

From Data to Impact

A Multi-Partner Framework to Advance Early Childhood in Illinois

Early Childhood Participation in Chicago

Chicago and Illinois have made major investments in early childhood data systems, research capacity, and public programs. For the first time, the technical infrastructure exists to examine participation, access, and equity across early childhood education and care (ECEC) programs and over time. What remains is the coordinated effort required to translate that infrastructure into timely, usable, and responsive insights that meet policy and practice needs.

This brief is intended for philanthropic, public-sector, and system leaders and presents a multi-partner¹ framework that organizes existing work, clarifies remaining gaps, and outlines how philanthropy and public agencies can work together to move from data availability to meaningful impact.

Why This Framework, Why Now

Chicago's early childhood system continues to face persistent questions that are difficult to answer with confidence. Which children are being served by which programs? Which children are not being served at all? Where do participation gaps persist across neighborhoods, program types, and populations?

While research agendas and analyses already exist across the city and state, the challenge at this stage is not a lack of ideas or expertise. Rather, it is the need for sustained governance, collaboration, sequencing, and investment to meaningfully advance existing efforts.

For the purposes of this framework, the early childhood system refers to publicly funded early care and education programs, including child care, Head Start and Early Head Start, preschool and pre-kindergarten, and related early childhood services. We



What this Framework Does

Aligns state, city, and research partners around a shared approach to understanding participation, access, and equity in early childhood education and care.

Organizes existing and future work into a clear three-tier framework that supports both immediate decision-making and long-term system learning.

Clarifies where high-quality data infrastructure is already in place and where additional coordination, analysis, and investment are needed.

Identifies concrete entry points for philanthropic investment that complement public-sector priorities and timelines.

Strengthens the foundation for sustained, collaborative research that informs policy, practice, and resource allocation across Chicago and Illinois.

¹ Partners include the Center for Early Learning Funding Equity (CELFE), Chicago Early Childhood Integrated Data System (CECIDS), Early Childhood Research Alliance of Chicago (EC*REACH), Illinois Early Childhood Asset Map (IECAM), NORC at the University of Chicago, and the Illinois Workforce and Education Research Collaborative (IWERC). This framework was developed with support from the Robert R. McCormick Foundation.

recognize that current data systems do not fully capture participation across the entire population of young children.

Recent progress in the Illinois Longitudinal Data System (ILDS) and the Chicago Early Childhood Integrated Data System (CECIDS) has meaningfully changed what is possible. This framework responds to that moment by articulating how partners can align near-term analysis with longer-term learning in service of children, families, and providers.

The sections that follow describe what this framework is designed to accomplish and how that work is organized to support both near-term decision-making and longer-term system learning.

What This Framework Is Designed to Accomplish

This framework is intended to serve as a shared reference point for partners, funders, and public agencies through which intentional collaboration can advance analysis, alignment, and investment over time. The framework can inform efforts to:

- Articulate information needs by working with policy audiences to understand how prior analyses have failed to meet their needs and to define actionable use cases.
- Design research approaches for complex policy questions that cannot be answered through descriptive analysis alone.
- Leverage existing data to support longitudinal analyses now made possible through integrated systems.
- Identify gaps in existing data and outline approaches to new data collection where needed.
- Foster collaboration across organizations to maximize impact and reduce duplication.
- Develop a roadmap for future work, including timelines, roles, and funding strategies.

These objectives are operationalized through a four-tier framework that organizes work by timeframe, complexity, and investment horizon.

A Four-Tier Framework for Action

The four tiers described below are not intended to be strictly sequential; rather, they represent distinct and complementary pathways that together support immediate insight, sustained learning, and long-term impact. Addressing questions across these tiers requires coordinated effort across organizations with complementary expertise.

Table 1: Framework for Action Tiers

Tier	Purpose of Work	Primary Data Sources	Timing of Impact	Illustrative Questions
Foundational Tier	Define priority use cases, align metrics and definitions, and clarify what information is	Structured input from policymakers, providers, and advocates and audit/review of the documentation for	Enables all subsequent tiers	What decisions are stakeholders trying to make? How should participation, eligibility, and

Tier	Purpose of Work	Primary Data Sources	Timing of Impact	Illustrative Questions
	required to support real policy and practice decisions.	existing program/administrative data (CECIDS, ILDS).		access be defined to support those decisions?
Tier 1 Immediate Descriptive Analysis	Produce timely, point-in-time descriptive analyses that address pressing questions using existing data.	CECIDS, ILDS, other state and local administrative data, and publicly available datasets (e.g., Census).	Near term	Who is currently being served, and where? Where are participation gaps by geography, program type, or population?
Tier 2 Longitudinal and Integrated Analysis	Examine trends over time and across systems to understand patterns in participation, access, and outcomes.	Linked administrative datasets across early childhood programs; selected integrations with other human services data; targeted qualitative inputs.	Medium term	How have participation patterns changed over time? What pathways do children and families follow across programs?
Tier 3 Analytically Complex Studies	Design and conduct rigorous studies that address questions not answerable through administrative data alone.	Primary data collection (e.g., surveys, interviews), advanced analytic methods, and mixed-methods approaches.	Long term	What factors drive participation and retention? What policy or program changes lead to improved outcomes for children, families, or the workforce?

Foundational Tier: Define Data and Research Needs

Conversations about information needs in ECEC rarely get beyond broad questions, but the specific details drive whether analyses are ultimately useful. Activities in this tier include developing use cases, analyzing gaps, and gathering feedback on what makes information effective for decision-makers.

Develop use cases: Define the specific use cases of policymakers and providers and the metrics that need to be developed for these use cases. This process answers questions like:

- What metrics are needed? For which populations? How frequently?
- How will concepts like participation, quality, and type of care be operationalized? For example, “participation” can be measured using funded enrollment or attendance and must be defined over a given time period (e.g., a day, a month, a year).
- What information is necessary for the ways decision-makers actually want to use these data? What is interesting but unlikely to be actionable?

- Decision-makers themselves may not understand all the implications of how metrics are defined, but when they articulate how they wish to use the information, research partners can provide clarity on what data and analysis can meet that need.

Analyze gaps: Compare the identified use cases and metrics against available data and the sorts of descriptive analyses that have been completed or can be asked of these data. This requires a deep understanding of the actual data that has been collected.

Gather feedback: Review prior analyses and existing products with decision-makers. How do these products not meet their needs? What would make more useful analyses? Why do we continue to ask and answer the same basic questions?

This foundational work ensures that subsequent analyses are aligned with real decision needs and grounded in shared definitions.

Tier 1: Immediate Descriptive, Point-in-Time Analysis with Existing Data

This tier focuses on timely, point-in-time descriptive analyses that address pressing questions using existing data. Questions can be answered now or in the near future with current data. Activities to facilitate these analyses include inventorying current efforts, executing on “low hanging fruit”, and sharing initial results.

Inventory current efforts: Develop and maintain comprehensive knowledge of efforts currently underway in partnership with the city and the state to identify which analyses could be completed as part of existing scopes of work and within existing resources.

Execute on “low hanging fruit”: Utilize existing data from ILDS and CECIDS (or other publicly available datasets such as Census data) to conduct foundational descriptive analyses. These will emphasize addressing the pressing questions that are most feasible with the current data available, with a quick turnaround.

Share initial results: Provide actionable insights to policymakers and providers to support immediate decision-making.

Specifically, initial focal questions, depending on what is learned in the needs analysis described in the Foundational Tier, may include:

- How many birth-to-five children live in IL by county and city? How does this vary by demographics (e.g., race/ethnicity, language spoken in home)?
- How many children in IL are eligible for each type of early childhood funding stream (including Head Start/Early Head Start, Child Care Assistance Program, Early Childhood Block Grant, etc.)?
- What is the capacity of early childhood services by program type and setting (e.g., center-based, family care homes, school-based, full-day / half-day programs)?

This is not a comprehensive list but rather an initial set of questions to focus the analysis. As more data becomes available, questions can and should be added. It should also be noted that many of these initial questions have been the focus of existing projects like CECIDS and ILDS.

While Tier 1 analyses provide essential snapshots, many policy questions require understanding how participation and outcomes evolve over time.

Tier 2: Longitudinal Analysis with Integrated Data

Analyses in this tier examine trends over time and across geographies to answer questions about the ECEC system that are identified in the Foundational Tier work. This tier focuses on solidifying questions and integrating data for these more complex questions—enabling more precise answers about feasibility and resource needs for further research. The questions for this tier encompass more robust analyses that would continue to use existing data sources, such as:

- How have population trends of children changed over time? How does this vary by geographic region?
- For children from birth to age five, including those with multiple care arrangements, how long do they remain in each program they attend?
- How have students' school readiness scores changed over time? What is the variation in school readiness scores by region?
- What are the program participation rates and gaps, and how have these changed historically?
- What are the various workforce pathways? What factors predict mobility, retention, and advancement for the ECEC workforce?

In addition, this tier includes investigating other potential data sources that could be integrated with existing ECEC data to refine findings and address data gaps. Potential data integrations could include participation in other social and human services (SNAP/WIC/TANF, child welfare, Medicaid) or details on parental and worker education and employment history.

Finally, this tier includes targeted qualitative research, such as focus groups, that could be used to complement analyses of existing data sources to inform interpretation. This research would be limited and not representative, suggesting hypotheses for further exploration. Some of the most consequential questions for policy and practice extend beyond what integrated administrative data alone can answer.

Tier 3: Analytically Complex Studies

This tier focuses on the design of robust, representative research, including primary data collection (e.g., surveys), to answer questions that the existing data are unable to address. These studies are empirically rigorous but also deeply tied to the needs of the community. They often entail sophisticated analytic approaches while aiming to address pressing questions. These are our “big bets” on ways to maximize investment in early childhood through careful and rigorous research. In particular, this tier includes questions like:

- What is the impact of Chicago's universal pre-kindergarten expansion on children's school readiness?
- How do parents make decisions regarding ECEC enrollment? What are the barriers and opportunities to support increased participation in ECEC?
- How do changes in compensation for the ECEC workforce affect teacher retention and student outcomes? What factors impact educator well-being and retention?
- How is the Kindergarten Individual Development Survey (KIDS) currently used in classrooms and what are opportunities to improve its use?

These important questions reflect individuals' motivations or systems where administrative data are not comprehensively collected. The only way to robustly answer these important policy questions is through large, multi-year research projects.

Next Steps and Ongoing Engagement

This framework is intended to support continued dialogue and alignment across philanthropy, public agencies, researchers, and early childhood practitioners. The partners view it as a shared reference point rather than a fixed plan.

As this work moves forward, one potential area for exploration is whether there are shared "north star" questions. That is, priority questions of participation or equity that are of interest to both the City of Chicago and the State of Illinois and could help shape future analyses, investments, or collaborations. Identifying such questions would not require consensus or joint action but could provide a useful reference for aligning efforts where appropriate.

Ongoing engagement will help refine use cases, clarify sequencing across tiers, and ensure the framework remains responsive to evolving policy and practice needs. These conversations will also inform where philanthropic investment can be most catalytic and how it can best complement public-sector efforts.

The authors look forward to continued engagement as this framework moves from planning to implementation and as opportunities emerge to deepen collaboration in service of a more equitable and effective early childhood system.

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