2018 State of State Early Childhood Data Systems

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The Early Childhood DATA Collaborative

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Executive Summary

Are young children (birth to age 8) on track to succeed when they enter school? How many children have access to high-quality early care and education (ECE) programs? Is the early childhood workforce adequately trained to meet the needs of young children? Most policymakers cannot answer these basic questions because data about interventions for young children are siloed in different state and local databases. This means policymakers and other decision-makers do not have a complete picture of who is participating in which services or how well those services promote positive school readiness or health outcomes for children over time.

The mission of the Early Childhood Data Collaborative (ECDC) is to support state policymakers in developing and using coordinated state early care and education (ECE). With these goals in mind, we launched our third national survey to examine the capacity of state early childhood data systems to answer critical policy questions related to early childhood services. The survey included questions about current state data capacity to:

1. Link child-level data to assess access to ECE services, early health, social services, and children's school readiness
2. Link program site-level data to assess program supply, quality, and characteristics
3. Link workforce-level data to assess workforce investments, supply, and characteristics
4. Govern early childhood data sharing
5. Use coordinated early childhood data

States collect a variety of disconnected data about children participating in multiple government-funded programs, characteristics of high-quality ECE programs, and information about the ECE workforce. When all these data are connected, policymakers can answer questions about children's overall access to early learning services as well as the outcome of early intervention services, quality programs, and a stable well-trained ECE workforce over time. The results from the 2018 Early Childhood Data Systems Survey and changes observed since our 2013 survey provide a clearer picture of progress states are making toward fully integrating their early childhood data systems and improving their ability to answer critical early childhood policy questions. Below are some key findings:

Key findings

1. Policymakers still lack comprehensive data needed to assess early childhood policies and outcomes. Fewer than half of states currently link child-level data to gain a comprehensive picture of early learning (22 states), social services (11 states), and children's health history (8 states). These numbers represent a decrease from 2013.
2. Home visiting and federally funded Head Start programs are least likely to be linked compared to other ECE programs. A majority of states linking data did not include Head Start or home visiting child-, program-, or workforce-level data as part of their data integration efforts.
3. An increased number of states link child-level data from subsidized child care programs compared to 2013. The number of states linking child-level data from subsidized child care programs, funded by the Child Care and Development Block Grant, increased from 12 to 17.

4. Data about program site quality are linked most frequently by states compared to other types of data such as workforce conditions (e.g., turnover) or structural standards (e.g., class size). Of the 22 states linking program site data across programs, most (91 percent) linked data measuring program quality for at least one ECE program, compared to 68 percent linking information about working conditions (e.g., wages, benefits, turnover).

5. States were least likely to link workforce-level data compared to child- and program-level data. While most states (84 percent) collect some workforce data in a workforce registry, only 15 states (30 percent) reported the capacity to link workforce data across ECE programs, which is critical to answering questions about the changing demographics, qualifications, and needs of the workforce over time

6. Fewer states have a defined data governance body to support the coordination and use of ECE data compared to 2013. The number of states with a defined data governance body decreased from 32 to 22 in our 2018 survey.

7. States lack processes to engage the public about data privacy policies. Fewer than one third of those states with a governance structure indicated that information about data privacy is publicly available (27 percent) or that public comment is solicited (27 percent).

Recommended action steps for policymakers

To increase the number of states with comprehensive early childhood data systems, we recommend the following action steps for policymakers:

1. Establish and strengthen state ECE data governance bodies to guide the coordination, security, and appropriate use of ECE data.

2. Strengthen states' capacity to securely link data on young children across *all* state and federal ECE programs, including Head Start and home visiting.

3. Expand efforts to collect and link data about the early childhood workforce.

4. Communicate with parents about data privacy policies and uses of early childhood data.

5. Use existing data systems planning tools and technical assistance to support early childhood data system integration.

For more information about early childhood data systems in your state, go to our interactive website to view or download your state profile at www.ecedata.org.

Why Integrating Early Childhood Data Matters

Research on the importance of early childhood development[1] continues to spark policy discussions about the types of interventions needed for children from before birth through age 8 to promote positive health and educational outcomes (see Early Childhood Policy Questions). Services received in the early years of life are particularly important for young children who live in poverty, have experienced trauma, or are at risk of entering kindergarten with fewer readiness skills than their peers. To make informed policy decisions about whether government services are equitable, cost-effective, and responsive to the diverse needs of families while also yielding the greatest benefits, policymakers need access to accurate and comprehensive information about who receives the services and how they fare later in life. Such information promotes policymaking that brings the best quality of services to the families and communities that need them.

Early Childhood Policy Questions

1. Are children, birth to age 5, on track to succeed when they enter school and beyond?
2. Which children have access to high-quality early care and education programs?
3. Is the quality of programs improving?
4. What are the characteristics of effective programs?
5. How prepared is the early care and education workforce to provide effective education and care for all children?
6. What policies and investments lead to a skilled and stable early care and education workforce?

Source: Early Childhood Data Collaborative (2010).

Federal policy guidance and grants have also promoted an increase in state policy discussions about the importance of early childhood data coordination and needed policies. For example, the Child Care and Development Block Grant Reauthorization (2014) requires states to assess the supply and quality of care for children in high-poverty areas in order to prioritize services. To do so, states must have comprehensive data on children's access across all ECE programs. The Every Student Succeeds Act (2015) instructs states to identify ways to improve coordination among local education agencies, schools, and existing early childhood programs; these linkages are intended to support children's transition from early childhood into schools. Additionally, in 2011, 2012, and 2013, Race to the Top – Early Learning Challenge grants were issued to 20 states, creating a unique opportunity to enhance these states' early learning data systems. All these efforts have helped place a greater emphasis on the need to strengthen states' use and coordination of early childhood data.

The Early Childhood Data Dilemma

Although states gather substantial data about all early childhood services, most states lack the ability to coordinate these data across programs. Several factors contribute to this issue. For example, programs are often siloed in different state agencies; however, children and their families frequently enroll in multiple services managed by states' departments of education, health and human services, public assistance, child welfare, and others. Moreover, agencies and programs may collect and define demographic and success metrics differently, making it challenging to connect the same child or family information across systems. In addition to facing technical obstacles to pulling these data together, many states lack clear policies for facilitating cross-agency data sharing and recognizing

[1] Alliance for Early Success and Child Trends. (2015). *Birth through Eight State Policy Framework: Research at a Glance*.

shared data as an essential asset for policymakers. Consequently, policymakers and other decision makers cannot gain a complete picture of who receives specific services or whether those services promote school readiness or positive health outcomes over time (see Disconnected Early Childhood Data Needed to Answer Policy Questions).

Policy plays a vital role in coordinating data across agencies. Policy can be the means of funding infrastructure needed to support data integration, convening stakeholders across multiple agencies to discuss data needs and gaps, and providing governance structures and processes needed to safeguard data privacy. The Early Childhood Data Collaborative is focused on identifying and addressing existing policy gaps by communicating the need for and benefits of integrated early childhood data.

Disconnected Early Childhood Data Needed to Answer Policy Questions

Current and Previous Early Childhood Data Systems Surveys

The Early Childhood Data Collaborative (ECDC) supports state policymakers' development and use of coordinated state early care and education (ECE) data systems. Part of our work involves regularly checking in with states to see where they are making progress and what challenges remain. With these goals in mind, we launched our 2018 survey to assess states on the components of a coordinated early childhood data system that we identified as necessary to answer critical policy questions related to early childhood services (see Fundamentals of a Coordinated Early Childhood Data System). Specifically, we asked about states' capacity to:

1. Link child-level data to assess access to ECE services (Fundamentals: #1, #2, #3)
2. Link child-level data to assess children's early health (Fundamentals: #1, #4)
3. Link child-level data to assess children's access to supportive services (Fundamentals: #1, #4)
4. Link child-level data to assess children's school readiness (Fundamentals: #1, #4)
5. Link program site-level data to assess program supply, quality, and characteristics (Fundamentals: #5, #6)
6. Link workforce-level data to assess workforce investments, supply, and characteristics (Fundamentals: #7, #8)
7. Govern the use of early childhood data (Fundamentals: #9, #10)
8. Use coordinated early childhood data (Fundamentals: #9, #10)

ECDC completed two previous national surveys (2010 and 2013). The 2010 survey assessed states' progress related to all 10 fundamentals of a coordinated data system necessary to answer key early childhood policy questions, including questions related to child-, program-, and workforce-level data. The 2013 survey focused on child-level data (fundamentals 1-4) and governance (fundamentals 9 and 10). The purpose of focusing the 2013 survey on child-level data linkages was to help policymakers,

administrators, ECE professionals, and parents understand key policy questions related to how investments in multiple ECE programs were (or were not) working together to promote young children's growth and development over time.

The 2010 survey[2] found that much of the data that states collected on children, ECE programs, and the ECE workforce were uncoordinated and housed across multiple data systems and agencies. The 2010 survey also revealed significant data collection gaps related to children's development and ECE workforce characteristics. By 2013, more states were securely linking ECE child-level data to their state's K-12 data (59 percent), social services data (39 percent), and health data (24 percent)[3]. The 2013 survey also found that state-coordinated ECE data systems were more likely to link data for children participating in state pre-kindergarten and preschool special education than children in Head Start or subsidized child care programs. Additionally, the 2013 survey found that over two thirds of states (71 percent) reported collecting state-level child development data from ECE programs, and over half (57 percent) reported capturing kindergarten entry assessment data.

Fundamentals of a Coordinated Early Childhood Data System

1. Unique statewide child identifier
2. Child-level demographics and program participation information
3. Child level data on development
4. Ability to link child-level data with K-12 and other key data systems
5. Unique program site identifier with the ability to link with children and the ECE workforce
6. Program site structural and quality information
7. Unique ECE workforce identifier with ability to link with program sites and children
8. Individual-level data on ECE workforce demographics, education, and professional development information
9. State governance body to manage data collection and use
10. Transparent privacy protection and security policies and practices

Notably, Pennsylvania was the only state in both 2010 and 2013 surveys that linked all ECE programs at the child and program levels; however, there have been investments since then, such as the Race to the Top-Early Learning Challenge (RTT-ELC) grants,[4] that have moved other states along in linking ECE child-level data to answer key policy questions. For example, through RTT-ELC funds, North Carolina was able to build an Early Childhood Integrated Data System (NC ECIDS), which has increased the number of policy questions that can be answered about program participation and services received over time. Between 2010 and 2013, there was also an increase in governance. Of 51 respondents, 32 states (63 percent) had designated an ECE data governance entity to guide the development and use of a state-coordinated longitudinal ECE data system by 2013, compared to only four states in 2010.

There are some important differences between the 2013 and 2018 versions for the Early Childhood Data Systems Surveys. While 2013 Early Childhood Data Systems Survey focused on secure child-level data linkages, the 2018 Early Childhood Data Systems Survey expanded its reach to include questions about child-, family-, program-, and workforce-level data linkages, to provide an update on developments in states since the administration of the 2010 survey. The 2018 Survey also included questions regarding home visiting data, which were absent from the 2013 survey. Finally, the 2018 Survey added new questions about states' data governance structure, data sharing policies, and stakeholders' use of data to inform early childhood policies and practice. Where possible, our key findings highlight changes between the 2013 and 2018 surveys.

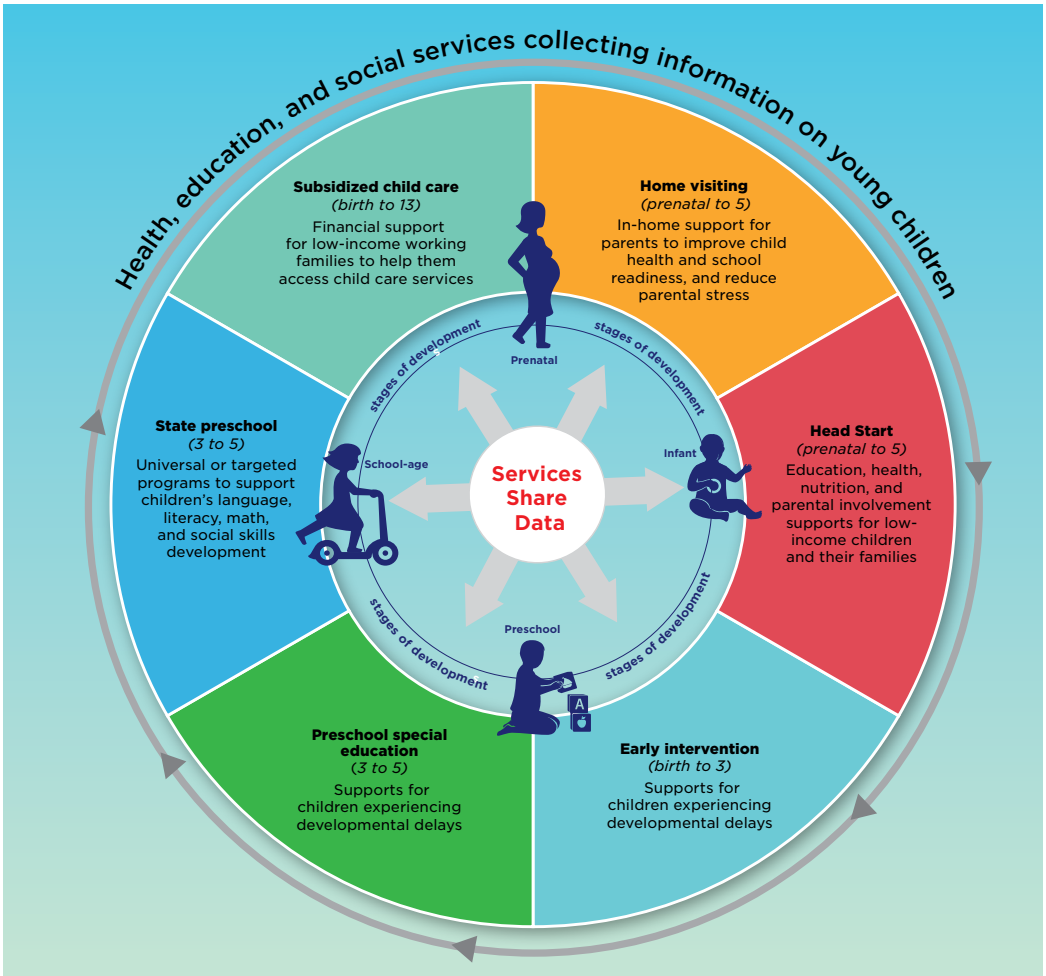
[2] Early Childhood Data Collaborative (2010). *10 Fundamentals of Coordinated State Early Care and Education Data Systems Inaugural State Analysis.*
[3] Early Childhood Data Collaborative (2013). *2013 State of States' Early Childhood Data Systems*. Child Trends.
[4] Jordan, E. & King, C. (2015). *Stacking the Blocks: A Look at Integrated Data Strategies. Rising to the Challenge: Building Effective Systems for Young Children and Families, a BUILD E-Book*. Early Childhood Data Collaborative & BUILD Initiative.

Survey methods

The 2018 Early Childhood Data Systems Survey, conducted in April through June 2018 by the ECDC, focused on assessing the capacity of states to link child-, family-, program-, and workforce-level data across early care and education programs, including: early intervention (IDEA Part C), preschool special education (IDEA Part B, Section 619), state pre-kindergarten, Head Start, subsidized child care, and home visiting (see Figure 1). By linking child-, family-, and program-level data across programs, we gain the ability to follow individual children, programs, and staff across programs and over time, using data housed in different data systems or within the same data system. The 2018 Survey included questions about the following core categories: linking child-level data, linking program-level data, linking workforce-level data, governing use of data, and using coordinated early childhood data.

This report includes a summary of responses from all 50 states; the District of Columbia declined to participate in the survey. For each state, a main contact was identified to complete an online survey about the state's ECE programs and to coordinate staff responses from the respective ECE programs. The main contacts who responded to the survey primarily represented staff from departments of Health, Social, Human, and/or Family Services (50 percent). Main contacts also represented staff from states' Department of Education (30 percent), Early Childhood Advisory Council/Children's Cabinet (6 percent), Office of Early Learning/Childhood (8 percent), and other organizations (6 percent). A full list of survey contacts is available in Appendix A.

Figure 1. Early Childhood Program Linkages



Summary of survey findings

This section summarizes results from the 2018 Early Childhood Data Systems survey. The results are organized into five main sections that detail state progress related to:

- Child-level data
- Program-level data
- Workforce-level data
- Data governance and policies
- Uses of early childhood data

Within each section, we share information about cross-agency linkages (i.e., early childhood, education, health, social services), ECE programs linked (i.e., Head Start, home visiting, subsidized child care), and types of data linked (i.e., demographics, quality measures, staff qualifications). The sections describing governance and uses of early childhood data provide examples of state governance structures and ways data are used in states with established, coordinated data systems. We include comparisons of results between the 2013 and 2018 surveys where applicable. Due to changes in questions and methodology, we are not able to provide comparisons for all results.

Individual state profiles are available to view or download on our interactive website at www.ecedata.org.

Child-Level Data

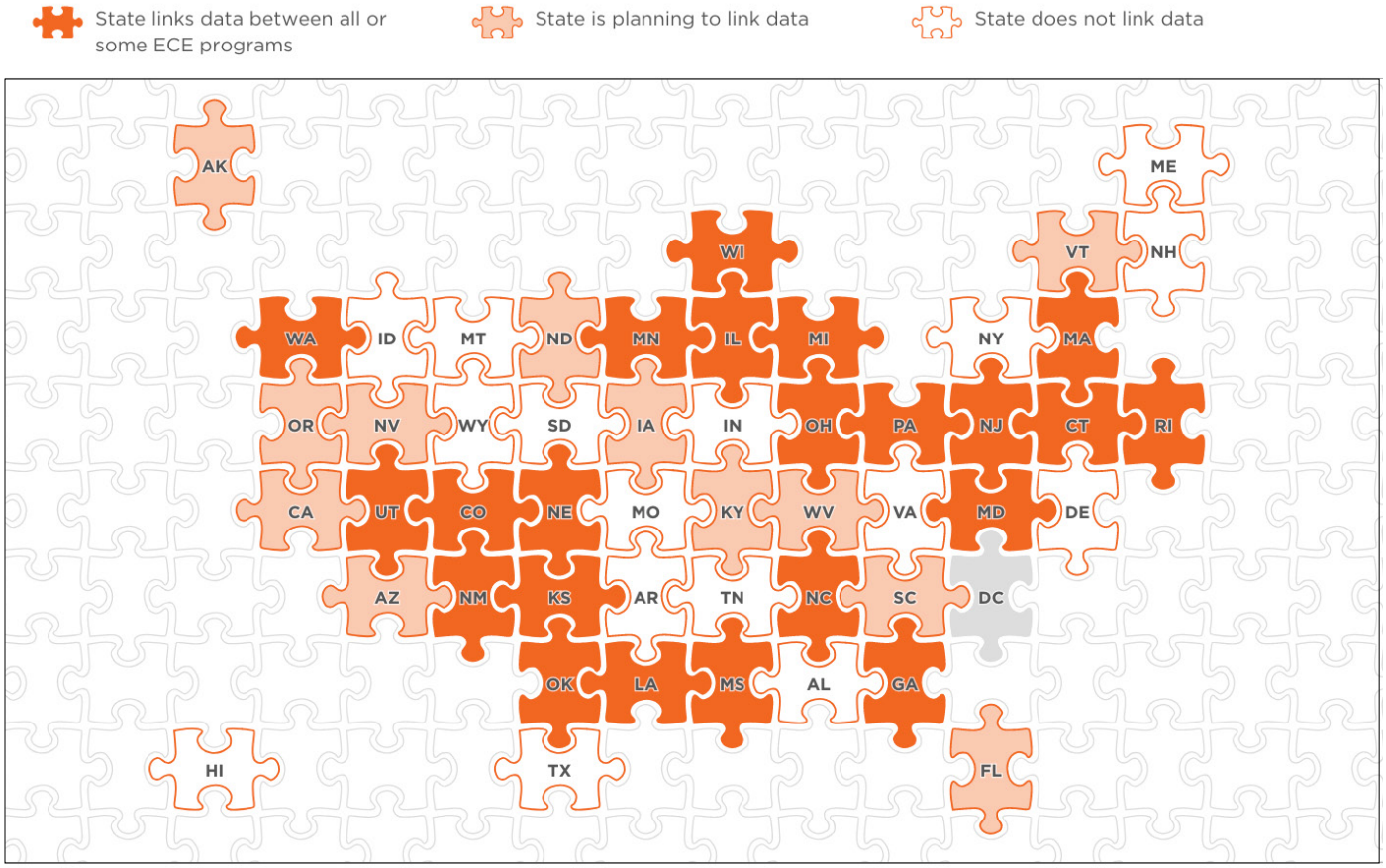
Key early childhood policy questions include questions around access to child care (e.g., How many children we are serving? Which children are receiving which types of care?), early childhood quality (e.g., How many children receive high-quality care?), and school readiness (e.g., How many young children on-track are to start kindergarten with the skills needed to succeed?). Answering these questions can be challenging, especially for states that do not have ways to coordinate data collected about children as they move through state early education, health, and social services. The ability to securely link data about children's growth and development, as well as the systems they encounter, is key to helping states begin to answer these key policy questions.

Linking child-level data to assess access to ECE services

States were asked about their ability to securely link child-level data collected across their early intervention (IDEA Part C), preschool special education (IDEA, Part B 619), state pre-kindergarten, state-funded Head Start, federally funded Head Start, subsidized child care, and home visiting programs. The ability to link child data across ECE databases means that information about an individual child is connected across early childhood programs and over time. For example, if a child attended a state pre-kindergarten program and switched to Head Start midyear because the family moved, a program administrator would be able to connect information about that child from both programs. This type of linking helps policymakers make a more accurate count of children being served across programs. Additionally, it allows for data sharing between ECE programs, which could reduce unnecessary re-assessment when a child moves from one program to another, while also helping to provide continuity of care.

Out of 50 states surveyed, fewer than half (22 states or 44 percent) reported capacity to link child-level data (see Figure 2) for at least one early childhood program. Georgia and Mississippi were the only states that reported linking data from all six ECE programs. Of those 22 states, a majority (18 states, or 86 percent) implemented an Early Childhood Integrated Data System (ECIDS) to accomplish this goal. An ECIDS is a data system that combines, secures, and reports information from a variety of early learning services and programs, including data related to children and families served by the program, members of the workforce, and the characteristics of the program or services. States without an ECIDS may manually link data by combining data from each program into a combined data set rather than using another data system to integrate the data. While 12 out of 50 states (24 percent) have plans to link child data, 16 states (32 percent) reported no linkages or plans to link.

Figure 2. States Linking Child-Level Data Across ECE Programs



Linking Early Care and Education Data:

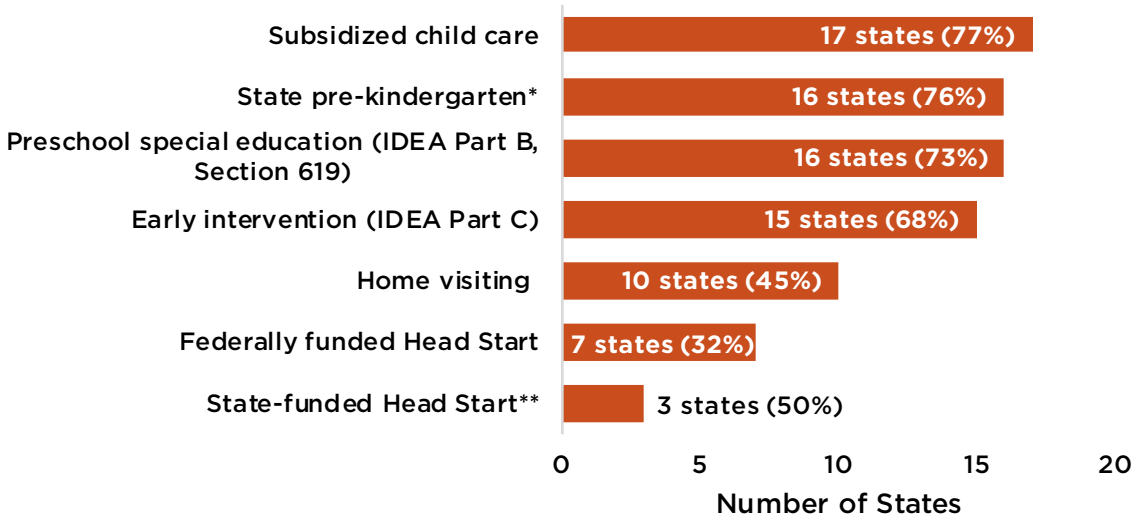
Georgia's Cross Agency Data System (CACDS)

Georgia's ECIDS links child-level data across all six major early care and education programs. By securely linking data across ECE programs, policymakers have access to data to identify service gaps, target services for vulnerable children, and support research on program outcomes.

You can learn more about Georgia's ECIDS at http://www.gacacds.com/

States linking child-level data were asked which ECE programs' data were linked (see Figure 3). A majority of states link data for children enrolled in subsidized child care (77 percent), state pre-kindergarten (76 percent), preschool special education (73 percent), or early intervention (68 percent). Children enrolled in home visiting (45 percent) or federally funded Head Start (32 percent) were less likely to be included in coordinated state data systems.

Figure 3: ECE Programs Linked by States Linking Child-Level Data Across ECE (n= 22 states)



*Number of states included with state-prekindergarten (n= 21)
** Number of states included with state-funded Head Start (n= 6)

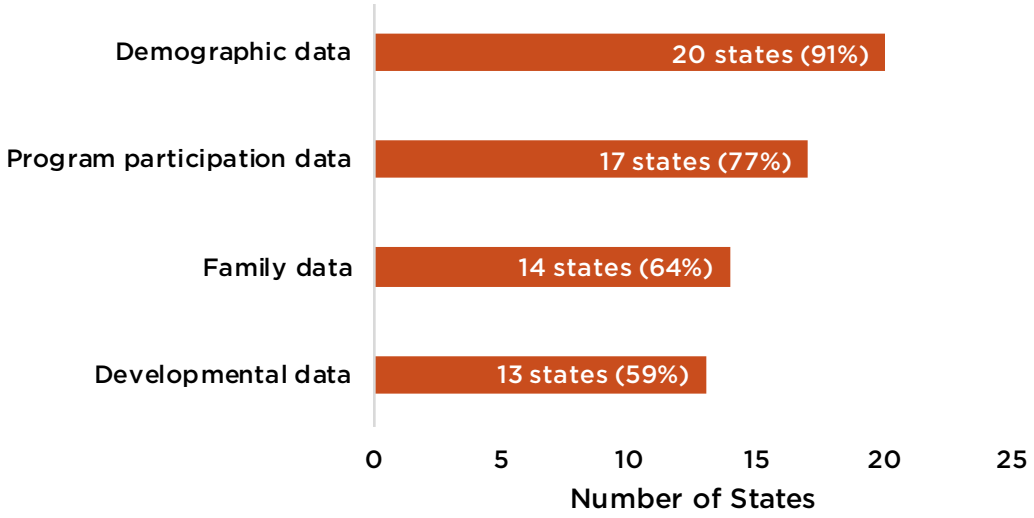
For each ECE program, states were asked if they had the capacity to link information on all children enrolled. Most reported having the capacity to link data for all children enrolled in each ECE program. Capacity ranged from 71 percent to 87 percent, except for state-funded Head Start (33 percent). See Appendix B for additional details on states linking child-level data across ECE programs.

Types of child-level data linked

States were asked which of the following types of data they linked about children enrolled in ECE programs (see Figure 4): demographic, program participation, family, and child development. Most states linked all four types of data. The percentage of states linking each type of data from at least one ECE program ranged from 59 percent to 91 percent. States were more likely to report linking

child demographic data (e.g., ethnicity, age, gender, languages) and program participation data (e.g., attendance, length of time in program/services). Fewer states reported the capacity to connect data about a child's family (e.g., parent education level, employment status, household income, ethnicity) or development (e.g., screening, assessment). See Appendix C for additional details on types of child-level data linked.

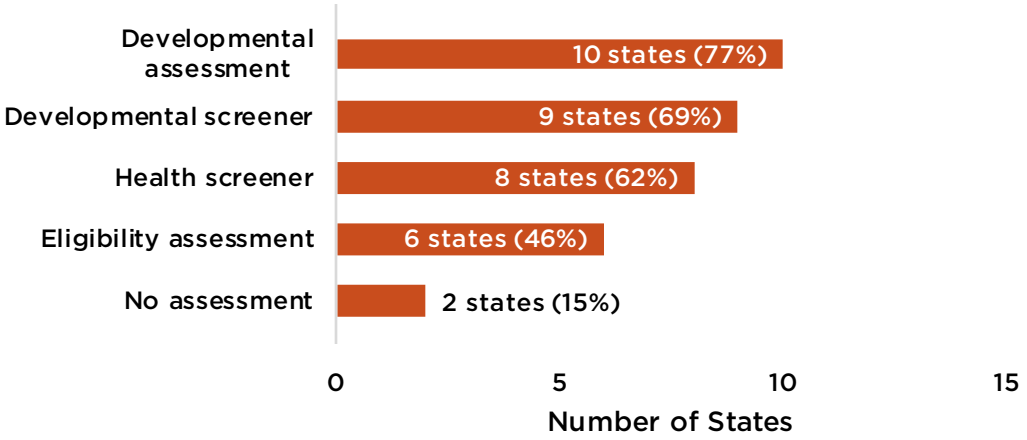
Figure 4. Type of Child-level Data Linked (n= 22 states)



Types of child screening and assessment data linked

States that reported linking child development data were asked to identify the types of assessment or screening data collected (see Figure 5). Of those states collecting these types of data (n= 13 states), most (77 percent) collect developmental assessment data (i.e., ongoing tracking of a child's development and learning to inform instruction); additionally, most (69 percent) collect developmental screening data (i.e., to determine if a child's development is on track and if the child may have a developmental delay or disability). Over half of these 13 states (62 percent) reported collecting health screening data (e.g., lead, vision, hearing, height and weight for body mass index). Fewer than half of states (46 percent) collected eligibility assessment data (i.e., to determine if a child qualifies for services). See Appendix D for additional details on types of child screening and assessment data linked.

Figure 5. Types of Child Screening and Assessments Data Linked (n= 13 states)

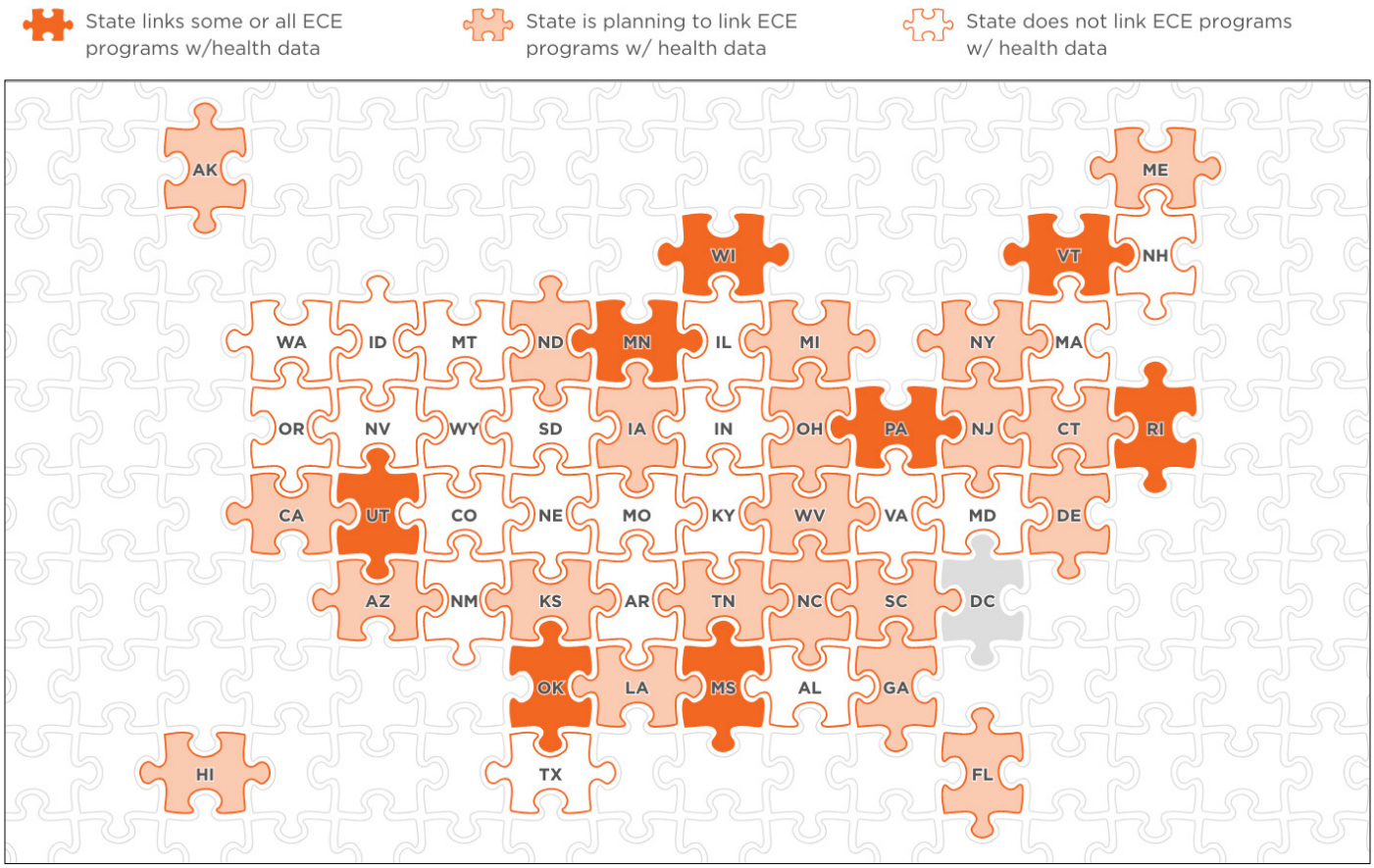


Linking child-Level data to assess children's early health

Knowledge of children's early health and development is vital to understanding the health of a state's population, both in the present and in the future. By collecting and linking data on individual children's health, as well as the health services and early childhood programs and services they receive, states have a clearer picture of a child's whole health and development. Policymakers can also use these data to answer important policy questions related to early health intervention services and children's development. Because of the sensitive nature of health data, federal laws govern the sharing and security of these data. It is essential for policymakers to understand that states can both meet data security requirements and effectively link data to benefit families participating in these programs.

Out of 50 states surveyed, only eight states (16 percent) reported linking ECE child-level data with the state's health data (see Figure 6). The remaining states' responses were equally split between 21 states (42 percent) planning to link health data and 21 states (42 percent) reporting no linkages or plans to link.

Figure 6. States Linking Child ECE and Health Data



Linking Health Data

KIDSNET (Child Health Information System)

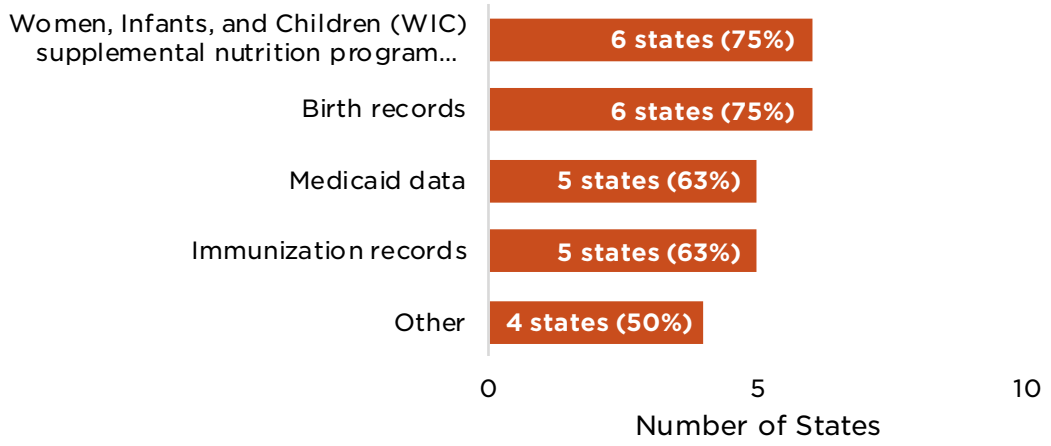
Rhode Island's KIDSNET securely links child health data and tracks public health services to inform preventative health policies for young children. Programs include: Newborn Screening Programs; Home Visiting; Women, Infants, & Children (WIC) Supplemental Nutrition Program; Childhood Immunization Program; Childhood Lead Poisoning Prevention Program; and Birth Defects Program.

You can learn more about Rhode Island's KIDSNET at http://health.ri.gov/publications/factsheets/Kidsnet.pdf

Types of health data linked

The eight states linking health and ECE data were asked to indicate which of the following four types of health data they are linking: birth records; immunization records; Medicaid; and Women, Infants, & Children (WIC) supplemental nutrition program (See Figure 7). Oklahoma, Mississippi, and Rhode Island reported linking all four types of health data. Most of the states linking health and ECE data (75 percent) reported having the capacity to link birth records and WIC data. More than half (63 percent) link immunization records or Medicaid data. Half of states (50 percent) reported linking another type of health data not included in the survey. These other health data included Free and Reduced Price Meal Program, Early Hearing Detection and Intervention Program, Maternal and Child Health Program, Lead Screening and Remediation Program, newborn bloodspot and hearing, diagnostic audiology, and birth defects. See Appendix E for additional details on types of child health data linked.

Figure 7. Types of Child Health Data Linked (n= 8 states)

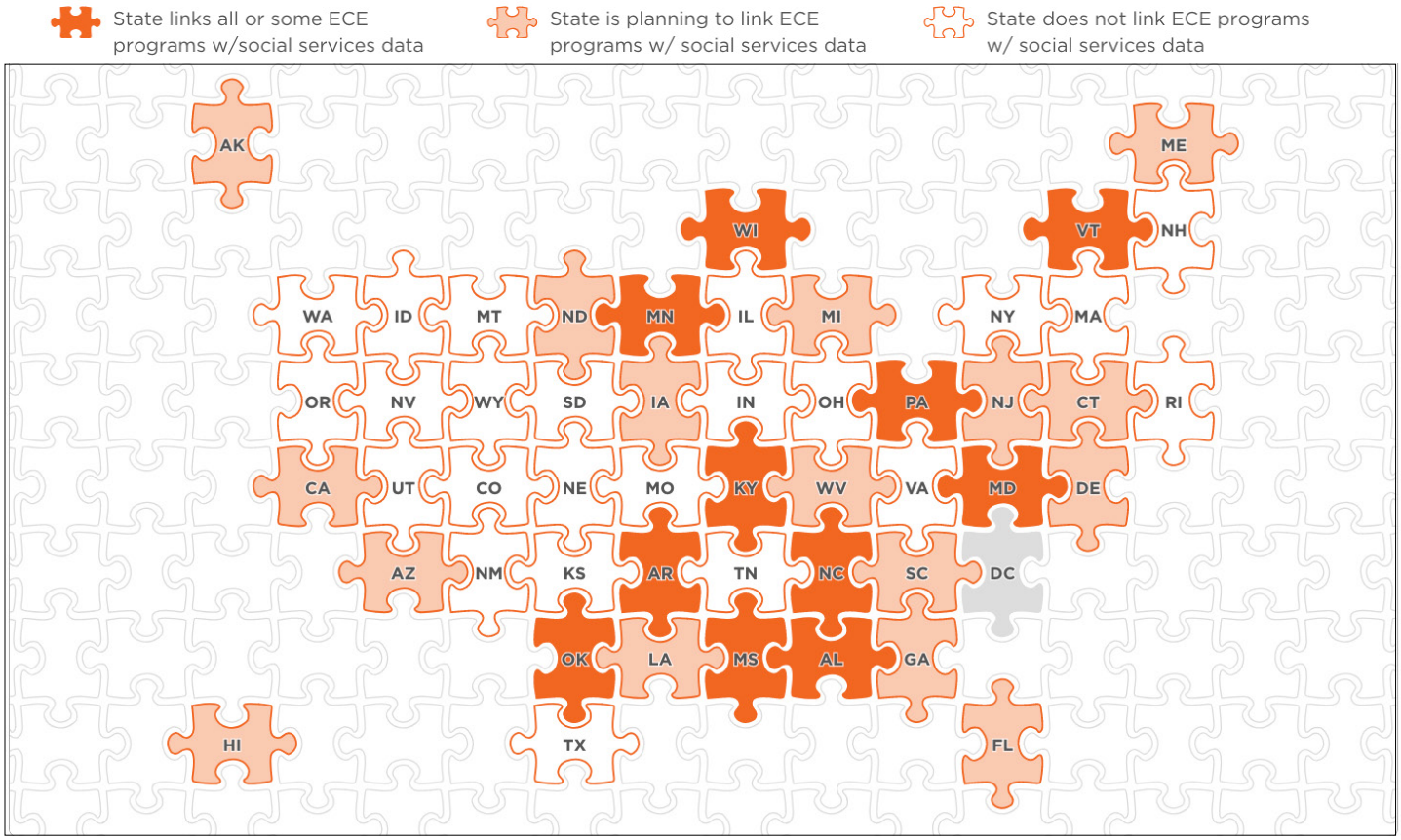


Linking child-level data to assess children's access to supportive services

Children enrolled in early care and education services may live in families receiving supportive social services such as cash assistance, child welfare, nutritional services, or housing assistance. The range of services a young child can encounter before entering kindergarten is extensive. To understand how well these services are serving children and families, states need to securely link these data to identify service gaps. By doing so, policymakers can answer policy questions about the reach of programs and their effect on the well-being of families with young children.

Out of all 50 states surveyed, only 11 states (22 percent) reported linking ECE data with social services data at the child-level (see Figure 8). While 16 states (32 percent) reported plans to link, the remaining 23 states (46 percent) do not link these data or plan to do so.

Figure 8. States Linking Child ECE and Social Services Data



Linking Social Services Data

Minnesota's Early Childhood Longitudinal Data System (ECLDS)

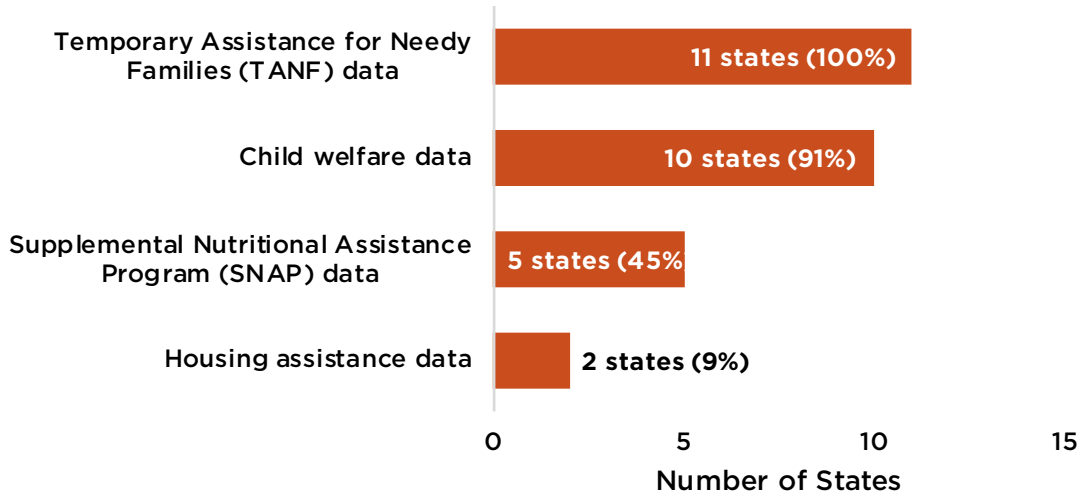
Minnesota's ECLDS securely links data from the state departments of education, human services, and health. The ECLDS includes a web-based portal for the public to access de-identified, aggregate-level data to run standard reports and conduct analyses. Having access to these data enables nongovernmental organizations, such as non-profit human service agencies, to better serve the unique needs of their communities.

You can learn more about Minnesota's ECLDS at http://ecIds.mn.gov/

Types of social services data linked

The 11 states linking social services and ECE data were asked which of the following four types of social services data they link: Temporary Assistance for Needy Families (TANF), child welfare, Supplemental Nutrition Assistance Program (SNAP), or housing assistance (see Figure 9). All 11 states reported being able to link TANF data. Almost all states (91 percent) reported linking child welfare data. Fewer states (45 percent) reported linking SNAP data. Two states (Mississippi and Vermont) reported being able to link housing assistance data. See Appendix F for additional details on types of social services data linked.

Figure 9. Types of Social Services Data Linked (n= 11 states)

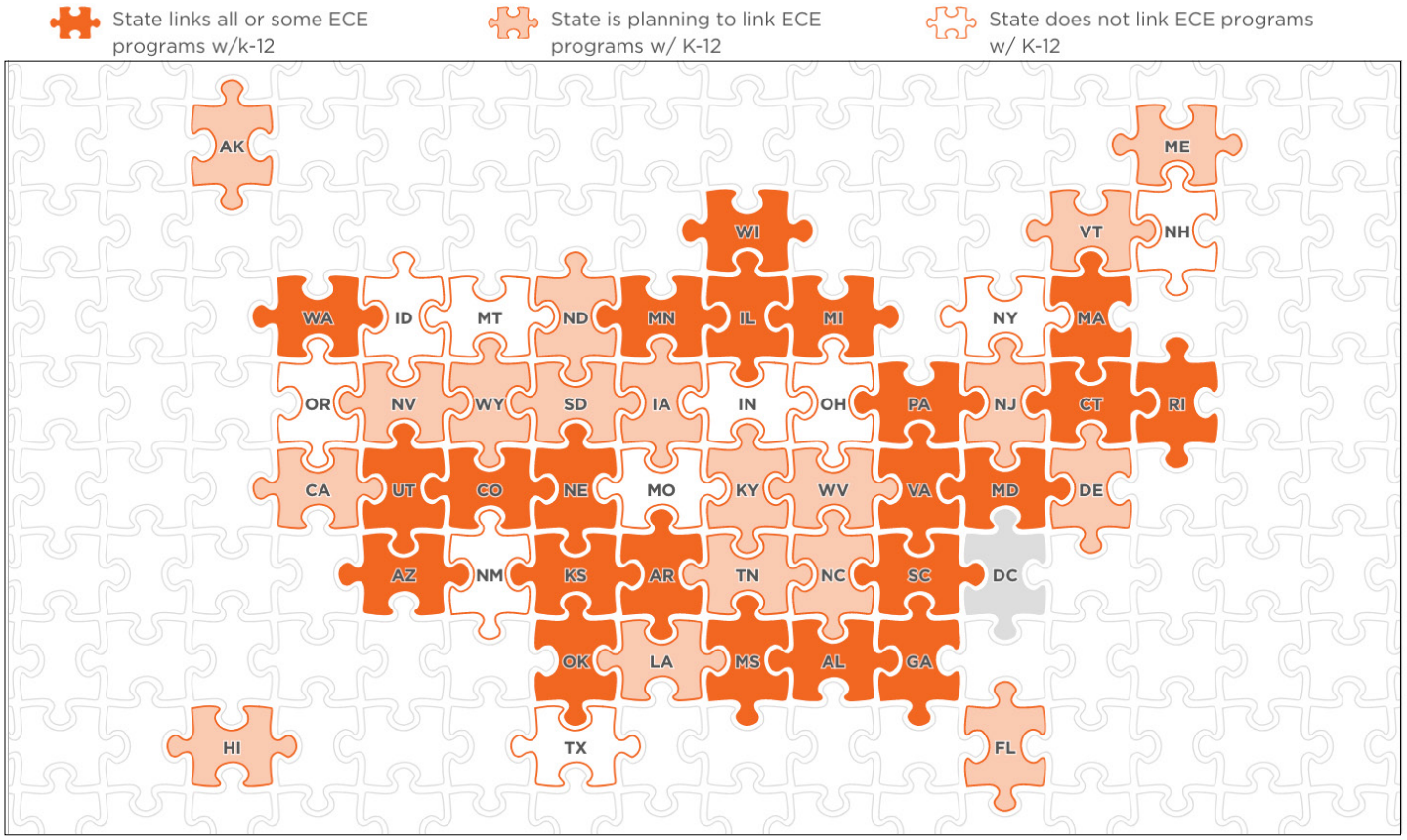


Linking child-level data to assess children's school readiness

The transition from early childhood care settings to kindergarten is one of the most significant milestones in a young child's life. Access to information about children's readiness for kindergarten and their subsequent success in the K-12 system is key during this transitional period. States that can link data between ECE data systems and the K-12 data system are uniquely positioned to answer important policy questions regarding ways to address school readiness and increase equity in educational outcomes.

Out of all 50 states, fewer than half (22 states, or 44 percent) reported capacity to link child-level ECE data with the state's K-12 data system (see Figure 10). While 18 states (36 percent) said that they plan to link ECE and K-12 data, 10 states (20 percent) said that they do not link these data or plan to do so.

Figure 10. States Linking Child ECE and K-12 Data



Linking K-12 Data

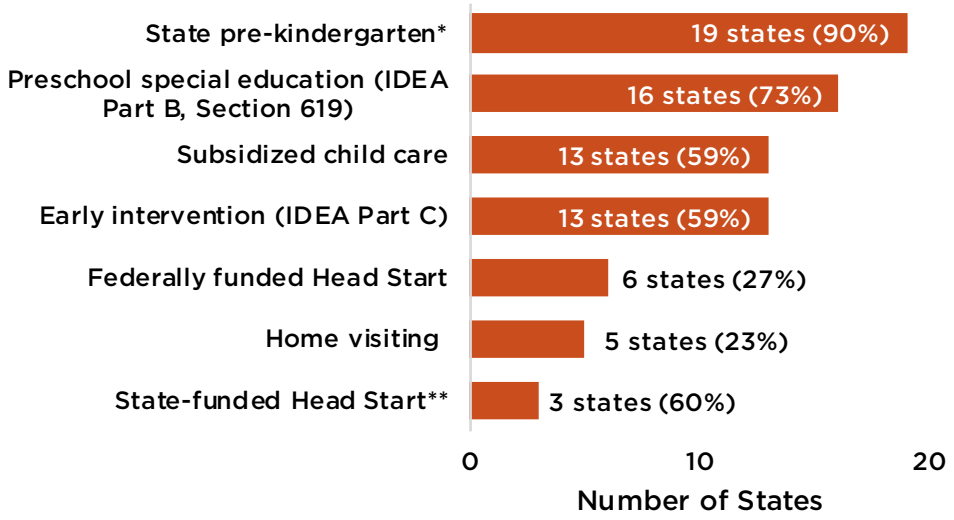
Mississippi LifeTracks

Mississippi's LifeTracks system securely links early childhood, K-12, postsecondary education, and the workforce data. Data are collected to inform decisions made to improve education and workforce outcomes. With longitudinal data on children's development, policymakers can answer questions about children's school and career readiness.

You can learn more about Mississippi's LifeTracks at https://lifetracks.ms.gov/

States linking ECE and K-12 data were asked which ECE programs they have the capacity to link (see Figure 11). Of the 22 states, nearly all (90 percent) link state pre-kindergarten child data with K-12 data. Most states link preschool special education (73 percent), early intervention (59 percent), and subsidized child care data (59 percent). States were less likely to link federally funded Head Start data (27 percent) and home visiting data (23 percent). See Appendix G for additional details on ECE programs linked with K-12 data.

Figure 11. ECE Programs Linked by States Linking Child ECE and K-12 data (n= 22 states)



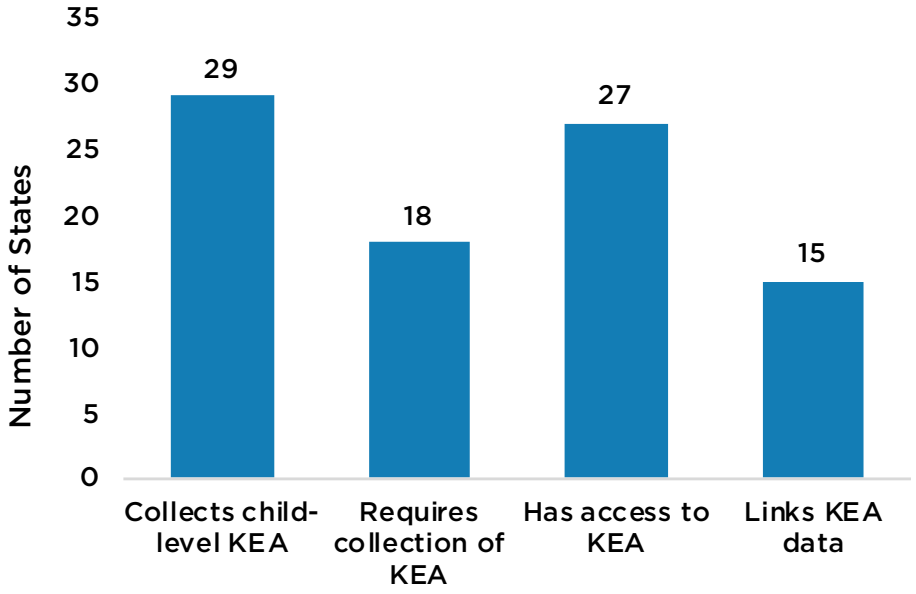
*Number of states included with state-prekindergarten (n= 21)
** Number of states included with state-funded Head Start (n= 5)

Linking kindergarten entry assessment data (KEA)

Many states have implemented kindergarten entry assessments (KEA), which are used at the beginning of the school year to collect information about children in the areas of physical development, language development, social-emotional development, cognitive knowledge, and approaches to learning. By linking KEA data with ECE data at the state level, policymakers can make informed decisions regarding policies and practices that support high-quality early childhood programs and enhance kindergarten programs' readiness for children as they transition to a school setting.

States were first asked if they capture KEA data captured in a data system (see Figure 12). States that responded yes were also asked if KEA data are required to be collected statewide, made accessible at the state level, or linked to the state's ECIDS or ECE databases. Over half of the 50 states surveyed (29 states) reported that they capture child-level KEA data. Of those 29 states, over half (64 percent) reported that they require KEA data collection. Additionally, almost all of these states (93 percent) said that they have access to state-level KEA data, and about half of states (52 percent) said that they have the capacity to link KEA data with their ECIDS or state ECE data systems.

Figure 12. Kindergarten Entry Assessment (KEA) Data Collection



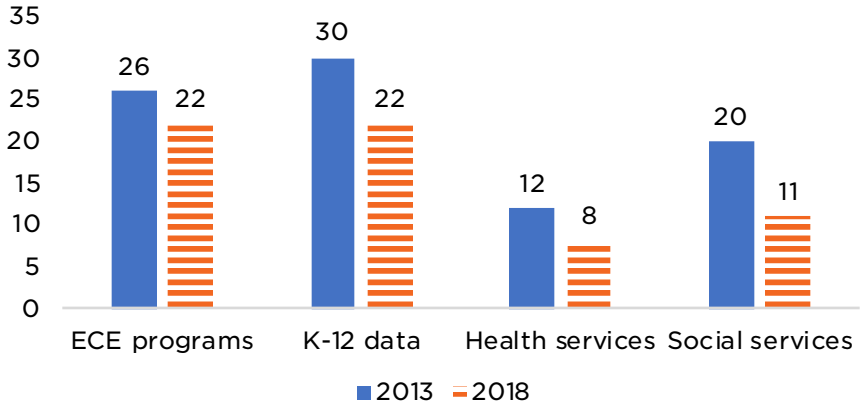
Methods for linking child/family level data

States use a variety of methods to link child-level data across multiple data systems. Using a standard method for securely identifying individual children participating in government programs makes it easier to connect records across ECE and other data systems. We asked states to identify the methods they use to link child-level, family-level, and K-12 data; states were able to select more than one method. Overall, most states (82 percent) use a unique ID to link child-level data. A unique child ID is a single, nonduplicated number that is assigned to and remains with a child throughout the child's participation in ECE programs and services. Fewer than half the states (45 percent) reported using a matching process to link data associated with variables such as a child's name, gender, or birthdate. To link family-level data, most (43 percent) used a unique child ID, while the remaining states used either a unique family/case ID (36 percent) or matched records based on other variables. For linking K-12 data, nearly all states were more likely to use an ID assigned from the K-12 data system (59 percent) than to use a matching process (36 percent).

Comparison between 2013 and 2018 results

Compared to the results from the 2013 Early Childhood Data Systems Survey, fewer states reported linking child-level data across ECE programs and other systems such as K-12, health, and social services databases (see Figure 13). However, the pattern of linkages in 2018 is similar to that of 2013, with fewer states linking health and social services data compared to ECE programs and K-12 data systems. This decrease may be due to a lack of governance and funding needed to sustain efforts to facilitate cross-agency data sharing.

Figure 13. Number of States Linking Child-Level Data in 2013 and 2018 Across ECE, K12, Health, and Social Services Data Systems



In the 2013 and 2018 surveys, states were asked to report which child data were linked across ECE programs and with a K-12 data system (see figures 14 and 15). Questions about linking home visiting programs were not included in our 2013 survey; therefore, no comparison is available. For the other ECE programs, we show an overall decrease in the number of programs, which mirrors the decrease in total number of states linking child-level data. In both years, states' pre-kindergarten and preschool special education programs were linked more frequently compared to the other ECE programs. However, the number of states linking subsidized child care and federally funded Head Start increased, even with fewer states linking overall. The increase in states linking subsidized child care may be a result of data coordination goals met by states that received federal Race to the Top – Early Learning Challenge grants. Given that 13 of 16 states linking subsidized child care received this grant, it may have been a key driver for this progress.

Figure 14. Number of States Linking Child-Level Data by ECE Program Type in 2013 and 2018

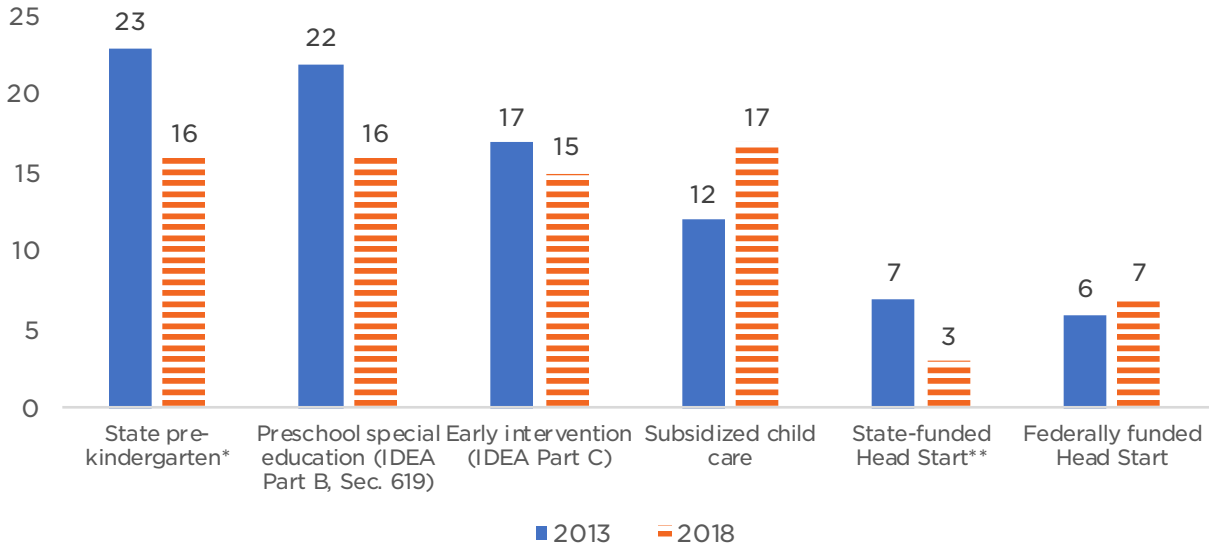
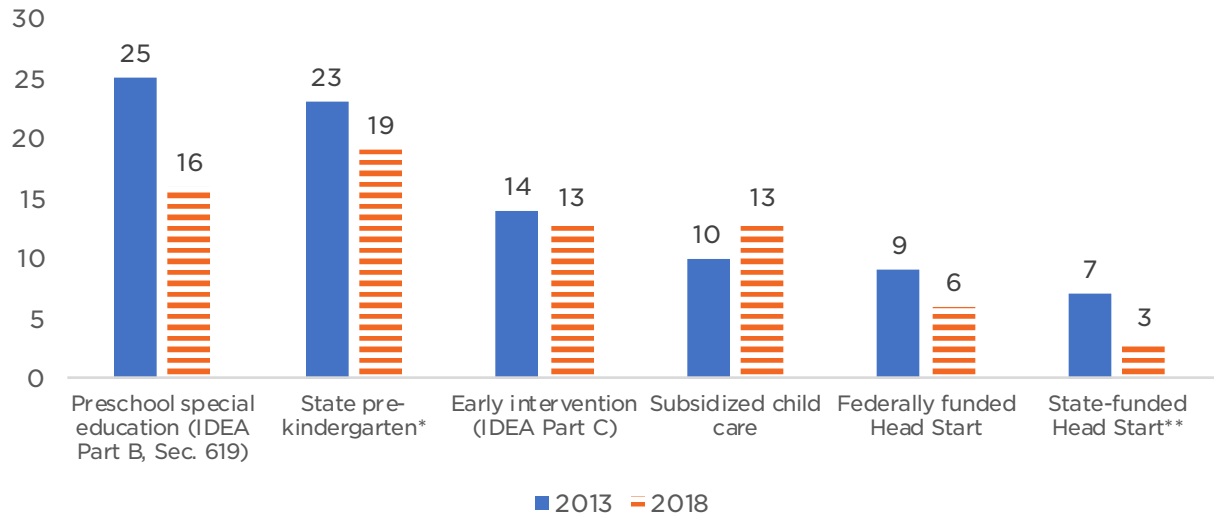


Figure 15. Number of States Linking Child-level ECE Data with K-12 by ECE Program Type in 2013 and 2018



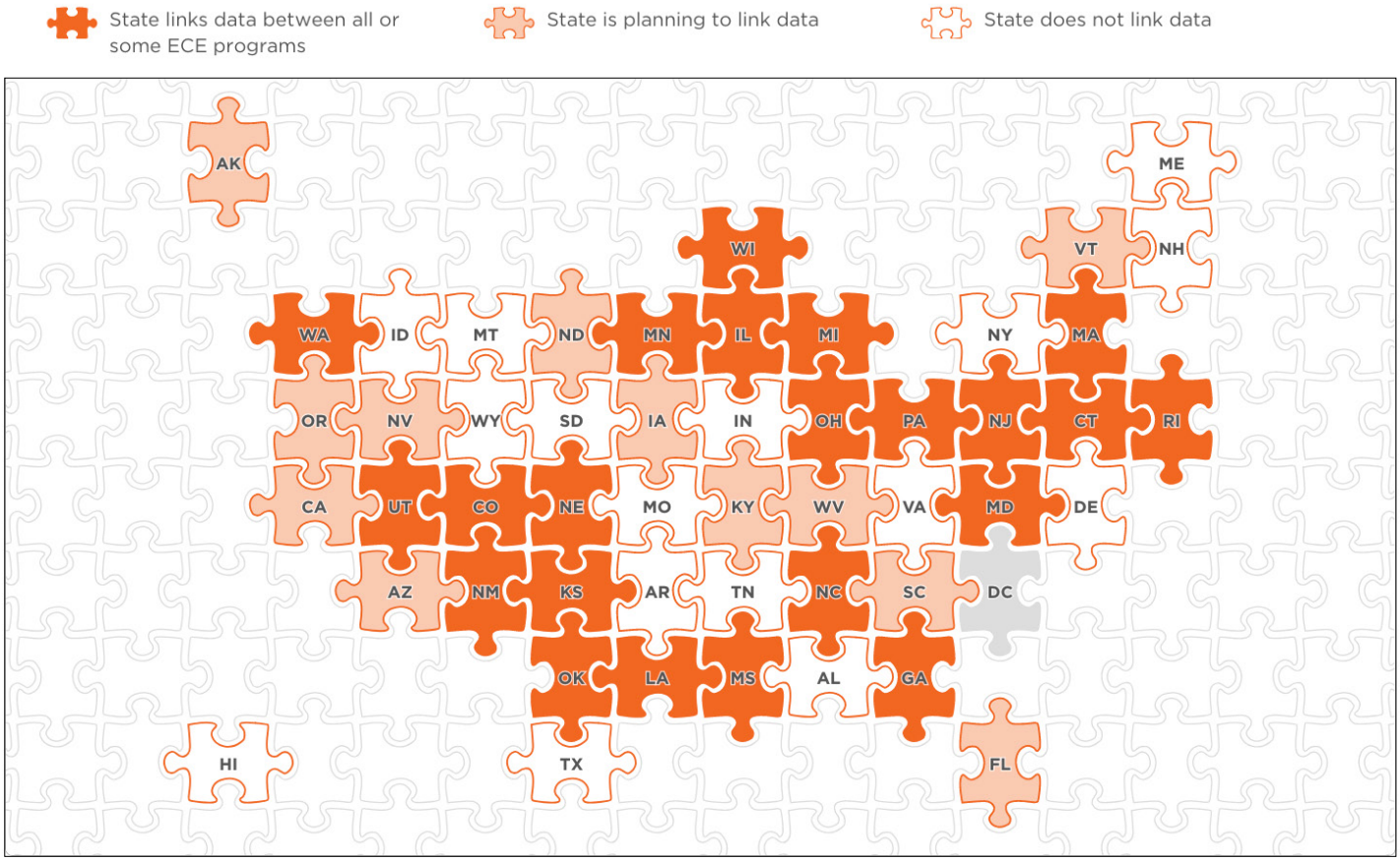
Program Site-Level Data

States were asked about their ability to link program site-level data collected across ECE programs. Linking program-level data means having the ability to track the quality and other characteristics of individual early learning programs, which may receive funding from one or more government sources; it is also a way to track the children these programs serve. States were also asked about the types of data collected at each ECE program level. Collecting, linking, and tracking these data about ECE programs help states get a clearer picture of their child care supply. Policymakers can use these data to answer questions about characteristics of high-quality programs, working conditions, and capacity to serve children in different types of ECE settings. For example, states can track that Program X, which receives Head Start and state pre-kindergarten funding, increased its quality rating in 2015 and 2017.

Linking program site-level data to assess program supply, quality, and characteristics

Out of 50 states surveyed, 22 states (44 percent) link program site-level data across some or all ECE programs (see Figure 16). Another 16 states (34 percent) are in the process of planning or implementing a way to link program site-level data. The remaining 12 states (24 percent) reported they do not link program site-level data. While fewer than half reported linking program data, 35 states (70 percent) assign a program site ID number to individual early childhood education sites, an important precursor to linking site-level data.

Figure 16. Links Program-Level Data Across ECE programs



Linking ECE Program Data

Pennsylvania's Enterprise to Link Information for Children Across Networks (PELICAN)
PELICAN includes a master provider index (MPI) used to share and update changes to a provider's information with the appropriate data systems. Linking these data allows policymakers to access information regarding which programs serve the most children and the characteristics of these programs.

You can learn more about PELICAN at: http://www.pakeys.org/pa-early-learning-initiatives/pelican/

Of the 22 states linking program site-level data across ECE program databases, the majority have the capacity to link data with subsidized child care (86 percent), licensed child care (73 percent), and state pre-kindergarten (71 percent). Just over one third of states link site-level data with federally funded Head Start data (36 percent). A smaller number of states link site-level data with databases for preschool special education (32 percent), early intervention (27 percent), or home visiting (23 percent).

Types of program data linked

States linked several types of information about program sites, including data about licensing status (e.g., capacity, violations), structural standards (e.g., curriculum, class size), working conditions (e.g., wages, benefits, turnover), and quality measures. Out of 50 states, 41 states (82 percent) reported having an operational Quality Rating and Improvement System (QRIS), which involves measuring and rating participating ECE programs to quantify characteristics of quality. The 22 states linking program-level data were asked about which types of data they had the capacity to link at the site level (see Table I). Out of the 22 states, 20 states (91 percent) had the capacity to link quality measures or licensing data for at least one ECE program. Additionally, 17 states (77 percent) had the capacity to link data on structural standards, and 15 states (68 percent) had the capacity to link working conditions for at least one program. For detailed information on which types of information are linked by specific ECE program by state, see Appendix H.

Table 1. Types of Program Site Data Linked by ECE Program (n= 22 states)

Program Name	Licensing status (e.g., license capacity, violations, complaints)	Structural standards (e.g., curriculum, class size, staff ratio)	Working conditions (e.g., professional development, wages, benefits, turnover)	Quality measures (e.g., ECERS, CLASS, QRIS rating)	Other
Early intervention (IDEA Part C)	6 states, 27%	5 states, 23%	4 states, 18%	7 states, 32%	1 state, 5%
Preschool special education (IDEA Part B, Section 619)	4 states, 18%	4 states, 18%	3 states, 14%	6 states, 27%	1 state, 5%
State pre-kindergarten*	14 states, 67%	12 states, 57%	9 states, 43%	14 states, 67%	2 states, 10%
State-funded Head Start**	3 states, 50%	2 states, 33%	3 states, 50%	3 states, 50%	2 states, 33%
Federally funded Head Start	7 states, 32%	5 states, 23%	4 states, 18%	8 states, 36%	1 state, 5%
Subsidized child care	19 states, 86%	17 states, 77%	12 states, 55%	20 states, 91%	2 states, 9%
Home visiting	3 states, 14%	3 states, 14%	3 states, 14%	3 states, 14%	1 state, 5%
Licensed child care	17 states, 77%	12 states, 56%	7 states, 32%	16 states, 68%	5 states, 23%

*Number of states included with state-prekindergarten (n= 21)
** Number of states included with state-funded Head Start (n= 6)

Linking program site-level data with children and staff

States were also asked about their ability to link program site-level data with individual child-level data that are sometimes reported to different agencies or captured in different databases. In other words, could a state connect an individual child to the specific early childhood program that the child attends? Overall, 34 states (68 percent) have the capacity to link program- and child-level data, while the remaining states either did not have the capacity (22 percent) or did not know (10 percent).

Of the 34 states with the capacity to link program site- and individual child-level data, most link data from subsidized child care (91 percent) and state pre-kindergarten (69 percent). A smaller number of states linked across databases for home visiting (41 percent), early intervention (38 percent), preschool special education (38 percent), federal Head Start (38 percent), and licensed child care (38 percent).

Workforce-Level Data

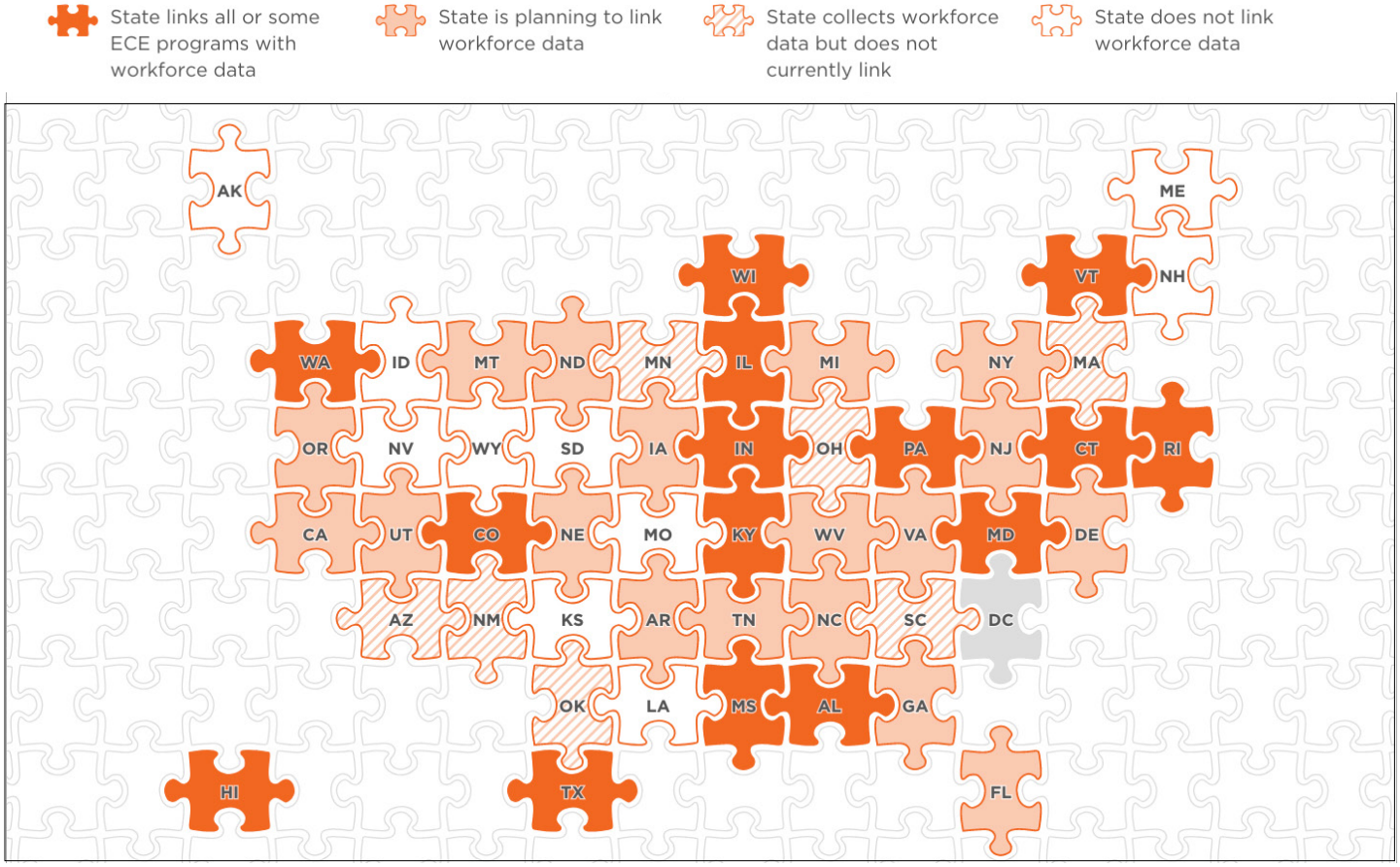
States were asked about their ability to link workforce-level data across ECE programs. Linking workforce-level data means having the ability to follow individual child care workers over time and across programs. Issues of high turnover, low pay, and burnout are endemic to the child care workforce. Many proposed policy solutions to improve child care access and quality center on professionalizing the childcare workforce. As such, data collected in this area allow states to understand one of the most important components of their childcare programs. By linking workforce-level data across ECE programs, states can see how individuals move within the workforce (e.g., if a childcare worker moves from subsidized child care to a Head Start center) as well as trends across the workforce (e.g., how many people left the childcare workforce altogether in a given year).

Linking workforce-level data to assess workforce investments, supply, and characteristics

Out of 50 states surveyed, 42 states (84 percent) have a workforce registry; however, only 15 states (30 percent) reported linking individual workforce-level data across ECE programs (see Figure 17). Registries typically track education, training, and employment information[5]. The scope and data capacity of registries varies. There are seven states (14 percent) that collect workforce data and have the capacity to link, but do not currently do so. An additional 18 states (36 percent) are planning to link workforce-level data across ECE programs. The remaining 10 states (20 percent) lack the capacity to link workforce data across ECE programs and do not plan to do so.

[5] National Workforce Registry Alliance (2013). *State of Registries Survey 2012: A Survey of the Nation's Early Childhood and School-Age Registries.*

Figure 17. Links Workforce Data Across ECE Programs



Linking Workforce Data

Illinois's Gateways to Opportunity Workforce Registry

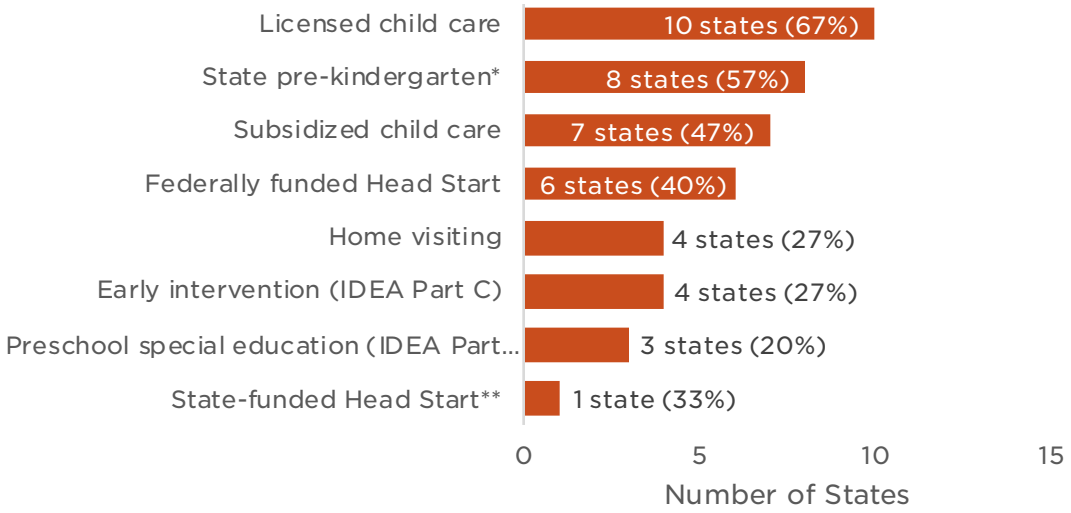
Illinois's Gateways to Opportunity is a workforce registry used to manage the education, training, and credentials of ECE professionals. Data from the registry are used to produce an annual report[6] on workforce trends related to changing demographics, education levels, training participation, and wages.

You can learn more about Illinois' Gateways to Opportunity at: http://www.ilgateways.com/

Among the 15 states linking workforce-level data across ECE databases, most link data about staff working in licensed child care settings (67 percent) or state pre-kindergartens (57 percent) (see Figure 18). Fewer than half link individual workforce-level data from subsidized child care (47 percent), federally funded Head Start (40 percent), home visiting (27 percent), early intervention (27 percent), or preschool special education (20 percent) programs.

[6] Whitehead, J. (2018). *Illinois' Early Childhood Workforce 2017 Report.* Bloomington, IL: INCCRRA.

Figure 18. States Linking Workforce-Level Data by ECE Program (n= 15 states)

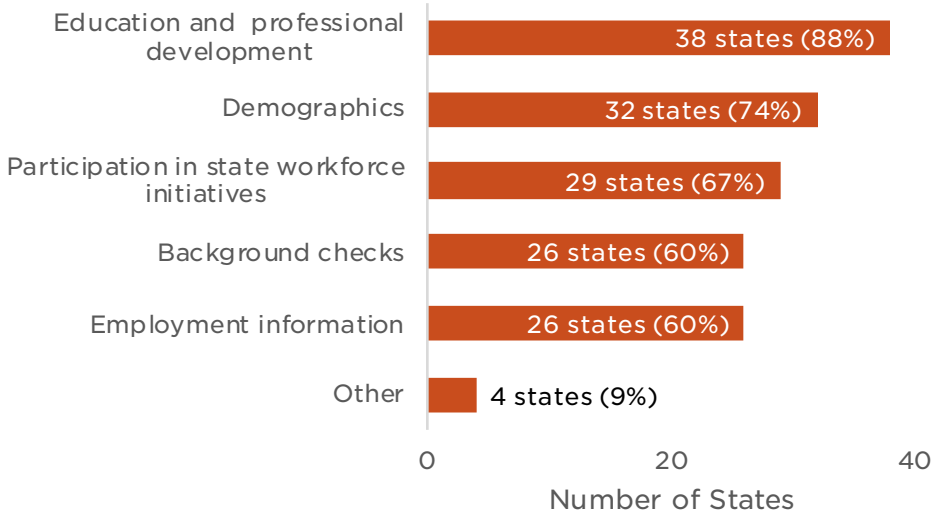


*Number of states included with state-prekindergarten (n= 14)
** Number of states included with state-funded Head Start (n= 3)

Types of workforce data linked

States collect several types of information about individual members of the early childhood workforce (see Figure 19). There were 43 states with a workforce registry and/or linking workforce data that responded to our questions about the type of workforce data they collect. Almost all collect information about education and professional development (88 percent), demographics (74 percent), and participation in state workforce initiatives (67 percent). A smaller number of states collect information about background checks (60 percent) or employment (60 percent). For detailed information on which types of information are linked by specific ECE program by state, see Appendix I.

Figure 19. Types of Workforce-Level Data Collected (n= 43 states)



We also asked states if they could link workforce data with data collected at the child and program level. Out of 48 states that responded, 11 states (23 percent) can connect child information to information about ECE staff, and 34 (71 percent) are able to connect staff information to their ECE program site.

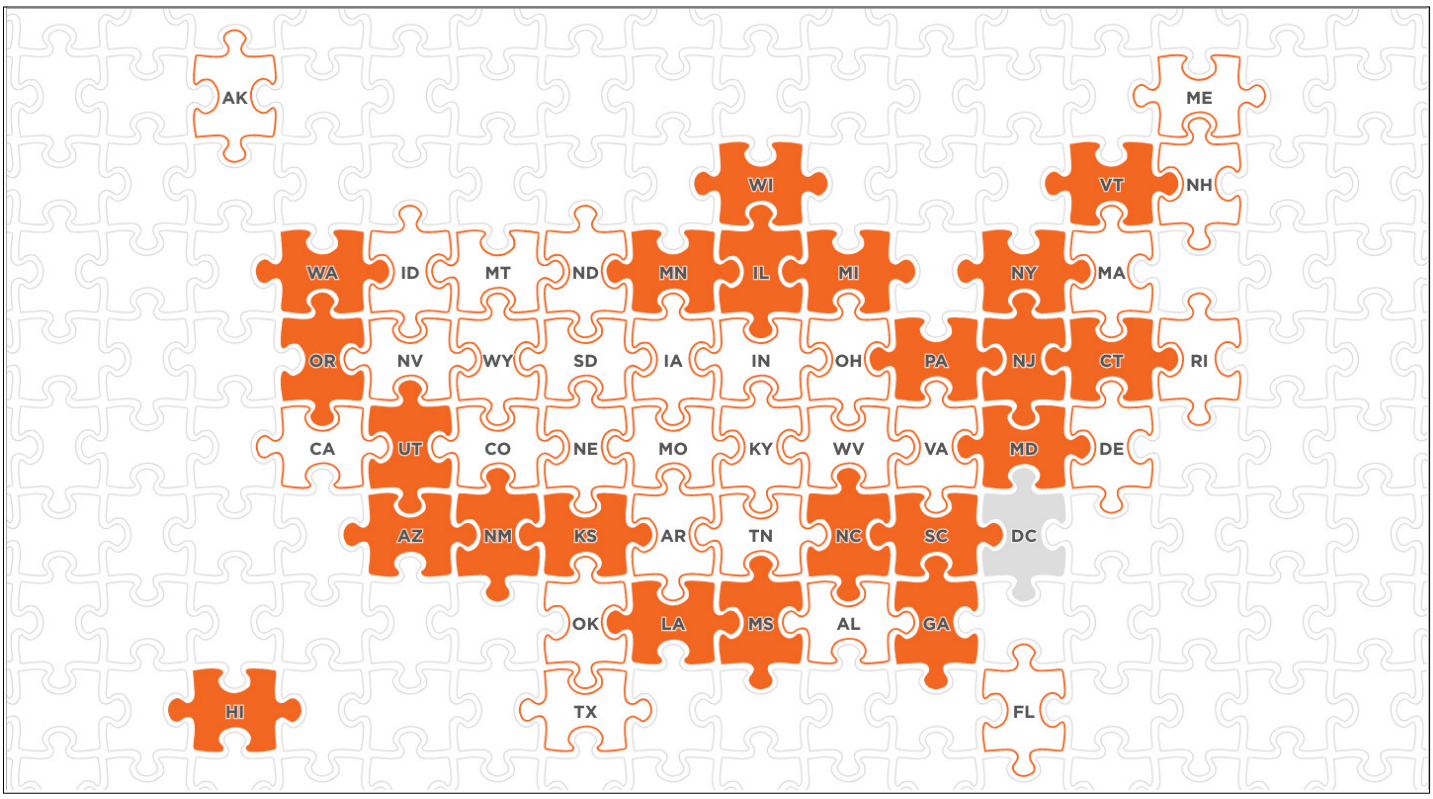
Early Childhood Data Governance and Policies

States were asked about the type of data governance structures in place to support the coordination and use of early childhood data described above. Data privacy and security are of paramount importance to early childhood data systems, as these systems often house sensitive information about children and families. We define data governance as a structure used to establish policies and guide how data are managed and used across data systems. We specifically asked about policies related to data ownership, access, and privacy.

Data governance structures

Out of 50 states, 22 states (44 percent) have a defined governing body that oversees the coordination of early childhood data (see Figure 20). These governing bodies are formed in a variety of ways. In 11 states (50 percent), the governing body was formed as a voluntary collaboration. In four states (18 percent), the governing body was formed through a state or federal grant. There were three states (14 percent) that used state legislation and two states (9 percent) that used a state charter to establish governance. Only one state formed the governing body from a state early childhood advisory council.

Figure 20. States with a Defined Early Childhood Governing Body



Data Governance Structures

Oregon: A single lead state department or agency

The Oregon Department of Education established a data governance committee to coordinate its data goals and planning across the agency. Its charter specifies the committee's membership, purpose, and authority.

Minnesota: A cross departmental/agency coordinating entity

Minnesota's governing body includes members appointed from the following agencies: Department of Health, Department of Education, and Department of Human Services. Each department identifies an agency and community leaders as representatives.

Wisconsin: Governance body oversees the ECIDS only.

Wisconsin's governance was formed as part of a federal grant and is guided by an agreement among the Department of Children and Families, Department of Public Instruction, and Department of Health Services. The agreement establishes policies to support the development and security of data shared across agencies through the Wisconsin ECIDS.

States involve different entities in the management and decision making related to integrating early childhood data systems. Among the states with a defined governing body, 20 states provided additional information regarding the structure:

- **Eight states** with a cross-departmental or coordinated agency structure (Georgia, Michigan, Minnesota, Mississippi, New Mexico, New York, Pennsylvania, Utah). This means the governance responsibilities are shared across participating agencies/departments.
- **Six states** with governance specific to ECIDS (Illinois, New Jersey, North Carolina, South Carolina, Vermont, Wisconsin). In these structures, each ECE program database maintains oversight of its respective agency or department data.
- **Five states** with a single lead state departmental/agency structure (Connecticut, Kansas, Louisiana, Oregon, Washington). This means there is a single agency responsible for managing early childhood data integrated.
- **One state** with no entity playing a governance role for coordinating the ECIDS (Arizona).

Data access policies

Respondents were also asked about the types of documented policies and procedures in place for accessing or using data (see Table II). The most common policies or procedures were those regarding data ownership (18 states) and appropriate use of shared data (16 states). Several states reported policies or procedures in place for consulting with data owners about other potential uses (14 states). For states with established ECIDS, a little over half reported policies for determining the information needs of the coordinated early childhood data system (9 states), while only one third of states without an ECIDS reported have these policies. Two states reported that they had none of these policies or procedures in place.

Table 2. Documented Policies and Processes for Data Access and Use (n= 22 states)

Policy/Process	No. of States*	% of States with Governing Body
Data ownership	18	82
Appropriate use of shared data	16	73
Consulting with data owners about other potential uses	14	64
Determining the information needs for the maintenance of coordinated early childhood data(with an ECIDS)	9	56
Determining the information needs for the maintenance of state data (without an ECIDS)	2	33
None of the above	2	9
Other	4	18

*States can select all options that apply.

Data privacy and security policies

States were also asked about specific data privacy and security policies. Responses were varied (see Table III). The most common policies were those regarding data breach response processes (11 states), the regular review of the data privacy policy (10 states), and third-party vendors or contractors (9 states). A smaller number of states had policies regarding an inventory of collected and stored data (8 states), risk assessment and mitigation (7 states), the complaints process (6 states), and informing members of the public on data privacy (6 states). Only one state had a policy for soliciting broad public comment on their privacy policy. In addition, one state reported having none of the above policies in place. For detailed information on governance structures and policies by state, see Appendix J.

Table 3. Documented Policies and Processes Regarding Data Privacy and Security (n= 22 states)

Policy/Process	No. of States	% of States with Governing Body
Defined data breach response process	11	50
Data privacy policy regularly reviewed and updated	11	50
Data privacy policies that apply to third-party vendors or contractors	9	41
Regularly reviewed and updated inventory of data collected and stored	8	36
Periodic risk assessment and appropriate action to mitigate and resolve identified risks	7	32

Table 3 cont. Documented Policies and Processes Regarding Data Privacy and Security (n= 22 states)

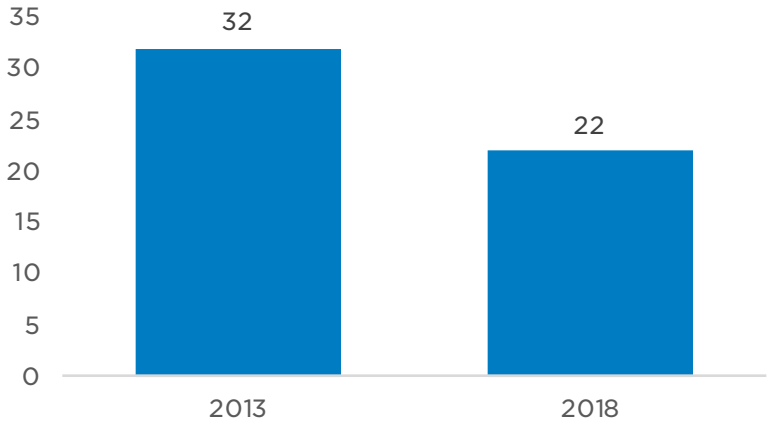
Policy/Process	No. of States	% of States with Governing Body
Information available to explain data privacy policies to parents or other members of the public	6	27
Clear and documented process for receiving and responding to complaints, concerns, or questions from parents and others	6	27
Solicits broad public comment on privacy policy, with clarity on which issues are open for public comment and which are not	1	5
None of the above	1	5
Other	6	27

*States can select all options that apply.

Comparison between 2013 and 2018 results

Compared to the results from the 2013 Early Childhood Data Systems Survey, fewer states reported having a data governance body in 2018 (see Figure 21). The reduction in number of states with governance structures may be related to the end of funding for State Advisory Councils on Early Education and Care (SACs) in 2013. SACs were charged with providing recommendations and developing a plan for a coordinated early childhood data system. In fact, 20 percent of respondents in 2013 were SAC representatives compared to only 6 percent in 2018.

Figure 21. Number of States with a Data Governance Body in 2013 and 2018



Uses of Coordinated Early Childhood Data

Finally, states were asked about how they use the information they collect across ECE programs. ECE data can serve many purposes, from internal evaluation and monitoring, to external research requests, to helping parents make informed child care decisions. By knowing the types of data states are collecting *and* how states use the data they collect, we can have a better understanding of what types of data are most useful for states to answer the questions that are important to them. We can also begin to explore areas where data is insufficient to address key policy questions.

States use the data they collect for a variety of purposes. The three most common uses of ECE program data, for the 22 states with governance structures, were sharing information with stakeholders or policymakers (64 percent), developing standard data reports (59 percent), and answering key policy questions (59 percent). States also used the data they collected to respond to external data requests (55 percent), evaluate early childhood program outcomes (55 percent), conduct research studies (45 percent), and for accountability or compliance (36 percent). Only five states (23 percent) used the data they collected to share information with parents. In addition, 10 states produced annual reports using their coordinated early childhood data. For detailed information on uses of ECE data by state, see Appendix K.

Using ECE data to inform policy

North Carolina's Early Childhood Integrated Data System (NC-ECIDS)

NC-ECIDS is intended for use by the public, state agencies, policymakers, and researchers to support data-driven decisions and improve outcomes for children. Users can customize or view standard reports about the number of children served in one or more program by county. There is an approval process to access data for research purposes.

You can learn more about NC-ECIDS at: https://www.ecids.nc.gov/ecids/

Key findings

1. **Policymakers still lack comprehensive data needed to assess early childhood policies and outcomes.** Since 2013, the number of states linking ECE data across ECE programs decreased from 26 to 22. This decrease may be due to a lack of governance and funding needed to sustain efforts to facilitate cross-agency data sharing. Fewer than half of states currently link child-level data to gain a comprehensive picture of early learning (22 states), social services (11 states), and children's health history (8 states). However, for the first time we were able to document 19 states with an established ECIDS.

2. **Home visiting and federally funded Head Start programs are least likely to be linked by states compared to other ECE programs.** A majority of states linking data did not include Head Start or home visiting child-, program-, or workforce-level data as part of their data integration efforts. This exclusion represents a significant knowledge gap because each program's focus on comprehensive services for families is critically important as policymakers use data to make decisions regarding ECE policies.

3. **An increased number of states link child-level data from subsidized child care programs compared to 2013.** The number of states linking child-level data from subsidized child care programs, funded by the Child Care and Development Block Grant, increased from 12 to 17. Data coordination was a key goal for states that received federal Race to the Top – Early Learning Challenge grants. Since 13 of 17 states linking subsidized child care received this grant, it may have been a key driver for this progress.

4. **Data about program site quality are linked most frequently by states compared to other types of data, such as workforce conditions (e.g., turnover) or structural standards (e.g., class size).** Forty-one states (82 percent) have quality rating and improvement systems that collect and measure program quality. Of the 22 states linking program site data across programs, most (91 percent) linked data measuring program quality for at least one ECE program, compared to 68 percent linking information about working conditions (e.g., wages, benefits, turnover). Data on professional development activities, wages, benefits, and turnover are critical to informing policies that support a qualified and stable workforce. Most states (70 percent) assign a provider site identification number, making it possible to link these types of data in the future if the data are coordinated.

5. **States were least likely to link workforce-level data compared to child- and program-level data.** While most states (84 percent) collect some workforce data in a workforce registry, only 15 states (30 percent) reported the capacity to link workforce data across ECE programs, which is critical to answering questions about the changing demographics, qualifications, and needs of the workforce over time. Similar to program site linkages, data related to employment (i.e., compensation and years of experience) were less likely to be linked compared to education or demographic data. Fewer than one third of states linking included early intervention, preschool education, or home visiting program staff.

6. **Fewer states have a defined data governance to support the coordination and use of ECE data compared to 2013.** The number of states with a defined data governance body decreased from 32 to 22 in our 2018 survey. This change may be due to the end of funding for State Advisory Councils (SACs) in 2013.[7] From 2009 to 2013, SACs were responsible for improving coordination of early childhood services and developing recommendations for a unified early childhood data collection system. In fact, 29 out of the 32 states in 2013 reported strategic planning around data sharing as the key role of their governance structure. It is unclear how many of these SACs continued to function after funding ended in 2013.

7. **States lack processes to engage the public about data privacy policies.** Most states (82 percent) with governing bodies reported having a defined process for data breaches. Fewer than one third of those states indicated that information about data privacy is publicly available (27 percent) or that public comment is solicited (27 percent).

[7] Early Childhood State Advisory Councils Final Report (2015).

Action Steps for Policymakers

To increase the number of states with comprehensive early childhood data systems that integrate and use data to improve services for children birth through age 8, we recommend the following actions:

1. **Establish and strengthen state ECE data governance bodies to guide the coordination, security, and appropriate use of ECE data.** Convene stakeholders (e.g., parents, ECE professionals, program administrators, policymakers) to identify policy questions and data needed to inform ECE policies. Assess data safeguards to confirm privacy policies are clear, facilitate cross-agency/program secure data sharing, and are available to the public to ensure transparency (e.g., posting data security policies online). Provide adequate funding to support the staffing and resources needed to translate data into actionable reports for policymakers and the public (e.g., making standard reports or data dashboards available online).

2. **Strengthen states' capacity to securely link data on young children across all state and federal ECE programs.** Develop more effective strategies to incorporate data from home visiting and federally funded Head Start data so policymakers and practitioners have a more comprehensive view of children's learning and development.

3. **Expand efforts to collect and link data about the early childhood workforce.** To construct better policies and practices to support the early childhood workforce, policymakers need data about current workforce conditions (i.e., professional development, compensation, and turnover).

4. **Communicate with parents about data privacy policies and uses of early childhood data.** Families need to know that data about their children will be secure. It is important for states to have information about data security and privacy policies that are publicly available and customized to address questions parents may have about how data are accessed and used by stakeholders.

5. **Use existing data systems planning tools and technical assistance to support early childhood data system integration.** Engage with federal technical assistance groups—such as the State Longitudinal Data System State Support Team (SST), the DaSy Center, and the Privacy Technical Assistance Center—for assistance in developing a data system that will best support efforts to integrate early childhood data..

   For more information about early childhood data systems in your state, go to our interactive website to view or download your state profile at www.ecedata.org.

Appendix A. State Survey Contacts

State	Name	Department/Division	Title
1. Alabama	Jeanetta Green	Alabama Department of Human Resources	Director, Child Care Services Division
2. Alaska	Christina Hulquist	Alaska Department of Health and Social Services, Child Care Program Office	Program Coordinator II
3. Arizona	Suzanne Perry	Arizona Department of Education	619 Coordinator/Early Childhood Special Education Director
4. Arkansas	Tonya Williams	Division of Child Care and Early Childhood Education/Department of Human Services	Director
5. California	Guadalupe Romo-Zendejas	Early Education & Support Division, California Department of Education	Manager
6. Colorado	Colin Tackett	Department of Human Services	Manager, IT Solutions & Strategies
7. Connecticut	Deb Resnick	Connecticut Office of Early Childhood	Manager, Quality Improvement Division
8. Delaware	Kimberly Krzanowski	Delaware Department of Education	Executive Director, Office of Early Learning
9. Florida	Rodney MacKinnon	Office of Early Learning, Florida Department of Education	Executive Director
10. Georgia	Bentley Ponder	Georgia Department of Early Care and Learning	Senior Director of Research and Policy
11. Hawaii	Dana Balansag	Department of Human Services	Child Care Program Administrator
12. Idaho	Ericka Rupp	Idaho Department of Health and Welfare	Program Manager
13. Illinois	Charlie Rosemond	Governor's Office of Early Childhood Development	Data & Outcomes Manager
14. Indiana	Rene Withers	Office of Early Childhood and Out—of-School Learning/Family Social Services Administration	Deputy Director
15. Iowa	Wendy Hoogeveen	Iowa Department of Human Services	Child Care Program Manager
16. Kansas	Karen Beckerman	Department for Children and Families	Strengthening Families Services Director
17. Kentucky	Darlene Hoover	Division of Child Care, Cabinet for Health and Family Services	Assistant Director

Appendix A cont. State Survey Contacts

State	Name	Department/Division	Title
18. Louisiana	Donald Ceaser	Louisiana Department of Education	Program Consultant
19. Maine	Jaci Holmes	Maine Department of Education	Federal State Legislative Liaison
20. Maryland	John Lamb	Maryland State Department of Education	Deputy Chief of Child Care Subsidy
21. Massachusetts	Jennifer Louis	Massachusetts Department of Early Education and Care	Data Services Manager
22. Michigan	David Judd	Michigan Department of Education, Office of P-20 Data and Information Management	Director
23. Minnesota	Anita Larson	Minnesota Department of Education	ECLDS/ECIDS Lead
24. Mississippi	Laurie J. Smith, PhD	State Early Childhood Advisory Council	Director, SECAC; Office of Governor Phil Bryant, Education and Workforce Development Policy Advisor
25. Missouri	Cindy Burks	Children's Division, Department of Social Services	Program Administrator
26. Montana	Patty Butler	Department of Public Health and Human Services	Chief, Early Childhood Services Bureau
27. Nebraska	Melody Hobson	Nebraska Department of Education	Administrator, Office of Early Childhood
28. Nevada	Christell Askew	Child Care Development Program, Division of Welfare and Supportive Services, Department of Health and Human Services	Child Care Administrator
29. New Hampshire	Debra Nelson	New Hampshire Department of Health and Human Services	Bureau Chief, Child Development and Head Start Collaboration
30. New Jersey	Karin Garver	New Jersey Department of Education	Program Specialist
31. New Mexico	Katrina Montano-White	Children, Youth and Families Department	Bureau Chief - Office of Child Development
32. New York	Cate Bohn	New York State Council on Children and Families	Policy Analyst
33. North Carolina	Dr. Kristi L. Snuggs	Division of Child Development and Early Education, Department of Health and Human Services	Deputy Director

Appendix A cont. State Survey Contacts

State	Name	Department/Division	Title
34. North Dakota	Amy Olsen	Department of Human Services	Early Childhood Services Administrator
35. Ohio	Michelle Albast	Ohio Department of Job and Family Services	Chief, Bureau of Child Care Operational Support
36. Oklahoma	Debra Andersen	Oklahoma Partnership for School Readiness	Executive Director
37. Oregon	Ben Tate	Early Learning Division, Oregon Department of Education	Chief of Staff
38. Pennsylvania	Marci Walters	Office of Child Development and Early Learning, Department of Human Services	Administrative Officer 5
39. Rhode Island	Kayla Rosen	Children's Cabinet	Policy Director
40. South Carolina	Michele Bowers	South Carolina Department of Social Services	State Child Care Administrator
41. South Dakota	Kristi Swier	Department of Education	Head Start Collaboration Office Director
42. Tennessee	Tasha Owens-Green	Department of Human Services	Child Care Services Director
43. Texas	Jason Vaden	Texas Workforce Commission	Director, Workforce Program Policy
44. Utah	Stephen Matherly	Department of Health	ECIDS Program Coordinator
45. Vermont	Reeva Murphy	Child Development Division, Department for Children and Families, Vermont Agency of Human Services	Deputy Commissioner
46. Virginia	Kathy Glazer	Virginia Early Childhood Foundation	President
47. Washington	Nancy Coverdell	Department of Early Learning	Data Governance Coordinator
48. West Virginia	Janie Cole	West Virginia Department of Health and Human Resources	Interim Deputy Commissioner
49. Wisconsin	June Fox	Wisconsin Department of Public Instruction	ECIDS Steering Committee Chairperson
50. Wyoming	Nichole R Anderson	Wyoming Department of Family Services	Program Manager

Appendix B. Status Linking Child Data Across ECE Programs by State

State	Has an early childhood integrated data system	Early intervention (IDEA Part C)	Preschool special education (IDEA Part B, 619)	State-funded prekindergarten	State-funded Head Start	Federally funded Head Start	Subsidized child care	Home visiting
1. Colorado	No	Yes	Yes	Yes	.	Yes	Yes	No
2. Connecticut	Yes	No	No	Yes	No	No	Yes	Yes
3. Georgia	Yes	Yes	Yes	Yes	.	Yes	Yes	Yes
4. Illinois	Yes	Yes	Yes	Yes	.	No	Yes	Yes
5. Kansas	No	No	Yes	Yes	.	No	No	Yes
6. Louisiana	Yes	No	No	No	No	No	Yes	No
7. Maryland	Yes	No	No	No	.	No	Yes	No
8. Massachusetts	Yes	No	No	No	.	No	Yes	No
9. Michigan	Yes	Yes	Yes	Yes	.	Yes	Yes	No
10. Minnesota	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
11. Mississippi	Yes	Yes	Yes	Yes	.	Yes	Yes	Yes
12. Nebraska	No	Yes	Yes	Yes	.	No	No	No
13. New Jersey	Yes	No	Yes	Yes	Yes	No	No	No
14. New Mexico	Yes	Yes	Yes	Yes	.	No	Yes	Yes
15. North Carolina	Yes	Yes	Yes	Yes	.	No	Yes	No
16. Ohio	Yes	Yes	Yes	Yes	.	No	Yes	Yes
17. Oklahoma	No	Yes	Yes	No	.	No	No	No
18. Pennsylvania	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
19. Rhode Island	Yes	Yes	Yes	Yes	No	No	No	Yes
20. Utah	Yes	No	No	No	.	Yes	Yes	Yes
21. Washington	Yes	Yes	Yes	Yes	.	No	Yes	No
22. Wisconsin	Yes	Yes	No	.	.	No	Yes	Yes

Appendix C. Types of Child-Level Data Linked by State

State	Demographics (e.g., ethnicity, age, gender, languages)	Program participation (e.g., attendance, length of time in program/ services)	Family characteristics (e.g., parent education level, employment status, household income)	Child development data (e.g., screening, assessment)
1. Colorado	Yes	Yes	Yes	Yes
2. Connecticut	Yes	Yes	Yes	No
3. Georgia	Yes	Yes	Yes	Yes
4. Illinois	Yes	Yes	Don't know	Don't know
5. Kansas	Yes	Don't know	No	No
6. Louisiana	Yes	Yes	Yes	No
7. Maryland	No	No	No	No
8. Massachusetts	No	No	No	No
9. Michigan	Yes	No	Yes	No
10. Minnesota	Yes	Yes	Yes	Yes
11. Mississippi	Yes	Yes	Yes	Yes
12. Nebraska	Yes	Yes	No	Yes
13. New Jersey	Yes	Yes	No	No
14. New Mexico	Yes	Yes	Yes	Yes
15. North Carolina	Yes	Yes	Yes	Yes
16. Ohio	Yes	No	No	Yes
17. Oklahoma	Yes	Yes	Yes	Yes
18. Pennsylvania	Yes	Yes	Yes	Yes
19. Rhode Island	Yes	Yes	Yes	Yes
20. Utah	Yes	Yes	No	Yes
21. Washington	Yes	Yes	Yes	Yes
22. Wisconsin	Yes	Yes	Yes	Yes

Appendix D. Types of Child Screening and Assessment Data Linked

State	Health screener	Developmental screener	Eligibility/ diagnostic assessment	Developmental assessment	Other type of screener/ assessment
1. Colorado	No	No	No	Yes	No
2. Georgia	No	No	No	Yes	No
3. Minnesota	Yes	Yes	No	Yes	No
4. Mississippi	Yes	Yes	Yes	Yes	No
5. Nebraska	No	No	No	Yes	No
6. North Carolina	Yes	Yes	Yes	.	No
7. Ohio	Yes	Yes	No	Yes	No
8. Oklahoma	Yes	Yes	Yes	Yes	No
9. Pennsylvania	Yes	Yes	Yes	Yes	No
10. Rhode Island	Yes	Yes	Yes	Yes	No
11. Utah	No	Yes	No	No	No
12. Washington	No	No	No	Yes	No
13. Wisconsin	Yes	Yes	Yes	.	No

Appendix E. Types of Child Health Data Linked

State	Birth records	Immunization records	Medicaid/ children's health insurance records	Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	Other health data
1. Minnesota	Yes	No	No	No	Yes
2. Mississippi	Yes	Yes	Yes	Yes	No
3. Oklahoma	Yes	Yes	Yes	Yes	No
4. Pennsylvania	No	No	Yes	Yes	No
5. Rhode Island	Yes	Yes	Yes	Yes	Yes
6. Utah	Yes	No	No	Yes	Yes
7. Vermont	No	Yes	Yes	No	No
8. Wisconsin	Yes	Yes	No	No	Yes

Appendix F. Types of Social Services Data Linked

State	Temporary Assistance for Needy Families (TANF)	Child welfare	Supplemental Nutrition Assistance Program (SNAP)	Housing assistance	Other social services data
1. Alabama	Yes	Yes	No	No	No
2. Arkansas	Yes	Yes	Yes	No	Don't know
3. Kentucky	Yes	Yes	Yes	No	Don't know
4. Maryland	Yes	No	Yes	No	Yes
5. Minnesota	Yes	Yes	Yes	No	No
6. Mississippi	Yes	Yes	Yes	Yes	No
7. North Carolina	Yes	Yes	Yes	No	.
8. Oklahoma	Yes	Yes	Yes	Don't know	No
9. Pennsylvania	Yes	Yes	Yes	.	.
10. Vermont	Yes	Yes	Yes	Yes	.
11. Wisconsin	Yes	Yes	Yes	No	Yes

Appendix G. ECE Programs Linked by States Linking Child ECE and K-12 data

State	Early intervention (IDEA Part C)	Preschool special education (IDEA Part B, 619)	State-funded prekindergarten	State-funded Head Start	Federally funded Head Start	Subsidized child care	Home visiting
1. Alabama	No	No	Yes	.	No	No	No
2. Arizona	No	Yes	No	No	Yes	No	No
3. Arkansas	No	No	Yes	.	No	Yes	No
4. Colorado	Yes	Yes	Yes	.	Yes	Yes	No
5. Connecticut	Yes	Yes	Yes	Yes	No	Yes	Yes
6. Georgia	Yes	Yes	Yes	.	Yes	Yes	Yes
7. Illinois	Yes	Yes	Yes	.	No	Yes	Yes
8. Kansas	No	Yes	Yes	.	No	No	No
9. Maryland	Yes	Yes	Yes	.	No	Yes	No
10. Massachusetts	No	No	No	.	No	Yes	No
11. Michigan	Yes	Yes	Yes	.	No	Yes	No
12. Minnesota	Yes	Yes	Yes	Yes	Yes	Yes	No
13. Mississippi	Yes	Yes	Yes	.	Yes	Yes	Yes
14. Nebraska	Yes	Yes	Yes	.	No	No	No
15. Oklahoma	Yes	Yes	Yes	.	No	No	No
16. Pennsylvania	Yes	Yes	Yes	Yes	Yes	Yes	No
17. Rhode Island	No	No	Yes	No	No	No	No
18. South Carolina	No	Yes	Yes	.	No	No	No
19. Utah	No	No	Yes	.	No	No	No
20. Virginia	No	Yes	Yes	.	No	No	No
21. Washington	Yes	Yes	Yes	.	No	Yes	No
22. Wisconsin	Yes	No	.	.	No	Yes	Yes

Appendix H. ECE Program Data Linked

State	Early intervention (IDEA Part C)	Preschool special education (IDEA Part B, 619)	State-funded prekindergarten	State-funded Head Start	Federally funded Head Start	Subsidized child care	Home visiting	Licensed child care
1. Alabama	No	No	No	.	No	Yes	No	Yes
2. Arkansas	No	No	Yes	.	Yes	Yes	No	Yes
3. Colorado	No	No	Yes	.	Yes	Yes	No	No
4. Connecticut	No	No	Yes	Yes	No	Yes	Yes	Yes
5. Georgia	No	No	Yes	.	Yes	No	No	Yes
6. Illinois	No	No	No	.	No	Yes	No	Yes
7. Maryland	Yes	Yes	No	.	No	Yes	No	No
8. Massachusetts	No	No	Yes	.	No	Yes	No	Yes
9. Michigan	No	No	No	.	No	Yes	No	Yes
10. Mississippi	Yes	Yes	Yes	.	Yes	Yes	Yes	Yes
11. Nebraska	Yes	Yes	Yes	.	No	No	No	No
12. New Jersey	No	Yes	Yes	Yes	No	No	No	No
13. New Mexico	Yes	Yes	Yes	.	No	Yes	Yes	No
14. Oklahoma	No	No	No	.	Yes	Yes	No	Yes
15. Oregon	No	No	Yes	Yes	Yes	Yes	No	Yes
16. Pennsylvania	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17. Rhode Island	No	Yes	Yes	Yes	Yes	Yes	No	Yes
18. South Carolina	No	No	Yes	.	No	Yes	No	Yes
19. Tennessee	No	No	Yes	No	No	Yes	No	Yes
20. Vermont	No	No	No	.	No	Yes	No	Yes
21. Washington	No	No	Yes	.	No	Yes	No	No
22. Wisconsin	Yes	No	.	.	No	Yes	Yes	Yes

Appendix I. ECE Workforce Data Linked by Program

State	Has a workforce registry	Early intervention (IDEA Part C)	Preschool special education (IDEA Part B, 619)	State-funded prekindergarten	State-funded Head Start	Federally funded Head Start	Subsidized child care	Home visiting	Licensed child care
1. Alabama	Yes	No	No	No	.	No	Yes	No	Yes
2. Colorado	Yes	No	No	No	.	No	No	No	No
3. Connecticut	Yes	No	No	Yes	No	No	No	No	Yes
4. Hawaii	Yes	No	No	No	.	Yes	No	No	Yes
5. Illinois	Yes	Yes	Yes	Yes	.	No	Yes	Yes	Yes
6. Indiana	No	Yes	Yes	Yes	.	Yes	Yes	Yes	Yes
7. Kentucky	Yes	No	No	Yes	.	Yes	Yes	No	Yes
8. Maryland	Yes	No	No	No	.	Yes	No	No	No
9. Mississippi	No	Yes	Yes	Yes	.	Yes	Yes	Yes	Yes
10. Pennsylvania	Yes	No	No	Yes	Yes	No	No	No	No
11. Rhode Island	Yes	No	No	No	No	No	No	No	No
12. Texas	Yes	No	No	No	.	No	No	No	No
13. Vermont	Yes	No	No	Yes	.	No	Yes	No	Yes
14. Washington	Yes	No	No	Yes	.	Yes	No	No	Yes
15. Wisconsin	Yes	Yes	No	.	.	No	Yes	Yes	Yes

Appendix J. Type of Governance Structures

State	State entities included in data governance body
1. Arizona	No entity in the state plays a governance role for coordinating early childhood data
2. Connecticut	A single lead state department or agency
3. Georgia	A cross departmental/agency coordinating entity
4. Hawaii	(Missing)
5. Illinois	The state governance body oversees the ECIDS, but each specific ECE program database is overseen by its respective agency or department
6. Kansas	A single lead state department or agency
7. Louisiana	A single lead state department or agency
8. Maryland	(Missing)
9. Michigan	A cross departmental/agency coordinating entity
10. Minnesota	A cross departmental/agency coordinating entity
11. Mississippi	A cross departmental/agency coordinating entity
12. New Jersey	The state governance body oversees the ECIDS, but each specific ECE program database is overseen by its respective agency or department
13. New Mexico	A cross departmental/agency coordinating entity
14. New York	A cross departmental/agency coordinating entity
15. North Carolina	The state governance body oversees the ECIDS, but each specific ECE program database is overseen by its respective agency or department
16. Oregon	A single lead state department or agency
17. Pennsylvania	A cross departmental/agency coordinating entity
18. South Carolina	The state governance body oversees the ECIDS, but each specific ECE program database is overseen by its respective agency or department
19. Utah	A cross departmental/agency coordinating entity
20. Vermont	The state governance body oversees the ECIDS, but each specific ECE program database is overseen by its respective agency or department
21. Washington	A single lead state department or agency
22. Wisconsin	The state governance body oversees the ECIDS, but each specific ECE program database is overseen by its respective agency or department

Appendix K: Uses of Early Childhood Data

State	Answer key policy questions	For accountability/ compliance purposes	Develop standard data reports using cross-program data	Respond to external data requests	Evaluate early childhood program/ initiative outcomes	Conduct research studies	Share information with policymakers	Share information with parents	Other ways
1. Arizona	No	No	No	Yes	Yes	Yes	Yes	No	No
2. Connecticut	Yes	Yes	Yes	No	No	No	No	No	No
3. Georgia	Yes	No	Yes	Yes	No	Yes	Yes	No	No
4. Hawaii	No	No	No	No	No	No	No	No	No
5. Illinois	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. Kansas	No	No	No	No	No	No	No	No	No
7. Louisiana	No	Yes	No	Yes	No	No	No	No	No
8. Maryland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
9. Michigan	No	No	Yes	Yes	Yes	No	Yes	Yes	No
10. Minnesota	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
11. Mississippi	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12. New Jersey	Yes	No	Yes	No	Yes	No	No	No	No
13. New Mexico	No	No	No	No	No	No	No	No	Yes
14. New York	No	No	No	No	No	No	No	No	Yes
15. North Carolina	Yes	No	Yes	Yes	No	Yes	Yes	No	No
16. Oregon	No	No	No	No	No	No	No	No	No
17. Pennsylvania	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
18. South Carolina	Yes	No	No	No	No	No	Yes	No	No
19. Utah	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes
20. Vermont	Yes	No	Yes	No	Yes	No	Yes	No	Yes
21. Washington	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
22. Wisconsin	Yes	No	No	No	Yes	Yes	Yes	No	No