DQC
Data Quality Campaign

WHAT NOW?

Transform State Early Childhood Data to Meet the Needs of Children, Families, and Those Who Support Them

Early childhood, defined for this resource as the years from when children are born until they enter kindergarten, is a crucial time for children and those who support them. It is a pivotal period of physical and mental development that lays the foundation for a child's future academic achievement, social development, and lifelong health.

Families with young children often rely on a variety of services to ensure that their child has what they need to thrive—including early care and education programs, early intervention, home visiting, and social assistance programs, among others. Unfortunately, families may have very limited information about what services exist, whether or not those services have capacity, and whether or not they and their children are eligible to access those services. Early childhood service providers are often burdened by data submission requirements that provide no value to them. And policymakers may know very little about which families are accessing which services in what combinations and what impacts those services are having, which makes accurately assessing service gaps and mobilizing resources to address them difficult.

Better data is critical to improving the early childhood ecosystem. While many states have initiated promising efforts on these fronts, more comprehensive efforts are needed. This resource is meant to help states understand the return on investment of improving their data capacity; provide some high-level guidance about how to make the improvements they need; and support them in laying a strong foundation for connecting early childhood data within the ecosystem and with K–12, postsecondary, and workforce data.

The Data Quality Campaign (DQC) released _What Now? A Vision to Transform State Data Systems to Inform People's Pathways through Education and the Workforce_ in 2023 to articulate its vision for access to education and workforce data for individuals, the public, and policymakers. The vision includes five use cases that show what's possible when statewide longitudinal data systems (SLDSs) provide tailored access to individual-level data. It also includes recommendations for state and federal leaders to make this vision a reality. A companion use case, _Connect School and District Leaders to the Information They Need to Ensure That Their Students Thrive_, released in 2024, articulates this vision for K–12.

A VISION
to Transform State Data Systems to Inform People's Pathways through Education and the Workforce

This resource builds on and complements *What Now?* by providing a vision for the use of early childhood data. More foundational work on the early childhood data ecosystem is required to make this vision a reality. The three use cases included in this resource highlight ways in which states can use their data systems to help improve child experiences and outcomes and ensure that robust early childhood data can be connected both within the ecosystem and with SLDSs. They show that access to data can help meet the needs of families, providers, the public, and policymakers and support members of each of these groups in making better decisions. DQC developed the three use cases in this resource in collaboration with an advisory committee of representatives from leading national organizations working across the early childhood ecosystem and vetted the use cases with state leaders. Whatever data infrastructure or policy landscape a state is starting from, the use cases in this document can guide purposeful development.

Who needs access to data?

States should ensure that families, providers, the public, and policymakers have tailored access to the information they need to make decisions.

- **Families** need information that allows them to find the appropriate services for their children and then helps them enroll in those services.

- **Providers** need detailed information about the children and families they serve—and the broader landscape of services in their community—to provide high-quality services while complying with regulatory and reporting requirements.

- **Members of the public** need user-friendly and dynamic dashboards, reports, and open data tools that display data they can disaggregate by population characteristics and geographic region to understand the scope and impact of early childhood investments.

- **State-level policymakers** in charge of cross-sector, statewide changes *and* **local system leaders** need functionality that allows them to leverage policy and funding to improve state early childhood systems—particularly with regard to understanding access to services and directing resources to address service gaps.

WHAT ARE EARLY CHILDHOOD INTEGRATED DATA SYSTEMS?

As states think about early childhood policy in the context of their larger education and workforce systems, they need to work both horizontally and vertically. Ideally, a state will have a robust early childhood integrated data system (ECIDS) that connects data horizontally from different early education and care services, as well as an SLDS that integrates select data vertically from the state's early childhood, K–12, postsecondary, and workforce sectors.

The relationship between ECIDSs and SLDSs can vary from state to state. In states with an ECIDS, these systems may exist as their own entity, be connected to their state's SLDS, or both. (See "Integrate Data across Services to Inform Policy Decisions" for an example of an ECIDS.) States that don't have a strong ECIDS can still begin meaningful work toward these use cases; the state's SLDS and its governance structure can integrate select early childhood sector data to begin providing stakeholders with contextualized, high-quality early childhood insights as the state continues work to strengthen horizontal data connections across the early childhood sector.

- **State-level program leaders** need data to ensure that their program is successfully implemented, including through effective collaboration with other available early childhood services.

- **Advocates** can use data to help make the case for policy change and effective investments.

- **Researchers** rely on data to answer critical questions about family experiences and about the operation and long-term impacts of the early childhood system.

How to use these use cases

This resource offers state and local leaders a place to start by detailing three use cases that support data-informed decisionmaking across early childhood. Implementing these use cases would require states to improve their data systems and integrate information from multiple state and/or local sources. Each use case includes:

- A story showing what's at stake;
- The types of data that different stakeholders need access to;
- A description of what will be possible when these use cases are realized;
- Examples of states that are in the process of making data access possible; and
- Considerations for getting started.

The future of early childhood data systems must start with people. Each use case outlines the information that people need to help them make decisions. **States are uniquely positioned to use their SLDSs to provide this information at scale and support stakeholders across the early childhood ecosystem.**

The needs of young families are urgent. Tinkering around the margins is not enough. It is time for states to take charge to make this vision for early childhood data systems a reality.

INSIDE ...

Make accessing services easier for families

ELISE IS A GRANDMOTHER TAKING CARE OF HER DAUGHTER'S TWO-YEAR-OLD CHILD WHILE HER DAUGHTER PURSUES A COLLEGE DEGREE. Her granddaughter is bright and engaging, but her motor skills have been slow to develop. Elise wonders if occupational therapy might be helpful.

Using her state's family portal, Elise **can explore local early childhood services that her granddaughter is eligible for based on her family's income and needs.** Elise learns that her granddaughter can receive a free screening and will qualify for free early intervention services if she is in fact developmentally delayed. Moreover, her granddaughter is eligible for health insurance and food benefits, and Elise can use the family portal to easily apply for those additional services without going through separate application processes.

JAIME IS A WORKING FATHER IN A RURAL AREA. HE NEEDS A PLACE FOR HIS FOUR-YEAR-OLD SON TO SPEND THE DAY. He cannot afford the one private child care center he knows of within easy driving distance of Jaime's job site—and while he's open to the idea of home-based care, he doesn't know what options are available.

Jaime **learns from the state family portal that his family is eligible to receive a child care subsidy.** Moreover, he **finds out that multiple child care providers within a reasonable driving distance of his house—some center based, some home based—accept those subsidies.** One of those providers even offers state-funded pre-K for part of the day.

Right now, families seeking early childhood services for their children have to do their own research to find a high-quality service provider that meets their needs, see if that provider has any availability, and then apply separately to each service for which they might be eligible. If states provide information through a centralized portal, families can enter basic information about themselves and what they're looking for. They can then receive up-to-date information on available services in their area—potentially including information about the quality of those services—and use convenient online forms to apply for eligibility or enroll. If they are seeking eligibility for multiple services, the family portal can help streamline and expedite the application process.

A digital family portal can bring together relevant information from across services that are administered by different offices and agencies; families can then explore that data based on their own characteristics and needs.

Beyond child care, family portals can connect families to other types of early care services, including:

- Services under the Individuals with Disabilities Education Act (IDEA) for children with special needs;
- Comprehensive services, like home visiting, that support health and development;
- Nutrition benefits and supports;
- Health insurance;
- The federally funded Head Start program, which offers a combination of services for family-income-eligible children from birth to age five; and
- Publicly funded pre-K where offered by states and communities.

Many child care and pre-K programs are funded by a mix of public and private funding streams; even one slot in a single preschool classroom can be supported by a mixture of funding sources like state-funded pre-K and Head Start. Further, many early childhood supports and interventions—like home visiting, occupational therapy, and nutrition benefits—are administered and managed by different state agencies, each with their own eligibility and application standards.

Family portals can provide families with clearer information about services they're eligible for across the entire birth to age five continuum and streamline the application process. In addition to supporting families, family portals benefit a range of stakeholders across the early childhood ecosystem. With family portals:

Early childhood providers can more easily reach the families seeking the services they offer and quickly fill program vacancies.

People who work to support families—including home visitors, social workers, pediatricians, child care resource and referral agency staff, and others—can:

- Use the portal as part of their one-on-one engagement with families to help families determine what services they need.

- Support and better connect local community collaborations that provide resources and support to families.

Policymakers can offer a valuable constituent service, helping families with young children take advantage of publicly funded resources and supporting workforce participation.

State program staff can leverage family portals to improve the uptake of services and help make sure that families are aware of their options across a range of settings.

The public benefits from greater workforce participation and from more effectively deployed and used public services.

Building a successful family portal requires timely, accurate data about available services. In some instances that data is already being collected by the state; in other instances it is not. And even when the state has relevant data, that data may not be timely or accurate enough to be useful in a family portal. Developing a family portal requires attention to both the available data and the human systems that support families' use of that data. But the payoff can be substantial if families use the portal to find and enroll in the services they need.

STATE HIGHLIGHT

South Carolina used federal Preschool Development Grant Birth through Five funds to establish a family portal. The portal has a simple screener that allows families to check their eligibility for different forms of public support, and it offers tools that help families identify available services in their area and apply for those services. If families are applying for more than one service, the portal eliminates redundancy by prepopulating applications with any information families have already entered. As part of the development of the portal, the state worked across services to align eligibility requirements, allowing it to build a single point of entry that could be used across funding streams.

The overall design of the portal was shaped by extensive consultation with families and providers, and the central technology is complemented by a network of support personnel who can work with families to help them find the services they need. The state's goal is to enable families to find whatever services they need, regardless of the administering agency or setting.

AS STATES WORK TO MAKE ACCESSING SERVICES EASIER FOR FAMILIES, LEADERS SHOULD CONSIDER THE FOLLOWING STEPS:

- **Develop an aligned eligibility screener to simplify all eligibility processes.** While eligibility for individual programs and services may still need to be determined by the agencies and providers overseeing those programs or services, having an eligibility screener that helps expedite the process could reduce the burden on families and providers.

- **Evaluate existing data collection and reporting** by working with families to identify the key information needed in a family portal and then assess existing data collections to determine whether that information is collected and available to develop the portal. For example, many families are eligible for child care subsidies but do not receive them, and many providers are licensed for more capacity than they can actually offer; using those data points can provide a misleading picture of service availability. While states will still have to collect any data needed to fulfill federal reporting requirements, they should look holistically at their data collection and reporting to see how it can be more useful to the field—and if changes to state law or regulation are needed, they should consider making those changes.

- **Get something up and running and build from there.** Some providers will immediately see the benefit of a family portal and be eager to participate; others may be more reluctant. Ultimately, states are uniquely positioned to build all-inclusive portals, but they should not wait for completeness to get started. Building a successful portal with interested providers can be a great way to encourage other providers to become involved. As long as the underlying architecture is robust enough to handle anticipated growth, there are benefits to getting started and then working iteratively to expand.

Reduce the reporting burden on providers

ALISON RUNS AN EARLY CHILDHOOD CENTER IN A RAPIDLY GROWING SUBURBAN COMMUNITY. She has a grant to provide free state-funded pre-K for three- and four-year-olds and also offers child care for children birth to age five whether or not they enroll in state pre-K. The child care is paid for by families, many of whom leverage state subsidies. Further, many of her infants and toddlers are eligible for services under IDEA, and many of the children she serves are eligible for nutrition assistance. Alison tries to use every public funding stream she can to benefit the population she serves.

In Alison's state, each of the funding streams she uses is overseen by a different state agency. Each of those agencies has its own reporting system. Several of them are paper based, and all of them have their own timelines and reporting requirements, often including different categories for reporting certain basic facts like child demographics.

Alison's center has invested in modern software to run its operations, and **most of the data Alison needs for reporting—and for her own decisionmaking—is collected through that software. The software itself allows her to collect data directly when relevant transactions occur,** including when children are dropped off in the morning and picked up at night. This transaction-based data is much more accurate than her previous paper-and-pencil system.

But Alison's staff still spend a lot of time pulling information out of the software and manually entering it into separate paper and digital forms that are then sent to different state agencies. **State-level integration of data and alignment of systems, programmatic definitions, and reporting requirements,** within and across agencies and services, **could streamline and simplify Alison's reporting and help ensure that she gets useful information back from the state.**

Providers' most valuable resource is time, and every minute they spend ensuring compliance with state reporting requirements is a minute they are not spending serving children, engaging families, or participating in professional development to improve their craft. If states can reduce the burden of data collection and send back meaningful information, providers will be in a much better position to serve children and families.

Integrating and aligning early childhood data systems and reporting processes would benefit numerous stakeholders. With greater integration and alignment:

Early childhood providers can report data with less burden on their limited time and staff resources and receive more benefit from the data they collect.

- In addition to minimizing the need for duplicative or inconsistent reporting to different agencies, better aligned data systems can streamline reporting by allowing providers to submit data, with the press of a button, through the child care management software they already use internally.

- Data reported to the state is used to determine how much the state will pay providers—and in the case of subsidized child care offered by private providers, speeding up the payment cycle can make a meaningful difference to business viability.

- When providers get back from the state data that puts their own operations in a larger context, they may gain useful insights to help improve their performance.

State and local program administrators and agency leaders receive higher quality, more accurate data because the reporting processes are based on provider transactions rather than reconstructed after the fact. Data can be reported to the state in a timelier manner, and states have an increased ability to share data back with providers that places each provider's own operations in a larger context, which may be useful to the provider's ongoing improvement efforts.

Families benefit from timely, actionable data about the early childhood programs that serve them. Although they may not know it, they may also benefit from providers having more efficient administrative systems that allow the providers to focus more resources on direct services.

STATE HIGHLIGHT

Iowa offers child care providers a free Child Care Management System (CCMS) and related business coaching that helps the providers use the CCMS to improve their management practices. The state contracted with two vendors to provide the CCMS, purchasing licenses for providers and covering the cost for two years. The state also defined requirements for participation that allowed the construction of a data bridge between the state and individual providers. That bridge means that providers do not need to enter data a second time; the same system they use to collect data can feed the data directly to the state.

Since the state launched its work, additional vendors have chosen to offer free CCMS options that meet the state's requirements. As the state creates a stronger culture of data use at both the provider and state levels and as the provider community improves its technological capacity, child care providers are finding that the CCMS saves them significant time and boosts revenue—making it possible for them to cover the costs if the state chooses to stop doing so.

AS STATES WORK TO REDUCE THE REPORTING BURDEN ON PROVIDERS, LEADERS SHOULD CONSIDER THE FOLLOWING STEPS:

- **Evaluate the data being collected to determine what is actually useful.** States should stop collecting data that is not useful to providers, families, or the state, unless it is required by federal law.

- **Define standards and harmonize requirements.** Providers are sometimes asked to report the same information in multiple ways. As part of the process of implementing technology updates, states should thoroughly examine how they might streamline data collection and consider changes if state law or regulations are the source of the disconnect.

- **Set requirements for the CCMS that multiple vendors can reach.** States should work with providers to determine what data they really need and be clear about what the state is hoping to collect and how it plans to use that data. Then they can create an environment in which any vendor can design CCMS data dashboards, reports, and data bridges that meet the state's criteria.

- **Offer data training for providers.** New technology tools are helpful only if providers know how to use them. States should support providers in employing tools to improve their practices. The training should be designed around the needs of providers and the capabilities of the new technology tools.

- **Engage key partners—including technical assistance centers, resource and referral agencies, provider associations, and licensing entities.** Providers look to these resources for help, and the more these partners understand the state's work, the more likely they are to reinforce and engage with the state's processes.

- **Send data back to providers.** States can work with the provider community to determine what reports would be most helpful to them and then regularly provide those reports. Receiving useful data encourages providers to buy in to the system and keep it operating effectively.

Integrate data across services to inform policy decisions

MARTHA IS THE HEAD OF A STATE EARLY CHILDHOOD AGENCY WHO HAS JUST SUBMITTED AN AMBITIOUS POLICY PROPOSAL TO HER GOVERNOR. The governor and her budget and policy teams have a lot of questions about existing early childhood services, their quality, whom they serve, and how the service changes Martha is proposing could affect the long-term success of different student populations. With access to securely integrated data from state K–12 and higher education agencies and each of the agencies serving young children, **Martha and the governor's office can work together to answer these questions and determine what state policies and investments will yield the best results** for young children, their families, and the state.

FELIPE IS A LEGISLATOR WHO WANTS TO BETTER UNDERSTAND THE REACH AND IMPACT OF EARLY CHILDHOOD SERVICES IN HIS DISTRICT. He agrees to host a public forum for providers and families. At that forum, he asks Martha's team to provide an overview of the services available in his district, including **information about the services offered in different communities, the percentage of the eligible population taking advantage of the services, the quality of the services offered, and the elementary school outcomes of enrolled students.** The conversation sparks several valuable discussions about how to improve access and strengthen local systems.

States offer many different services for young children, but state leaders are often unable to answer even basic questions about those services. Policymakers and program leaders may have no sense of the number of children who are eligible for services, the number of children who are enrolled in more than one service, the extent of turnover and churn among the early childhood workforce, how providers are leveraging different funding sources or program resources to provide services, or the impacts of different investments on long-term outcomes for children and families. Not having that information makes it very difficult to understand how to mobilize resources to improve early childhood access and quality as well as how early childhood connects with K–12, postsecondary, and workforce outcomes.

WHAT DOES ACCESS LOOK LIKE IN ACTION?

Understanding the early childhood ecosystem requires data about populations, available services, participation in services, the early childhood workforce, and child outcomes. States collect much of that data but historically have held it in separate silos. By integrating data across early childhood services—and connecting it to the rest of the P–20W spectrum—state policymakers and advocates can have a more complete picture of the experiences of young children and can better address key policy issues including:

- **Mapping supply and potential demand** to understand where resources are needed. When states integrate data about population and demographics with data about the uptake of publicly and privately funded early childhood services, state and local administrators can better understand whether services are reaching the families and communities they were designed to reach—including the historically underserved.

- **Understanding the quality of services offered.** If states have a clear thesis about quality improvement, systemwide data is essential for tracking progress, mobilizing resources to support the improvement process, and understanding the long-term impacts of investments in quality improvements.

- **Understanding the early childhood workforce.** In many states, data about early childhood professionals comes from voluntary workforce registries with incomplete coverage. Having stronger requirements and capacity for the collection of workforce data—and connecting it to data about populations, services, and quality—can help lead to policies that increase the supply of qualified professionals.

- **Ensuring that trusted researchers have access** to de-identified individual-level data on the services children use in early childhood and what happens to those children and their families later in life.

Better connected early childhood, K–12, postsecondary, and workforce information can also be useful at the community level so community leaders and policymakers can use the data to support improved service delivery.

STATE HIGHLIGHT

Virginia's LinkB5 system is owned and governed by the Virginia Department of Education and supported by the Virginia Early Childhood Foundation and the University of Virginia. At the heart of the system is the state's new unified measurement and improvement system. The system is mandatory for publicly funded providers across multiple funding streams—including child care centers, family child care, public school pre-K, and special education—and other providers have also opted in. Data is linked across students, classrooms, sites, and teachers, allowing for a rich understanding of the actual experiences of Virginia children. In addition to providing statewide data tailored to the needs of different audiences, the LinkB5 team supports community-level efforts to use data in support of systems change.

CONSIDERATIONS FOR GETTING STARTED

AS STATES WORK TO INTEGRATE DATA TO INFORM POLICY DECISIONS, LEADERS SHOULD CONSIDER THE FOLLOWING STEPS:

- **Support the participation of child-serving agencies.** State law should outline how agencies are expected to participate in statewide data systems and governance. Agencies should be appropriately resourced to facilitate this work.

- **Create public-facing dashboards.** Making data available to the public can provide a greater understanding of available early childhood services. One of the goals of integrated data is to support increased transparency, and making information widely available through dashboards can help to accomplish that goal. Key audiences should be engaged in the process of designing the dashboards to ensure that the dashboards include the most useful information.

- **Modernize data infrastructure.** Cross-agency data governance boards should help states update their data infrastructure as better technologies become available. Tools like WestEd's P20W Modernization Diagnostic Tool can help states assess and improve their data system infrastructure.

- **Respond to data requests quickly.** Technology can speed up response time, but technology upgrades must be bolstered by responsive human systems. Cross-agency data governance boards can be charged with creating data request criteria and transparent review processes that allow for greater responsiveness, ensure that all appropriate privacy and security protocols are being followed, and make certain that state resources are being used in a responsible manner.

- **Create incentives for the workforce to participate in data systems.** Many states have voluntary workforce registries, but participation must be widespread to provide a comprehensive understanding of the workforce landscape. States can create sufficient incentives or requirements to participate in workforce data—including creating data bridges between registries and other systems, which could also reduce the administrative burden on providers and practitioners.

- **Look beyond state administrative data.** State administrative data tells an essential but limited part of the story. Population-level data and trends—and, if available, data about early childhood services beyond the publicly funded system—are critical to understanding the children and families that early childhood services are meant to serve but have not yet reached.

BUILDING AND GOVERNING FLEXIBLE, REAL-TIME DATA SYSTEMS

To answer complex, interdisciplinary questions, states need sophisticated and thoughtfully constructed data infrastructure. But they also need **data governance.** Cross-agency data governance boards that bring together leaders from state agencies—often along with other stakeholders like parents, educators, and data privacy experts—provide states with a transparent structure to make decisions about how state data is linked, used, accessed, and protected. Data governance boards manage the development of the state's data efforts and have a key role in aligning data standards and ensuring data quality. Robust cross-agency data governance is key to establishing a culture of effective data use in states.

Data governance also provides a mechanism to facilitate stakeholder engagement efforts and ensure that the state's data system is meeting the needs of families, educators, and community leaders. Depending on what they hear from their community and their own policy goals, state leaders can identify which data tools or dashboards they create first, the research agenda they develop, the open data sets they make available, and the staffing and analytic capacity they hire for.

In early childhood, data governance takes place in the context of a changing landscape of overall governance. Many states have made efforts to unify the oversight of early childhood services, particularly in early education and care. While unified early childhood agencies may reduce the need for interagency data integration to support early childhood services, a robust state P–20W data ecosystem will always require cross-agency data governance.

State recommendations

Leading states are already making substantial headway toward implementing each of the use cases described in this resource and finding other ways to leverage data to improve their early childhood systems—and they are honing key lessons and best practices for other states to consider. DQC's state recommendations to support data access through improved SLDSs apply to all segments of state P–20W systems. But work in the early childhood sector has its own additional considerations. This section includes recommendations for states looking to strengthen their data culture and infrastructure—all of which require time and engagement from leaders inside and outside of state government as well as sustainable funding to be implemented on an ongoing basis.

Human Systems and Capacity

- **Start with stakeholders' questions.** Stakeholders' questions should guide data access and use. Policy leaders should ensure that leaders throughout the system—including elected officials, executive branch administrators, community leaders, and provider leaders—have the data they need to answer their own policy and practice questions.

- **Engage the public.** Policy leaders should work with key stakeholders, including families and providers, to make sure that data systems are user friendly, address people's needs, and provide useful information. Dashboards, visualizations, websites, and other tools can empower people to use the data on their own terms.

- **Build state data capacity and support data use.** Data systems are a means, not an end. Having a strong data governance structure is one essential component of state data capacity, but a strong structure alone is not enough. States need personnel who are skilled data storytellers as well as coaches and trainers who can help state agency personnel, community leaders, and providers use the data themselves. Families also need human support to help navigate the system, providers need support to successfully implement new approaches to enrollment, and policymakers need analytic support to make sense of the new numbers being produced. The capacity for human systems must evolve over time alongside expanded technology systems. Tools like WestEd's P20W Modernization Diagnostic Tool can help states assess and improve their data system capacity and use.

- **Nurture community-level infrastructure.** States should engage stakeholders—including families and providers—to determine which capacities for data management, analytics, and use should sit at the state level; which should be regional; and which should be local. It does not make sense for each community in a state to develop its own data infrastructure, but the state will never be in the best position to provide community-level supports for families and providers. Ensuring that people at the community level are trained and supported to leverage state data infrastructure will likely be the most effective way to deliver quality services at scale.

- **Build trust with high-quality data.** If stakeholders cannot trust state data, they will not use it, making building a culture of data use impossible. At the same time, part of building a data culture is understanding that data does not always have to be perfect to still be useful; data use improves data quality, which in turn builds trust.

Technology

- **Leverage advances in technology.** States can be slow to adopt new technologies—in part due to purchasing processes—but efficiency demands keeping up with the times. States have limited resources to serve families; the more those resources are spent on overpriced technology and cumbersome processes, the less states will have available to provide high-quality services. Therefore, states should look at using the cloud and Software as a Service (SaaS) options.

- **Deliver an early win.** Modernizing data systems to provide meaningful, actionable data access to a range of stakeholders will take time. But state leaders should define an early win that matters to their community that they can deliver on quickly. When data provides a tangible benefit, even a small one, momentum and public buy-in for future data system improvements grow. Early wins can set the stage for building an ongoing culture of meeting data needs on a timely basis; when it comes to data, speed does matter.

Federal recommendations

Federal support has been essential to states as they have built their early childhood data systems. A series of federal system grants have provided states with the resources to plan and build their data infrastructure. However, because this support has been episodic and unpredictable, state efforts to strengthen their systems have proceeded unevenly. To foster a more stable and consistent planning and building process, the federal government should provide dedicated funding, technical assistance, and support; offer guidance on effective data use; and help to scale best practices and address barriers, as laid out in DQC's federal recommendations to support data access through improved SLDSs. Federal leaders should also prioritize the following efforts to support early childhood data systems.

- **Expand, align, and coordinate funding for data systems.** Federal support for early childhood data systems has generally come from grants—including the SLDS, Race to the Top—Early Learning Challenge, and Preschool Development Grant Birth through Five grant programs—that were designed primarily for other purposes. Some states have made meaningful progress leveraging these grants, but dedicated and sustained funding focused on early childhood data infrastructure could make a major difference. The funding could address any or all of the use cases described in this resource and should give states the flexibility to design systems that meet their needs. It should also ensure that early childhood data is a key part of SLDSs that span early childhood, K–12, higher education, and the workforce.

- **Provide guidance on and support for linking and accessing data.** The confusing patchwork of privacy laws and policies is a barrier to linking data across sectors. Some states have reduced the confusion by creating new or consolidated early childhood agencies, thus reducing interagency data sharing. But even those states offer many important early childhood services outside a single agency. States continue to need guidance on how best to integrate data in a manner that protects individual privacy. Federal guidance addressing common early childhood use cases could help states better understand their data-related opportunities while ensuring that they comply with all relevant laws and best practices. Guidance is particularly important given the number of core funding streams in early childhood that originate with the federal government—including Head Start, the Child Care and Development Fund (CCDF), and Maternal and Infant Early Childhood Home Visiting, among others. Implementation of a new final CCDF rule adopted in 2024 presents a great opportunity for states to reflect on the needs of the early childhood system and how stronger data infrastructure might help to meet those needs.

- **Build connections between states and Head Start.** Future reauthorizations of the Head Start Act could also strengthen the ties between state data efforts and Head Start providers, which could help states be more precise in their understanding of existing early childhood services—and could help providers leverage state resources to assist with required community assessments. Some states are already working to incorporate Head Start data, which can be beneficial to both states and Head Start providers. So far, however, those states have had to work program by program to identify interested partners. Leadership from the federal government could result in a more systemic approach—one that should engage state leaders and Head Start leaders to ensure that both are benefitting from integrating Head Start and state data.

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Early Childhood Advisory Committee

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- Winona Hao, Director of Early Learning, National Association of State Boards of Education
- Mandy Sorge, Executive Director, National Association of State Leaders in Early Education
- Patrick Lyons, Senior Policy Specialist, National Conference of State Legislatures
- Victoria Jones, Senior Director of Data, National Head Start Association
- Karin Garver, Early Childhood Educational Policy Specialist, National Institute for Early Education Research
- Aaron Loewenberg, Senior Policy Analyst, New America
- Kristin Bernhard, Chief Policy & Research Officer, Start Early
- Ann Hanson, Vice President, Start Early
- Miriam Calderon, Chief Policy Officer, Zero to Three

State Leaders

- Illinois Data, Analytics, and Insights Workgroup
- Heather Rouse, Director, Iowa's Integrated Data System for Decision-Making
- South Carolina First Steps
  - » Alissa Durham, First Five SC Coordinator
  - » Betty Gardiner, Director of Grantmaking and Development
  - » Rachal Hatton-Moore, Two-Generation Systems Manager

  - » Karen Oliver, Early Childhood Advisory Council Program Manager
  - » Chelsea Richard, Chief of Staff
  - » Molly Tuck, Strategic Data Fellow
- Virginia Department of Education
  - » Erin Carroll, Assistant Superintendent of Early Childhood
  - » Jenna Conway, Deputy Superintendent of Early Childhood

  - » Amy Edmondson, Early Childhood Data and Research Analyst
  - » Andrea Hoover, Early Childhood Technical Project Manager
  - » Lauren Snellings, Early Childhood Data and Research Analyst
  - » Tierah West, Associate Director of Early Childhood Data Systems
- Lachelle Brant, Deputy Policy Director, Office of Wyoming Governor Mark Gordon

Individuals

- Benjamin Boer, Senior Director of Data, EdSystems Center at Northern Illinois University (Project Lead, Illinois Longitudinal Data System)
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- Tiffany Ferrette, Senior Policy Analyst, Child Care and Early Education, Center for Law and Social Policy

- Diane Girouard, State Policy Senior Analyst, Child Care Aware of America
- Theresa Hawley, Executive Director, Center for Early Learning Finance Equity
- Adam Lucas, Technology Consultant, Opportunities Exchange
- Will McCoy, Vice President, Strategic Partnerships, Third Sector Intelligence
- Joy Milano, Technical Assistance Specialist, Manhattan Strategy Group

- Sally Shepherd, Technical Assistance Specialist, SRI Education
- Louise Stoney, Co-Founder, Opportunities Exchange
- Chris Strausz-Clark, Chief Executive Officer, Third Sector Intelligence
- Matt Weyer, Policy Director, Education Commission of the States

Resources

MAKING THE CASE FOR DATA CAPACITY

- [2023 Data Capacity of State-Funded Pre-K Programs across the United States](#) (Child Trends, 2023)
- [Early Childhood Data Systems: Responding to COVID-19 and Building for the Future](#) (Data Quality Campaign, 2020)
- [Expanding Mobility: The Power of Linked Administrative Data for Multi-Gen Analysis](#) (Actionable Intelligence for Social Policy, 2021)
- [Integrated Data Can Help States Better Respond to and Recover from Crises Like COVID-19](#) (Child Trends, 2020)

- [Integrated Early Childhood Data Is an Essential Tool for Advancing Racial and Ethnic Equity](#) (Child Trends, 2022)
- [State Early Childhood Data Linkages](#) (Watershed Advisors, 2024)
- [States' Preschool Development Grant Applications Reveal Priorities for Stronger Data Integration](#) (Child Trends, 2023)
- [Strength in Numbers: Supporting Quality Improvement in Early Care and Education Programs through Linking Administrative Data](#) (Child Trends, ASPE, and OPRE, 2016)

- [Supporting Early Educator Compensation through Strong Data Collection](#) (Center for the Study of Child Care Employment, 2022)
- [Using Integrated Data to Increase Equitable Access to Early Childhood Programs](#) (Child Trends, 2022)
- [The Workforce Data Deficit: Who It Harms and How It Can Be Overcome](#) (Center for the Study of Child Care Employment, 2018)
- [Worried About Implementing New CCDF Rules? Modern Technology Can Help](#) (Opportunities Exchange, 2024)

HOW TO DEVELOP EARLY CHILDHOOD DATA SYSTEMS

- [Building Capacity to Implement an ECIDS: Leadership Staffing](#) (ECDataWorks, 2023)
- [Building Capacity to Implement an ECIDS: Leveraging State Resources](#) (ECDataWorks, 2023)
- [Building Capacity to Implement an ECIDS: Technical Resources](#) (ECDataWorks, 2023)
- [Early Childhood Integrated Data Systems Toolkit](#) (Statewide Longitudinal Data Systems Grant Program State Support Team, 2021)
- [Education-to-Workforce Indicator Framework](#) (Mathematica, 2022)

- [Guidance for Reporting Data on Your Early Care and Education Workforce](#) (Center for the Study of Child Care Employment, Early Childhood Data Collaborative, and National Workforce Registry Alliance, 2024)
- [How Modern Technology Can Help States Implement New Policy Reform](#) (Opportunities Exchange, 2023)
- [How Policymakers Can Support Early Childhood Data Governance](#) (Child Trends, 2019)
- [The Importance of Modernizing Technology in Developing Early Childhood Integrated Data Systems](#) (Foresight Law + Policy, 2022)
- [Navigating Data Systems When Integrating Home Visiting Data](#) (Child Trends, 2020)

- [A Planning Guide for Linking Data to Support Program Improvement in Early Care and Education](#) (Child Trends, ASPE, and OPRE, 2016)
- [Programmatic Use Case Repository](#) (ECDataWorks)
- [Roadmap for Early Childhood and K-12 Data Linkages: Key Focus Areas to Ensure Quality Implementation](#) (Data Quality Campaign and Early Childhood Data Collaborative, 2016)
- [System Transformation for Equitable Preschools (STEP Forward with Data) Framework](#) (Child Trends, 2024)
- [An Unofficial Guide to the Why and How of State Early Childhood Data Systems](#) (Start Early, 2017)

EFFECTIVE DATA USE

- Building More Equitable Pre-K Assessment Systems: Lessons from States (New America, 2022)
- Data-Driven Decision-Making (National Association of Elementary School Principals, 2024)

- Five Ways to Support Effective Data and Research Use in Early Learning (American Enterprise Institute, 2023)
- Leveraging Early Childhood Data for Better Decision Making (National Association of State Boards of Education, 2018)

- Lost in the Labyrinth: Helping Parents Navigate Early Care and Education Programs (New America, 2023)
- P20W Modernization Diagnostic Tool (WestEd, 2024)

OTHER RESOURCES FROM THE FIELD

- 2024 Child Care and Development Fund Final Rule (Administration for Children and Families)
- Centering Black Families: Equitable Discipline through Improved Data Policies in Child Care (The Center for Law and Social Policy, 2023)
- Child Care Payments: Attendance Vs. Enrollments (Child Care Aware of America, 2021)
- Community of Innovation Resources
- Early Childhood Workforce Index (Center for the Study of Child Care Employment)

- ECE Technology Ecosystem Learning Hub (Opportunities Exchange)
- Education Commission of the States Resources
- Mapping CACFP Participation (Child Care Aware of America)
- Putting Advocacy on the Map: Using GIS Technology to Inform Advocacy (Child Care Aware of America, 2023)
- Racial Wage Gaps in Early Education Employment (Center for the Study of Child Care Employment, 2019)

- Shaping Equitable Early Childhood Policy: Incorporating Inclusive Community Engagement Frameworks into Expanded Data Strategies (The Center for Law and Social Policy, 2021)
- State of Babies Yearbook (Zero to Three)
- State of Pre-K Yearbook Research Appendices (National Institute for Early Education Research)
- The State(s) of Early Intervention and Early Childhood Special Education: Looking at Equity (National Institute for Early Education Research)

STATE AND LOCAL CASE STUDIES

- AVANCE–Houston's Partnership with the Houston Independent School District (Child Trends, ASPE, and OPRE, 2016)
- Building Collaboration to Coordinate Early Childhood Data: State Spotlight on Wisconsin (Child Trends, 2017)
- Crafting an ECE System for the 21st Century: A Technology Pathway for Colorado's Department of Early Childhood (Opportunities Exchange, 2022)

- Iowa Leads the Way: How Modern Technology Can Improve Access to High-Quality Child Care (Opportunities Exchange, 2023)
- The Learning Center for Families' Use of Data to Support Children's Healthy Development (Child Trends, ASPE, and OPRE, 2016)
- Mississippi Early Childhood System Asset Map (Mississippi State Early Childhood Advisory Council, 2022)

- Rochester Childfirst Network's Use of Linked Data to Support Classroom Teaching (Child Trends, ASPE, and OPRE, 2016)
- Telamon North Carolina Corporation's Collaboration with a County Agency (Child Trends, ASPE, and OPRE, 2016)
- Tulsa Community Action Project's Commitment to Data Driven Decision-Making (Child Trends, ASPE, and OPRE, 2016)

STATE EARLY CHILDHOOD DATA DASHBOARDS

- Illinois (Erikson Institute)
- Maine (Maine Department of Health and Human Services)

- Ohio (Groundwork Ohio)
- Tennessee (Tennesseans for Quality Early Education)

- Texas (Texans Care for Children)