

Cost Modeling for Early Childhood Special Education and Early Intervention

Cost Model Technical Network 2.0
September 12, 2024



Let's Get to Know Each Other

1. Your name
2. Your organization



Agenda

- Using Cost Modeling to Inform a Funding Formula
 - Sessy Nyman, Autumn Hagstrom, Center for Early Learning Equity
- Cost Modeling for EI
 - Abby McCartney and Alejandra Garcia, Afton Partners

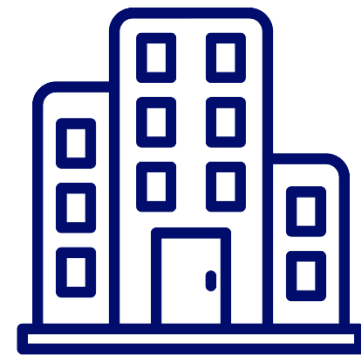
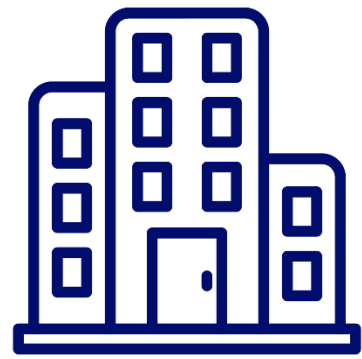


A photograph of two young children playing together. In the foreground, a young girl with long dark hair and yellow hair ties is focused on a yellow toy. In the background, a young boy in a yellow t-shirt with a graphic that says "THE FISHING CREW" and "CRASH!" is smiling and holding a yellow toy. They are surrounded by colorful toys on a table.

Early Childhood Special Education Funding Formula

September 2024

ECSE In Wyoming



IDEA Parts B and C funds run through the WY Dept of Ed

Funds are transferred to the Division of Behavioral Health

BHD Contracts with 14 CDCS

CDCs ensure children receive services

CDCs ensure children receive:


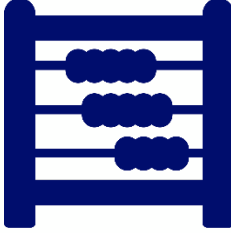










- Developmental Assessments and Screenings
- Coordination of community services and supports
- Speech and Language Therapy
- Physical Therapy
- Occupational Therapy
- Interpretation
- Vision and hearing services
- Assistive technology
- Preschool (Part B)

Defining the Problem

- There is widespread dissatisfaction with the current approach to funding ECSE
- Part B (ages 3-5) presents the biggest funding challenge for CDCs
 - The 'educational/preschool' part of the day for children with an IEP is a significant cost driver and not funded through the formula
 - Scarcity of program 'slots' in any given community can sometimes make it hard to meet the educational needs of children with an IEP; some CDCs provide the slot themselves
- The Jackson area is a cost outlier
- Recruiting and retaining qualified staff is a major challenge due to historically low wages

Wyoming's current approach to funding is not based on actual costs experienced by the Child Development Centers. As a result, state agencies, Child Development Centers, and—most importantly—families often do not have access to the programs and services that meet their individual child's need. Further, consistent under-funding creates ongoing challenges for the Wyoming legislature to allocate additional dollars.

Formula Principles

Old Approach	Guiding Principle	
		Uses an accurate child count
		Allows CDCs to predict how much they will receive on a per-child basis
		Accommodates the complexities of the differing availability and usage of other funding streams (e.g., Head Start, TANF) for the preschool intervention (Part B)
		Driven by the cost of providing services
		Simple to update and consistent with other funding streams
		Reflects the high-quality, inclusive early childhood experiences all children deserve and places families at the center of the work.

Our Approach

The work group used **cost modeling** to develop an equitable and adequate funding formula for Part B and Part C services.



Existing data and reports

Fiscal Profiles, Expenditure and Revenue Analysis, Personnel Survey, BHD Administrative data



Qualitative data collection

Individual interviews with WDE, BHD, CDCs, Head Start
Listening Sessions with Therapists and Teachers

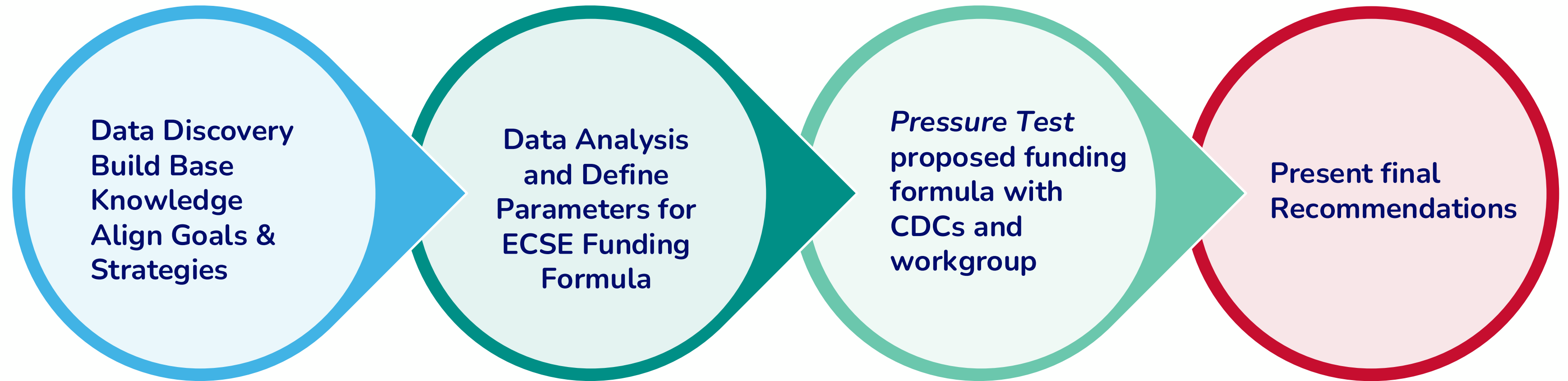


Our own data collection

Questionnaire for all CDCs, BHD, and DOE

Cost modeling allows us to build an **adequate funding formula** by analyzing the cost of high-quality and inclusive services.

Our Process



ECSE financing workgroup engagement/input throughout

Nov - Jan

Feb - Mar

Mar - May

June

Child Count

Wyoming had previously identified the inadequacy of the current child count process, which counts children at a single point in time



Because children are born continuously throughout the year, the total population eligible to be served grows by 20% as additional children are born.

We recommend a **child count completed twice per year** (May 1 and Dec. 1) to better reflect how many children are served through IDEA Part B, C system in Wyoming throughout a 12-month period. We then recommend using a **three-year rolling average of annual counts**, to provide stability over time.

4 Part Formula

Based on our cost analysis, we identified a four-part formula.

Based on current CDC practices:



Child Find

Cost and responsibilities for child find



Free and Appropriate Education

Cost of the education component for Part B children

Based on best-practice for a high-quality program:



Administration

Cost of non-therapeutic and teaching staff
Costs for building, supplies, etc.



Therapeutic and “Push In” Services

Cost of special ed teachers
Cost of SLPs, OTs, PTs, etc.



Child Find

We recommended the cost for administering Child Find be included in formula.



The average cost is estimated at \$82.50 per child for Child Find screening.

$$\begin{array}{ccccc} \text{Cost of} & & \text{Children} & & \\ \text{Screening Per} & \times & \text{Screened} & = & \text{Cost of Child} \\ \text{Child} & & \text{Directly by} & & \text{Find} \\ & & \text{CDC} & & \end{array}$$

Using screening data from BHD, we estimate that about 18% of each region's under-5 population is screened annually (directly by the CDC).

Other children in the state may be screened by pediatricians, school districts, etc. Those screenings would not be included in the formula.

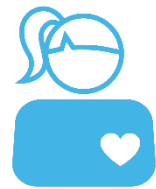
These recommendations are based on actual Child Find cost and screening data.



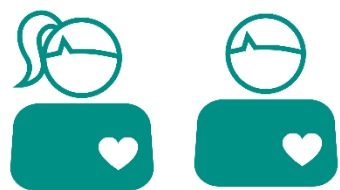
Free and Appropriate Education

Under IDEA Part B, 3—and 4-year-olds are entitled to a **free and appropriate public education**, typically provided through a classroom-based preschool program.

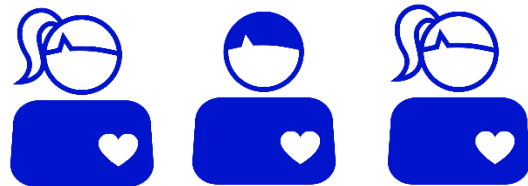
In many states, children with IEPs would typically be enrolled in the state pre-kindergarten program. Because there is no public pre-k in Wyoming, CDCs are responsible to ensure children receive the required educational component by:



Operating Classrooms OR



Purchasing a Slot in a Community-Based Program OR

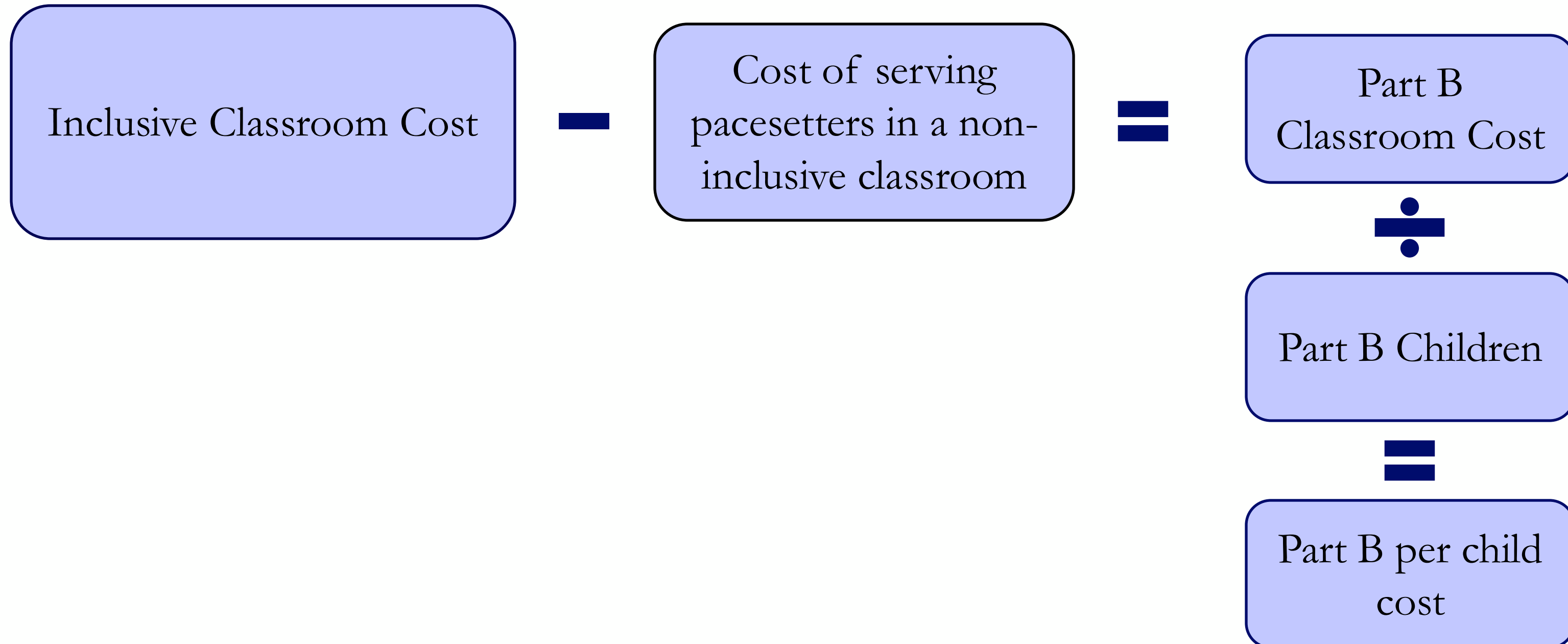


Partnering with Other Publicly Funded Preschool and Head Start Programs



Free and Appropriate Education

Calculating the cost of serving Part B children in an inclusive classroom:





Free and Appropriate Education

During our cost analysis, we found the payment rates and already existing stipend offered by the **Wyoming Child Care Subsidy program** adequately cover the cost of an inclusive preschool classroom.

Half Day, School Year
Inclusive Preschool Program = Current Part-Day
Subsidy Rate + \$250 Monthly Special
Needs Stipend

Full Day, Full Year
Inclusive Preschool Program = Current Part-Day
Subsidy Rate * 2 + \$250 Monthly Special
Needs Stipend

Our Recommendation:

FAPE is funded as a per-child amount using the above formula *only for children whom the CDC either provides or purchases a slot.*

CDCs receive a \$250 per month special needs per-child stipend *regardless* of the environment FAPE is provided in.

These recommendations are aligned with the current cost of preschool AND the current child care funding system.



Administration

Like school districts, CDCs have administrative costs. The proposed formula echoes the School Funding Model's approach to administrative costs.

	CDCs	Districts
Staffing	<p>CDCs need key administrative staff responsible for:</p> <ul style="list-style-type: none">• Ensuring Compliance with IDEA Part B and C• Record Keeping• Fiscal Controls• Administrative Leadership	<p>For districts with less than 500 children, the School Funding Model allocates funding to support the following:</p> <ul style="list-style-type: none">• Superintendent• Assistant Superintendent• Business Manager• 3 Administrative Staff
Non-personnel	<p>There are also costs related to buildings, transportation, supplies, etc.</p>	<p>Districts receive \$451 per child funding for non-personnel administrative costs.</p>



Administration (Staffing)

Our Recommendation:

A funding formula that includes an administrative staffing structure like small school districts in the current school funding formula and the same per-child funding for non-personnel administrative costs.

Recommendations

Small CDC
(Under 200 children)

Director (asst. superintendent salary equivalent)

Business Manager

2 Administrative Staff

Per-child administrative cost (currently \$451)

Large CDC
(Over 200 children)

Director (superintendent salary equivalent)

Business Manager

3 Administrative Staff

Per-child administrative cost (currently \$451)

These recommendations align with and draw on the funding formula for school districts.



Therapeutic Services

CELFE used the BHD Personnel Survey, data on Part B services, and our therapist and teacher listening sessions to understand cost drivers and inform our recommendation:

We calculated an average cost per child for each type of therapy based on:



Prevalence of Services



Competitive market-driven
Therapist Salaries



Desired Caseloads



Best practices for children

These recommendations are based on ideal caseloads and median salaries of therapists in all industries in Wyoming.

4 Part Formula

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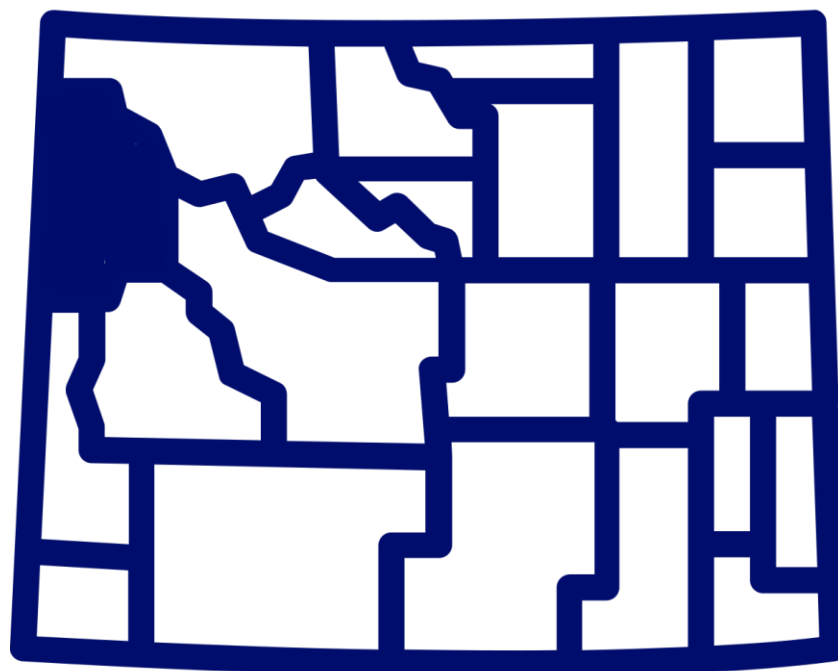
Regional Cost Adjustment

During our stakeholder engagement, we learned that Region 4 faces significant challenges due to the high cost of living in the area, which significantly drives the cost of labor.

Wyoming's K-12 funding formula uses a regional cost adjustment to increase funding for higher cost-of-living areas.

Our formula

Includes a regional cost adjustment based on the school funding formula. The formula allows users to toggle the regional cost adjustment on and off.



Most regions:

0-6% increase

Region 4 (Teton):

43% increase

Proration of the formula

The **therapeutic services** and **administration** costs in the formula:



Reflect the wages CDCs need to pay based on competitive market wages to recruit and retain employees



Supports CDCs to provide high-quality, inclusive early childhood experiences through caseloads that are similar to special education in elementary grades

The resulting cost is substantially higher than the current contracts with CDCs.

Therefore, we developed a proration function in the formula for the state to make adjustments in alignment with available resources.

Our Recommendation:

The funding formula include a proration variable—applied only to the administrative and therapeutic services components of the formula—to allow for incremental increases towards fully funding a high-quality system.

The final result is a dynamic tool

Salary Inputs	Ideal						
	Salary	Benefits	Caseload	Children That Need Service	FTE Per Child	Cost Per Child	Actual Cost Per Child
Special Ed Teachers	60149	\$19,066	15	100%	0.067	\$5,281	\$5,281
Family Engagement Coordinator	60149	\$19,066	15	100%	0.067	\$5,281	\$5,281
Speech Therapists	80920	\$21,851	40	71%	0.025	\$2,569	\$1,824
Speech Therapists Assistants	58940	\$18,904	50	71%	0.020	\$1,557	\$1,105
Ots	83740	\$22,230	30	21%	0.033	\$3,532	\$742
OT Assistants	54790	\$18,347	50	21%	0.020	\$1,463	\$307
PTs	88290	\$22,840	25	6%	0.040	\$4,445	\$267
PT Assistants	58940	\$18,904	50	6%	0.020	\$1,557	\$93
Counselors	63490	\$19,514	25	2%	0.040	\$3,320	\$66
Intepreter	54210	\$18,270	0	0%	0.000	\$0	\$0
	Per Child Funding						
Part B	\$9,686						
Part C	\$9,686						
FAPE Funding							
	Child Care Subsidy	Payment Days					
3 Year Old Half Day Rate	\$20.51	175					
ESY Full Day Rate	\$41.02	220					
	Monthly Amount	Months					
Regular Special Needs Stipend	\$250	10					
ESY Special Needs Stipend	\$250	12					

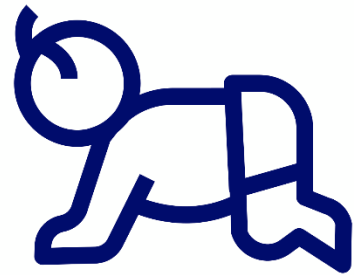
Admin Inputs				
		Small CDC		Large CDC
Director	1	\$81,093	1	\$101,365
Business Manager	1	\$64,557	1	\$64,557
Clerical Staff	2	\$33,456	3	\$33,456
Total Staff				
	Amount			
Social Security	6.20%			
Medicare	1.45%			
Worker's Compensation	0.70%			
Unemployment Insurance	0.06%			
Retirement (Employer Share)	5.00%			
Health Premiums	\$11,000			
Non-Personnel Funding	\$452	per child		

Total Cost

The average per-child spending in Wyoming school districts is \$18,542.

Current Approach

Approx. \$41 million



\$11,297

per Part C child

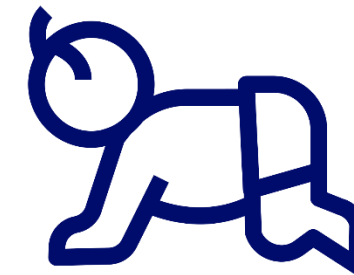


\$12,152

per Part B child

New Formula

Approx. \$53 million



\$11,500

per Part C child



\$17,300

per Part B child

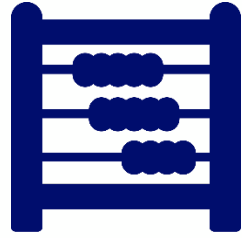
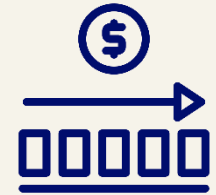




A proration of 70% would bring the total system closer to current spending of \$41 million.

New Child Count Approach

Approx. 77
Additional children

Approx. \$1.5 mil
Additional funding

Formula Principles

Old Approach	New Approach	Guiding Principle
✗	✓	 Uses an accurate child count
✗	✓	 Allows CDCs to predict how much they will receive from the formula
✗	✓	 Accommodates the complexities of the differing availability and usage of other funding streams (e.g., Head Start, TANF) for the preschool intervention (Part B)
✗	✓	 Driven by the cost of providing services
✗	✓	 Simple to update and consistent with other funding streams
✗	✓	 Equitable and reflects the high-quality, inclusive early childhood experiences all children deserve and places families at the center of the work.



Thank you!

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celfe.org



Early Intervention Cost Modeling & Payment Reform

Afton Partners

The specific goals of this project are to:

- **Understand the full cost of the EI System**, including direct services, service coordination and infrastructure, through development of a **cost model**
- **Develop recommendations for a payment structure** that will:
 - Improve the family experience and access to services
 - Improve recruitment and retention of EI providers
 - Incentivize activities that improve the family experience, including training, collaboration, and smooth transitions between services
 - Incentivize serving historically marginalized communities and populations

Over the past year, we've heard from EI practitioners and families more than **1,300 times** through a variety of community engagements.

EI Focus Groups

- Practitioner focus groups were held in November and December 2023, engaging **310 EI practitioners.**
- Family focus groups were held in January and February 2024, engaging **107 EI parents and caregivers.**

Cost Survey

- **707 EI practitioners** responded to the EI Cost Survey in February and March, providing input on payment reform priorities and sharing their cost data.

Time Use Study

- **237 EI providers** participated in the EI Time Use Study in February and March to track their daily time use and provide data on billable time for EI providers.
- Providers also had the opportunity to attend a reflection session for continuing education credit.

EI Workforce Workgroup

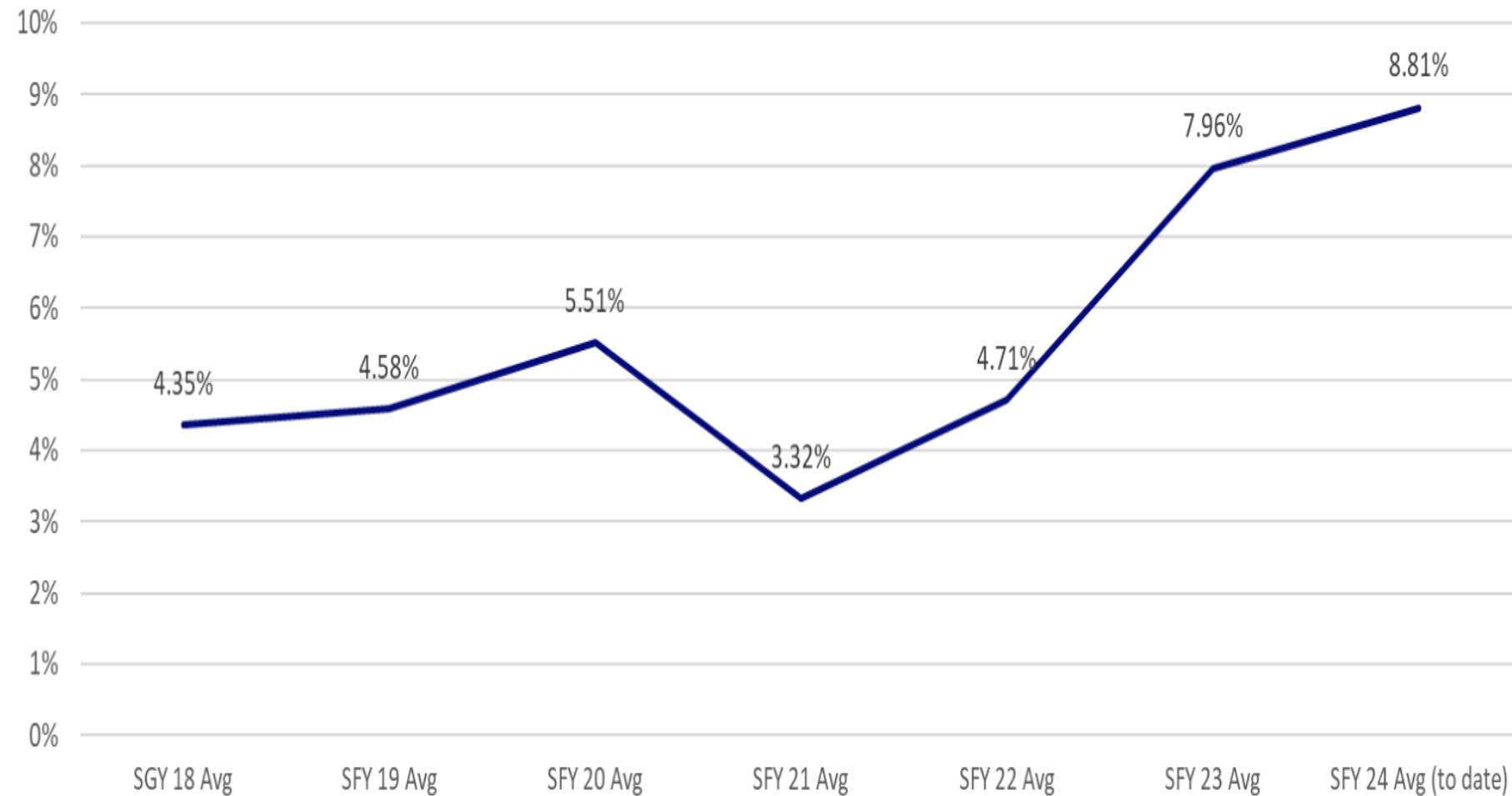
Current State of EI in Illinois



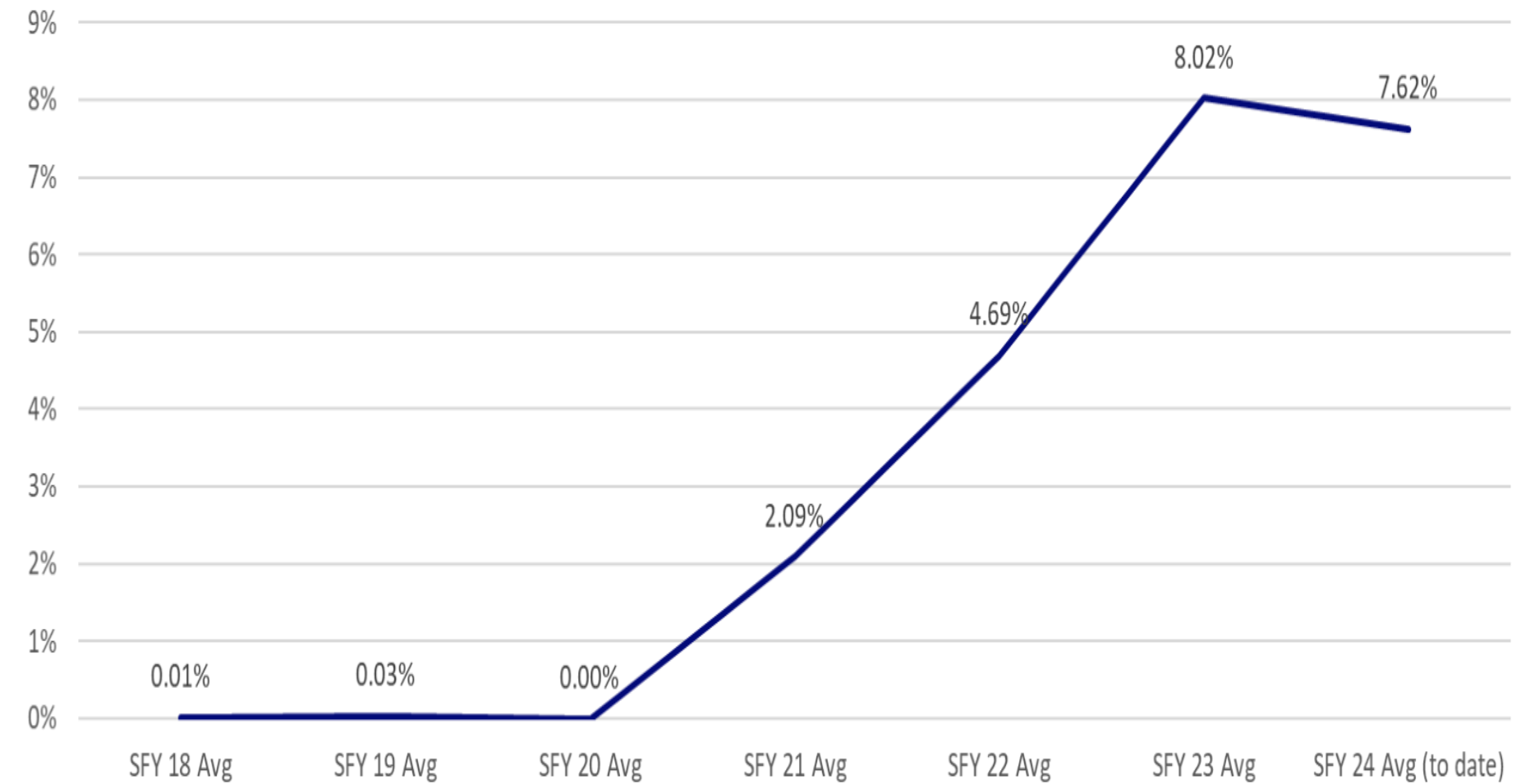
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Families are struggling to access services in a timely manner, with service and intake delays reaching 5-year highs in 2023.

El Service Delays (SFY 2018-2024)



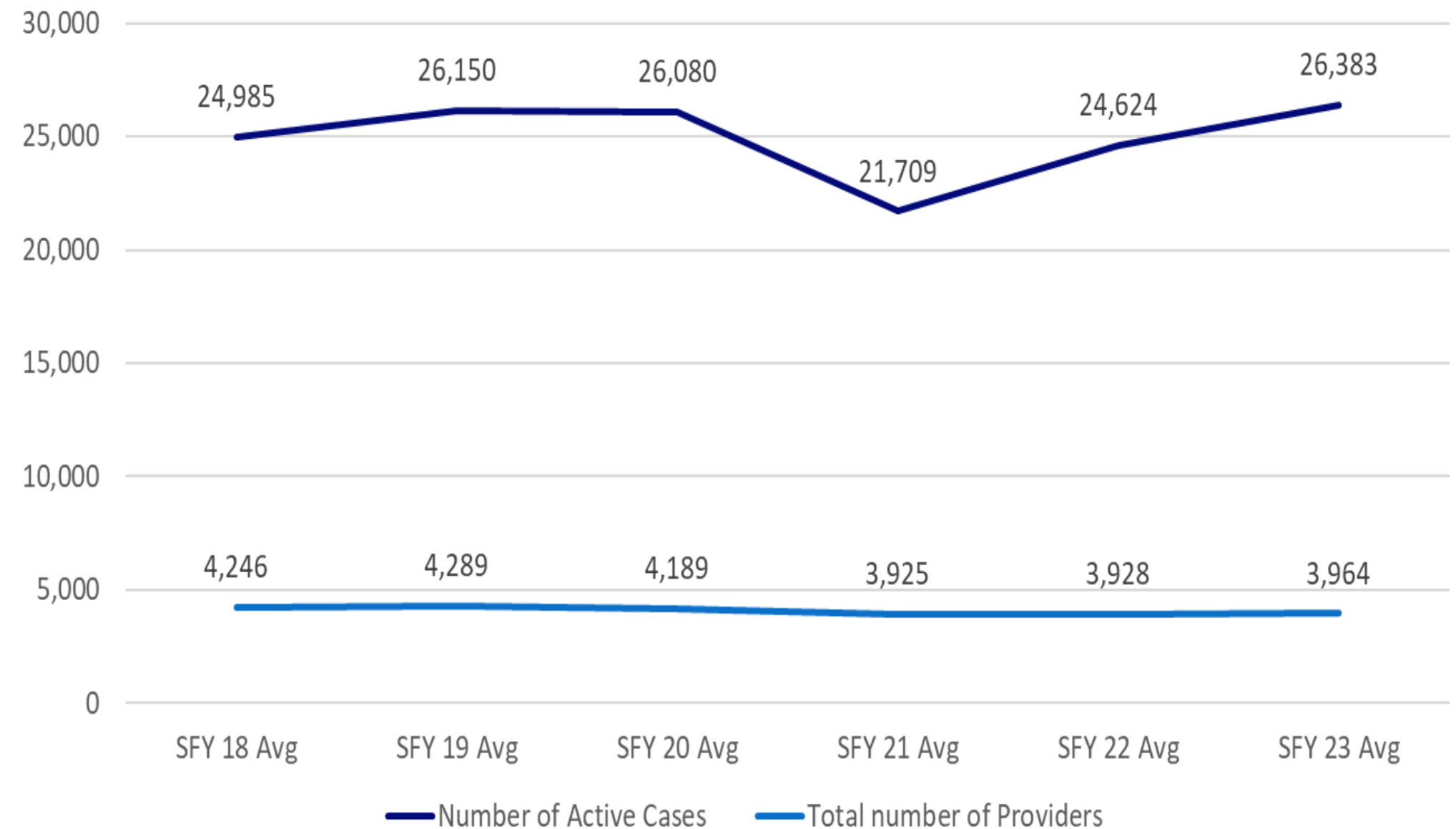
El Intake Delays (SFY 2018-2024)



The number of active providers has declined by over 6% since 2020, while active cases have increased by more than 5%.

"If you're a small mom and pop like you and me, people think we can keep the business running but I don't know how much you really can... I lost more than 50% of [my providers]. **They just left EI because they're getting better wages and salaries in other areas,** whether it's a nursing office, hospital clinics, when there's a school system, everywhere else... [providers] are getting better wages." - EI Agency owner, Chicago area

Total Providers vs Number of Active Cases (SFY 2018-2023)



Provider reimbursement rates are significantly below those in other states, including in those with similar living wages.

State (Highest to Lowest Reimbursement)	Speech Language Pathologist	Occupational Therapist	Physical Therapist	Developmental Therapist/ Educator
VA	\$150	\$150	\$150	\$100
AZ	\$133-\$199	\$133-\$199	\$133-\$199	\$96-\$144
IN	\$118	\$133	\$140	\$86
CT	\$120	\$120	\$120	\$120
NJ	\$112	\$112	\$112	\$95
UT	\$103-\$108	\$127-\$130	\$127-\$130	\$74-\$78
NY*	\$90-\$111	\$90-\$111	\$90-\$111	\$86-\$106
KY	\$89	\$89	\$89	\$89
MO	\$85	\$85	\$100	\$75
IL	\$85	\$85	\$85	\$67
OH	\$72	\$87	\$87	(none reported)

**New York provides rates for “basic” and “extended” services. Extended services are defined as one hour or more, comparable with the hourly rates presented for the rest of the states in this chart.*



**DIVISION OF
EARLY CHILDHOOD**

Source: Ted Burke, “Early Intervention Recommendations: Improving Service Coordination and Early Intervention Provider Services in Illinois”



When families do access services, they overwhelmingly feel EI providers are high quality and meet their families' needs.

“I love all of our providers... My husband and I call them the Dream Team. We feel very blessed... **It feels as though they are genuinely invested in our family and my daughter** and I'm so grateful.”

- EI Parent, Normal, IL

“My team is AMAZING. All three are moms, which I think helps... Since they come to our home, they are able to interact with my daughter and me and answer all my questions. **I cannot think of anything needing improvement - they are knowledgeable, communicative, and amazing.**” - EI Parent, Skokie, IL

Aligning Rates and Grants to Real Costs



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Over the past year, we've heard that provider and service coordinator compensation is too low, making it difficult for EI to recruit and retain practitioners.

This directly impacts families, who are experiencing delays and other challenges:

"If you don't get on this early, you could have a 1.5-year-old and maybe not be seen until your kid turns 2. And then you have very little time left to utilize these services, so it's very hard and disheartening... Within our county **[people] are having challenges getting the therapy that they need through EI because of the wait list** and ultimately, they are then going to private centers or providers." - EI Parent, Frankfort, IL

"My service coordinator was a nice person, but it was obvious at times that **her caseload was too heavy**. She was getting our kids mixed up with other kids and there were meetings that should have been scheduled that were missed altogether... If somebody can make those loads a bit lighter just so communication flows better and more easily, that will improve the relationship." – EI Parent, Peoria, IL

What would it take to adequately compensate EI direct service providers?

1

Align base pay to market.

2

Pay providers for the true amount of time that it takes to provide services.

3

Account for cancellations.

Help
is here



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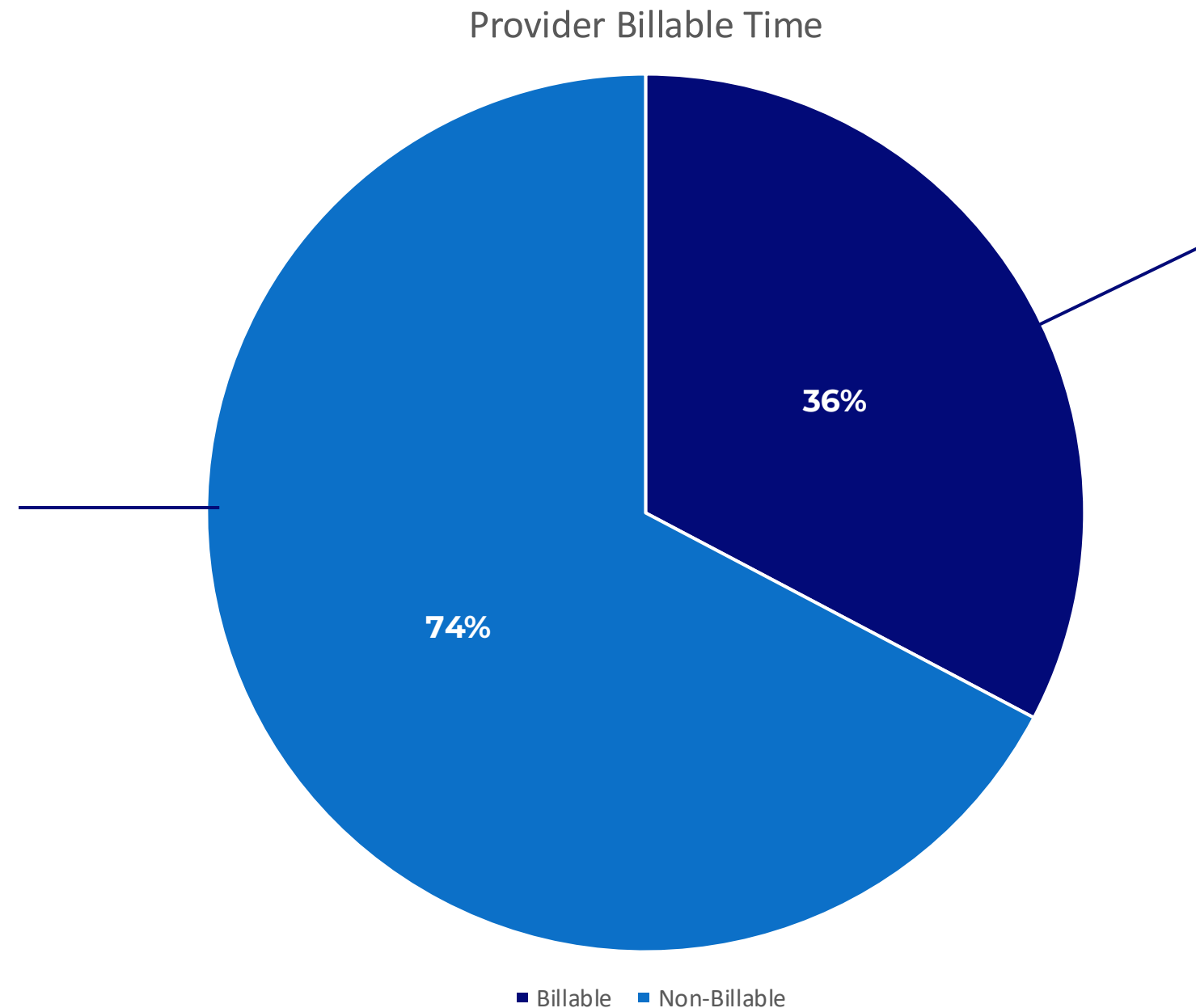
Cost Modeling for Fee for Service Payment

- In Illinois, EI services are paid for by a **fee-for-service model**, like health care services
- Direct service providers can bill for time spent with the child (conducting an evaluation, providing services, etc.) or IFSP development
 - Cannot bill for time spent traveling to appointments, preparing, scheduling, writing reports, etc.
- The **billable rate** must account for all these other activities
- To understand billable vs. non-billable time, we conducted a **time use study**
 - Asked participating providers to track their time spent on EI activities in 15 minute increments for 10 days in a 4-week period
 - Collected info on caseload, virtual appointments, cancellations, etc.

On average, approximately 36% of providers' time is billable.

Non-Billable Tasks

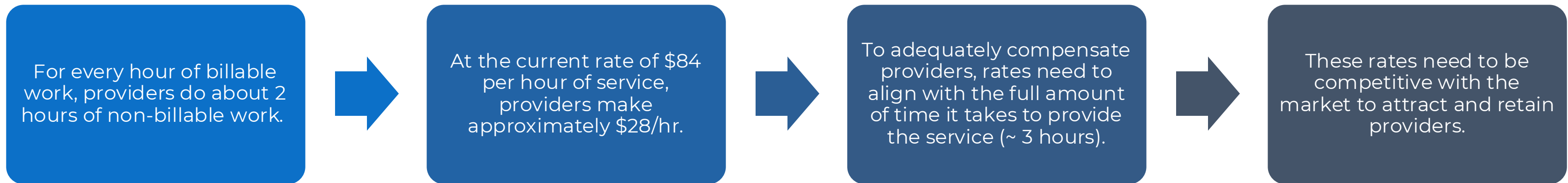
- Travel
- Documentation and reporting
- Communicating with families
- Preparation and planning
- General administrative tasks
- Billing
- Time spent on cancelled appointments (~20% of appointments)



Billable Tasks

- Providing services to children/families
- Conducting evaluation appointments
- Participating in IFSP meetings

To adequately compensate EI providers, the billable rate needs to cover the full time it takes to provide a service.



A cost model was developed to inform rates that would provide adequate compensation, considering:

Wages/ Compensation

- Differentiated by role & specialty
- Options: Bureau of Labor Statistics, Education Level (median wages for workers with a master's or bachelor's degree), and "custom" wages option

Hours Worked

- Based on time use study
- Billable percentage is used to translate compensation into the rate per service needed to reach desired compensation

Benefits & Taxes

- Payroll taxes (different for agency and self-employed)
- Retirement
- Health insurance

Non-Personnel Costs

- Includes costs such as rent/facilities, travel, supplies, licensing fees, etc.

Example of translating competitive wages to costs per service: *Self-Employed Physical Therapist*

Expense	Cost Per Hour Worked	Notes
Wages/Salary	\$50.31	BLS salary for a PT: \$104,640
Taxes and Benefits	\$12.95	
Non-Personnel Costs	\$7.12	Annual costs divided by annual hours worked
Total Cost Per Hour Worked	\$70.37	
<i>Percentage of Time</i>	<i>34%</i>	

Example of translating competitive wages to costs per service:

Speech Therapist at an Agency

Expense	Cost Per Hour Worked	Notes
Wages/Salary	\$42.27	Median wage for a Speech Language Pathologist in Illinois: \$87,922
Taxes and Benefits	\$8.80	
Agency Admin Personnel	\$7.07	Annual costs of agency director and admin staff, divided by annual hours worked
Non-Personnel Costs	\$2.65	Annual costs divided by annual hours worked
Total Cost Per Hour	\$60.79	

Draft for discussion, subject to revision

Comparison of Cost Per Service to Current Rates

Using a weighted average of self-employed and agency costs, with wages benchmarked to BLS salaries for Illinois:

Service	Current Rate Per Hour of Service	True Cost Per Hour of Service	Percentage Difference vs. Current Rates
Audiologist*	\$ 53.51*	\$ 166.06	210%
Developmental Therapist	\$ 66.80	\$ 145.56	118%
Occupational Therapist	\$ 84.64	\$ 176.18	108%
Physical Therapist	\$ 84.64	\$ 188.85	123%
Psychologist	\$ 100.72	\$ 198.78	97%
Social Worker	\$ 65.12	\$ 127.57	96%
Speech Language Pathologist	\$ 84.64	\$ 163.89	94%
Nutritionist	\$ 122.64	\$ 128.75	5%
Interpreter / Translator	\$ 63.04	\$ 89.30	42%

**Audiologist rate is an average across all types of claims billed by audiologists*

Lessons Learned

- Fee for service structure requires a different approach in cost modeling
- Qualitative discussions in focus groups were key to understanding challenges and developing data collection methods that addressed the most important questions
- Time use study provided a valuable source of real-time information, with some limitations
 - Sample sizes were small for specific groups of providers or types of services, such as virtual
 - Reflection sessions were valuable for understanding the data and allowed us to offer continuing education credit to participating providers
- EI workforce has a very different profile than other early childhood fields, with most providers having an advanced degree and significant earning potential in related fields (e.g. health care)
 - Growth and diversification of the workforce is a significant need
- Rates are one important component to addressing EI workforce challenges, but not sufficient on their own

Additional Resources

- Additional research and recommendations for the EI system in Illinois are available at:
<https://providerconnections.org/research-and-initiatives/>
- Additional information on EI nationally:
 - [Prenatal-3 Policy Impact Center](#)
 - [Infant-Toddler Coordinators Association](#)
 - [New America Early and Elementary Education](#) – blog post series on EI

For additional questions or information, contact Abby McCartney at amccartney@aftonpartners.com

Questions?

