue to employ PSURS data to gain greater insight into and support of their diverse student populations and that they are increasingly disaggregating race, ethnicity, and gender data beyond Integrated Postsecondary Education Data

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1. SHEEO includes the District of Columbia, Puerto Rico, and all U.S. territories and freely associated states when using the term "state."

2. Referred to as "state agencies" in this report, this term comprises state postsecondary governing boards, coordinating boards, and departments of education, and systems composed of two- and four-year and technical institutions. Respondents also included agency staff from P20W/SLDS agencies, whose responses were informed by the postsecondary data in their systems. While SHEEO received 73 total responses, because Arizona and Delaware do not have PSURSs, they provided written responses outside the parameters of the survey that indicated how their states use available postsecondary data. Thus, the figures within this report reflect the 71 respondent agencies that completed the full survey.

System (IPEDS) categories. Among the new data elements SHEEO included for reporting this year are tribal affiliation, student parent/caregiver status, foster care status, refugee status, justice system involvement, and other data elements about historically underrepresented groups in higher education. SHEEO also inquired about data elements collection related to existing structural barriers to higher education access and success (*e.g.*, basic needs security and mental health information). While responses on the collection of these data elements varied, state agencies are generally expanding their collection and use of PSURS data to build a more complete picture of their student population and develop policies and programs to support their success.

Because SHEEO wanted to better understand not just what data are being collected, shared, and used but also the value PSURS data provide to states, SHEEO asked states to share specific examples of how their PSURS data are being used to improve work processes and outcomes. The representative examples SHEEO highlights in this report underscore the significance PSURSs have in improving mandated reporting, informing state goals and student outcomes, bolstering communication with stakeholders, creating greater transparency and trust, and garnering support and funding.

# EVOLVING SYSTEMS AND ELEMENTS

Advancements in technology have allowed for greater collection, storage, sharing, and linking of PSURS data. As a result, PSURSs have proliferated and are increasingly connected to other data systems within states. These connections, especially with K-12, labor/workforce agencies, and state longitudinal data systems (SLDSs; *e.g.*, state data systems that can connect individual-level data across early childhood, K-12, postsecondary, and workforce sectors[3]), allow for more effective understanding and support of students as they move into and through higher education.

## PSURSS EVOLUTION AND GROWTH

For more than a decade, SHEEO has asked states how many PSURSs exist in their state, where those systems are housed, who oversees them, and how PSURS data are linked and shared with other state agencies. As with prior years, state agencies reported a diversity of approaches to housing and sharing their postsecondary data. As shown in the map below, most states (21) have a single PSURS that houses postsecondary data for the state—across institutional types. However, many states have multiple and separated PSURSs, and these systems can be separated by two- or four-year sectors or by other agency governance factors. For example, California has two four-year PSURSs in the University of California and California State University systems and a third in the California Community Colleges system. Similarly, Minnesota has multiple PSURSs. The Minnesota Office of Higher Education (MOHE) and Minnesota State PSURSs have data emanating from four- and two-year institutions, while the University of Minnesota system contains data from its member four-year institutions.

*FIGURE 1*
**HOW MANY PSUR SYSTEMS DOES YOUR STATE HAVE?**



NUMBER OF PSURSs
0   1   2   3+
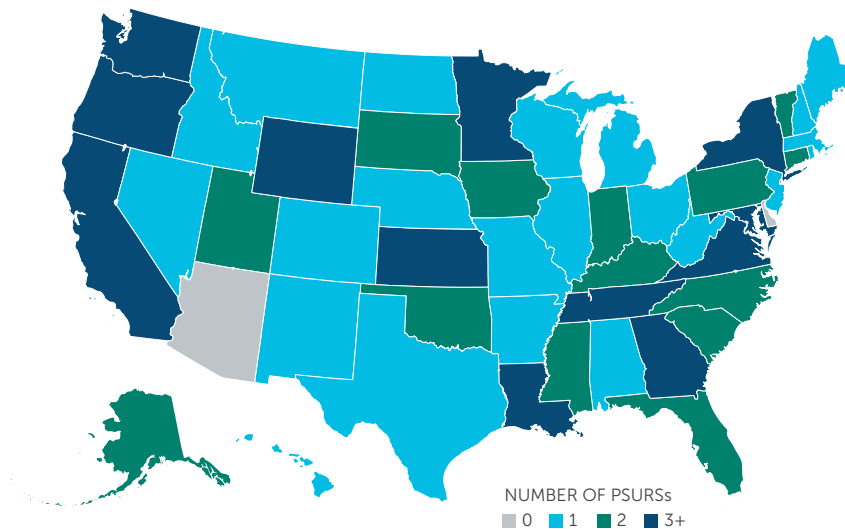
**SOURCE:** State Higher Education Executive Officers Association

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3.   Education Commission of the States (ECS). (2021, Dec. 14). *50-state comparison: statewide longitudinal data systems*, [webpage]. Denver, CO: ECS.

With the growth and popularity of SLDSs, many PSURSs have linked to or been subsumed by larger, statewide P20W data systems that house individual data from early childhood through the workforce. Where data sits and how it is collected and shared between PSURSs and SLDSs also varies by state. For example, in Nebraska, Nebraska's Coordinating Commission for Postsecondary Education, which does not have a stand-alone PSURS, relies on PSUR data that is collected by and housed in the Nebraska Statewide Workforce and Educational Reporting System (NSWERS). In other states, PSURSs and SLDSs exist as separate but connected systems. In Maryland, while the Maryland Higher Education Commission (MHEC) has a PSURS to inform its work, MHEC also submits PSURS data to the state's SLDS, the Maryland Longitudinal Data System Center. As a result, multiple PSURSs can exist within a state with varied connections to that state's SLDS. In a few states, like Arizona and Delaware, no PSURS exists. Despite the absence of PSURSs in these states, these agencies are using data from their postsecondary institutions and state partners to assist with decision-making and to share information with stakeholders to improve student outcomes and reach state goals.

Although PSURSs and SLDSs vary, most states are moving toward further integrating their PSURSs data into SLDSs, as they receive federal and state support. As an example, California, as described above, has historically had three PSURSs that operated independently. With an infusion of grant funding and the support of its governor and legislature, California created the California Cradle-to-Career SLDS, which will include data from the state's multiple PSURSs.

## GROWING AND COMPLEX CONNECTIONS TO INFORM CHANGE
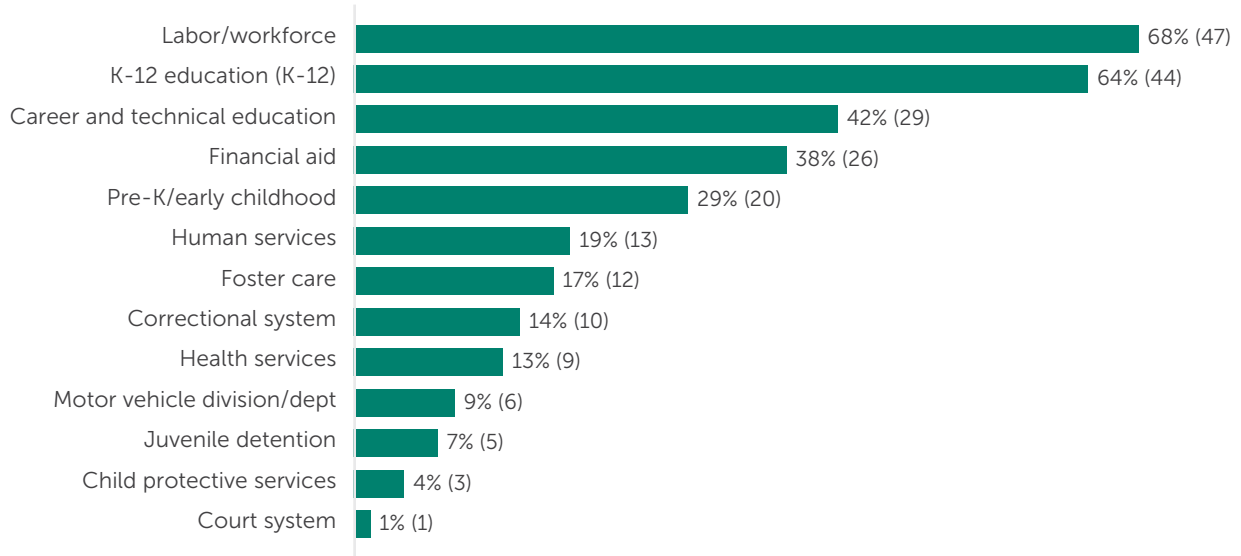
**Strong Foundations 2023 asked:**
Which state agency unit record systems does your PSUR link to?

As in prior Strong Foundations surveys, results from the 2023 administration indicated the greatest number of connections exist between PSURSs and data systems for labor/workforce and K-12 education. With growing field, economic, and political interest in postsecondary-to-workforce outcomes, non-degree credentials, and credentials of value,[4] in *Strong Foundations 2023*, respondents indicated commensurate growth in PSURS data alignment with workforce data systems and with data from technical college systems. While workforce and K-12 connections have steadily risen over the last decade, state agencies also reported increasing connections between PSURSs and data systems associated with health and human services, foster care, and corrections agencies.

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4.  SHEEO. (2019). Communities of Practice: *Aligning postsecondary education and the workforce* [webpage]. Denver, CO: SHEEO.; SHEEO. (2019). *SHEEO/Credential Engine: Transparency and credential literacy in the marketplace* [webinar]. Washington, D.C.: SHEEO; National Association of State Workforce Agencies (NASWA). (2022, July 26). *Defining, measuring, and improving credentials of value.* [webinar]. Washington, D.C.: NASWA & SHEEO.; U.S. Department of Education. (n.d.). *Raise the bar: Postsecondary and career pathways* [webpage]. Washington, D.C.: U.S. Department of Education.

*FIGURE 2*

**WHICH STATE AGENCIES' UNIT RECORD SYSTEMS DOES YOUR AGENCY/PSUR SYSTEM CURRENTLY LINK TO?**

| Agency | Percentage (Count) |
|---|---|
| Labor/workforce | 68% (47) |
| K-12 education (K-12) | 64% (44) |
| Career and technical education | 42% (29) |
| Financial aid | 38% (26) |
| Pre-K/early childhood | 29% (20) |
| Human services | 19% (13) |
| Foster care | 17% (12) |
| Correctional system | 14% (10) |
| Health services | 13% (9) |
| Motor vehicle division/dept | 9% (6) |
| Juvenile detention | 7% (5) |
| Child protective services | 4% (3) |
| Court system | 1% (1) |

**NOTES:**

1. States were able to select all the response choices that were applicable to their agency.

2. Two states did not provide a response to this question.

**SOURCE:** State Higher Education Executive Officers Association

In addition to the agencies noted above, three respondents indicated that they share data with health occupation licensing systems; one respondent noted teacher licensure systems, and one referenced revenue systems. The University of Alaska System also noted access to the Alaska Permanent Fund Dividend application data. States also noted the ability to share data with other states via data sharing agreements.
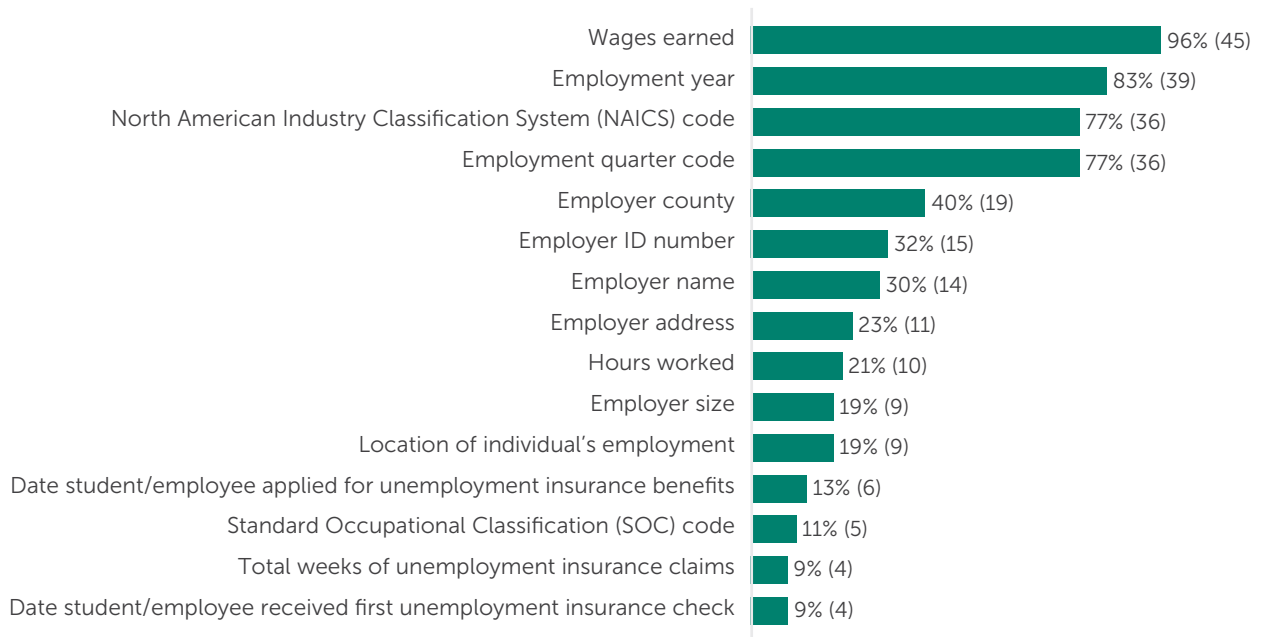
**Strong Foundations 2023 asked:**

Which partner agency data elements does your agency have access to?

SHEEO wanted to understand not just what systems PSURSs linked to but also what data elements state agencies had access to, especially labor/workforce and K-12 elements. The charts below indicate the most commonly accessed data from partner agency systems.

*FIGURE 3*

**WHICH LABOR/WORKFORCE DATA ELEMENTS DOES YOUR AGENCY HAVE ACCESS TO?**

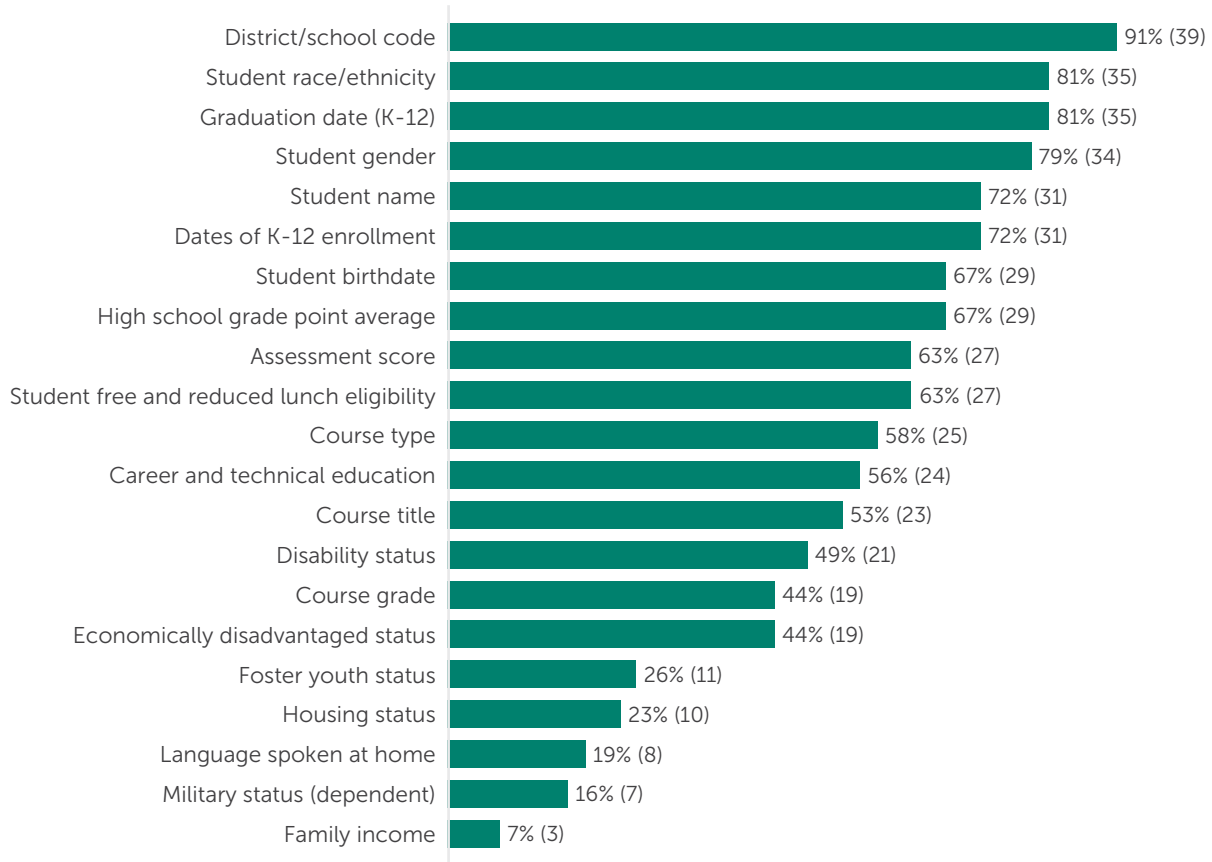| Data element | Percentage (count) |
|---|---|
| Wages earned | 96% (45) |
| Employment year | 83% (39) |
| North American Industry Classification System (NAICS) code | 77% (36) |
| Employment quarter code | 77% (36) |
| Employer county | 40% (19) |
| Employer ID number | 32% (15) |
| Employer name | 30% (14) |
| Employer address | 23% (11) |
| Hours worked | 21% (10) |
| Employer size | 19% (9) |
| Location of individual's employment | 19% (9) |
| Date student/employee applied for unemployment insurance benefits | 13% (6) |
| Standard Occupational Classification (SOC) code | 11% (5) |
| Total weeks of unemployment insurance claims | 9% (4) |
| Date student/employee received first unemployment insurance check | 9% (4) |

**NOTES:**

1. States were able to select all the response choices that were applicable to their agency.

**SOURCE:** State Higher Education Executive Officers Association

FIGURE 4
**WHICH K-12 DATA ELEMENTS DOES YOUR AGENCY HAVE ACCESS TO?**

| Data Element | Percentage (Count) |
|---|---|
| District/school code | 91% (39) |
| Student race/ethnicity | 81% (35) |
| Graduation date (K-12) | 81% (35) |
| Student gender | 79% (34) |
| Student name | 72% (31) |
| Dates of K-12 enrollment | 72% (31) |
| Student birthdate | 67% (29) |
| High school grade point average | 67% (29) |
| Assessment score | 63% (27) |
| Student free and reduced lunch eligibility | 63% (27) |
| Course type | 58% (25) |
| Career and technical education | 56% (24) |
| Course title | 53% (23) |
| Disability status | 49% (21) |
| Course grade | 44% (19) |
| Economically disadvantaged status | 44% (19) |
| Foster youth status | 26% (11) |
| Housing status | 23% (10) |
| Language spoken at home | 19% (8) |
| Military status (dependent) | 16% (7) |
| Family income | 7% (3) |

**NOTES:**
1. States were able to select all the response choices that were applicable to their agency.

**SOURCE:** State Higher Education Executive Officers Association

Respondents noted that, in addition to the K-12 elements referenced above, they had access to the following: disciplinary records, attendance records, English proficiency, migrant status, gifted status, special education status, dual enrollment, pre-K attendance, diploma type, technical credit courses, alternative learning services, personal learning places, and adult basic education preparation.
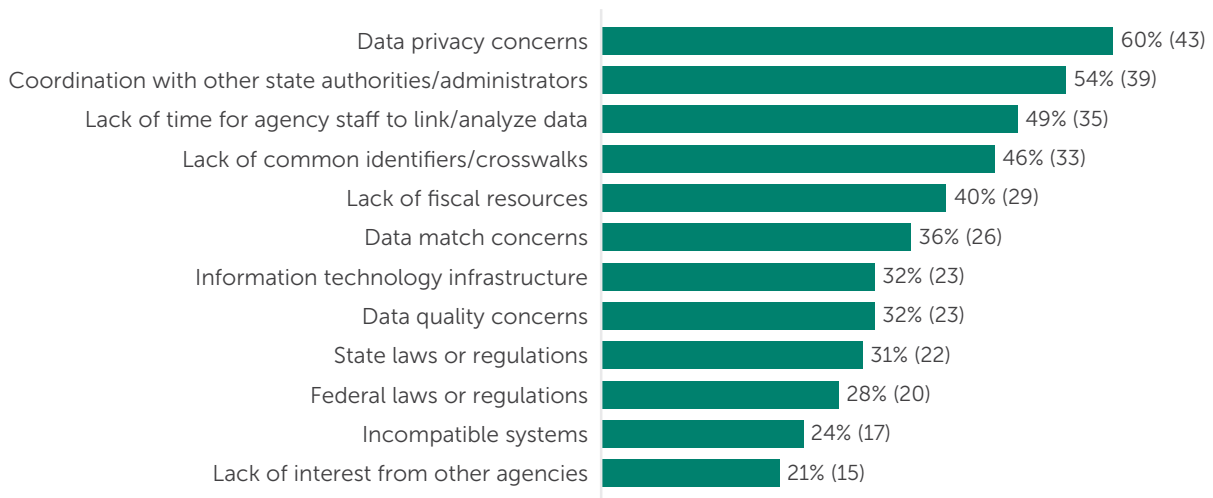
State agencies have access to a wealth of information via their PSURSs and their partner agencies. However, there are challenges associated with accessing data from data systems outside their PSURS. Data privacy concerns were among the most reported barriers to data sharing. More information on data privacy associated with PSURSs can be found in the *Strong Foundations 2020* report Privacy and Security in State Data Systems and in a forthcoming *Strong Foundations 2023* report that delves further into the data privacy and security standards and practices associated with PSURSs.

*FIGURE 5*

**WHICH OF THE FOLLOWING PREVENTS OR INHIBITS YOUR AGENCY FROM LINKING TO UNIT RECORD SYSTEMS, ESPECIALLY ACROSS AGENCIES, SECTORS, OR STATES?**

| Category | Percentage (Count) |
|---|---|
| Data privacy concerns | 60% (43) |
| Coordination with other state authorities/administrators | 54% (39) |
| Lack of time for agency staff to link/analyze data | 49% (35) |
| Lack of common identifiers/crosswalks | 46% (33) |
| Lack of fiscal resources | 40% (29) |
| Data match concerns | 36% (26) |
| Information technology infrastructure | 32% (23) |
| Data quality concerns | 32% (23) |
| State laws or regulations | 31% (22) |
| Federal laws or regulations | 28% (20) |
| Incompatible systems | 24% (17) |
| Lack of interest from other agencies | 21% (15) |

**NOTES:**

1. States were able to select all the response choices that were applicable to their agency.

2. Two states reported that this question was not applicable to their state.

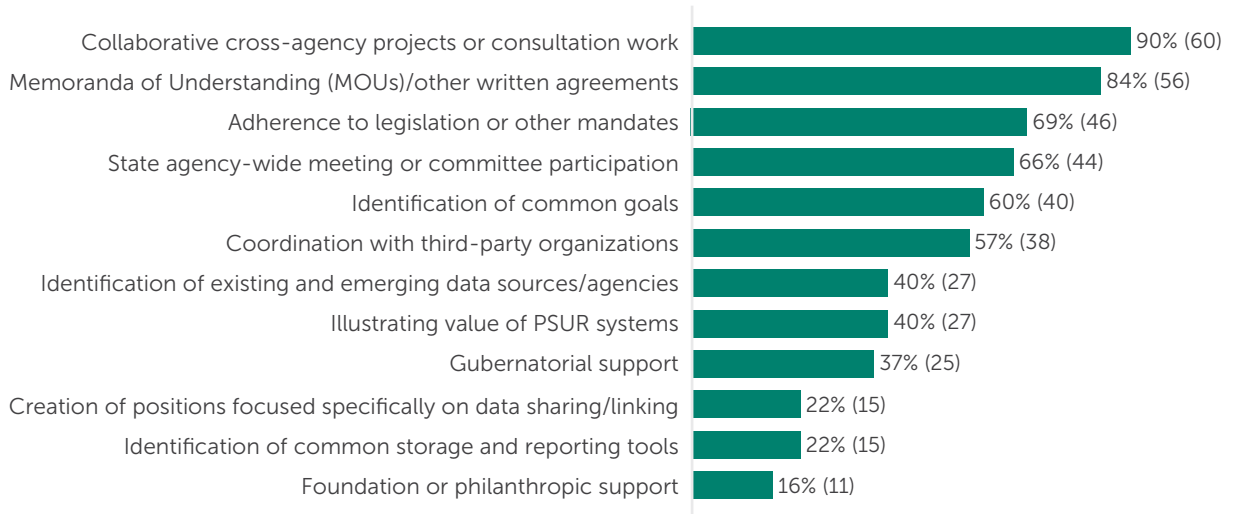**SOURCE:** State Higher Education Executive Officers Association

Despite the challenges in linking and sharing data, state agencies are actively working to improve these connections. Relationship building through collaborative cross-agency projects and consultation and MOUs were the most popular reported means of improving data sharing and linkages, followed by mandates, meetings, shared goals, and third-party coordination.

*FIGURE 6*

**WHAT STRATEGIES HAS YOUR AGENCY ADOPTED TO INCREASE COORDINATION RELATED TO DATA LINKING AND SHARING PSUR SYSTEM DATA WITH OTHER STATE AUTHORITIES/ADMINISTRATORS?**

| Strategy | Percentage (count) |
|---|---|
| Collaborative cross-agency projects or consultation work | 90% (60) |
| Memoranda of Understanding (MOUs)/other written agreements | 84% (56) |
| Adherence to legislation or other mandates | 69% (46) |
| State agency-wide meeting or committee participation | 66% (44) |
| Identification of common goals | 60% (40) |
| Coordination with third-party organizations | 57% (38) |
| Identification of existing and emerging data sources/agencies | 40% (27) |
| Illustrating value of PSUR systems | 40% (27) |
| Gubernatorial support | 37% (25) |
| Creation of positions focused specifically on data sharing/linking | 22% (15) |
| Identification of common storage and reporting tools | 22% (15) |
| Foundation or philanthropic support | 16% (11) |

**NOTES:**

1. Four state agencies did not provide a response to this question.

2. States were able to select all the response choices that were applicable to their agency.

**SOURCE:** State Higher Education Executive Officers Association

## VALUE SPOTLIGHT: PUTTING PSURS DATA TO WORK WITHIN AND BEYOND STATE BORDERS IN KENTUCKY

One of the most robust examples of connecting PSURSs and SLDSs within a state to inform student success and workforce outcomes is the Kentucky Center for Statistics (KY Stats; Kentucky's SLDS) Career Explorer. Drawing on data from SHEEO member Kentucky Council on Postsecondary Education and its partner agencies, the Kentucky Community and Technical College System, the Kentucky Department of Education, the Education Professional Standards Board, the Kentucky Higher Education Assistance Authority, and the Kentucky Education and Labor Cabinet, the Career Explorer allows students and other stakeholders to search for careers based on major, certification, or degree requirements, on their desired interest and salary, and on the career's expected knowledge, skills, and abilities.

Kentucky is also an excellent example of a state connecting PSURS data with workforce data across state boundaries to help inform better regional understanding of postsecondary success. Kentucky, along with a number of state postsecondary agencies, participates in the Coleridge Initiative's Administrative Data Research Facility (ADRF). The ADRF is designed to improve sharing of state workforce and postsecondary data across state boundaries. Participation in the ADRF and in the National Association of State Workforce Agencies' (NASWA) Multi State Data Collaboratives (regional groups working to problem solve data-sharing barriers and create regional data insights and opportunities through the ADRF) has allowed state postsecondary agencies to expand access to and utility of PSURS and workforce system data by creating a mechanism for increasing and improving both intrastate and interstate data connections and agency collaborations between postsecondary and labor/workforce agencies.

# IMPROVING INSIGHTS AND SUPPORT VIA DISAGGREGATED DATA AND EXPANDED METRICS

Sharing data within states and their regions helps support student success, from K-12 through higher education and into the workforce. Meeting state workforce needs and economic goals in the coming decades will require states to provide equitable opportunities and student support for access to and completion of higher education.[5] Using disaggregated demographic data and collecting equitable opportunity-associated data elements through PSURS data are both helping states better plan for state economic and individual success.

## USING DISAGGREGATED DATA TO IMPROVE INSIGHTS

In aggregate, data can tell a compelling story that helps us better understand higher education broadly. However, that story becomes more nuanced and insightful when the supporting data are disaggregated to highlight the differences within and between groups. State agencies are increasingly working to disaggregate their data into categories that allow for more meaningful understanding, more effective policy development, and more targeted interventions to address their state postsecondary goals.

**Strong Foundations 2023 asked:**

Do you disaggregate beyond IPEDS requirements?

IPEDS requires that states and postsecondary institutions report data on student and staff race, ethnicity, and gender. Currently, IPEDS reporting categories allow for nine race and ethnicity categories and two gender categories.[6] These categories provide a useful standard for national comparisons. Yet increasingly, states are further disaggregating the data in these categories. The Minnesota Office of Higher Education (MOHE) and the University Hawaiʻi System (UHS) are among the 29 responding state agencies that indicated they disaggregate race, ethnicity, and gender data beyond IPEDS requirements. By further digging into their demographic data, these agencies can better understand who their students are and how to support them through college and into their careers.

- MOHE worked with its colleagues at the Minnesota State (MS) and the University of Minnesota (UM) systems to create its gender disaggregation categories. Through that process, MOHE developed 19 categories for gender.[7]

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5.  Association of Public and Land Grant Universities (APLU). (n.d.). *Building a future workforce for all learners* [webpage]. Washington, D.C.: APLU.

6.  Starting in 2024, changes to gender subcategories will include women, men, another gender, and gender unknown.

7.  MOHE's gender categories include: agender, androgyne, androgynous, bigender, cis/cisgender, demigender, genderqueer or gender fluid; man, multigender, non-binary or gender non-conforming, questioning or unsure, trans/transgender, two spirit, woman, another gender identity not listed, more than four, prefer not to disclose, not reported by student, and not reported by institution.

According to Steve Rogness, research analyst at MOHE, the agency was committed to this work because *"Research shows that transgender and nonbinary individuals experience discrimination and harassment that may affect educational outcomes. Gathering gender identity data that includes transgender and nonbinary students will help us understand the full gender diversity of Minnesota college students and will allow for equity analysis to better serve all students."* In addition to improving insight into student realities and needs, doing this work with MS and UM provided opportunities for strengthening collaboration among system and institutional colleagues by meeting an area of need. As Meredith Fergus, director of research at MOHE explains, *"The ability to disaggregate data on student success and student outcomes by gender identity is reporting that is highly sought after by the campus offices and student associations supporting inclusive gender identity and understanding."* Being able to provide disaggregated gender data not only supports Minnesota's students but strengthens the relationship between Minnesota's postsecondary education agencies.

- At the UHS, IPEDS' Asian and Native Hawaiian or Other Pacific Islanders categories were not detailed enough to help UHS appropriately understand and support its student cohorts. As a result, the UHS uses 10 categories for Asian students and nine categories for Native Hawaiian or Other Pacific Islander students.[8] Creating this level of detail was essential for the UHS to ensure it has a clearer view of its student population, with a particular interest in knowing more about its Native Hawaiian student population. According to Kara Plamann Wagoner, director of institutional research, analysis, and planning at the UHS, disaggregating data in these categories allows the system to better understand its diverse student population, which results in better programs and services to those students. But she also noted that *"disaggregating data goes beyond insights for UHS analysts and administrators. From the perspective of students, disaggregation allows them to see themselves in data rather than being othered or lumped together in a broad category; students who have been historically excluded can view enrollment or graduation rates with labels that fit their own identity. They may spark a deeper sense of belonging. People like me are here and succeeding. I belong here too."*

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8.  USH categories for Asian students are Japanese, Chinese, Filipino, Korean, Thai, Vietnamese, Laotian, Asian Indian, other Asian, mixed Asian. UHS categories for Native Hawaiian or Pacific Islander students are native or part-time Hawaiian, Guamanian, Chamorro, Marshallese, Micronesian, Samoan, Tongan, other Pacific Islanders, and mixed Pacific Islanders.

## EXPANDING DATA ELEMENTS TO IMPROVE SUPPORT

In *Strong Foundations 2023*, SHEEO asked about collection of PSURS data elements associated with student identities and life experiences.[9] State agencies are tracking more information about students, beyond basic demographic categories, to better understand their student populations. These may include military affiliation, caregiver status, immigration status, or involvement in the justice system. States are also beginning to track basic needs security and mental health information and are collecting county residency information to focus on rural student populations. The use of these data elements helps state agencies target programs, wraparound services, and interventions to improve student opportunity and outcomes.

- The California Community College Chancellor's Office explains that their PSURS data *"provide a comprehensive look at student outcomes based on location and student demographics. This has prompted us to make changes in a variety of services and to better focus resources to where they are needed or to re-envision how students experience college."* Using PSURS data to inform services development and resource allocation results in more and better support for students. For example, Missouri's Department of Higher Education & Workforce Development (DHEWD) has used data to inform several of its initiatives. By drawing on its PSURS data and data from the Missouri Department of Social Services, the Department of Corrections, and Missouri higher education institutions, DHEWD has created programs related to its Equity in Missouri Higher Education initiatives, including COVID-19 student support, family support services on campuses, Missouri Prison Education; a Mental Health Taskforce, the Adult Learner Network, its 15 to Finish completion initiative, and more.

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9.  For a complete list of these elements, go to the Strong Foundations Survey Instrument document at postsecondarydata.sheeo.org/wp-content/uploads/2023/10/SF2023Survey.pdf.

# ENDURING VALUE TO STATES, STUDENTS, AND OTHER STAKEHOLDERS

States use PSURS data to inform a variety of efforts, including to fulfill reporting requirements, to build knowledge via research, to inform strategic planning efforts, to respond to inquiries by state legislators, partner agencies, and third parties, and to communicate student, system, and state success to stakeholders. Girding these efforts is a commitment to improving higher education for students and economic outcomes for their state. As such, state agencies deeply value their PSURSs.

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**Strong Foundations 2023 asked:**
For what purposes does your agency use PSURS data?

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*FIGURE 7*
**FOR WHAT PURPOSES DOES YOUR AGENCY CURRENTLY USE PSUR SYSTEM DATA?**

| Purpose | Percentage (count) |
| --- | --- |
| Generating reports and statistics | 96% (66) |
| Data-informed decision-making | 94% (65) |
| Inquiry responses | 88% (61) |
| Accountability | 83% (57) |
| Policymaking | 83% (57) |
| Cross-sector collaboration | 83% (57) |
| Research | 80% (55) |
| Compliance reports | 75% (52) |
| Consumer information for prospective students | 65% (45) |
| Feedback reports | 65% (45) |
| Grant reporting | 61% (42) |
| Predictive modeling or decision-making | 57% (39) |

**NOTES:**
1. States were able to select all the response choices that were applicable to their agency.

**SOURCE:** State Higher Education Executive Officers Association

In addition to asking state agencies what they use PSURS data for, SHEEO asked respondents to report how these data systems add value to their work. Across responses, state agencies underscored the importance of these systems and data in improving access, equity, and opportunity for their students and states through better reporting, research, planning, and communication.

## PSURS DATA IMPROVES REPORTING, RESEARCH, AND STRATEGIC PLANNING

State agencies are required to provide reports to federal and state governments to illustrate student, institutional, system, and student success. Because many of these requirements are legislatively mandated, it is no surprise state agencies indicated that "generating reports and statistics" and "accountability" are among the most prevalent uses of PSURS data. Responding to mandated reporting requirements is a major component of state agency work. For example, *MOHE noted that it "produces approximately 40 reports per year."* These reports span topics of interest, but can include enrollment, attainment, and completion data and, *as the* Oregon Higher Education Coordinating Commission *noted, "essential enrollment, affordability, and other outcomes [data] across institutions and groups, including assessment of equity progress, evaluation of state-funded programs, development and review of funding formulas," and "reporting support for multiple policy and program areas, including community college to public university transfer, internal evaluations, higher school programs areas, and workforce training."* PSURS data are vital to the core reporting efforts of state agencies. These data not only help state agencies respond to mandated requirements but also respond to other requests for information. As the Oklahoma State Regents for Higher Education *explained, through its PSURS, they "are able to run data inquiries for the media, legislature, and Oklahoma higher education institutions."*

Research is another key component of PSURS data use. *The* Colorado Department of Higher Education *(CDHE) noted that it uses PSURS data to inform "a variety of research projects."* That CDHE and other state agencies emphasize using PSURS data for research projects was also unsurprising, given that research historically has been a common theme across Strong Foundations survey responses. As reported in the *Strong Foundations 2020* report on State Postsecondary Data Research Partnerships, use of PSURS data to inform research priorities in collaboration with internal and external researchers has increasingly become an area of focus and demand for state agencies as they work internally and with their state institutions and third party partners to generate PSURSs-informed insight and answers to complex state issues.

Beyond mandated reporting and research initiatives, states actively use PSURS data to inform state-, system-, and agency-level strategic planning and decision-making. For example, *the* Connecticut State Colleges and Universities *noted that given the "breadth of comparable data for [its] 12 community colleges going back to the 1990s," their PSURS is an excellent resource on community college trends and has helped them develop key performance indicators for their strategic planning and student pathways work.* Using PSURS data to develop KPIs and inform other strategic planning activities is a vitally important part of their value to state postsecondary agencies, as these data make planning more robust and outcomes better realized. By using PSURS data for planning, state agencies have been able to take subsequent data-informed action. For example, *the* Indiana Commission for Higher Education *noted that its PSURS data "has helped us provide meaningful, actionable information on a host of issues, from dual credit to college-going rates to impact of financial aid to post-graduation employment."* Further, relying on these data for planning has helped state agencies better collaborate with partner agencies and reduce administrative burdens. *As the* North Dakota University System *explained, it has "connected K12-college-workforce data [to] respond to state specific questions around the workforce pipeline [and has] made cross-agency data analysis easier, with less staff, and without need to constantly create data sharing agreements."* Using PSURS data has allowed North Dakota to share information with partner agencies and provide insightful responses and has resulted in better connections, resources, and outcomes.

## PSURS DATA CREATES BETTER COMMUNICATIONS THAT RESULT IN BROADER UNDERSTANDING AND ACTION

Communicating success is also a key component of the value PSURSs provide to state agencies. Use of PSURS data in communications and internal collaborations between data and communications teams allows state agencies to get technical data into a more comprehensible format for legislators and stakeholders. Numerous respondents noted the importance of having intelligible data that they can use to communicate success and make the case for the value of higher education in their responses to legislative and third-party inquiries. *The Ohio Department of Higher Education noted that being able to show that its student success metrics have improved over time has helped it "make the case that greater investment in higher education will pay dividends."* Similarly, *the Washington Student Achievement Council noted that use of PSURS data has allowed it to "advocate for more state financial aid and make the case for the value of higher education."* Incorporating PSURS data into communication results in strong, data-informed decision-making for state agencies and better outcomes for their states.

Because PSURS data can help states quickly make important communications to stakeholders, state agencies are leveraging PSURS data in their issue briefs, websites, and social media campaigns to make the case for higher education in their states. *In the District of Columbia's Office of the State Superintendent of Education, the agency uses its PSURS to develop issue briefs that "calculate statewide postsecondary metrics for stakeholders who are interested in discussing policies and strategies that may move the needle."* These succinct and data-rich communications allow states to quickly convey important information to stakeholders.

Websites have also become key levers for sharing PSURS data publicly. For example, in Virginia, *the State Council on Higher Education for Virginia's research website is "the official source of higher education data in the Commonwealth. [The site's] reports are cited in legislation as the baseline and authoritative measurement."* Georgia, which also shares data online with policymakers, has also used the power of online interactions through a PSURS data-informed website aimed at students. *The University System of Georgia website "combines PSURS data and workforce outcomes data that show the value of a USG education, help students [compare] institutions and majors for employment and debt, and also consider the effect of taking a full-load of classes on total cost of a degree."* Sharing PSURS data broadly and online increases trust and transparency in state postsecondary outcomes.

Advancements in data visualization mean states are also using PSURS data dashboards as an important communications tool. Through these dashboards, states can more effectively and more transparently communicate timely information to their stakeholders. PSURS data dashboards are especially useful because they create opportunities for transparent information sharing, which helps states bolster trust with their legislators, institutions, and other stakeholders. *The Mississippi Community College Board noted that its "public-facing reports and dashboards have helped drive awareness and reliability for policy-making and more highly informed decision-making on all levels."* Likewise, *the Montana University System noted that its dashboards provide "critical reporting for decision-making and planning, as well as to inform the public on various initiatives and facts about [the Montana system]."* These dashboards not only share information with stakeholders, but their interactive nature also allows stakeholders to interact with the data themselves. For example, *the University of California System noted that its "public facing dashboards with student data on the UC Information Center is widely used by policymakers."* Because PSURS-informed dashboards make data accessible and digestible to readers, it makes it easier for postsecondary agencies to tell their stories and create opportunities for change.

Finally, in efforts to more effectively reach legislators, students, and families, states are also leveraging the power of social media, through hashtag campaigns, to highlight postsecondary success in their states. Both the Oklahoma State Regents for Higher Education with #OKHigherEdWorks and the KCPE with #KYHigheredMatters are sharing key data and statistics via social media to illustrate the value of higher education to their broader public stakeholders.

## VALUE SPOTLIGHT: PENNSYLVANIA'S STATE SYSTEM OF HIGHER EDUCATION

At a recent Community of Practice, Dr. Kate Akers, associate vice chancellor and chief data officer at Pennsylvania's State System of Higher Education (PASSHE), explained the value of PASSHE's PSURS data in improving reporting, planning, communication, and outcomes. She explained that efforts to connect PASSHE's PSURS data and information has improved work processes and outcomes by helping PASSHE to create better internal collaboration and transparency, to inform more robust and actionable strategic plans, and to advocate more effectively for state funding. PASSHE's efforts resulted not only in more relevant, robust, and strategic data and planning and improved coordination between PASSHE offices, but also helped PASSHE make a strong case for the value of higher education in Pennsylvania to the state legislature—resulting in increased funding of 15% for FY23 and an additional 6% for FY24.

In Pennsylvania, the need to create a more data-informed approach to practice was paramount. Like many large systems, PASSHE was challenged with declining enrollment, increasing costs, lack of public trust, and reduced public financial support. To mitigate these challenges, PASSHE staff worked in collaboration across its research and data, finance, and communications teams to better align data definitions, set shared goals, and communicate a shared vision of success. Senior data, finance, and communications officers encouraged collaboration among their staff and with the system's universities. That collaborative approach allowed everyone involved to start viewing shared analytics and finance data in new, integrated ways and to build trust and transparency among collaborators.

With improved data and collaboration have come improved communications and outcomes. In partnership with PASSHE's communications team, research and data leaders facilitated regional sessions with legislators to walk through connected data and talk about workforce outcomes, projected jobs, and why additional student support funding was needed on campuses. PASSHE also set up a strategic framework for communicating the value of higher education in Pennsylvania—the Power and Promise of PASSHE—to show how the system is using a unified data strategy to inform decision-making and advocate for a shared vision of change and support. PASSHE's PSUR dashboard data was integral to this messaging, especially when communicating employment and earnings outcomes to legislators. By sharing dashboard data on financial aid, financial needs, net price, enrollment, Pell eligibility, and affordability by locality, PASSHE was able to tailor its communications to specific regions and interests of the state. Further, PASSHE paired its dashboard information with a comprehensive accountability appropriations booklet which gave legislators a PDF version of relevant dashboards with a narrative that focused on information of interest.

# CONCLUSION

As PSURSs continue to evolve, use of these valuable state resources will remain a top priority for state agencies. *Strong Foundations 2023* survey results illustrate the deep value state agencies find in PSURSs. By employing PSURS data in reporting, research, planning, and advocacy efforts, state agencies are making an impact on their students and state. Further, as these systems develop to better connect to state partner agencies and SLDSs and as state agencies continue to create robust dashboards and data communications, opportunities for improved insight student and state realities and potential will grow. This growth provides an opportunity for further investment in and advocacy for these systems of change.

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