



The Data Capacity of State-Funded Pre-K Programs Across the United States

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Executive Summary

States working to improve their pre-kindergarten (pre-K) systems to better serve children, families, and the pre-K workforce must have access to comprehensive data to drive programmatic and systemic changes.¹ For decades, policy efforts have focused on expanding access to and improving the quality of pre-K programs.^{2,3} However, many families and children still lack access to high-quality pre-K, particularly those who face historical and systemic inequities.^{4,5,6} Members of the pre-K workforce also experience low wages and often lack benefits that influence their well-being and ability to serve families.^{7,8,9} Without comprehensive data, pre-K leaders, researchers, and policymakers are not able to answer critical questions and drive equity in pre-K systems.

To better understand the ways states are accessing^a, analyzing, and using pre-K data, the Early Childhood Data Collaborative (ECDC) at Child Trends conducted a survey of administrators of state-funded pre-K programs.^b Supplemental secondary data were pulled from publicly available sources for states that did not respond to the survey. The primary goal of the survey was to better understand the types of pre-K data states have access to and how they use, disaggregate, and link data. The survey was also conducted to inform the development of the [System Transformation for Equitable Preschools \(STEP Forward with Data\) Framework](#), a tool designed to help state leaders answer essential questions about their preschool systems, assess data gaps, establish data collection practices that address equity, and identify action steps for using data to create equitable preschool systems.

Key Findings

Findings from the 43 states indicate variation in states' current data capacities and several common opportunities for growth.

States were more likely to have access to child- and program-level data than workforce- and systems-level data.

- **93 percent of states had access to child- and program-level data.** Access was defined as data collected by a state agency that is accessible for use within the agency or by request. Most states reported having access to basic demographic data about children enrolled in pre-K programs (i.e., date of birth [100%], gender [98%], race [95%], ethnicity [95%], and disability status [95%]). However, fewer states had access to child-level data related to family characteristics or referrals to other social services (i.e., costs for care [21%], referrals to health or mental health services [17%], parental education [16%], reason for entering [16%], or existing programs [36%]). Frequently accessible program-level data focused on characteristics of the program such as its location, ages served, curriculum used, provisions for children with disabilities, or quality designations (i.e., accreditation, quality rating status). Only 19 percent of survey respondents reported having data about referrals to additional

^a In the survey, accessible data was defined as accessible data was defined as data collected by a state agency that is accessible for use within the state agency or by request.

^b The survey was sent to states with at least one state-funded pre-K program (43 states and Washington D.C.). Thirty-nine state-funded pre-K administrators in 35 states responded. For the eight states that did not respond, ECDC staff reviewed available secondary data to answer survey questions. Data gathered by survey respondents only are referred to as "survey respondents" whereas data gathered from both survey respondents and secondary data are referred to as "states".

services and 13 percent reported having data about cultural competency training for staff.

- **74 percent of states had access to workforce-level data.** States that collected workforce data typically captured information regarding staff role (96%), education (93%), workplace (90%), wages (67%), and demographics (i.e., ethnicity [70%], race [70%], gender [67%]). Demographics related to languages spoken (22%) or country of origin (6%) were less likely to be collected. States also routinely lacked access to data about the presence of professional development plans (19%), access to health care (16%), or enrollment in state assistance programs (9%) to understand workforce professional and economic needs.
- **84 percent of states could report on characteristics of their pre-K systems.** Most states could report data regarding sources of funding (83%) and number of pre-k spaces (67%) available within programs. Fewer states reported having data about policies that impact the early childhood workforce such as policies related to health care (14%), vacation (11%), sick leave (11%), and retirement benefits (11%).

While most states collected race and ethnicity data, fewer reported capacity to disaggregate data by other demographic characteristics and access information about family engagement.

- **States varied in race and ethnicity categories collected.** Nearly all states collected race and ethnicity data (95%), but the categories collected were not consistent. For example, White, Black, Asian, and Native American/Indigenous categories were collected by 80 percent of respondents while fewer reported collecting data on children identifying as Pacific/Islander (77%), Hispanic (74%), or Alaskan Native (71%). A little over one-third of states reported collecting data beyond the categories listed above.
- **Less than half of states reported capacity to disaggregate data by income, tribal affiliation, and country of birth.** While most respondents reported the ability to disaggregate data by child race and/or ethnicity (83%), child disability status (77%), and family languages spoken (54%), fewer were able to disaggregate by income (49%), family tribal affiliation (23%), and child's country of birth (20%). Furthermore, three survey respondents reported that they are unable to disaggregate data. Greater capacity is needed to disaggregate data to guide equity decisions. In addition, although almost all respondents reported collecting data by race and ethnicity (95%), fewer (83%) can disaggregate by these two demographic characteristics.
- **Access to data about community demographics and family engagement are limited.** While states had strong access to demographics about children enrolled in pre-K programs, less than half of survey respondents were able to report on the demographic characteristics of communities where pre-K programs are located (47%) which could aid leaders in outreach efforts. Even fewer states (17%) reported the ability to report on information about families' needs or the degree to which families are represented in pre-K program leadership and involved in decision making (17%).

States reported data infrastructure and management needs related to linking data within and across pre-K systems and frequently cited concerns related to data quality.

- **Most survey respondents reported that pre-K data was siloed across database systems.** Most respondents store pre-K data across several databases within an agency (57%) or across multiple agencies (47%). Fewer respondents reported storing data in a central database (29%) or an early childhood integrated data system (20%) which coordinates data from multiple early learning programs, including state-funded pre-K.
- **More than two thirds of states (69%) could link pre-K and K-12 data.** About 29 states reported the capacity to link data about children enrolled in pre-K programs with K-12 data systems which typically capture data for children pre-K through high school grades. States were less likely to link data for a child with program and workforce information (26%) or about pre-K aged children served across state pre-K and Head Start (24%).
- **Unique identifiers were frequently identified as facilitators to access, link, and use data.** A majority of survey respondents cited unique identifiers (86%) as key infrastructure needed to facilitate the sharing, analysis, and use of pre-K data. Having strong staffing capabilities (66%), a centralized data system (66%), and systematic approaches to data collection (63%) were frequently cited as supports needed to support data accessibility.
- **Data quality concerns were raised across all data collected.** Most respondents reported concerns with the quality of one or more data elements collected at the child-, program-, and workforce-levels (81%, 72%, and 54% respectively). Concerns regarding data quality were also frequently cited as a barrier to linking data across data systems (69%).

This report, which summarizes findings from the survey, provides a 2023 baseline of states' capacity for collecting, analyzing, and using data to improve their pre-K systems. The strengths and challenges identified can guide efforts to improve data within and across states and pre-K systems.

Accompanying this report are [state-specific profiles](#) and [interactive maps](#) that preschool leaders, researchers, and policymakers can use to inform planning efforts for making pre-K systems more equitable. We hope that states will use these survey findings with the forthcoming STEP Forward with Data Framework, a resource designed to guide the expansion and use of data systems to promote equity in state preschool systems.

Introduction

Inequities persist in access to and experiences in high-quality preschool.

High-quality early learning opportunities, including preschool, are vital for child development. Access to high-quality preschool programs that support children's social-emotional, cognitive, and learning development in ways that value culture and abilities sets them on a positive trajectory for academic achievement and overall well-being.^{10,11,12,13} High-quality preschool includes teachers who have access to strong professional development opportunities, are paid fair wages, and are supported by comprehensive benefits. Further, having a stable, nurturing environment allows families to work or pursue their education.

However, inequities persist in the preschool system that limit or prevent access with consequences for children, families, and preschool workforce members of marginalized communities in particular.^{14,15} For example, research points to the disproportionate rates of preschool suspension for Black and Indigenous children compared to White children which are counteractive to learning.¹⁶ In addition, over half of preschool-age children with a disability receive services in segregated settings despite research that points to greater cognitive and developmental gains in non-segregated settings.^{17,18} Furthermore, although the preschool workforce is more racially, ethnically, and linguistically representative of the children it serves^c compared to K-12 educators, it also sees some of the lowest wages compared to other early childhood and K-12 positions.¹⁹ Preschool workforce members also often experience bias and discrimination based on their own identity or lived experience, thus preventing them from serving in high-quality programs or in higher level positions where policies and practices are created.^{20,21}

Building a more equitable preschool system requires a strong data infrastructure.

Efforts to expand preschool have increased over the years,²² but states need data to understand the full landscape of services. This comprehensive view of the preschool system allows leaders to better answer questions about how children, families, and early childhood workforce members access and experience the preschool system. Further, having data that can be disaggregated can identify disparities in access to and experiences in quality programs, especially for those who experience systemic and historical barriers to high-quality preschool programs.

However, challenges persist in states' ability to access and use data to answer critical questions. Data necessary to build a cohesive picture of the preschool system may be collected but are stored in different locations and cannot be linked together because of how preschool is administered across states and localities. For example, some programs are federally funded such as Head Start and preschool programs funded through the Child Care Development Fund (CCDF). In these instances, Head Start or CCDF-funded programs are required to report specific data to the federal government. Other programs are administered at the state or local level (e.g., city- or county-based, early learning coalitions).²³ In these instances, the type of data that these programs collect or report may differ from one another

^c Having an education workforce that reflects the students it serves can benefit those students' [academic achievement](#) outcomes and can reduce [suspension rates](#). Evidence also points to the importance of dual-language learner (DLL) programs on [DLL](#) as well as White students' [learning and development](#).

and from those that are regulated by the federal government. To further complicate the preschool data landscape, some preschool programs within the system may be funded by both federal and state or local funding. This means that they are overseen by multiple regulating authorities, which may require them to collect multiple types of data that are misaligned to meet the expectations of each funder. Aligning data across preschool efforts requires strong data infrastructure and governance, processes to securely link multiple data sources, and that pre-kindergarten (pre-K, see Box 1) system staff have a robust knowledge of data use and capacity. As preschool leaders work to make their preschool systems more equitable, a critical first step is strengthening their data capacity and use to answer critical questions around access, experiences, and outcomes for children, families, and the workforce.

To better understand the ways that states are collecting, analyzing, and using pre-K data, Child Trends fielded the State-funded Pre-K Data Survey. In this report, we share findings about the current state of pre-K data, including access to high-quality data at different levels of the pre-K system (i.e., child, program, workforce, and system); the ability to disaggregate data; the ability to coordinate, link, and share data; and the capacity to build and maintain the infrastructure (e.g., quality data, staff, supportive policies that facilitate data sharing and linking). Understanding states' current data landscape and infrastructure will provide a baseline for supporting states as they work to equitably refine and expand preschool.

About the State-funded Pre-K Data Survey

To better understand states' capacity to access, use, and link data, Child Trends fielded the nationwide State-funded Pre-K Data Survey. The goal of the survey was to build knowledge of the state of pre-K data in the field to better understand data capacity, infrastructure, and readiness to engage in using data to make pre-K systems more equitable. See Box 2.

The survey was developed in part to contribute information about the pre-K data landscape to the creation of the [System Transformation for Equitable Preschools \(STEP Forward with Data\) Framework](#). The framework is a tool for preschool leaders to use to assess data gaps; establish standardized and consistent ways to collect, store, and use data; and identify action steps for creating equitable preschool systems.

Box 1. Definition of preschool

The preschool landscape is inclusive of local-, state-, and federally funded preschool programs, such as Head Start, for 3- and 4-year-olds. However, this report summarizes findings from a state-funded pre-K data collection. **For this reason, the term “pre-K” is used in the remainder of the report, and specifically refers to state-funded pre-K.**

Box 2. Additional survey resources

Additional findings can be found in supplemental [interactive maps](#) and [state-specific profiles](#). These resources can be used by preschool leaders, researchers, and policymakers to guide future steps in creating an equitable preschool system.

The State-funded Pre-K Data Survey, fielded from December 2022 to March 2023, focused on understanding states’:

- Access to data at the child-, program-, and workforce members levels and the ability to report on state-level pre-K data (see Box 3)
- Data accuracy or quality limitations
- Ability to disaggregate by child, family, or community characteristics
- Supports and barriers that facilitate or impede linking data
- Storing and using data

The survey was sent to states with at least one state-funded pre-K program (44 states and Washington District of Columbia.). Survey links were sent to multiple state contacts, and contacts were encouraged to collaborate with their colleagues to adequately answer questions. Thirty-nine state-funded pre-K administrators in 35 states responded. Three states with more than one state-funded pre-K program submitted multiple responses; each respondent completed the survey for one program (i.e., Connecticut, Hawaii, Washington).^d These responses were aggregated in the analysis. Respondents were staff from departments of Education; Children, Youth and Families; and Health and Human Services (a full list of contacts can be found in [Appendix A](#)). Respondents also had an opportunity to review responses and provide clarity or corrections on answers. Ten states did not respond to the survey. For eight of these 10 states, Child Trends staff reviewed available online data portals, reports, and other resources from state websites to identify data collected and reported at the state-level. The survey analysis includes data on 43 states total, including 35 survey responses and secondary data collected on eight states (i.e., Delaware, Florida, Illinois, Louisiana, Maryland, New Mexico, Ohio, Texas).

In the findings below, we distinguish between data gathered by survey respondents (hereafter referred to as “survey respondents”) and data gathered from both survey respondents and secondary data (hereafter referred to as “states”).

We conducted descriptive analyses, primarily generating frequencies. In this report, we describe survey findings across all states that data were collected. State by state data are provided in the Appendix and presented in online [state profiles](#). Survey findings are organized by the following categories addressed within the survey:

Box 3. Accessible data definition

Accessible data was defined as data collected by a state agency that is accessible for use within the state agency or by request.

States were asked about whether they could access child-, program-, workforce-, or systems-level data and could indicate, “Yes”, “No”, “Not yet, in the planning process”, “I don’t know”, or “Other”.

Respondents who reported having access to data were then asked to indicate the levels of accessibility for specific data elements, categorized as follows: (1) accessible, (2) collected but not accessible, (3) data are not collected, (4) in the planning process to collect, (5) unknown. It is possible that certain data elements might have been collected by states but not accessible to the agencies of the respondents.

^d States with multiple respondents have more than one state pre-K program.

- **Access to data at the child, program, workforce, and system levels.** Survey respondents were asked whether or not they have access to data elements for analysis and use at the child-level (e.g., gender, race, or date of birth), program-level (e.g., site or grantee location, ages of children served, transportation provided), and the workforce-level (e.g., gender, race, languages spoken of workforce member). See Box 1 for a definition of access and survey response options. Survey respondents were also asked about data elements they were able to report on at the pre-K system-level. State-level data were referred to as items related to the administration, funding, and management of the pre-K program. See [Appendix B](#) for additional details about states' access to data on children, programs, workforce, and systems.
- **How states use data.** Survey respondents were asked about the various ways they use data collected to inform decision making, such as around funding and funding allocation, and administrative and programmatic practice and policy. Respondents were also asked about their ability to disaggregate data to understand subgroup differences in outcomes and experiences.
- **Data infrastructure and linkages.** Survey respondents were asked about their pre-K data system including where data are housed; ability to share data and link data with other database; and supports and barriers to access, analyze, use, and link data.

Access to Data at the Child-, Program-, Workforce-, and Pre-K System Levels

Key findings

- Most states reported having access to child- and program-level data, while fewer have access to workforce-level data.
- Most survey respondents reported having access to data by specific workforce positions (e.g., director and lead or assistant teacher).
- Ninety-five percent of survey respondents collect data on children's race and ethnicity, but there is variation in the data collection categories used by states.
- Few survey respondents are able to report on family engagement methods or staff benefit policies.
- Concerns around the quality of data are persistent across each of the pre-K system levels.

While the survey asked about numerous data elements at each level, this report highlights data that were most and least likely to be accessible to state pre-K leaders.

In this section, we report on the following findings at the [child-](#), [program-](#), [workforce-](#), and [system-levels](#):

- Top five data elements that were most likely to be accessible based on states responses.
- Data elements that were reported to be accessible by 50% of the states.
- Five data elements that were least commonly reported to be accessible by states.

Almost all states have access to child-and program-level data, but fewer have access to workforce-level data.

Child-level

Child-level data involves specific information about individual children enrolled in state-funded pre-K programs, like age or gender along with family-level information such as family address and family military status. Child-level information could help state policymakers understand the demographic characteristics of children and families served by state-funded pre-K programs. By analyzing child-level data, states could identify potential gaps, develop targeted interventions for children and families, and identify disparities in equitable access to high-quality child care for children and families. For more detailed information about the specific data elements accessible in each state, please refer to the [state profiles](#).

Out of the 43 states, the majority (93%, n = 40)^e have access to child-level data. States were then asked to indicate their access to 32 specific child-level data elements. On average, states reported having access to 18 of the 32 child-level data elements (range = 5-29 data elements).

The top five child-level data elements that were most likely to be accessible to respondents were child demographics, including gender (n = 39), age or date of birth (n = 38), race (n = 38), ethnicity (n = 38), and disability status of child (n = 37). Table 1 highlights 23 of the 32 data elements that were accessible to 50 percent or more of the respondents.

^e 40 states have access to child-level data, including 32 respondent states and 8 states on which secondary data analysis was conducted.

Table 1. Child-level data elements reported to be accessible by 50% or more of the states (n = 40 states that have access to child-level data)

Data Element	Number of States	Percentage of States
Gender	39	98%
Age or date of birth	38	95%
Race	38	95%
Ethnicity	38	95%
Disability status	37	93%
Name and address of site where child is enrolled	32	80%
Family income level	27	68%
Child assessments conducted with child (formative and summative)	27	68%
Full or part time pre-K status	25	63%
Family address	25	63%
Foster care status	25	63%
Home language(s)	25	63%
Attendance	25	63%
Child assessment scores/results for child (formative and summative)	25	63%
Multilanguage learner status	25	63%
Child's teacher	24	60%
Child's class (if applicable)	24	60%
Child eligibility status for pre-K enrollment (if applicable in targeted program)	23	58%
Disciplinary actions (e.g., expulsions or suspensions)	22	55%
School child attends in kindergarten	21	53%
Family active military status	21	53%
Family migrant status (i.e., whether the family moves to follow seasonal work)	21	53%
Family housing status	21	53%

Source: Child Trends' State-funded Pre-K Data Survey.

Note: Data table displays the child-level data elements available to states, as reported by respondents and through secondary data collection.

States varied in the race and ethnicity categories they collect. Ninety-five percent of respondents reported collecting or having data about children’s race and ethnicity. Among the 35 survey respondents^f who reported having access to or collecting data on child race and ethnicity, most of them collected data on White, Black, Asian, and Native American/Indigenous children (80%). Slightly fewer agencies indicated the collection of data on Hispanic (74%) Pacific Islanders (77%) and Alaska Native children (71%), and one third (37%) reported collecting data on children from other race and ethnicity categories.^g

Parent education, families’ reason for choosing care, costs, and whether programs provide referrals to other services were least accessible to states. Table 2 shows the five child-level data elements that were least commonly reported to be accessible by states.

Table 2. Child-level data elements that were least commonly reported to be accessible by states (n = 40 states that have access to child-level data)

Data Element	Number of States	Percentage of States
Parent education level	5	13%
Referrals to other services (e.g., health or mental health services, food support)	5	13%
Family reasons for attending the program	5	13%
Costs paid by the family	6	15%
Family reasons for exiting the program	12	30%

Source: Child Trends’ State-funded Pre-K Data Survey.

Note: Data table displays the 5 least commonly collected child-level data elements, as reported by respondents.

Program-level

Program-level data refer to information about pre-K programs’ characteristics and design. Analyzing program-level data could help state policymakers understand the distribution and availability of pre-K services, evaluate the effectiveness of different program activities and curricula, and make informed decisions regarding resource allocation and program improvement efforts. For more detailed information about the specific data elements accessible in each state, please refer to the [state profiles](#).

^f 38 states had access to or collected data on child race, including 35 responses from the state administrators and 3 responses from secondary data sources. However, only the 35 respondents who participated in the survey provided details regarding the specific race/ethnicity data being collected. The research team was unable to retrieve this information from the secondary data sources.

^g The category “multi-racial” was not provided as a response option in the survey.

Out of the 43 states, the majority (93%, n = 40)^h have access to program-level data elements. These 40 states were then asked about their access to 15 specific program-level data elements. On average, states have access to 7 data elements (range = 0-14 data elements).

The top five program-level data elements that were most likely to be accessible were site or grantee location (n = 38), ages of children served (n = 37), funding per child (n = 29), curriculum used (n = 24), and provision of services for children with a disability or developmental delay (n = 23). Six data elements were reported as accessible by more than half of the respondents. Table 3 includes data elements that were accessible to at least half of respondents.

Table 3. Program-level data elements reported to be accessible by 50% or more of the states (n = 40 states that have access to program-level data)

Data Element	Number of States	Percentage of States
Site or grantee location	38	95%
Ages of children served	37	93%
Funding per child	29	73%
Curriculum used	24	60%
Provision of services for children with a disability or developmental delay	23	58%
Participation in quality initiatives (e.g., accreditation status or QRIS)	21	53%

Source: Child Trends' State-funded Pre-K Data Survey.

Note: Data table displays the program-level data elements available to states, as reported by respondents and through secondary data collection.

Data on participation in cultural competency or multicultural training (n = 4, 13%), referrals to additional services (n = 6, 19%), and transportation provided (n = 12, 39%) were less accessible to states. Table 4 displays the five program-level data elements that were least commonly reported to be accessible by states.

^h 40 states have access to program-level data, including 32 respondent states and 8 states on which secondary data analysis was conducted.

Table 4. Program-level data elements that were least commonly reported to be accessible by states (n = 40 states that have access to program-level data)

Data Element	Number of States	Percentage of States
Participation in cultural competency or multicultural trainings for staff	4	10%
Referrals to additional services (such as early intervention and nutrition supports)	6	15%
Transportation provided	12	30%
Provision of services in specific languages or languages other than English	12	30%
Provision of activities to facilitate student transition to kindergarten	12	30%

Source: Child Trends' State-funded Pre-K Data Survey.

Note: Data table displays the 5 least commonly collected child-level data elements, as reported by respondents.

Workforce-level

Workforce-level data include information about those who work in the pre-K systems, such as directors, educators, or aides (e.g., race/ethnicity, level of education, and language spoken). Understanding workforce-level data allows state leaders and policymakers to gain insights into the diversity and qualifications of the preschool workforce, identify potential gaps in workforce representation, and inform strategies to promote equity and cultural responsiveness within early education settings. By analyzing workforce-level data, leaders and policymakers could develop targeted initiatives to support professional development, recruitment, and retention efforts, ultimately leading to a well prepared and diverse preschool workforce that meets the needs of all children and families. For more detailed information about the specific data elements accessible in each state, please refer to the [state profiles](#).

Among the 43 states, three quarters (74%, n = 32)ⁱ have access to workforce-level data.

Fewer states have access to workforce-level data compared to child- and program-level data. The 32 states that have access to workforce-level data were then asked about their access to 17 specific program-level data elements. On average, the states that have access to workforce-level data had access to 8 different data elements (range = 2-15 data elements). Among the 24 survey respondents^j who indicated having access to workforce-level data, the majority of them collected data on teachers/lead teachers (n = 23) and aides/assistants (n = 19), and slightly less than half collected data on directors (n = 11).

The top five workforce-level data elements that were most likely to be accessible were highest level of education of workforce member (n = 28), workforce member position or role (e.g., assistant or lead teacher [n = 27]), credentials and/or certifications received by the workforce member (n = 26), site where workforce member is a staff member (n = 26),

ⁱ 32 states have access to workforce-level data, including 24 respondent states and 8 states on which secondary data analysis was conducted.

^j The research team was unable to retrieve this information from the secondary data sources for 8 states.

and ethnicity of workforce members (n = 21). Table 5 shares eight data elements that were accessible to 50 percent or more of the respondents.

Table 5. Workforce-level data elements accessible to 50% or more of the states (n = 32 states that have access to workforce-level data)

Data Element	Number of States	Percentage of States
Highest level of education of workforce member	28	88%
Workforce member position or role	27	84%
Workforce credentials and/or certifications	26	81%
Site where workforce member is a staff member	26	81%
Ethnicity of workforce members	21	66%
Race of workforce members	21	66%
Workforce members wage or salary	20	63%
Gender of workforce member	20	63%

Source: Child Trends' State-funded Pre-K Data Survey.

Note: Data table displays the workforce-level data elements available to states, as reported by respondents and through secondary data collection.

Country of origin of workforce members, enrollment in financial assistance programs, and health insurance conditions were least accessible to states. Table 6 shows the five workforce-level data elements that were least commonly reported to be accessible by states.

Table 6. Workforce-level data elements that were least commonly reported to be accessible by states (n = 32 states that have access to workforce-level data)

Data Element	Number of States	Percentage of States
Country of origin of workforce members	2	6%
Enrollment in financial assistance programs (e.g., TANF or SNAP)	3	9%
Whether the workforce member has health insurance	5	16%
Presence of a professional development plan for the workforce member	6	19%
Language spoken by workforce member	7	22%

Source: Child Trends' State-funded Pre-K Data Survey.

Note: Data table displays the 5 least commonly collected child-level data elements, as reported by respondents.

System-level

States were also asked about their agency's ability to report on 13 state pre-K system data elements.^k These data elements included items related to the administration funding and management of the pre-K program as well as states' ability to report on family and community engagement. For more detailed information about the specific data elements states can report on please refer to the [state profiles](#).

Among the 43 states, the majority of them (84%, n = 35)^l could report on at least one system data element. The most common data elements that can be reported on by states were source of funding (n = 30), number of pre-K slots in each program (n = 24), demographic characteristics of communities where pre-K programs are located (e.g., racial/ethnic composition or income [n = 17]), pre-K enrollment procedures (n = 14), and waitlists for pre-K in each community (n = 8). Table 7 displays the 13 data elements reported by states.

Table 7. System-level data elements reportable by states (n = 36 states that could report on state-level data)

Data Element	Number of States	Percentage of States
Source(s) of funding	30	83%
Number of pre-K slots in each program	24	67%
Demographic characteristics of communities where pre-K programs are located (e.g., racial/ethnic composition or income)	17	47%
Pre-K enrollment procedures	14	39%
Waitlists for pre-K in each community	8	22%
Methods of communicating program health and safety information with families	6	17%
Family involvement in program leadership and administrative decision making (e.g., family satisfaction surveys or Family Councils)	6	17%
Feedback from families on how this pre-K program can best meet their needs	6	17%
Staff health care policies	5	14%

^k Response options included "Yes, my agency can report on this", "No, we cannot report on these, but these data are collected", "No, data are not collected", "In the planning process", or "I don't know".

^l 35 states are able to report on at least one systems-level data element, including 32 respondent states and 3 states on which secondary data analysis was conducted.

Data Element	Number of States	Percentage of States
Funding to support equity-focused activities (e.g., cultural sensitivity trainings or increasing the diversity of the workforce)	5	14%
Staff paid vacation policies	4	11%
Staff sick leave policies	4	11%
Staff retirement benefits policies	4	11%

Source: Child Trends' State-funded Pre-K Data Survey.

Note: Data table displays the system-level data elements reportable by states, as reported by respondents and through secondary data collection.

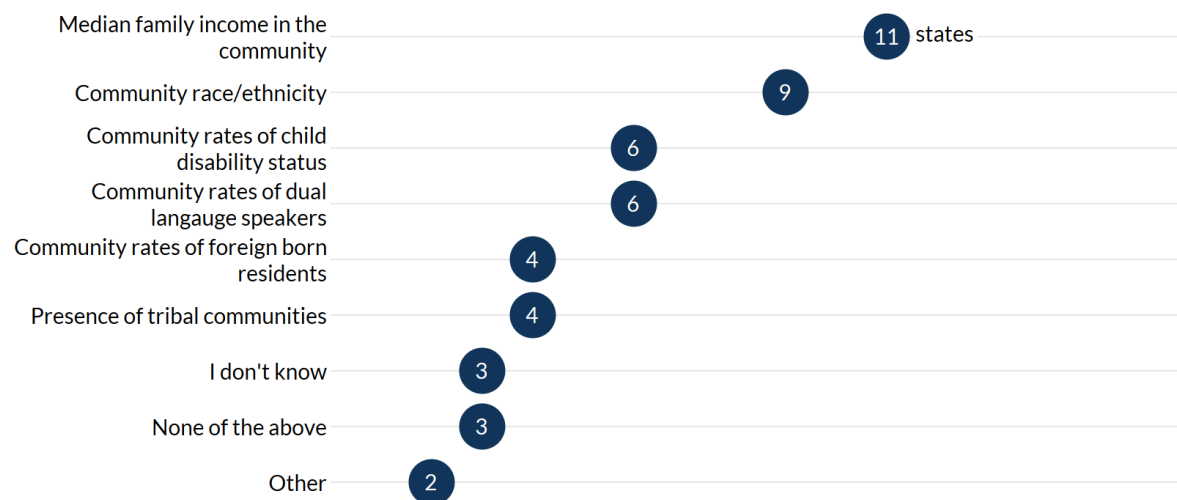
Only 11 percent of states were able to report on data about staff benefit policies. For example, less than five states could report data on staff health care policies (n = 5), staff paid vacation policies (n = 4), staff sick leave policies (n = 4), and staff retirement benefits policies (n = 4). Five states reported their capacity to report data on funding to support equity-focused activities (e.g., cultural sensitivity trainings or increasing the diversity of the workforce).

Less than half of states were able to report on demographic characteristics of communities where pre-K programs are located (n = 17, 47%) and fewer on family involvement in program leadership and administrative decision making (n = 6, 17%) or feedback from families on how this pre-K program can best meet their needs (n = 6, 17%).

- Of the 47% of survey respondents who are able to report on demographic characteristics of communities where pre-K programs are located, most monitored median family income in communities (n = 10). See Figure 1. Fewer monitored the presence of Tribal communities (n = 4).^m
- Among the six respondents who were able to report on family involvement in program leadership and administrative decision making, few collected family and child characteristics that make up representation in leadership and decision-making bodies. Less than half of respondents indicated collecting data on family languages spoken (n = 2), child country of birth (n = 2), family income (n = 2), child disability status (n = 2), and child race and ethnicity (n = 2). No respondents indicated collecting data on family tribal affiliation.
- Among the six respondents who were able to report on feedback from families on how their pre-K program can best meet family needs, all respondents indicated using surveys with parents and families to gather family feedback (n = 6), followed by needs assessments (n = 3), interviews or focus groups with parents and families (n = 2), and families participate in program decision making bodies (n = 2).

^m The characteristic provided may not reflect the complete list of possible community characteristics monitored by publicly funded pre-K programs.

Figure 1. Community characteristics monitored reported by respondents (n = 17 states that could report on community demographics)



Source: Child Trends' State-funded Pre-K Data Survey

Note: Figure displays data as reported by survey respondents and 1 secondary data state. Respondents could select all that applied.

Quality of accessible data

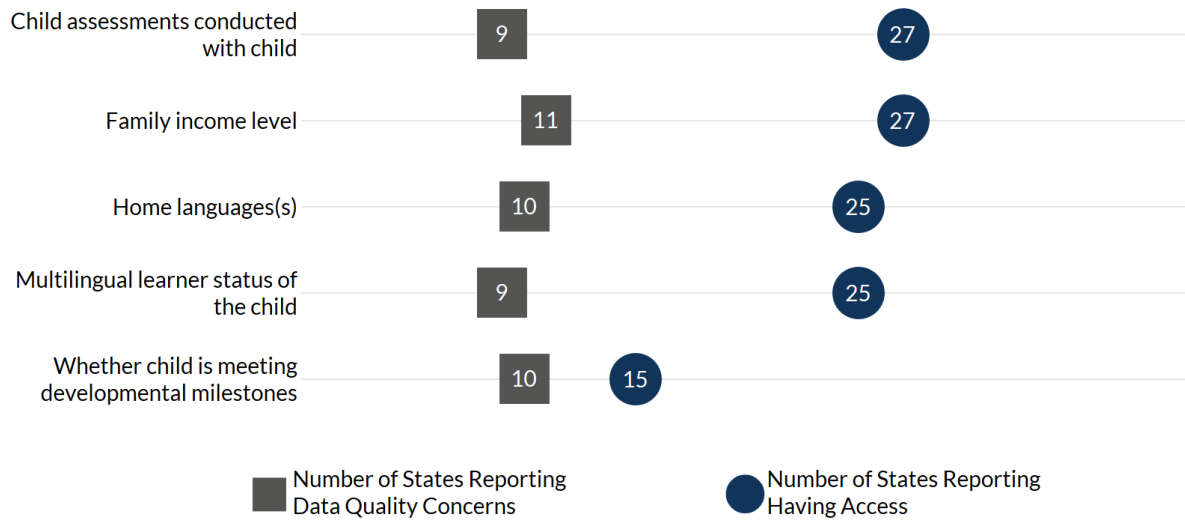
Data quality issues can be a significant barrier to using data despite the data being accessible. Limitations can arise from factors such as data entry errors, missing data, different definitions, and data integration issues. To identify the extent of data elements with data quality concerns, survey respondents were asked to indicate if there were any data accuracy or quality limitations using response options “Yes”, “No”, or “I don’t know” if they reported having access to child-, program-, and workforce-level data elements.ⁿ While survey respondents reported having access to various levels of data elements, most reported some data quality concerns about one or more data element.

Data quality concerns were prevalent at each level of the pre-K system.

Over three quarters of survey respondents (n = 26, 81%) reported data accuracy or quality concerns about some child-level data. Out of the 32 child-level data elements, each had at least one survey respondent reporting data limitations (range = 3-11 survey respondents). Figure 2 shows the five child-level data elements that were reported for data quality concerns by most of the respondents despite being accessible.

ⁿ Survey respondents were not given additional guidance on what could be considered data accuracy or quality caveats.

Figure 2. Top five child-level data elements with data quality concerns

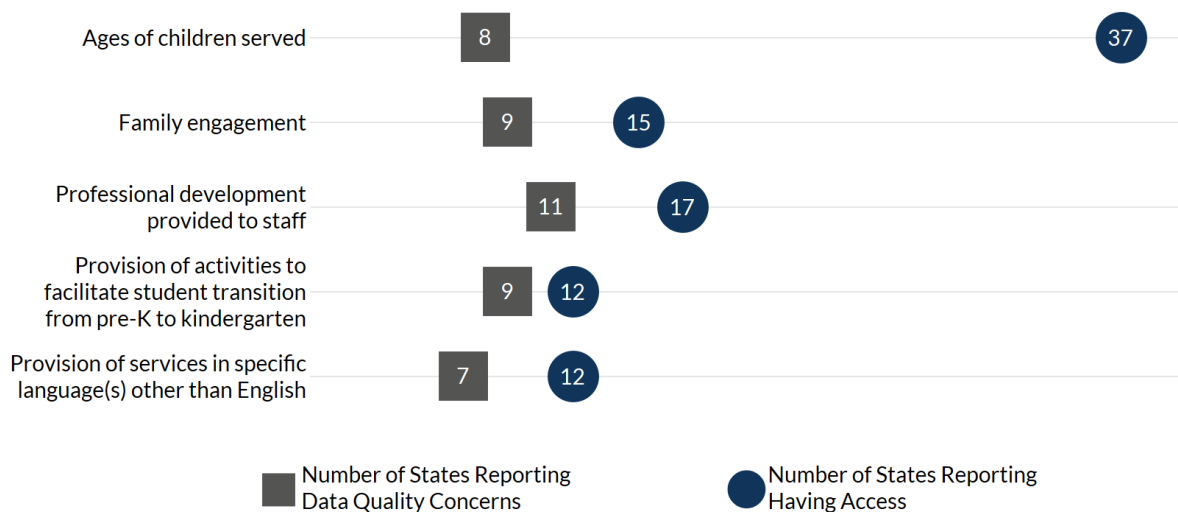


Source: Child Trends' State-funded Pre-K Data Survey

Note: Figure displays data as reported by survey respondents.

A majority of survey respondents (n = 23, 72%) reported concerns about the quality of some program-level data. Among the 15 program-level data elements, each had at least one survey respondent reporting data limitations (range = 5-11 survey respondents). Figure 3 shows the five child-level data elements that were reported for data quality concerns by most of the respondents despite being accessible.

Figure 3. Top five program-level data elements with data quality concerns

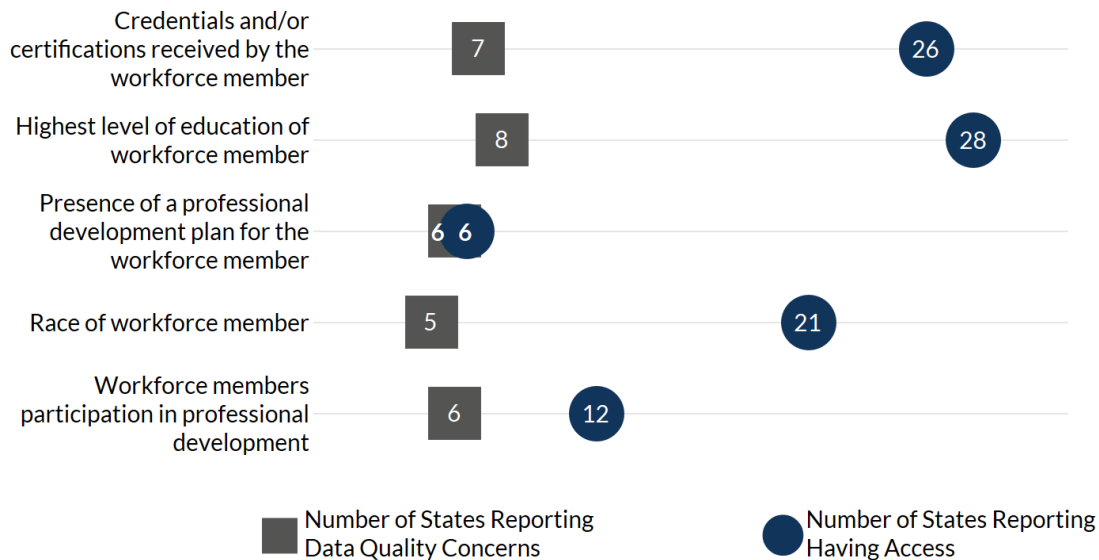


Source: Child Trends' State-funded Pre-K Data Survey

Note: Figure displays data as reported by survey respondents.

Over half (n = 13, 54%) of respondents reported concerns about the quality of some workforce-level data. Out of the 17 workforce-level data elements, 16 of the elements had data quality limitations as reported by the survey respondents (range = 1-8 survey respondents). Figure 4 shows the five workforce-level data elements that were reported for data quality concerns by most of the respondents despite being accessible.

Figure 4. Top five workforce-level data elements with data quality concerns



Source: Child Trends' State-funded Pre-K Data Survey

Note: Figure displays data as reported by survey respondents.

How States Use Data

Key findings

- Survey respondents most frequently cited using data by sharing information with policymakers; for monitoring, accountability, and compliance purposes; and responding to external data requests.
- All but three survey respondents reported having the ability to disaggregate data.
- The most common ways respondents could disaggregate data were by child race and/or ethnicity, child disability status, and family languages spoken.

Preschool leaders and policymakers can use data to inform decision making around funding allocation, policies, and practices. Data can also be used to help track outcomes (such as children's development and school readiness), allowing them to directly measure the impact of systems-level changes within a state. With robust data, agencies are also able to disaggregate data which, accompanied with efforts to dive deeper into what may be explaining these differences (e.g., looking at cross tabulations between variables, asking questions about why these data are occurring)²⁴, can shed light on the unique experiences of

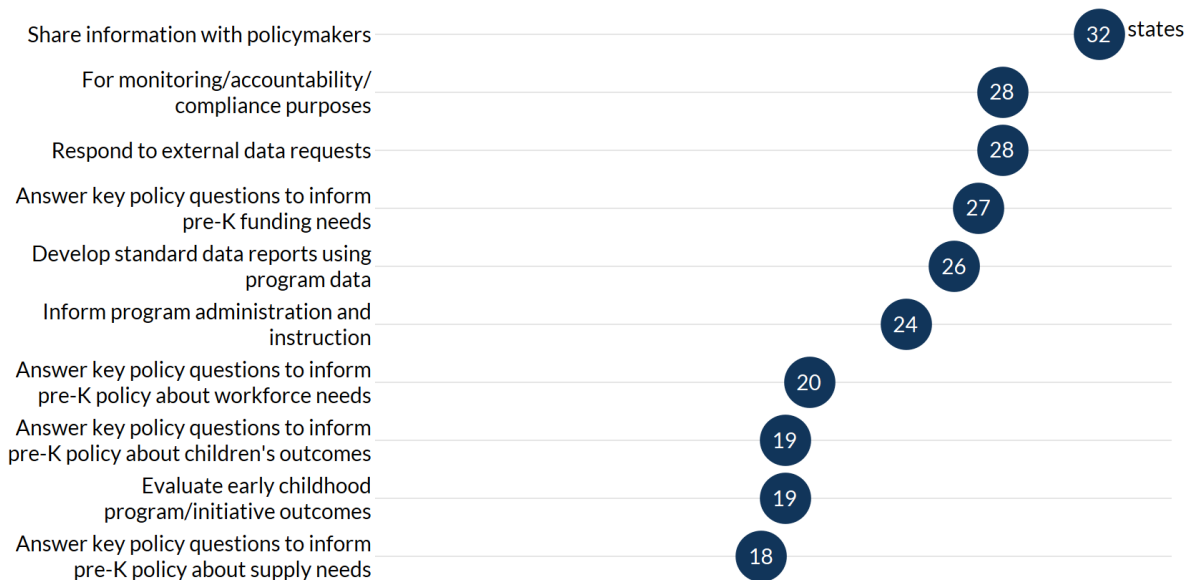
subsets of children that might otherwise be missed. Identifying subgroup differences in outcomes or experiences helps preschool leaders and policymakers understand how to tailor and target resources and investments where they are most needed.

To better understand current applications of the data available to preschool leaders and policymakers, the survey asked respondents about the ways they use collected data.

Respondents most commonly indicated using data in the following ways (See Figure 5): sharing information with policymakers (n = 32), responding to external data request (n = 28); monitoring, accountability, and compliance purposes (n = 28); and answering key policy questions about preschool funding needs (n = 27).

Survey respondents were less likely to use data to understand group differences (n = 11) or share information with parents (n = 11). Fewer respondents reported using data to conduct research studies, share information with parents, and understand how different children and families experience preschool.

Figure 5. Most frequently reported ways respondents report using data (n = 35 survey respondents)



Source: Child Trends' State-funded Pre-K Data Survey.

Note: Figure displays data as reported by survey respondents.

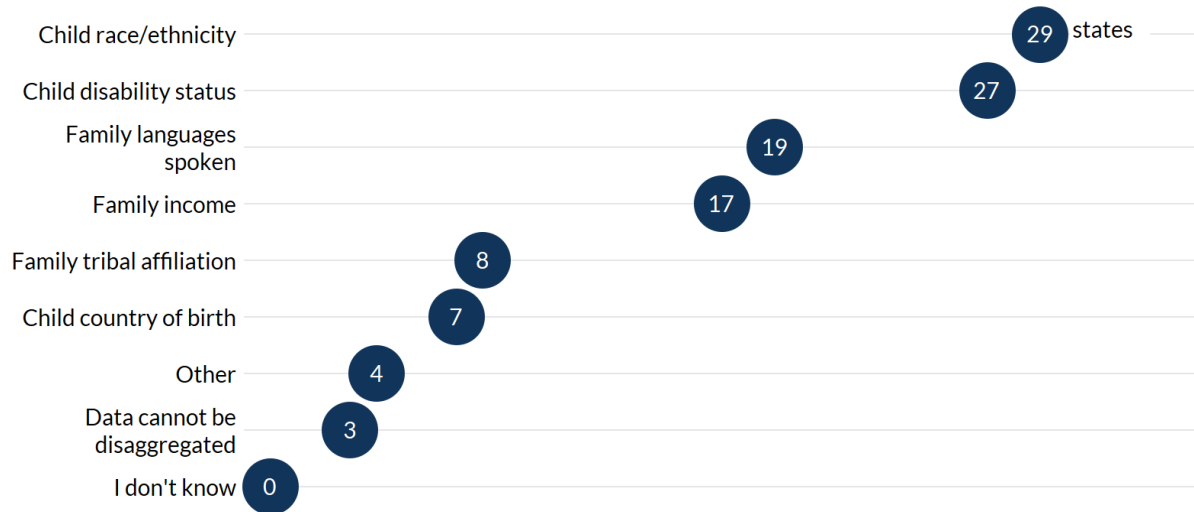
Disaggregating data by child race or ethnicity was the most commonly reported factor.

The 35 survey respondents^o were asked about their ability to disaggregate data in internal or external reports by child and family characteristics. Disaggregating child-level data can aid states in identifying where there are disparities or inequities and can help pre-K leaders target areas of need.

^o The research team was unable to retrieve this information from the secondary data sources for 8 states, so 35 survey respondents answered this question.

83% of survey respondents reported being able to disaggregate data by some child and family characteristics. The most commonly reported characteristics respondents are able to disaggregate data by included child race and/or ethnicity (83%), child disability status (77%), and family languages spoken (54%).^p See Figure 6. Least commonly reported characteristics included family tribal affiliation (23%) and child country of birth (20%). Notably, three survey respondents reported that they are unable to disaggregate data. For state-specific information on disaggregates for child and family characteristics, [see Appendix C](#).

Figure 6. Child and family characteristics states report the ability to disaggregate data (n = 35 survey respondents)



Source: Child Trends' State-funded Pre-K Data Survey.

Note: Figure displays child and family characteristics data, as reported by respondents.

^p Respondents could select all child and family characteristics that applied.

Data Infrastructure and Linking

Key findings

- Survey respondents most frequently reported housing pre-K data across several databases or systems within the same agency or across multiple agencies.
- Almost three-fourths of respondents have the ability to link pre-K data with K-12 data. Many fewer respondents have the ability to link pre-K data within or across other pre-K systems.
- Among respondents who are able to link data within or across other pre-K systems, use of unique identifiers, memoranda of understanding/agreement (MOU/MOA), and data sharing agreements were the most frequently reported supports currently in place to facilitate data linking.
- Nearly all respondents reported that the supports in place to access, analyze, or use data on the pre-K program include unique identifiers for the child, worker, or program; a team to monitor data collection and analysis; and a centralized data or reporting system.
- Commonly identified barriers to data access, analysis, and use include data quality concerns and data management issues.

The ability to access data in an efficient manner and connect different types of data are valuable components for better data usage. Having numerous data points but no way to view or analyze them limits the ability to render data useful. Moreover, simple questions may be answered with a single source of data (i.e., only child-level or only workforce-level data), but complex questions and insights often require combining different sources and types of data together. For example, program information about curriculum used and children's native language may be used to drive curriculum change. To make the most of the data a state has collected, it is important to have a proper data infrastructure to support the storage and connection of pre-K data to answer questions on the effectiveness of its policies.

Survey respondents frequently reported housing data in several databases within and across agencies.

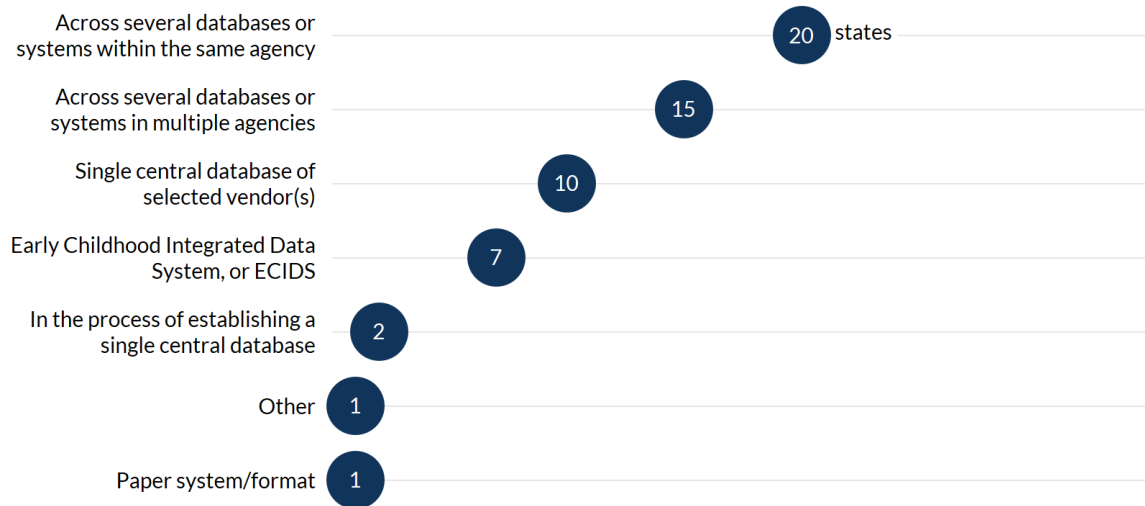
Survey respondents (n = 35) were asked to identify the ways in which data from their state-funded pre-K program are typically housed. Respondents were allowed to select all applicable options and provide further detail in a free response box.

The most widely reported methods of storing data were across several databases or systems, either within the same agency (n = 20) or across multiple agencies (n = 15).⁹ See Figure 7. Those who responded that data are typically housed across multiple agencies were further asked if there is a process in place to share data between databases or agencies; 12

⁹ Survey respondents could select all response options that applied.

survey respondents said this can be done, either easily (n = 4) or with some difficulty (n = 8). The next most prevalent method of housing data was in a single central database (n = 10) or an Early Childhood Integrated Data System (ECIDS [n = 7]).

Figure 7. How data from state-funded pre-K programs are housed (n = 35 survey respondents)



Source: Child Trends' State-funded Pre-K Data Survey.

Note: Figure displays data as reported by survey respondents.

The majority of survey respondents were able to link pre-K and K-12 data, while fewer could link pre-K data across and within pre-K programs.

The storage of data across multiple databases and different agencies requires a method to link that information to make it useful in decision making. The ability to link data means connecting individual data points that are of a different type or in a different system. Creating a linkage allows decision makers to answer more complex questions and gain a more thorough understanding of the state of a preschool system. Types of data linkages include connecting pre-K data to K-12 data, to other pre-K data, and child-level data to program- and workforce-level data. [See Appendix D](#) for state-specific types of data linkages with other data.

Almost three fourths of respondents (n = 29, 69%) could link pre-K and K-12 data. See Table 8. States that could link pre-K and K-12 data could link on average 20 data elements of the 32 asked about^r (see Table 9). All respondents reported being able to link demographics data related to the child's age, gender, race, ethnicity, and disability status.

^r The child-level data elements that could be linked with K-12 data were the same elements asked about in child-level data access, see [Access to data on the child-level](#).

Table 8. Data linkages by type (n = 42 states with the capacity to link data)

Type of data linkage	Total N	Number of states reporting linking this type of data	Percentage of states reporting linking this type of data
Link pre-K and K-12 data	42	29	69%
Link between child, program, and workforce	42	11	26%
Link data across pre-K programs, including Head Start	42	10	24%

Source: Child Trends' State-funded Pre-K Data Survey.

Note: Denominator is all respondents and all states from the secondary data search that had linkage information found.

Table 9. Data elements able to be linked to K-12 by 50% or more of respondents (n = 29 survey respondents)

Data element	Number of states reporting data element is linked to K-12	Percentage of states reporting data element is linked to K-12
Age or date of birth of child	26	90%
Race of child	26	90%
Ethnicity of child	26	90%
Gender of child	26	90%
Disability status of child	26	90%
Name and address of site where child is enrolled	23	79%
School child attends in kindergarten	22	76%
Attendance of child	21	72%

Data element	Number of states reporting data element is linked to K-12	Percentage of states reporting data element is linked to K-12
Home language(s) of child	19	66%
Multilingual learner status of the child	19	66%
Foster care status of the child	18	62%
Full or part time status of child	18	62%
Childs teacher	18	62%
Family address	17	59%
Family housing status	17	59%
Childs class (if applicable)	16	55%
Family eligibility for state assistance programs, e.g., TANF or SNAP eligibility	16	55%
Child assessments conducted with child (formative and summative)	15	52%
Child assessment scores/results for child (formative and summative)	15	52%
Disciplinary actions (such as expulsions or suspensions)	15	52%
Family migrant status (i.e., whether the family moves to follow seasonal work)	15	52%

Source: Child Trends' State-funded Pre-K Data Survey.

Note: Table displays data as reported by survey respondents.

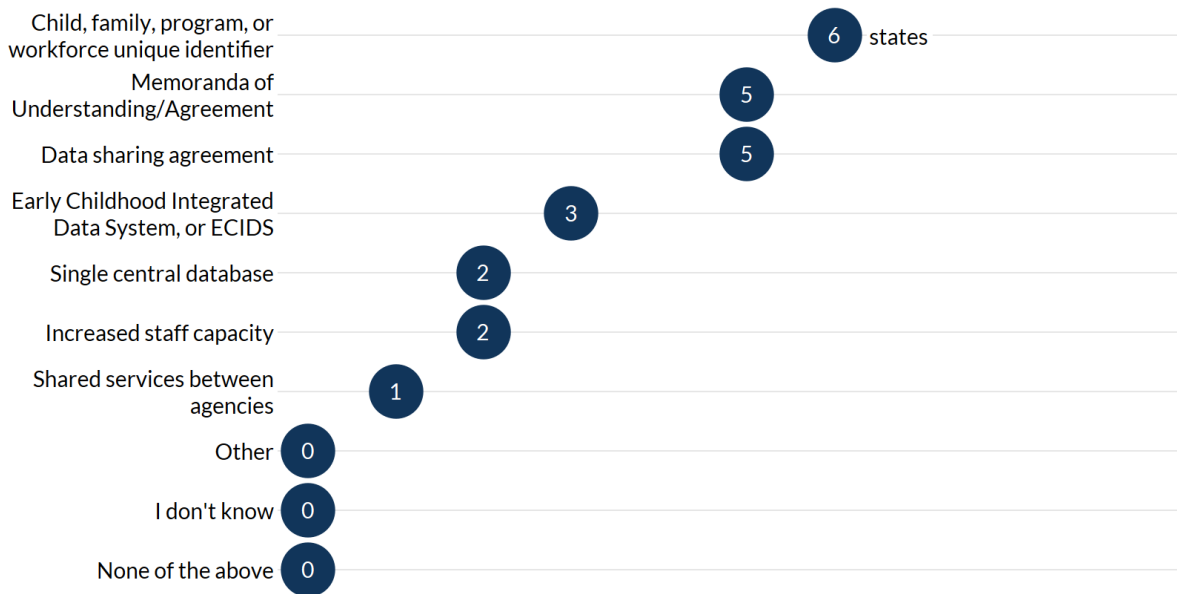
Less than one third of survey respondents reported having at least one support in place to facilitate data linking with other pre-K programs.

Certain data infrastructures can make data easier to work with or increase an agency's capacity for linking data; examples include unique identifiers to individual people and programs in the data, a single centralized database where all data is stored, and formal relationships between groups through memoranda of understanding. Respondents were asked about supports that facilitate their state agency's ability to coordinate or link data as well as barriers they face in accessing and using their data.

Unique identifiers and data agreements to share data were more frequently identified as supports that facilitate an agency's ability to link data; yet few respondents reported them as being used (See Figure 8). Respondents who reported the ability to link all or some pre-K data with other pre-K programs were asked about current supports that facilitate their ability to coordinate data (n = 10). Use of unique identifiers (n = 6), memoranda of understanding/agreement (MOU/MOA [n = 5]), and data sharing agreements (n = 5) were among the most commonly cited supports. These elements improve the efficiency of data sharing by congregating all data in one place or having one data field that can be relied on to link data between tables or systems.

Respondents who reported they either do not have the ability to link all or some pre-K data with other pre-K programs or were in the planning process were asked about supports that *would* facilitate their ability to coordinate data (n = 21). Commonly cited potential supports were similar, including use of an ECIDS (n = 14), data sharing agreements (n = 13), MOU/MOAs (n = 11), single central database (n = 11), and increased staff capacity (n = 11). Notably, more respondents reported supports that *would* facilitate coordination compared to supports that *currently* support coordination.

Figure 8. What currently facilitates the ability to coordinate data (n = 10 survey respondents who could link pre-K data with other pre-K programs)



Source: Child Trends' State-funded Pre-K Data Survey.

Note: Figure displays data as reported by survey respondents.

Having consistency in data and processes strengthened agencies' abilities to access, analyze, or use data (see Table 10). Some of the most frequently cited factors that currently strengthen the ability to work with data were unique identifiers for children, worker, or program (n = 30); a team to monitor data collection and analysis activities (n = 23); a centralized data system (n = 23); and a systematic approach to data collection (n = 22). On the other hand, data quality issues (n = 24) and data management issues (n = 18) were some of the most cited barriers to accessing, analyzing, or using data (see Table 11).

Table 10. Reported supports to accessing, analyzing, or using pre-K data (n = 35 survey respondents)

Supports	Number of States	Percentage of States
Unique identifiers for the children, worker, or program	30	86%
Team to monitor data collection and analysis activities	23	66%
Centralized data or reporting system	23	66%
Systematic approach to data collection	22	63%
Research partnerships	19	54%
Policies facilitating access, analysis, or use	19	54%
Ability to link data across multiple systems via unique identifiers	17	49%
Dedicated sustainable funding for data infrastructure development and/or management	12	34%
Early Childhood Integrated Data System, or ECIDS	12	34%
Sufficient staff capacity	9	26%
Other	1	3%
We do not have supports in place	1	3%
Members of my agency do not access or analyze pre-K data	1	3%

Source: Child Trends' State-funded Pre-K Data Survey.

Note: Table displays data as reported by survey respondents.

Table 11. Reported barriers to accessing, analyzing, or using pre-K data (n = 35 survey respondents)

Barriers	Number of States	Percentage of States
Data quality issues	24	69%
Data management issues	18	51%
Challenges with data sharing or limited access to data	14	40%
Lack of data systems or infrastructure	13	37%
Lack of funding for data systems development and maintenance	12	34%

Barriers	Number of States	Percentage of States
Lack of staff expertise to collect, analyze, interpret, or communicate data	11	31%
Antiquated data systems or infrastructure	11	31%
Policies limiting access, analysis, or use	9	26%
Lack of public or political will or interest	6	17%
Other	5	15%
Issues related to managing data disclosure risks	3	9%
We do not face any barriers	1	3%
Members of my agency do not access or analyze pre-K data	0	0%

Source: Child Trends' State-funded Pre-K Data Survey.

Note: Table displays data as reported by survey respondents.

Discussion

Policymakers, advocates, and researchers can use data to make informed decisions around making more equitable pre-K systems. However, most states lack the ability to paint a comprehensive picture of their pre-K systems. Our survey findings show that reasons for this include a lack of access to specific data elements such as family voice and parent and community demographic data, the inability to disaggregate data beyond race and ethnicity, data quality concerns, and limited supports in place to link data with other pre-K data. Here, we highlight key findings that speak to states' current data capacities along with opportunities for growth.

States were more likely to have access to child- and program-level data compared to workforce- and systems-level data.

States have access to a lot of data on children and programs. The majority of states reported having access to a wide range of child-level and program-level data which is an important first step in effectively using pre-K data to shape policy and practices that support more equitable access and experiences and outcomes for families. Most survey respondents could access data on children's demographics (e.g., date of birth, gender, race, ethnicity, etc.) and program characteristics (e.g., location, ages served, curriculum used, etc.) but were less likely to access key data about a family's needs (e.g., referrals to health and mental services) and program services (e.g., cultural competency training for staff) that provide insight on resources and training to support the diverse needs of families and ensure culturally affirming environments. These discrepancies in the types of data state leaders are able to access have

implications for how decision makers approach identifying solutions when information about a child's family circumstances or experience of early educators are not fully understood.

States had less access to workforce-level data elements compared to child-, program-, and systems-level data. Knowing who makes up the preschool workforce and the various supports they have access to is necessary to ensure the workforce reflects the communities they serve, and the workforce has equitable experiences in the preschool system. Data on the workforce can also inform states of its strength. While data about pre-K funding and number of spaces were tracked at the systems-level to a lesser degree, very few states tracked workforce policies (e.g., health, vacation, and retirement benefits) which have implications for the stability of a diverse and qualified workforce. Efforts to address these gaps will help leaders have a more comprehensive picture of their preschool system.

Federal and state reporting requirements drive state data collection efforts. Because states prioritize data collected based on what is required for program compliance, reporting purposes, or information necessary to administer public pre-K, the type of data collected are often limited to data that help advance those specific goals. For example, we found that most states had access to demographic data that allows system leaders to determine whether a child is eligible for state-funded pre-K and to identify children as they move through the system. However, data that could give preschool leaders a closer look at the equity of their system and policies in terms of access to high-quality culturally affirming pre-K environments, removal of barriers to consistent enrollment, positive discipline experiences for underserved or priority populations, and understanding investments in program design and workforce development structures—such as costs paid by the family, referrals to other mental health or food support services, and families' reasons for program selection or exit—were less likely to be collected.

The ability to use data to make equitable, informed decisions requires disaggregating data by a range of demographic characteristics and collecting more family engagement data.

Many states are unable to disaggregate data beyond child race and ethnicity. Most states lacked the ability to disaggregate data by common characteristics including family income, child country of birth, or family tribal affiliation. The data that states have access to impacts how they are able to use, disaggregate, and examine data. For states to disaggregate data by less commonly reported characteristics, it may be necessary to make practice or policy changes that support or require the collection of key child and family characteristics of interest to the administration. It is also possible that current data collection efforts need to be bolstered in order to have a more robust dataset that allows for data disaggregation by sociodemographic characteristics beyond race and ethnicity. There can be instances where:

1. The population sizes become too small to provide meaningful insight on a population after disaggregation.
2. There is already a relatively low population count.
3. There are missing data at the regional or municipal level.

These scenarios not only prevent states from being able to disaggregate data, but they also often require states to suppress data until concerted efforts, such as bolstering on the ground data collection, can be made to build out data in underrepresented communities. It is critical to understand that disaggregation alone is not enough. Additional research efforts should be

made to understand why findings for certain subgroups are occurring, and then take the necessary steps to address the situation.

Furthermore, while most survey respondents collected race and ethnicity data, there was variation in which racial categories were used across states which may result in some groups' experiences not being represented. For example, most respondents used White, Black, Asian, and Native American/Indigenous categories; fewer agencies indicated the collection of data on Pacific Islanders, Hispanic, and Alaska Native identities; and a little over one third indicated using other racial or ethnic categories. Decisions regarding which group identities are collected and how they are categorized are important to develop in partnerships with communities so they accurately reflect current and shifting demographics. The variation in categories collected for this data element and others also impact capacity to coordinate data across programs if categories included are inconsistent.

Data on family engagement are limited. More work could be done to engage families and collect their insights to support efforts in making the system more equitable. States need to hear about who they are, how programs are meeting their needs, their experiences in the preschool system, and if and how programs engage and incorporate family voices within programs. Lack of family data may prevent preschool leadership from understanding how current overarching program policies and procedures are effectively supporting families, and how to shift program policies to adequately support families and children's needs.

States need support to link data within and across pre-K systems and address concerns around data quality.

Survey findings reinforced the siloed nature of pre-K data. For example, less than one quarter of respondents can store data using an Early Childhood Integrated Data System (ECIDS), while over half reported data are stored across several databases or systems within the same agency. Few survey respondents reported the ability to link data between the various levels of the system or across pre-K programs. Opportunities to facilitate building and strengthening data connections within pre-K systems included unique identifiers for the child, program, or worker; a team to monitor data collection and analysis activities; and a centralized data or reporting system. Supports to facilitate linking data across pre-K systems included unique identifiers, MOU/MOAs, and data sharing agreements. These findings indicate that having guidelines in place to enable data sharing and giving a systematic method as to how it should happen are important.

Data quality concerns loomed large for many respondents. Across each level, concerns about the quality of specific data elements were reported. Concerns about data quality and data management issues were identified as the main barriers to accessing, analyzing, and using data. Poor data quality can lead to misleading analyses and assumptions about what data may be saying, which can lead administrators and policymakers to flawed decision making and program implementation. Moving forward, concerns about data quality need to be identified and addressed early to make sure data that are being used to inform policy decisions are of the highest quality and appropriate for their intended uses.

Limitations

Limitations of the survey should be taken into consideration when reviewing the findings. First, the programs surveyed do not reflect all types of care in which preschool-age children may be enrolled. The State-funded Pre-K Data Survey focused on state-funded pre-K

programs designed for 3- and 4- year-olds. The survey did not collect information on non-state-funded child care centers or home-based child care. A forthcoming report will provide information about Head Start and Tribal Head Start.

Second, selected data elements were built upon a need to understand the collection, accessibility, and usage of data to inform the development of the STEP Forward with Data Framework and our understanding of the preschool data landscape. Those data elements are not exhaustive of all data elements states collect. Child Trends focused on 32 child-level data elements, 15 program-level data elements, and 17 workforce-level data elements that are typically accessible to and collected by states. However, it is possible that states may have specific requirements or programs in place that necessitate the collection and access of additional data elements.

Finally, survey data reflected the information known by the respondent for their individual state agency, and not all states responded to the survey. For 33 states, a single survey respondent from the state agency reported the data. Different agencies within a state may have access to varying levels or types of data, leading to potential discrepancies in the reported information. Moreover, data collected is often restricted to what is required by federal, state, and local regulations. States may have different reporting requirements that affect how much or little they collect.

Next Steps

The past decade has seen progress in data integration and data system development that has allowed states to begin to answer critical policy questions. The survey findings shed light on states' current data capacities and areas with potential for growth. As states consider improving and expanding their pre-K data, we provide the following recommendations as informed by survey responses and the following framework.

States should consider using the System Transformation for Equitable Preschools (STEP Forward with Data Framework as a comprehensive tool to build and enhance an equitable preschool system. The [Framework](#) outlines six steps and offers a set of related questions by which states can assess their success in meeting the goals of their preschool systems. The six steps include assessing supply, outreach, enrollment, children's learning experiences, transitions to kindergarten, and administration. By leveraging these components, states can develop robust data-driven strategies, leading to ongoing improvements in pre-K education with a focus on equity.

The [STEP Forward with Data Framework](#) provides a comprehensive guide to help federal, state, territory, Tribal, and local preschool leaders build a consistent, equity-centered data system. The STEP Forward with Data Framework, developed by the Early Childhood Data Collaborative at Child Trends, can help federal, state, territory, Tribal, and local preschool leaders, will:

- Answer essential questions about their preschool systems, and specifically about populations that have been marginalized by racism and systemic inequities.
- Establish standardized and consistent ways to collect, manage, and use data that address issues related to equity in preschool.
- Assess data gaps and integration needs to support the use of preschool data.
- Identify clear action steps for creating a more equitable preschool system based on the data they collect and the questions they are answering.

The new round of Preschool Development Grant (PDG) funding in 2022 has the potential to increase states' capacity for data collection. As reported, multiple constraints—such as financial, regulatory, and logistical—limit states' capacity to collect, access, and analyze data. PDG funding can provide necessary financial support to help states evaluate and improve their data systems. These funds also represent an opportunity for states to reassess their ability to collect and report data at various levels of the pre-K system (i.e., child, program, workforce, and system). Strengthening data infrastructure and data capacity through PDG funding will ensure the availability of cohesive data that can be used to inform policy efforts aimed at strengthening and expanding preschool in an equitable and inclusive way.

States can use the survey findings to identify data collection gaps, pinpoint potential areas for improvement, and explore avenues for providing support to further develop their data systems. The survey findings provide valuable insights into the opportunities and challenges states encountered in their data access, collection, and linkage efforts across various levels of the pre-K system. Additionally, learning from the capacities and progress of other states enables states to benchmark their efforts and adopt best practices. By leveraging the survey findings, states can pave the way towards data-driven strategies that lead to continuous improvements in building a consistent, equity-centered data system to support their pre-K programs.

Appendix A. Survey Contacts

State	Department	Contact Title
Alabama	Alabama Department of Early Childhood Education	Senior Director of Early Learning and Early Education
Alaska	Alaska Department of Education & Early Development	Education Specialist II
Arizona	Arizona Department of Education	Director of Early Childhood
California	California Department of Education	Education Program Administrator
Connecticut	Connecticut Office of Early Childhood	Education Consultant, Smart Start Program Manager
Connecticut	Connecticut Office of Early Childhood	Education Consultant, School Readiness Co-Program Manager
Connecticut	Connecticut Office of Early Childhood	Education Consultant, Child Day Care Co-Program Manager
District of Columbia	Office of the State Superintendent of Education (OSSE)	Director, Policy, Planning and Research
Georgia	Georgia Department of Early Care and Learning	Deputy Commissioner for PreK & Instructional Supports
Hawaii	Executive Office on Early Learning	Research Statistician
Hawaii	Hawaii State Public Charter School Commission	Early Learning Program Director
Indiana	Family and Social Services Administration/Office of Early Childhood and Out of School Learning	Assistant Director of Pre-K
Iowa	Iowa Department of Education	Bureau Chief

State	Department	Contact Title
Kansas	Kansas State Department of Education	Director, Early Childhood
Kentucky	Kentucky Department of Education	Early Learning Advisor
Maine	Maine Department of Education	Early Childhood Specialist
Massachusetts	Massachusetts Department of Elementary and Secondary Education	Early Learning Team Lead
Michigan	Michigan Department of Education	Manager, Great Start Readiness Program
Minnesota	Minnesota Department of Education	Program and Collaboration Specialist
Mississippi	Mississippi Department of Education	Director, Office of Early Childhood
Nebraska	Nebraska Department of Education	Administrator, Office of Early Childhood Education.
Nevada	Nevada Department of Education, Office of Early Learning and Development	Nevada Ready Pre-K Supervisor
New Jersey	NJ Department of Education	Director, Office of Preschool Education
New York	New York State Education Department Office of Early Learning	Associate
North Carolina	Division of Child Development and Early Education	North Carolina Pre-K Program Manager
North Dakota	North Dakota Department of Health & Human Services	Best in Class Program Administrator
Oklahoma	State Department of Education	Deputy Superintendent of Curriculum and Instruction
Oregon	Early Learning Division- Oregon Dept. of Education	Early Learning Programs Director

State	Department	Contact Title
Pennsylvania	Office of Child Development and Early Learning	Administrative Officer 5
Rhode Island	Rhode Island Department of Education	Director, Instruction, Assessment, and Curriculum
South Carolina	South Carolina Department of Education	Team Lead, Early Learning
Tennessee	Tennessee Department of Education	Research and Data Analyst
Utah	Utah State Board of Education	Preschool Education Specialist
Vermont	Agency of Education	Universal PreK Coordinator
Virginia	Virginia Department of Education	Associate Director of PreK Programs
Washington	Department of Children, Youth and Families	Early Childhood Education Assistance Program Data Manager
Washington	Office of Superintendent of Public Instruction	Executive Director, Early Learning
West Virginia	West Virginia Department of Education	Pre-K Coordinator
Wisconsin	Wisconsin Department of Public Instruction	Early Childhood Consultant

Appendix B. Status of Child-, Program-, and Workforce-Level Data by State

State	Child-level data accessible?	Program-level data accessible?	Workforce-level data accessible?
Alabama	Yes	Yes	Yes
Alaska	Yes	Yes	Yes
Arizona	Yes	Yes	Not yet, in the planning process
Arkansas	No response	No response	No response
California	Yes	Yes	Yes
Colorado	No response	No response	No response
Connecticut	Yes	Yes	Yes
District of Columbia	Yes	Yes	Yes
Delaware	Yes	Yes	Yes
Florida	Yes	Yes	Yes
Georgia	Yes	Yes	Yes
Hawaii	Yes	Yes	Yes
Idaho	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program

State	Child-level data accessible?	Program-level data accessible?	Workforce-level data accessible?
Illinois	Yes	Yes	Yes
Indiana	Yes	Yes	No response
Iowa	Yes	Yes	Yes
Kansas	Yes	Yes	Yes
Kentucky	Yes	Yes	Yes
Louisiana	Yes	Yes	Yes
Maine	Yes	Yes	Not yet, in the planning process
Maryland	Yes	Yes	Yes
Massachusetts	Yes	Yes	Yes
Michigan	Yes	Yes	Yes
Minnesota	Other	Other	Other
Mississippi	Yes	Not yet, in the planning process	Not yet, in the planning process
Missouri	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program
Montana	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program
Nebraska	Yes	Yes	Yes
Nevada	Yes	Yes	Other

State	Child-level data accessible?	Program-level data accessible?	Workforce-level data accessible?
New Hampshire	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program
New Jersey	No	Yes	Not yet, in the planning process
New Mexico	Yes	Yes	Yes
New York	Yes	Yes	I don't know
North Carolina	Yes	Yes	Yes
North Dakota	Yes	Yes	Other
Ohio	Yes	Yes	Yes
Oklahoma	Yes	Yes	Yes
Oregon	Not yet, in the planning process	Yes	Yes
Pennsylvania	Yes	Yes	Yes
Rhode Island	Yes	Yes	Yes
South Carolina	Yes	Yes	Yes
South Dakota	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program
Tennessee	Yes	Yes	Yes
Texas	Yes	Yes	Yes
Utah	Yes	Yes	Yes

State	Child-level data accessible?	Program-level data accessible?	Workforce-level data accessible?
Vermont	Yes	Yes	No
Virginia	Yes	Other	Other
Washington	Yes	Yes	Yes
West Virginia	Yes	Yes	Yes
Wisconsin	No	No	No
Wyoming	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program

Appendix C. Factors that can be Disaggregated in Internal and External Reports

State	Data cannot be disaggregated	Child race/ethnicity	Child disability status	Family income	Child country of birth	Family languages spoken	Family tribal affiliation	I don't know	Other (Please specify):
Alabama		X	X	X	X	X	X		X
Alaska	X								
Arizona		X	X				X		
California		X	X	X	X	X	X		
Connecticut		X		X					
District of Columbia		X	X			X			
Georgia		X	X						
Hawaii	X								
Iowa		X	X						
Kansas		X	X	X		X			
Kentucky		X	X	X					
Maine		X							
Massachusetts		X	X	X	X	X			

State	Data cannot be disaggregated	Child race/ethnicity	Child disability status	Family income	Child country of birth	Family languages spoken	Family tribal affiliation	I don't know	Other (Please specify):
Michigan		X	X	X					
Minnesota		X	X	X		X	X		
Mississippi		X	X		X	X			
Nebraska		X	X			X			Qualifies for free or reduced lunch
Nevada	X								
New Jersey		X	X		X	X			Internal only
New York		X	X			X			
North Carolina		X	X	X		X			Any fields that are collected
North Dakota		X	X			X			
Oklahoma		X	X	X	X	X	X		
Oregon		X	X	X		X			
Pennsylvania		X	X	X		X			
Rhode Island		X	X	X		X	X		
South Carolina		X							
Tennessee		X	X	X	X	X			

State	Data cannot be disaggregated	Child race/ethnicity	Child disability status	Family income	Child country of birth	Family languages spoken	Family tribal affiliation	I don't know	Other (Please specify):
Utah									Data can be disaggregated for some, but not all students
Vermont			X						
Virginia		X	X	X					
Washington		X	X	X		X	X		
West Virginia		X	X			X			
Wisconsin		X	X	X			X		

Appendix D. Ability to Link State-funded Preschool Data with Other Datasets

State	Ability to link pre-K programs, including Head Start	Ability to link child, program, workforce, or state-level data from state-funded preschool program	Ability to link data with K-12 data
Alabama	For some data elements	For some data elements	Yes
Alaska	I don't know	For some data elements	Planning to/In Progress
Arizona	For some data elements	For some data elements	Yes
Arkansas	No response	No response	No response
California	No	No	No
Colorado	No response	No response	No response
Connecticut	No	No	No
District of Columbia	For some data elements	For some data elements	Yes
Delaware	Yes	Yes	No response
Florida	I don't know	No response	No response
Georgia	Yes	Yes	Yes
Hawaii	Planning to/In Progress	Planning to/In Progress	Yes

State	Ability to link pre-K programs, including Head Start	Ability to link child, program, workforce, or state-level data from state-funded preschool program	Ability to link data with K-12 data
Idaho	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program
Illinois	Yes	Yes	No response
Indiana	I don't know	No response	No response
Iowa	I don't know	Yes	Yes
Kansas	No	No	Yes
Kentucky	For some data elements	For some data elements	Yes
Louisiana	Yes	Yes	No response
Maine	No	No	Yes
Maryland	Yes	Yes	Yes
Massachusetts	I don't know	Yes	Yes
Michigan	Other	For some data elements	No
Minnesota	Planning to/In Progress	For some data elements	Planning to/In Progress
Mississippi	No	No	Yes
Missouri	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program

State	Ability to link pre-K programs, including Head Start	Ability to link child, program, workforce, or state-level data from state-funded preschool program	Ability to link data with K-12 data
Montana	No pre-K program	No pre-K program	No pre-K program
Nebraska	Other	Planning to/In Progress	Yes
Nevada	No	No	Planning to/In Progress
New Hampshire	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program
New Jersey	I don't know	No	Yes
New Mexico	Yes	No response	Planning to/In Progress
New York	No	No	Yes
North Carolina	Planning to/In Progress	For some data elements	Yes
North Dakota	Planning to/In Progress	No	Planning to/In Progress
Ohio	Yes	Planning to/In Progress	Yes
Oklahoma	Planning to/In Progress	No	Yes
Oregon	Planning to/In Progress	Planning to/In Progress	Planning to/In Progress
Pennsylvania	For some data elements	For some data elements	Yes
Rhode Island	Yes	Yes	Yes
South Carolina	Planning to/In Progress	Planning to/In Progress	Yes

State	Ability to link pre-K programs, including Head Start	Ability to link child, program, workforce, or state-level data from state-funded preschool program	Ability to link data with K-12 data
South Dakota	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program
Tennessee	No	Yes	Yes
Texas	Yes	Yes	Yes
Utah	No	For some data elements	Yes
Vermont	For some data elements	For some data elements	Yes
Virginia	For some data elements	For some data elements	Yes
Washington	Planning to/In Progress	Planning to/In Progress	Yes
West Virginia	Yes	For some data elements	Yes
Wisconsin	No	Yes	Yes
Wyoming	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program	N/A - no state-funded pre-K program

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