

Executive Purpose

Building the future of early childhood requires a clear view of how education and care systems actually operate. Early Childhood Integrated Data Systems (ECIDS) provide that clarity by organizing complex funding, program, and regulatory data into usable system insights.

This brief argues that ECIDS are not discretionary technology projects—they **are foundational public infrastructure**. With an ECIDS, policymakers can pursue strategic financing and cost modeling with confidence, using limited public funds to advance clearly defined goals. Without integrated data, strategic financing cannot be done reliably or transparently.

For legislators, this choice determines whether funding levels, rate increases, and capacity expansions are set using transparent, repeatable evidence—or rebuilt through one-off analyses each budget cycle.

Policymakers Need Better Information About Early Childhood Systems

Early childhood systems are financed through dozens of overlapping funding streams that generate large volumes of data through separate and often duplicative compliance and reporting systems. In most states and communities, there is no overarching data system to knit together these various datasets. This can leave policymakers drowning in data, while starving for the information they need to effectively plan for, fund, and oversee publicly funded early childhood services.

While data exists, it is not compiled into a format that can support system-level decision-making. As a result, policymakers are routinely asked to answer high-stakes questions without integrated visibility into the system:

The Questions Policymakers Need Answered

- ? Who is being served, by which programs, and where?
- ? Where does unmet demand persist across age groups and geographies?
- ? How do funding levels relate to actual service capacity and costs?

Without an ECIDS, these questions are often poorly addressed using partial and siloed data. Periodic efforts may be made to bring the data together for specific analyses, but these projects are time-intensive, often lack transparency, and cannot be easily replicated.

Policymakers need to rely upon a system that consistently integrates data to produce regular, comparable, and timely estimates of supply, demand, and other critical indicators of a well-functioning early childhood system.

The Role of an ECIDS

An ECIDS is not a single database. It is a **shared public infrastructure** that connects existing early childhood data across programs, agencies, and funding streams. It provides the foundation for developing system-level metrics and coherent views of how the early childhood system operates.

A functioning ECIDS allows leaders to:

- 🔗 Link children, families, programs, and funding across systems
- 📋 Apply consistent business rules to fragmented data
- 🔄 Produce repeatable and transparent analyses to inform resource distribution and other policies

Building an ECIDS transforms compliance-oriented data into **decision-grade information**. A well-designed and adequately resourced ECIDS supports routine reporting while also enabling more advanced, data-informed approaches such as cost modeling and strategic financing.

Key Application: Strategic Financing

One area where integrated data is especially valuable is in allocating public resources. **Strategic financing** requires distributing resources across programs and funding streams to achieve specific system goals, using data to set priorities and assess trade-offs. This work requires a clear view of how dollars, services, and outcomes interact across the system.

An ECIDS-enabled financing strategy allows policymakers to:

-  Estimate cost variation across provider settings and regions
-  Calibrate rates to actual staffing and service delivery conditions
-  Compare policy scenarios using real system data
-  Track how investments translate into capacity and enrollment over time

When considering increased investment to expand infant care, a state can use ECIDS data to specifically examine eligibility, enrollment, staffing levels, and funded capacity across regions. By linking data across programs, policymakers can identify where demand is highest, understand how staffing affects capacity, and see how quickly new slots are filled after investments are made.

Not ECIDS-Enabled	ECIDS-Enabled
<ul style="list-style-type: none"> ■ Data pulled separately from multiple program systems ■ One-time estimates built through manual reconciliation ■ Averaged or national staffing and cost assumptions ■ Limited visibility into investment impacts ■ Results hard to explain or update 	<ul style="list-style-type: none"> ■ Eligibility, enrollment, licensing, and workforce data linked across programs ■ Repeatable estimates using shared business rules ■ Staffing patterns and costs reflect local delivery conditions ■ Ability to track how funding translates into capacity and enrollment ■ Decisions are transparent, defensible, and adjustable mid-cycle

This is the difference between budgeting based on assumptions and budgeting based on evidence.

Conclusion

Policymakers face increasing pressure to do more with limited early childhood resources. Strategic and agile decision-making is not possible without the data infrastructure that ECIDS provides. By integrating existing data into a coherent system, ECIDS supports better planning, resource allocation, and accountability.

The necessary data exists, but states and communities need to make it actionable. States need to invest in the governance, analytic expertise, and sustained infrastructure required to support strategic financing and multi-year budgeting. Investing in a robust ECIDS enables a shift towards a disciplined, repeatable, and data-informed fiscal strategy.

Recommended Actions

1. Frame ECIDS as core public infrastructure, not a discretionary IT project.
2. Align ECIDS development explicitly with financing, cost modeling, and equity goals.
3. Embed ECIDS into multi-year budgeting processes to strengthen continuity, transparency, and fiscal discipline.

An ECIDS is not an end in itself. It is the foundation that allows early childhood systems to plan, invest, and adapt with confidence, ensuring that limited public funds are used effectively to achieve public goals.

ECIDS as Core Public Infrastructure

Early childhood systems cannot pursue strategic financing, cost modeling, or rate reform without integrated, decision-ready data. Early Childhood Integrated Data Systems (ECIDS) provide the foundational infrastructure needed to connect funding, service delivery, and regulatory data across programs and agencies. When designed intentionally, an ECIDS transforms fragmented compliance data into transparent, repeatable fiscal intelligence—allowing policymakers to calibrate rates to real delivery conditions, measure equity commitments consistently, and align investments with system goals. Framing ECIDS as public infrastructure—not discretionary technology—positions states to make evidence-based, multi-year budgeting decisions that strengthen accountability and long-term system sustainability.

About the Chicago Early Childhood Integrated Data System (CECIDS)



The Chicago Early Childhood Integrated Data System (CECIDS) is a citywide, cloud-based data system that integrates early childhood data across programs, agencies, and funding streams to provide a unified view of how young children and families access early childhood services in Chicago. By connecting fragmented data, CECIDS enables policymakers and system leaders to understand supply, demand, access, and equity across Chicago's early childhood system and to make more informed, data-driven decisions about resource allocation and system design.

Launched in 2022, CECIDS is the first integrated data system of its kind in Illinois and serves as an early model for how jurisdictions can build and use ECIDS infrastructure to support coordinated planning and strategic financing. CECIDS is stewarded by the Center for Early Learning Funding Equity (CELFE) as part of its broader work to strengthen data infrastructure and advance equitable, data-informed early childhood funding strategies.

Learn more at cecid.org.

About the Center for Early Learning Funding Equity (CELFE)

The Center for Early Learning Funding Equity (CELFE) builds capacity for assessing adequacy and equity in early learning funding systems through research and partnerships. CELFE develops innovative approaches and funding mechanisms that support the diverse needs of children and families, drawing on decades of experience in designing and implementing early learning systems at the state and local levels. This work includes advancing data-informed approaches that strengthen how funding systems operate and support more equitable outcomes for young children.

Learn more at celfe.org.

