



Cost Study of the Early Childhood Education and Assistance Program: Final Report

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Executive Summary

This report summarizes the 2020 Preschool Cost Study of Washington's Early Childhood Education and Assistance Program (ECEAP), Washington's pre-kindergarten program that prepares 3- and 4-year-old children furthest from opportunity for success in school and in life. ECEAP focuses on the well-being of the whole child by providing comprehensive education, health and family support services to the most vulnerable of Washington's young children – those in intense poverty, experiencing complex trauma or both.

Measuring the true cost of care for early childhood programs like ECEAP is challenging, as there are many factors that impact cost and reporting cost data is a complex and time-consuming undertaking for programs. A cost survey is a useful method for obtaining some of the information required to better understand the cost of care, but surveys are limited in their ability to fully capture, on their own, how costs vary across many different program characteristics and contexts. Rather than being the sole source of data used for setting rates, data from a cost survey can be combined with data from other sources and methods to inform a broader process for setting rates. The purpose of the cost study of the Washington ECEAP program was to collect data on the costs of delivering high-quality ECEAP services, as they may vary in general by program setting and program model, and to provide a dataset and base cost modeling tool that would enable DCYF (in collaboration with ECEAP stakeholders) to further model how costs may vary by program size, geographic location, teacher compensation levels, allocation of staff time and other program characteristics. This report summarizes the data collected through this study, describes the results of the analysis of the survey data and describes how DCYF can use the results to further model how costs may vary by different program contexts and characteristics.

Review of Preschool Programs in Other States

A review of preschool program requirements and spending in other states was conducted as part of the cost study, drawing primarily on the annual preschool report published by the National Institute for Early Education Research (NIEER; Friedman-Krauss et al., 2020) along with additional data sources where needed to complete the analysis. The state comparison provides information from other state preschool programs with similar characteristics to ECEAP to allow the DCYF to view policy options within the context of other states (Alabama, Connecticut, Louisiana, New Jersey, New Mexico, New York, Oklahoma, Oregon and Pennsylvania). The state comparison found that:

- After adjusting for regional price differences, the **total per-pupil preschool spending of approximately \$8,969 from all sources for Washington's ECEAP program is eleventh among all states**, when both state and federal funds are taken into account. Among peer state programs, only three (NJ, OK and OR) spend more per child.
- Among the peer states reviewed, only Oregon's preschool program **offers the type of comprehensive service model** that ECEAP provides, spending approximately \$10,140 per child (13% more than ECEAP).

- Detailed **information is not available for how peer states determine their per-child rates**; however, Oregon is the only state that has explicitly reported using a cost-analysis method (cost of quality calculator) to determine rates.
- Labor costs are typically the most significant cost that preschool programs encounter, but Washington's **ECEAP rates may not reflect the variation in labor costs** by region.
- In Washington, as in most states in the comparison group, the **preschool compensation/parity policies are determined at the local level**. Within the mixed delivery model, there is no standard state-wide policy requiring that preschool staff be compensated in parity with public school teachers. The state review revealed that Alabama is the only one of the states in the comparison group with a mixed delivery model that has this parity requirement. Multiple programs require parity for preschool teachers in public schools, including New Jersey, New Mexico, and Oklahoma.
- Key drivers of personnel costs are widely understood to include group size and staffing ratio standards, as well as teaching staff qualifications. The state review highlighted that **group size and staffing ratio for Washington ECEAP classrooms are similar** to those in most of the states in this comparison group.
- Most of the states reviewed **require a bachelor's degree with early child specialization** for lead teachers. While Washington only requires an associate's degree, it is important to note that 41% of lead teachers in ECEAP classrooms exceed this requirement, with either a bachelor's or master's degree (DCYF, 2019). It is also important to note that when considering the threshold at which to set educational requirements, states must consider both the costs required to recruit and retain teachers with the required degree and the capacity of institutes of higher education to produce a supply of educators with the required degree.

Cost Study Approach and Key Findings

The cost study was conducted as an online survey of current contracted ECEAP providers statewide, from April through mid-September 2020. The survey collected data on staffing, program costs, and estimates of staff time allocated for each ECEAP program standard area. Respondents were also asked to describe their fiscal challenges in operating the ECEAP program. The study team provided technical assistance throughout the data collection window, including two overview webinars, an FAQ document, and an inquiry inbox for individual questions, as well as extensive follow-up to clarify and validate ambiguous or incomplete responses. The final survey response yielded at least partial data from a total of 136 sites out of 386 sites invited to respond, representing 35% of all sites.

Key findings of the survey included:

- Per pupil **costs are estimated at levels that are above ECEAP reimbursement rates** for both community-based and school-based programs for both part-day and school-day program models.
- **Costs for community-based programs were consistently higher than costs for school-based programs**, due in part to having more staff and higher facility and maintenance

costs. Further exploration of the data is required to identify potential reasons for this difference, but possible explanations are that schools bring economies of scale in administering the ECEAP program and that schools may not have fully captured the costs of services funded by sources outside of the ECEAP contract.

- **Compensation levels tend to be higher for school-based programs than community-based programs**, with the exception of assistant teachers and program directors.
- For both school-based and community-based programs, **wages among the programs responding to the survey are higher in urban areas than in rural areas**. This finding is consistent with wage data reported by the Department of Labor for preschool and child care staff (U.S. Department of Labor, 2019).
- The study found a strong, positive and **significant relationship between salaries and the length of time teachers and assistant teachers have been with an ECEAP program** in both community-based and school-based programs.
- Labor costs are typically the most significant cost that preschool programs encounter, but Washington's **ECEAP rates may not reflect the variation in labor costs** by region.
- **ECEAP contractors and sites identified multiple challenges related to implementing ECEAP**, including challenges in maintaining staffing requirements, maintaining staff that are effective at managing children with challenging behaviors, funding the additional personnel costs that stem from the McCleary Act/SEBB, the need to subsidize ECEAP programs with other funding sources (e.g., Head Start, school district, or community fundraising), meeting Early Achievers standards, providing cost-effective transportation, and challenges related to the time required for attending to ECEAP documentation.
- Both contractors and sites identified **strategies that they implement to address the challenges**, including use of emergency loans, increasing private tuition for children not in ECEAP, reducing personnel, increasing staffing ratios, reducing material, supply and other operating costs.

This cost study provides a dataset that includes estimates of the cost of delivering ECEAP services that are representative of both community-based and school-based programs. The intended use of the dataset is to inform the development of assumptions for a cost modeling analysis that DCYF will undertake in 2021 (using the dynamic cost modeling tool that was developed as a companion to this study). The cost estimates derived from this dataset should not be used as the sole source for setting future ECEAP reimbursement rates. Rather, the dataset should be used by DCYF (in collaboration with ECEAP stakeholders) to inform model-based estimates (using cost model) of how costs may vary by context and program characteristics, such as program size, geographic location, teacher qualifications and compensation levels, allocation of staff time and other program characteristics.

I. Introduction

This report summarizes the 2020 Preschool Cost Study of Washington's Early Childhood Education and Assistance Program (ECEAP), Washington's pre-kindergarten program that prepares 3- and 4-year-old children furthest from opportunity for success in school and in life. ECEAP focuses on the well-being of the whole child by providing comprehensive education, health and family support services to the most vulnerable of Washington's young children – those in intense poverty, experiencing complex trauma or both. The program is provided without charge to qualifying families, including those with children who have an Individualized Educational Program for special education or children from families with incomes at or below 110% of the federal poverty level (\$28,820).

Based on the Head Start program model, Washington state has one of the few state-funded pre-kindergarten programs in the nation that provides comprehensive services for the specialized population both programs serve. ECEAP works with programs that implement services across the state to support children in their kindergarten readiness, stability in school and to support the day-to-day living needs of families. This two-generation approach increases the overall self-reliance of families and helps to offset the impacts of the complex trauma experienced by many families that participate in ECEAP. The developmentally appropriate and comprehensive approach includes:

- Traditional classroom component that focuses on educational learning for children
- A health and nutrition component that focuses on ensuring that children are healthy and able to be attentive while in school and attend classes more frequently
- A family support component supports parents in setting goals with a focus on increasing parental executive functioning and future-oriented thinking

Services provided through ECEAP are responsive and appropriate to each child's and family's heritage and experience. Children who participate in ECEAP programs learn to manage their feelings, get along with others and follow classroom procedures. They build the beginning skills for reading, math and science. The programs work closely with parents to support their children's health and education and to meet family goals. They also help families access medical and dental care and social services.

ECEAP is funded through the state budget, and currently serves approximately 15,600 children. DCYF contracts with multiple types of organizations to provide ECEAP, including but not limited to school districts, child care centers, educational service districts, community colleges, non-profit agencies, tribal nations, local county governments and city governments. Currently, DCYF has contracts with 55 organizations that manage nearly 400 ECEAP sites across Washington.

ECEAP serves children and families who are furthest from opportunity in the state—the children and families who are most frequently denied educational justice and access to safe and affordable housing and livelihoods. During the 2020-2021 program year:

- 81% of enrolled ECEAP families live at 110% of the federal poverty level or lower
- 87% (13,571) of ECEAP children would be eligible for free lunch
- 94% (14,663) would be eligible for free and reduced lunch

- 27% (4,212) received some sort of child welfare involvement (over a 4 year period of time)
- 66% (10,295) of children enrolled in 2019-20 were children of color
- 13% (2,028) experienced domestic violence
- 20% (3,120) of families reported experiencing mental health issues
- 39% of ECEAP families report an educational level less than high school

The program provides funding of \$8,237 per child for part-day programs and \$10,775 to \$11,776 per child for school-day programs through contracts with both public schools and community-based early childhood programs. There are three program models, including part-day programs that serve children for three hours per day during the school year (no less than 30 weeks), school-day programs that serve children from 5.5 hours to 6.5 hours per day for the entire school calendar, and a workday model that serves children for at least 10 hours per day throughout the entire calendar year.

The purpose of this cost study of ECEAP in Washington was to learn the actual operating costs to providers to sustainably deliver high quality ECEAP services. The findings will position the Department of Children, Youth & Families (DCYF) to demonstrate the budget needed to make ECEAP available across the state. Additionally, it will position DCYF to clearly demonstrate the financial impact of any future changes to ECEAP policies. The study collected demographic, workforce and cost data from 136 (35%) out of the 386 total sites that participate in ECEAP through an on-line survey. The scope of the study included community-based and school-based programs and the part-day and school-day program models. Due to data limitations, the study did not examine costs for family child care programs or the workday program model.

This report provides the results of the analysis of the survey data and describes how DCYF can use the results to model the costs of delivering ECEAP services across different program settings, program models and geographic regions. The report summarizes the results of the study and includes a review of preschool programs in other states, provides an overview of the methodology, details the results of the cost survey, describes how DCYF can use the results to model costs and reimbursement levels, and highlights key policy considerations.

II. Review of Preschool Programs in Other States

A review of preschool program requirements and spending in other state programs was conducted as part of the cost study. The peer state comparison provides information from other state preschool programs with similar characteristics to ECEAP to allow the DCYF to view policy options within the context of other states.

1. Overview and Method

ICF reviewed state-funded prekindergarten programs in other states that have similar characteristics to ECEAP. Programs were selected in nine states that are comparable to Washington state on at least one of the following factors:

Table 1. Selection Criteria

Criteria	Qualifier
Mixed Delivery System	Programs that include both public and community-based settings, such as Head Start, licensed family and center-based child care programs, public schools and other community-based organizations.
Percent of Three and Four-Year Old Children Served	Percent of 3-year old and 4-year old children served in state-funded prekindergarten programs. Only included programs that met or exceeded the percentage of children in this age span that ECEAP serves.
Spending per Child	Estimated amount spent per prekindergarten student served. Included programs with a range of spending amounts per child. Did not include any programs that spend less than 50% of the amount that Washington spends per child on ECEAP.

Table 2. Selection of Peer Programs by State¹

State	Program
Alabama	First Class Voluntary Pre-K (FCVPK)
Connecticut	School Readiness (SR)
Louisiana	Cecil J. Picard LA 4 Early Childhood Program (LA 4)
New Jersey	Abbott
New Mexico	New Mexico PreK
New York	NY Preschool
Oklahoma	Early Childhood Four-Year-Old Program
Oregon	Oregon Prekindergarten (OPK)
Pennsylvania	Pre-K Counts (PKC)
Washington	Early Childhood Education and Assistance Program (ECEAP)

1.1 Criteria Included in Analysis

ICF relied primarily on the extensive annual preschool report published by the National Institute for Early Education Research (NIEER; Friedman-Krauss et al., 2020) along with additional data sources where needed to complete the analysis. The analysis included the following factors:

¹ Several states included in the review have multiple state-funded pre-kindergarten programs. Only those programs that meet the selection criteria were included in the final analysis.

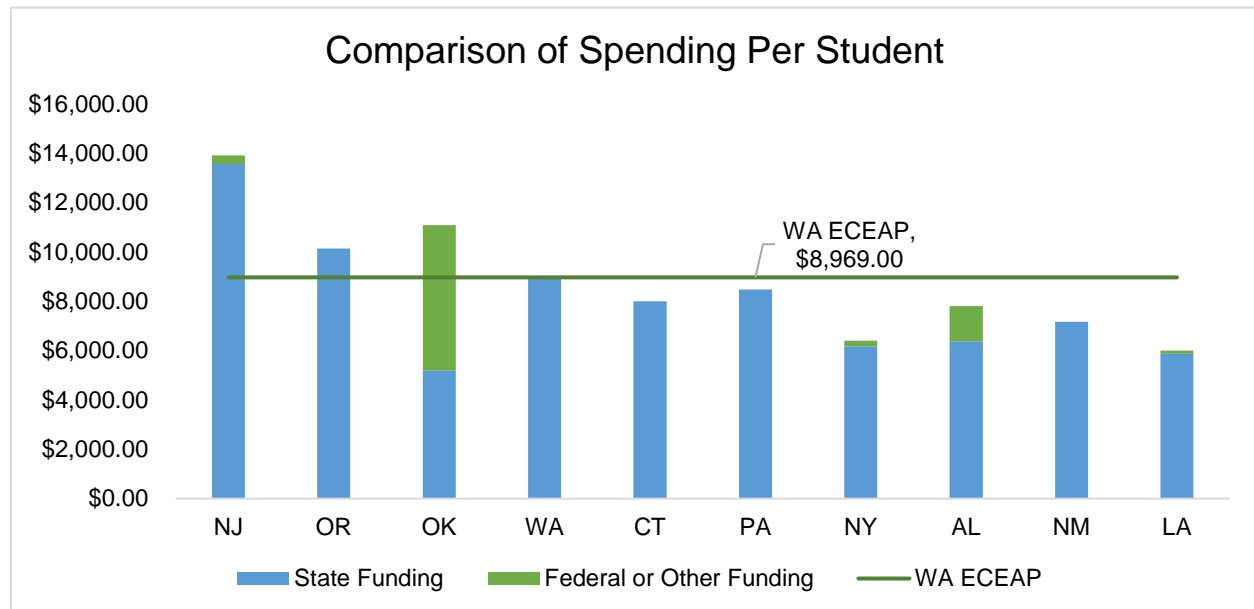
- Pre-K program name
- Setting type
- Total school or center enrollment
- Child eligibility
- Group size standards
- Staff-child ratio standards
- Lead teacher credential standards
- Assistant teacher credential standards
- Compensation policy
- NIEER standards met
- State reimbursement mechanism
- Delivery system (e.g., mixed)
- Maximum per-pupil funding amount
- Methods used for rate-setting

The full review was provided to DCYF in a separate report. Key findings are below.

2. Key Findings of Peer State Preschool Program Review

The study compared total per-pupil spending across all states and among the states included in the peer state analysis. Each state's spending was adjusted to account for regional price differences using the Bureau of Economic Analysis' regional price parity index (U.S. Department of Commerce, B2020). After adjusting for regional price differences, the **total per-pupil preschool spending of \$8,969 from all sources for Washington's ECEAP program is eleventh among all states**, when both state and federal funds are taken into account (Friedmann-Krauss, 2020). Among the states in the peer state analysis, as shown in Figure 1, **total per-child spending for the largest preschool program is surpassed by three of the peer states**, including New Jersey (\$13,900), Oklahoma (\$11,100) and Oregon (\$10,140), as reported by NIEER and adjusted for price parity. When comparing spending data across states, it is important to keep in mind that **multiple factors and cost drivers may influence the amount spent per child**, including the services provided through the program, quality and program standards, regional wages for preschool teachers, required teacher credentials, group size and staffing ratios. It is also important to note that the per-pupil spending reported in this context is based on data as reported by NIEER and is not the same as the per-child reimbursement rate that DCYF pays ECEAP contractors.

Figure 1. Per-Pupil Spending Amount and Comparison to WA ECEAP Spending



Sources: The State of Preschool 2019: State Preschool Yearbook, NIEER; spending adjusted per Bureau of Economic Analysis regional price parity index, relative to WA.

Detailed information is not available for how peer states determine their per-child reimbursement rates. However, Oregon is the only peer state that has explicitly reported using a cost-analysis method (Provider Cost of Quality Calculator) to determine rates.

In Washington, as in most states, the preschool compensation and parity policies are determined at the local level. Within the mixed delivery model, there is no standard state-wide policy requiring that preschool staff be compensated in parity with public school teachers. Alabama is the only one of the states in the review with a mixed delivery model that has this parity requirement. Multiple programs require parity for preschool teachers in public schools, including New Jersey, New Mexico, and Oklahoma.

Most of the states reviewed require a bachelor's degree with early child specialization for lead teachers. While Washington only requires an associate's degree, it is important to note that 41% of lead teachers in ECEAP classrooms exceed this requirement, with either a bachelor's or master's degree (DCYF, 2019). It is also important to note that when considering the threshold at which to set educational requirements, states must consider both the costs required to recruit and retain teachers with the required degree and the capacity of institutes of higher education to produce a supply of educators with the required degree.

Group size and staffing ratio standards for Washington ECEAP classrooms are similar to those in most of the states in this peer comparison group.

III. Overview of Cost Study Methodology

The Cost Study survey and sampling approach were developed with key input from DCYF and a focus group of ECEAP stakeholders.

1. Development of Survey Instrument and Sampling Approach

The survey was designed to gather information on all identifiable costs at the individual site level (location where ECEAP classrooms are located) and at the contractor level (the organization that holds the ECEAP contract and may also provide additional support services to sites) and to estimate the time that staff spent on tasks associated with specific ECEAP program standards. Initial conceptual discussions and survey design were completed in April 2020. A focus group was conducted via webinar with participants from DCYF and several small and large ECEAP contractors to review the survey and garner input on the length and structure of questions. The DCYF team provided input on the sampling approach and outreach methods. A copy of the survey instrument is included in Appendix C.

2. Technical Supports for Survey Respondents

A guidance document accompanied the survey to assist with likely questions about which contractor sites should be included and how to apportion staffing time in various program delivery scenarios. Contractors invited to the survey were told that participation was voluntary but that their participation was strongly encouraged to inform fair and accurate rate-setting.

Webinars were held to preview the survey and brief contractors on what information they should gather to complete the survey. The webinars were recorded and posted online to allow contractors to view later. In addition, a guidance document with a copy of the survey was sent to all contractors, shown in Appendix C. A technical assistance team provided communications and responded to participant questions as needed.

3. Data Collection

The survey was fielded online via Qualtrics to all current ECEAP contractors. Each contractor received a unique link to complete the online survey. Contractors with multiple selected sites received a unique link for each site, for up to 12 sites for large contractors (some contractors operated more than 12 sites but were asked to complete for up to 12 as selected). An identification key was used to keep responses confidential; the response dataset did not include names of respondents or names/location of program sites. The survey was designed to permit respondents to return to complete the information if needed before final submission. In addition, multi-site contractors who had difficulty responding via the online survey format were given the option to complete a spreadsheet version to expedite their reporting. The survey team reviewed and validated the data, including follow-up communications with contractors as needed, and then entered it on contractors' behalf. Data collection was open from May to mid-September 2020 as follows:

- Initial data collection was opened on May 6, 2020. Reminders were sent on May 13 and May 20.

- The COVID-19 pandemic and mandated program closures created significant disruption for programs that complicated data collection and reduced response rates. After initial review of responses received on May 29, the window was extended through the end of June to gain sufficient responses to complete subgroup analyses.
- A second wave of targeted data collection was opened from August 17 to September 15. DCYF program personnel did outreach by email and phone calls to encourage participation by select contractors, just to targeted contractors in underrepresented groups.
- In the final data collection phases, DCYF authorized alternative data collection methods and shifting resources to provide significantly more technical assistance to support ECEAP contractors survey completion and data validation.

4. Summary of Responses

A stratified sampling analysis was developed with the aim of estimating the response needed to conduct subgroup analyses to represent regional variation (rural/urban), a variety of settings (school-based and community-based), and multiple program models (Part-Day, School-Day, and full Working Day), in addition to state-level analyses. The final survey response yielded at least partial data from a total of 136 sites out of 386 sites invited to respond, representing 35% of all sites. Table 3 shows the breakout of all ECEAP sites across the state and Table 4 shows the survey responses by subgroup. In general, the responses received were proportionate to the total number of ECEAP providers in terms of program type, program model and geographic location. The table also provides the associated confidence levels, which is a range of values likely to encompass the true value of the data collected. The confidence intervals shown are based on the total number of responses received for each program type and program model. It is important to understand that the confidence intervals increase and the precision of the cost estimates decreases as the analysis compares different sub-populations within each category – e.g., breaking out responses for a specific program model or program setting by urban and rural areas or analyzing responses to questions that may have missing or unusable data variables.

Table 3. Summary of ECEAP Sites

Region and Provider Type	Total Sites: Part-Day	Total Sites: School-Day	Total Sites: Working Day	Total ECEAP Funded Sites
	N	N		N
Urban	250	84	8	342
Community-Based	88	52	7	147
Family Child Care	4	0	1	5
School-Based	158	32	0	190
Mostly or Entirely Rural	34	10	0	44
Community-Based	11	6	0	17
Family Child Care	1	0	0	1
School-Based	22	4	0	26
Grand Total	284	94	8	386
Community-Based Settings	99	58	7	164

Family Child Care Settings	5	0	1	6
School-Based Settings	180	36	0	216

Table 4. Survey Responses

Region and Provider Type	Part-Day	School-Day	Total ECEAP Funded Sites
Urban	86	28	114
Community-Based	26	17	43
School-Based	60	11	71
Mostly or Entirely Rural	16	6	22
Community-Based	6	4	10
School-Based	10	2	12
Total for All Settings	102	34	136
Community-Based Settings	32	21	53
School-Based Settings	70	13	83
Confidence Intervals (95% Confidence Level)			
All Settings	7.7%	13.5%	6.7%
Community-Based	14.3%	17.2%	11.0%
School-Based	9.2%	22.0%	8.5%

* Includes two working day sites that were received and included in the analysis for the school-day model.

Note: ECEAP Cost Survey, October 2020

5. Data Adjustments and Imputations

Upon the completion of data collection, several steps were taken to prepare the dataset for analysis. The study team conducted a quality review of the data to identify any anomalies that required follow up with programs that submitted surveys. When possible, the anomalies were corrected and the related survey record was maintained in the analysis dataset. If the anomalies could not be corrected the affected data elements or survey records were removed from the dataset. The team removed outliers for key data points, including salary data and cost data, if they were outside of 2.5 standard deviations from the mean. Finally, the team prepared imputed values for 18 sites that had salary and benefit data that exceeded the expected values, based on a comparison of the cost data provided and the estimated values based on the staffing and enrollment data provided. The team prepared an estimate of the total expected salary costs for each program in the final survey dataset, based on the salary data provided for each staff position and the percent of time allocated to ECEAP for each position. Whenever, the total salary costs entered in the survey exceeded 25% of the estimated salary costs, the survey records were reviewed and the original survey values for salaries were replaced with the estimated values. In those instances, the benefit costs were also updated, to reflect 37% of the total wage costs (the average spending on benefits as a percentage of salaries in the dataset).

6. Study Limitations

This study has several limitations that are important to consider when reviewing the findings and when using the data from the study to inform cost modeling. Key limitations include:

- The COVID-19 pandemic disrupted data collection significantly. Despite extending the data collection period until the middle of September, as described above, the pandemic continued to disrupt program operations and is likely one of the key factors that resulted in survey response rates that were lower than the originally planned targets.
- While the survey responses were representative of different program types, program models and geographic locations, the relatively small sample size limits the precision of the estimates derived from the data. In particular, caution should be used when reviewing the estimates for school-day sites for school-based programs. Additional data collection may be necessary in order to more accurately inform a cost model analysis in this area. Additionally, the sample is not sufficient to allow analysis of cost variations by subgroups (e.g., program enrollment size, geographic location) within a program type or program model.
- The survey relied upon self-reported data. Each program selected to participate in the survey received a user guide that recommended an approach for collecting and entering the data requested in the survey. It also provided guidance on which types of staff to engage for different survey sections. Additionally, programs had the opportunity to participate in two technical assistance webinars and had access to one-on-one technical assistance to support data collection. Despite the efforts made to ensure accuracy and consistency of data entry, there may be some degree of error in the data collected. As described above, some data adjustments and imputations were made to the data based on follow up communications with providers where clarification was needed, or to address apparent discrepancies.
- While programs were asked to report all costs (including those funded through ECEAP and those from other sources) associated with implementing ECEAP for each site selected to participate in the survey, the ability to track and report costs for specific sites varied across programs. Additionally, programs that operate multiple sites may have applied different methods to allocate contractor-level costs to each site. As a result, the degree to which the data reported capture the actual full cost of providing ECEAP services may vary across the responses received.
- Programs were asked to estimate how staff members allocate their time across different groups of ECEAP standards. Due to the timeframe available for data collection, the survey asked programs to estimate how staff allocated their time retrospectively. As a result, there may be variation in how the data were reported and how accurately they reflect the actual allocation of staff time.

The limitations described above are similar to the limitations found in other surveys of preschool and child care costs

IV. Results of Survey

1. Community-Based Programs

1.1 Staffing and Salaries

The study examined data on staffing data across ECEAP programs. The staffing section of the survey was designed to reflect feedback from a focus group that indicated that staffing configurations vary significantly and that the survey would need to provide programs with the ability to enter data for staff located on site, as well as staff working at the contractor level to provide support services to ECEAP sites. The survey asked each program to identify all staff involved in delivering ECEAP services, including both site and contractor-level staff. Programs could create their staff roster by either selecting from a drop-down menu that listed the positions commonly associated with ECEAP or they could enter a specific position description used by their program. For each position, the survey asked programs to identify the salary as of February 2020, whether the position was eligible for benefits, the average total hours worked, and the length of time the person in the position had worked with the program. To simplify reporting and to facilitate using the data in future cost modeling analyses, the analysis assigned each position to one of eight categories for staff at the site level, as illustrated in Table 5, and into one of five categories for staff at the contractor level, as illustrated in Table 6.

Table 5. Summary of Staff Positions – Site Level

Position Category	Examples of Positions Selected or Entered into Survey
Lead Teacher	Lead Teacher
Assistant Teacher	Assistant Teacher, Paraeducator, Floater Paraeducator, Educational Assistant, Temporary Classroom Assistant,
Director	Site Director
Assistant Director	Assistant Site Director
Coaching & Program Support	Early Childhood Specialist, Early Learning Coach, ECEAP Coach, ECEAP Health Manager, Individualized Support Teacher, Itinerant Family Support Specialist, Family Support Manager, Family Support Staff, Child Development/Education Manager, Mental Health Consultant, Nutrition Consultant, Psychologist, School Readiness Consultant, Speech Pathologist
Administrative Staff	Administrative Assistant, Accountant, Attendance Clerk, Data Entry Clerk, Data Entry Specialists, Fiscal Specialist, Finance Manager, Human Resource Coordinator, Office Manager, Operations Coordinator, Secretary, Transportation Manager,
Other Classroom Staff	Other Classroom Staff, Aide, Substitute
Support Staff	Other ECEAP Staff, Assistant Cook, Cook, Bus Driver, Custodian, Bus Monitor, Kitchen Aide, Transportation Assistant,

Table 6. Summary of Staff Positions – Contractor Level

Position Category	Examples of Positions Selected or Entered into Survey
ECECAP Director	ECEAP Director
Assistant ECEAP Director	Assistant ECEAP Director
Coaching & Program Support	Early Learning Manager, Early Childhood Specialist, Early Learning Mentor, ECEAP Coordinator, Education Coordinator, Family Services Coordinator, Health Consultant, Mental Health Specialist, Nutrition Consultant, Regional Director
Administrative Staff	Data Entry Assistant, Fiscal Assistant, Fiscal Manager, Grants/Contracts Coordinator, Information Specialist, Human Resource Assistant, Human Resource Manager, Operations Staff, Operations Coordinator, Secretary, Transportation Director
Support Staff	Bus Driver, Cook, Preschool Compliance Specialist, Maintenance Services Coordinator, Nutrition Assistant, Program Assistant, Interpreter, Custodian, Bus Monitor, Kitchen Aide, Transportation Assistant, Transportation Facilities Manager

The study examined the salaries that community-based ECEAP providers pay their staff at the site level, as shown in Table 6, and also at the contractor level, as shown in Table 7. The tables also show the percent of staff eligible for benefits and the average hours worked in total across all programs (including both ECEAP and non-ECEAP). The study also examined how salaries vary between urban and rural regions, as illustrated in Table 8.² Appendix A provides tables that break the staffing data down further by part-day and school-day. Programs were asked to report salaries as of February 2020 to account for salary increases that programs may have made in response to the McCleary Act/SEBB. In reviewing the salary data, it is important to understand that the data represent the actual wages paid, and may or may not be considered equal to a normative wage level that facilitates the attraction and retention of staff qualified for successful implementation of ECEAP program objectives.

As illustrated in Tables 7 and 8, salaries tend to be higher for positions funded at the contractor level than at the site level. For all positions, except support staff, salaries in urban locations are higher than salaries in rural locations, as illustrated in Table 9. When reviewing and using the data from these tables, caution should be used when the estimates are based on small samples sizes. Combined, the staffing data presented in this section and in Appendix A can inform the staffing assumptions that DCYF uses to model the cost of providing ECEAP. DCYF could use salary estimates, in conjunction with data from the U.S. Department of Labor’s Occupational Employment Statistics reports, to inform the development of assumptions for the wages that may be used in a future cost modeling analysis. If wages for some positions are considered insufficient to attract and retain qualified staff, DCYF could use the survey data or data from the Department of Labor to set wages in the model at higher percentiles of market wages.

² Due to small sample sizes for some positions, salary data for sites and contractor staff were combined for this table.

Table 7. Summary of Staffing – Site Level Staffing for All Community-Based Programs

Positions	n	Average Salary	Percent Eligible for Benefits	Average Hours Weekly
Lead Teacher	88	\$ 35,317	77%	39
Assistant Teacher	94	\$ 26,279	68%	36
Site Director	8	\$ 71,316	63%	40
Assistant Director	17	\$ 40,396	59%	39
Coaching & Program Support	100	\$ 30,410	60%	35
Administrative Staff	70	\$ 45,035	73%	37
Other Classroom Staff	45	\$ 20,765	53%	29
Support Staff	77	\$ 25,364	61%	33

Note: ECEAP Cost Survey, October 2020

Table 8. Summary of Staffing – Contractor Level Staffing for All Community-Based Programs

Positions	n	Average Salary	Percent Eligible for Benefits	Average Hours Weekly
ECEAP Director	25	\$ 61,822	92%	40
Coaching & Program Support	144	\$ 36,973	92%	36
Administrative Staff	26	\$ 49,196	100%	39
Support Staff	49	\$ 25,406	100%	39

Note: ECEAP Cost Survey, October 2020

Table 9. Summary of Salaries for both Site and Contractor Staff - Urban and Rural Areas (Community-Based)

Positions	n	Average Salary: Urban	n	Average Salary: Rural
Lead Teacher	76	\$ 33,822	12	\$ 28,308
Assistant Teacher	81	\$ 26,698	13	\$ 17,455
Director	21	\$ 68,254	12	\$ 57,605
Assistant Director	25	\$ 37,307	2	Excluded Due to Sample Size
Coaching & Program Support	209	\$ 37,440	35	\$ 20,646
Administrative Staff	75	\$ 48,812	21	\$ 33,843
Other Classroom Staff	41	\$ 21,455	8	\$ 16,007
Support Staff	104	\$ 24,121	22	\$ 34,738

Note: ECEAP Cost Survey, October 2020

1.2 Staff Time Allocation

The study also examined how staff allocate their time to meet the different groups of standards associated with ECEAP. As illustrated by the survey instrument in Appendix C, respondents were asked to estimate the portion of time that each staff member spends annually on work connected to each of 22 groups of standards across six domains. Tables 10 and 11 show the percentage of a program year that staff spend on activities within each of the six domains of ECEAP standards for part-day and school-day program models, respectively. The tables also show the average hours that staff spend on activities not related to ECEAP.

Table 10. Annual Staff Hours Allocated to ECEAP Standards by Domain and Position – Part-Day (Community-Based)

Domain	Child Outcomes	Environment	Family Eng. & Partnership	Curriculum	Program Admin. & Oversight	PD & Train.	Non-ECEAP
Lead Teacher	30%	5%	10%	22%	5%	5%	23%
Assistant Teacher	15%	0%	5%	45%	0%	5%	30%
Director	0%	3%	9%	0%	52%	5%	31%
Assistant Director	15%	0%	15%	15%	40%	10%	5%
Coaching & PD	5%	5%	15%	5%	20%	1%	49%
Admin. Staff	0%	1%	2%	0%	9%	2%	86%
Other Classroom Staff	0%	0%	0%	43%	2%	0%	55%
Support Staff	0%	0%	2%	0%	20%	0%	78%

Note: ECEAP Cost Survey, October 2020

Table 11. Annual Staff Hours Allocated to ECEAP Standards by Domain and Position – School-Day (Community-Based)

Domain	Child Outcomes	Environment	Family Eng. & Partnership	Curriculum	Program Admin. & Oversight	PD & Train.	Non-ECEAP
Lead Teacher	42%	1%	7%	35%	5%	5%	5%
Assistant Teacher	54%	0%	5%	25%	4%	5%	7%
Director	1%	5%	10%	0%	54%	8%	22%
Assistant Director	5%	10%	15%	15%	33%	0%	22%
Coaching & PD	9%	5%	12%	6%	22%	0%	46%
Admin. Staff	1%	3%	10%	0%	40%	1%	45%
Other Classroom Staff	25%	10%	0%	40%	2%	0%	23%
Support Staff	0%	5%	10%	0%	40%	0%	45%

Note: ECEAP Cost Survey, October 2020

DCYF can use the data on how staff allocate their time across the different domains of ECEAP standards in multiple ways to inform cost modeling analysis. The standards are cost drivers that impact the level of resources that ECEAP programs must use to meet to carry out the different objectives of ECEAP. DCYF can use the data on time allocation to inform staffing assumptions (number of positions and hours of work required) for a baseline cost model and then adapt that model to examine how the level of effort and required funding levels are affected by strengthening or relaxing specific standards. DCYF should also engage ECEAP stakeholders to review the data from the study and to inform how the assumptions are incorporated into the cost model.

1.3 Program Hours of Operation

The study examined the total hours that classrooms were operating annually by program model. Programs that operate on a part-day schedule are required to operate a minimum of 360 hours and those that operate on a school-day schedule are required to operate a minimum of 1,000 hours per year. Based on an analysis of administrative data on ECEAP programs provided by DCYF, as illustrated in Table 12, most programs tend to operate at or slightly above the required number of hours, with median operating hours of 381 for part-day programs and 1,008 for school-day programs.

Table 12. Program Hours of Operation by Program Model (Community-Based)

Setting and Program Model	N	Median Annual Classroom Hours of Operation
Community Based - Part-Day	30	381
Community Based – School-Day	16	1,008

Note: Based on analysis of ECEAP Administrative Data (March 2020) for the sites that participated in the survey.

1.4 Program Costs

A core part of the study examined the actual cost of providing care. Figure 2 provides the **cost per child of providing ECEAP**, based on the cost data provided through the survey, summarized by program model, including Part-Day and School-Day models. Tables 13 and 14 break out the cost per child by major cost categories for part-day and school-day models, respectively. Tables B.1 and B.2 in Appendix B provide additional detail from the survey results.

In reviewing the cost data, it is important to keep in mind that the results only present the median cost values for each program model. The results do not explore variations that may exist across programs with different characteristics, such as program size, geographic location, or contractor model. The sample sizes are not sufficient to allow a comparison of costs broken out by these characteristics. It is also important to keep in mind that programs vary in the way they track and report cost data. While each may report some cost data within each of the cost categories, there may be some overlap in the way programs report cost data across categories, especially for professional services and business expenses. Therefore, Tables 13 and 14 only present cost estimates by major category. DCYF should be cautious in using the more detailed cost estimates in Tables D.1 and D.2 for planning and cost modeling purposes. DCYF can engage ECEAP stakeholders to review the cost estimates derived from the survey and

recommend potential adjustments, based on the professional judgement of the stakeholders. DCYF can use the revised estimates to feed the assumptions for the cost model analysis, which will also allow DCYF to model the cost of care across different program characteristics, such as program size, geographic location, or contractor model.

Based on the data provided by ECEAP programs, as illustrated in Figure 2, the median cost per child across all sites is approximately \$10,600 for Part-Day services and approximately \$13,560 for School-Day services in community-based settings. The most significant cost component is for personnel wages and benefits, which represent approximately 66% of the total costs for part-day programs and 59% for school-day programs. Multiple studies of early childhood costs have found that similar proportions of funding spent on personnel (Institute of Medicine and National Research Council, 2015; Whitebook, et al., 2014). Appendix B provides additional detail on program costs, but again they should be used with caution.

Figure 2. Annual Cost Per Child for Community-Based Programs by Program Model

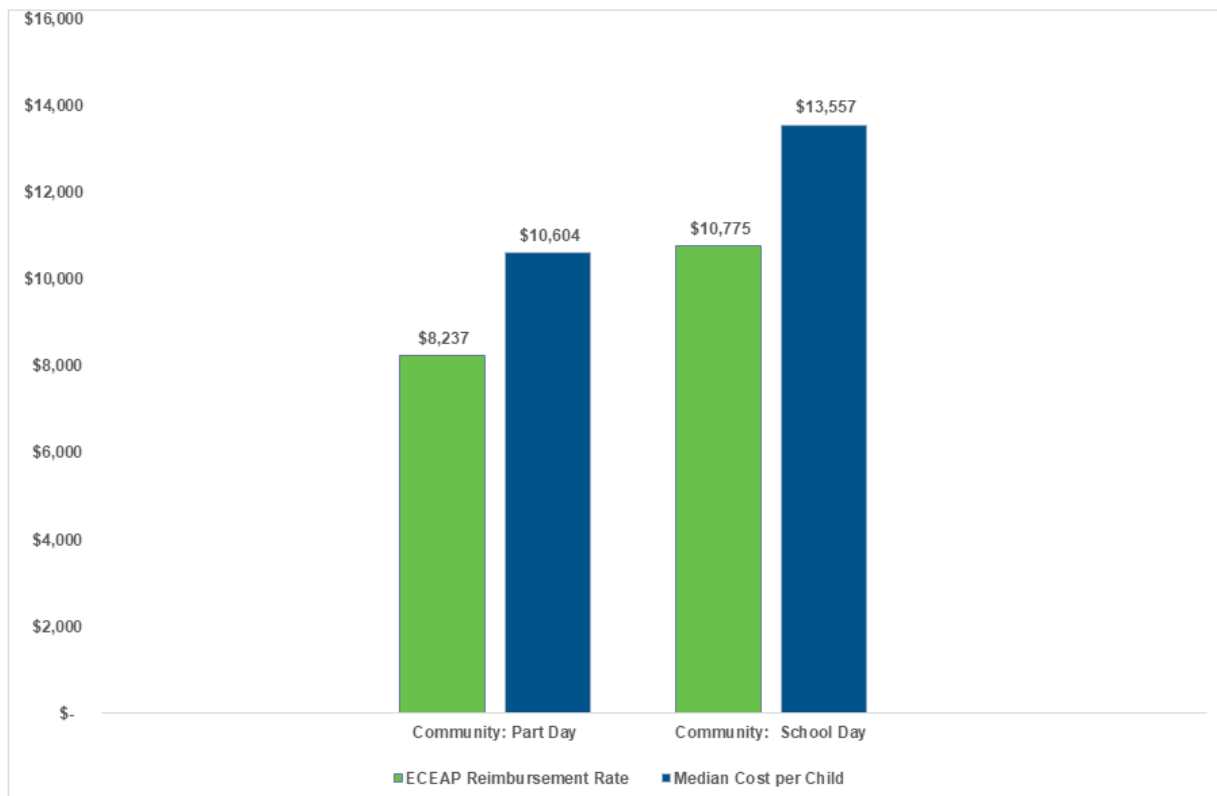


Table 13. Annual Cost Per Child for Community-Based Part-Day Programs

Cost Category	Total Costs
N	24
Median Personnel Costs – Wage	\$ 5,634
Median Personnel Costs – Benefit	\$ 1,354
Estimated Non-Personnel Costs	\$ 3,616
Median Total Cost Per Child	\$ 10,604

Note: ECEAP Cost Survey, October 2020

Table 14. Annual Cost Per Child for Community-Based School-Day Programs

Cost Category	Total Costs
N	15
Median Personnel Costs – Wage	\$ 6,521
Median Personnel Costs – Benefit	\$ 1,441
Estimated Non-Personnel Costs	\$ 5,595
Median Total Cost Per Child	\$ 13,557

Note: ECEAP Cost Survey, October 2020

The study compared the cost of providing care with the ECEAP reimbursement rates. As shown in Table 15, the ECEAP reimbursement rate is lower for both part-day and school-day programs than the actual cost of providing care, based on the data reported through the survey. When compared to the spending levels for Head Start in Washington state, as shown in Table 16, ECEAP costs and reimbursement rates are significantly less.

Table 15. Cost Per Child for Community-Based Programs Compared ECEAP Reimbursement Rate

Setting and Program Model	N	Total Costs	ECEAP Rate
Community Based - Part-Day	24	\$ 10,604	\$8,237
Community Based – School-Day	15	\$ 13,557	\$10,775 to \$11,776

Note: ECEAP Cost Survey, October 2020

Table 16. Cost Per Child for Community-Based Programs Compared to Head Start Spending

Setting and Program Model	N	Total Costs	Head Start Spending
Community Based - Part-Day	24	\$ 10,604	\$10,669 to \$19,130
Community Based – School-Day	15	\$ 13,557	\$10,669 to \$19,130

Note: ECEAP Cost Survey, October 2020

2. School-Based Programs

2.1 Staffing and Salaries

The study examined data on staffing across school-based ECEAP programs. The staffing section of the survey was designed to reflect feedback from a focus group that indicated that staffing configurations vary significantly and that the survey would need to provide programs with the ability to enter data for staff located on site, as well as staff working at the contractor level to provide support services to ECEAP sites. The survey asked each program to identify all staff involved in delivering ECEAP services, include both site and contractor-level staff. Programs could create their staff roster by either selecting from a drop-down menu that listed the positions commonly associated with ECEAP or they could enter a specific position description used by their program. For each position, the survey asked programs to identify the salary as of February 2020, whether the position was eligible for benefits, the average total hours worked, and the length of time the person in the position had worked with the program. To simplify reporting and to facilitate using the data in future cost modeling analyses, the analysis assigned each position to one of eight categories for staff at the site level, as illustrated in Table 17, and into one of five categories for staff at the contractor level, shown in Table 18.

Table 17. Summary of Staff Positions – Site Level

Position Category	Examples of Positions Selected or Entered into Survey
Lead Teacher	Lead Teacher
Assistant Teacher	Assistant Teacher, Paraeducator, Floater Paraeducator, Educational Assistant, Temporary Classroom Assistant,
Director	Site Director
Assistant Director	Assistant Site Director
Coaching & Program Support	Early Childhood Specialist, Early Learning Coach, ECEAP Coach, ECEAP Health Manager, Individualized Support Teacher, Itinerant Family Support Specialist, Family Support Manager, Family Support Staff, Child Development/Education Manager, Mental Health Consultant, Nutrition Consultant, Psychologist, School Readiness Consultant, Speech Pathologist
Administrative Staff	Administrative Assistant, Accountant, Attendance Clerk, Data Entry Clerk, Data Entry Specialists, Fiscal Specialist, Finance Manager, Human Resource Coordinator, Office Manager, Operations Coordinator, Secretary, Transportation Manager,
Other Classroom Staff	Other Classroom Staff, Aide, Substitute
Support Staff	Other ECEAP Staff, Assistant Cook, Cook, Bus Driver, Custodian, Bus Monitor, Kitchen Aide, Transportation Assistant,

Table 18. Summary of Staff Positions – Contractor Level

Position Category	Examples of Positions Selected or Entered into Survey
ECECAP Director	ECEAP Director
Assistant ECEAP Director	Assistant ECEAP Director
Coaching & Program Support	Early Learning Manager, Early Childhood Specialist, Early Learning Mentor, ECEAP Coordinator, Education Coordinator, Family Services Coordinator, Health Consultant, Mental Health Specialist, Nutrition Consultant, Regional Director
Administrative Staff	Data Entry Assistant, Fiscal Assistant, Fiscal Manager, Grants/Contracts Coordinator, Information Specialist, Human Resource Assistant, Human Resource Manager, Operations Staff, Operations Coordinator, Secretary, Transportation Director
Support Staff	Bus Driver, Cook, Preschool Compliance Specialist, Maintenance Services Coordinator, Nutrition Assistant, Program Assistant, Interpreter, Custodian, Bus Monitor, Kitchen Aide, Transportation Assistant, Transportation Facilities Manager

The study examined the salaries that school-based ECEAP providers pay their staff at the site level, as shown in Table 19, and also at the contractor level, as shown in Table 20. The tables also show the percent of staff eligible for benefits and the average hours worked in total across all programs (including both ECEAP and non-ECEAP). The study also examined how salaries vary between urban and rural regions, as illustrated in Table 21.³ Appendix A provides tables that break the staffing data down further by part-day and school-day.

In reviewing the salary data, it is important to understand that the data represent the actual wages paid, and may or may not be considered equal to a normative wage level that facilitates the attraction and retention of staff qualified for successful implementation of ECEAP program objectives. Programs were asked to report salaries as of February 2020 to account for salary increases that programs may have made in response to the McCleary Act/SEBB. As illustrated in Tables 19 and 20, salaries among the programs that responded to the survey tend to be higher for positions funded at the contractor level than at the site level, except for those in assistant directors and administrative staff. For all positions, except support staff, salaries in urban locations are higher than salaries in rural locations (see Table 21). Compared to community based programs, school-based salaries are significantly higher for all positions, except for assistant teachers, directors and support staff.

Table 19. Summary of Staffing – Site Level Staffing for All School-Based Programs

Positions	n	Average Salary	Percent Eligible for Benefits	Average Hours Worked
Lead Teacher	130	\$ 38,099	86%	38
Assistant Teacher	139	\$ 24,213	79%	32
Director	17	\$ 64,745	82%	41
Assistant Director	16	\$ 66,836	94%	40
Coaching & Program Support	151	\$ 37,148	77%	36
Administrative Staff	73	\$ 72,660	88%	37
Other Classroom Staff	9	\$ 28,975	67%	34
Support Staff	51	\$ 21,080	27%	28

Note: ECEAP Cost Survey, October 2020

³ Due to small sample sizes for some positions, salary data for sites and contractor staff were combined for this table.

Table 20. Summary of Staffing – Contractor Level Staffing for All School-Based Programs

Positions	n	Average Salary	Percent Eligible for Benefits	Average Hours Worked
Director	21	\$ 84,303	100%	41
Coaching & Program Support	75	\$ 60,337	95%	39
Administrative Staff	16	\$ 54,518	100%	38
Support Staff	8	\$ 41,980	100%	38

Note: ECEAP Cost Survey, October 2020

Table 21. Salaries for Site and Contractor Staff in School-Based Settings – Urban and Rural

Positions	n	Average Salary - Urban	N	Average Salary - Rural
Lead Teacher	118	\$ 39,435	13	\$ 32,080
Assistant Teacher	125	\$ 24,069	14	\$ 20,726
Director	34	\$ 78,367	4	Excluded
Assistant Director	14	\$ 65,133	3	Excluded
Coaching & Program Support	202	\$ 43,134	24	\$ 24,960
Administrative Staff	79	\$ 66,790	10	\$ 49,681
Other Classroom Staff	5	Excluded	4	Excluded
Support Staff	45	\$ 25,319	1	Excluded

Note: ECEAP Cost Survey, October 2020

Combined, the staffing data presented in this section and in Appendix A can inform the staffing assumptions that DCYF uses to model the cost of providing ECEAP. Specifically, DCYF can use the salary estimates, in conjunction with data from the U.S. Department of Labor’s Occupational Employment Statistics reports, to inform the development of assumptions for the wages that may be used in a future cost modeling analysis. If wages for some positions are considered insufficient to attract and retain qualified staff, DCYF can use the survey data or data from the Department of Labor to set wages in the model at higher percentiles of the wage levels in the market.

2.2 Staff Time Allocation

The study also examined how staff allocate their time to meet the different groups of standards associated with ECEAP. As illustrated by the survey instrument in Appendix C, respondents were asked to estimate the portion of time that each staff member spends annually on work connected to each of 22 groups of standards across six domains. Tables 22 and 23 show the median percentage of hours per year that staff spend on activities within each of the six domains of ECEAP standards for part-day and school-day program models, respectively. The tables also show the hours that staff spend on activities not related to ECEAP.

Table 22. Median Staff Time Percentage Allocated to ECEAP Standards by Domain and Position – Part-Day (School-Based Programs)

Domain	Child Outcomes	Environment	Family Eng. & Partnership	Curriculum	Program Admin. & Oversight	PD & Train.	Not-ECEAP
Lead Teacher	35%	5%	10%	30%	4%	2%	14%
Assistant Teacher	23%	2%	2%	30%	0%	0%	43%
Director	5%	2%	10%	5%	55%	10%	13%
Assistant Director	1%	3%	4%	7%	45%	20%	20%
Coaching & PD	5%	2%	22%	5%	25%	5%	36%
Admin. Staff	1%	1%	1%	0%	36%	5%	56%
Other Classroom Staff	0%	0%	0%	16%	0%	0%	84%
Support Staff	0%	0%	0%	10%	48%	5%	37%

Note: ECEAP Cost Survey, October 2020

Table 23. Median Staff Time Percentage Allocated to ECEAP Standards by Domain and Position – School-Day (School-Based Programs)

Domain	Child Outcomes	Environment	Family Eng. & Partnership	Curriculum	Program Admin. & Oversight	PD & Train.	Not-ECEAP
Lead Teacher	40%	5%	10%	17%	1%	10%	17%
Assistant Teacher	40%	5%	5%	14%	0%	9%	27%
Director	0%	5%	0%	0%	70%	10%	15%
Assistant Director	15%	10%	10%	15%	35%	15%	0%
Coaching & PD	0%	0%	10%	0%	2%	5%	83%
Admin. Staff	0%	0%	2%	0%	13%	0%	85%

Note: ECEAP Cost Survey, October 2020

DCYF can use the data on how staff allocate their time across the different domains of ECEAP standards in multiple ways to inform cost modeling analysis. The standards are cost drivers that impact the level of resources that ECEAP programs must use to meet to carry out the different objectives of ECEAP. DCYF can use the data on time allocation to inform staffing assumptions (number of positions and hours of work required) for a baseline cost model and then adapt that

model to examine how the required funding level is affected by strengthening or relaxing specific standards.

2.3 Program Hours of Operation

The study examined the total hours that classrooms were operating annually by program model. Programs that operate on a part-day schedule are required to operate a minimum of 360 hours and those that operate on a school-day schedule are required to operate a minimum of 1,000 hours per year. Based on an analysis of administrative data on ECEAP programs provided by DCYF, as illustrated in Table 24, most programs tend to operate near or slightly above the required number of hours, with median operating hours of 372 for part-day programs and 988 for school-day programs.

Table 24. Program Hours of Operation by Program Model (School-Based)

Setting and Program Model	N	Median Annual Classroom Hours of Operation
School-Based - Part-Day	57	372
School-Based – School-Day	12	988

Note: Based on analysis of ECEAP Administrative Data (March 2020) for the sites that participated in the survey.

2.4 Program Costs

A core part of the study examined the actual cost of providing care. Figure 3 shows the **cost per child of providing ECEAP**, based on the cost data provided through the survey. The analysis of costs only examined the costs for part-day programs, because the sample size for school-day programs was too small. Table 25 breaks out the cost per child by major cost categories. Table B.4 in Appendix B provides additional detail on costs.

In reviewing the cost data in the following table, it is important to keep in mind that the results only present the median cost values. The results do not explore variations that may exist across programs with different characteristics, such as program size, geographic location, or contractor model. The sample sizes are not sufficient to allow a comparison of costs broken out by these characteristics. It is also important to keep in mind that programs vary in the way they track and report cost data. While each may report some cost data within each of the cost categories, there may be some overlap in the way programs report cost data across categories, especially for professional services and business expenses. Therefore, DCYF should be cautious in using the cost estimates for specific cost categories for planning and cost modeling purposes.

Based on the data provided by ECEAP programs, the median spending per child across all sites is approximately \$8,614 for part-day services in school-based settings. The costs per child, based on the data reported, are less than the costs reported by community-based settings. Even though school-based programs tend to compensate staff at higher levels than community-based programs, they also tend to administer ECEAP with a smaller contingent of supporting staff, as illustrated in Tables A.1 through A.4 (Appendix A). They also tend to have lower costs for facility and maintenance costs compared to community-based programs. These findings are consistent with the results of a similar cost survey and study that compared the costs of

administering a state prekindergarten program across different settings (North Carolina Department of Health and Human Services, 2017). Additional analysis would be required to fully explore the differences, including the likely economies of scale that school systems offer to preschool programs. It is also possible that some survey respondents under-reported the costs of services that school systems provide that are funded outside of the ECEAP grant. Additional detail can be found in Appendix B.

The most significant cost component is for personnel wages and benefits, which represent approximately 71% of the total costs for part-day programs. Multiple studies of early childhood costs have found similar proportions of funding spent on personnel (Institute of Medicine and National Research Council, 2015; Whitebook, et al., 2014). Appendix B provides additional detail on program costs, but again they should be used with caution.

Figure 3. Annual Cost Per Child for School-Based Part-Day Programs

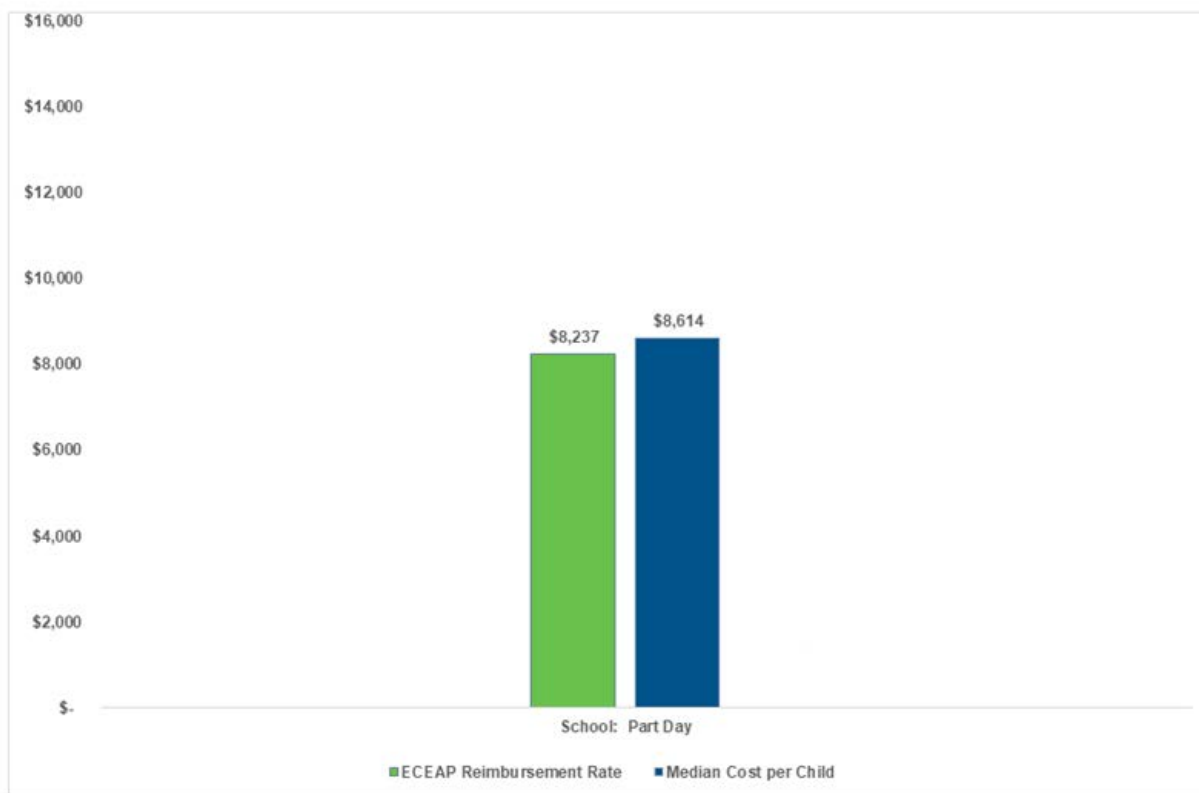


Table 25. Annual Cost Per Child for School-Based Part-Day Programs by Cost Category

Setting and Program Model	Total Costs
N	41
Median Personnel Costs – Wage	\$ 4,382
Median Personnel Costs – Benefit	\$ 1,724
Estimated Non-Personnel Costs	\$ 2,508
Median Total Cost Per Child	\$ 8,614

Note: ECEAP Cost Survey, October 2020

The study compared the cost of providing care with the ECEAP reimbursement rates. As shown in Table 26, the **ECEAP reimbursement rates are lower than the estimated cost for part-day programs**, based on the data reported in the survey. When compared to the spending levels for Head Start, as shown in Table 27, ECEAP reimbursement rates are significantly less.

Table 26. Cost Per Child for School-Based Programs Compared ECEAP Reimbursement Rate

Setting and Program Model	N	Total Costs	ECEAP Rate
School-Based - Part-Day	41	\$ 8,614	\$8,237
School-Based – School-Day	3	NA Due to Sample Size	NA Due to Sample Size

Note: ECEAP Cost Survey, October 2020

Table 27. Cost Per Child for School-Based Programs Compared to Head Start Spending

Setting and Program Model	N	Total Costs	Head Start Spending
Community Based - Part-Day	41	\$ 8,614	\$10,669 to \$19,130
Community Based – School-Day	3	NA Due to Sample Size	NA Due to Sample Size

3. Relationship Between Compensation and Time with Program

The study also examined the length of time that staff had been with ECEAP programs to compare length of time with the compensation levels for each of eight key staff positions. Research on the early childhood workforce indicates that staff compensation is a fundamental factor that drives both occupational and job turnover in the early childhood workforce (Totenhagen et al., 2016; Whitebook et al., 2004). An analysis of the correlation between staff compensation and the length of time staff have been with a program, as illustrated in Table 28, found a strong, positive and significant relationship between these two variables, for teachers and assistant teachers, in both community-based and school-based programs. The analysis also found a strong correlation for assistant directors in public school settings. The analysis did not find significant positive correlations between these variables and other positions.

Interestingly, there was a *negative* correlation between time in position and compensation for directors, in community-based programs.

Table 28. Correlation between Compensation and Time with ECEAP Program

Position	Community-Based Programs		School-Based Programs	
	n	Correlation (r)	n	Correlation (r)
Lead Teacher	63	.305*	97	.220*
Assistant Teacher	65	.251*	103	.264*
Director	28	-.464*	27	.147
Assistant Director	20	-.117	13	.759*
Coaching & Program Support	187	-.117	154	-.110
Administrative Staff	77	.104	65	.082
Other Classroom Staff	33	.240	3	.283
Support Staff	88	.101	25	.124

*Significant correlation, $p < .05$

4. Fiscal Challenges

The survey asked ECEAP providers to describe any challenges both at the site and contractor level that they have encountered in meeting the ECEAP standards, the fiscal impacts resulting from these challenges and the strategies used to address those challenges.

Program providers identified several challenges related to **staffing requirements and costs**. Some indicated that the requirement for three-hour classes increases staffing costs and others indicated that it was a challenge to ensure that a qualified lead teacher is always in the classroom. Several noted that they are unable to compete with school district salaries for qualified staff. **Respondents identified multiple strategies** for dealing with the increased cost for salaries and benefits, such as reducing staffing, increasing child-to-staff ratios, reducing the number of weeks students are served, providing “comp time” in lieu of overtime and not scheduling regular office time.

Some indicated an **increase in the number and severity of challenging behaviors in children**. Managing these challenges is compounded due to limited funding available for mental health consultants and inability to find substitutes willing to work in ECEAP classrooms. Some also indicated that the high level of stress is one factor that contributes to high-turnover rates among teachers in ECEAP classrooms.

Providers also identified **challenges related to transportation**. In some school-based programs, school districts subsidize the cost of providing transportation. However, due to the three-hour time requirement, some sites also indicated that they are not able to use school district transportation because ECEAP class times do not align with school system’s transportation schedule. Several contractors noted that a lack of transportation to/from program was a barrier to enrollment and increased hardship for low-income families.

Providers noted that on-site **program managers may fill multiple roles**, including serving as a substitute in the classroom and performing administrative assistant duties. Respondents also indicated that ECEAP **program documentation requires additional staff time to complete** and identified **multiple strategies** for addressing the challenge, such as using unpaid staff, reducing planning time and scheduling professional development time outside of regular operating hours.

Some subcontractors operating at multiple sites noted that they have difficulty with the 5% administrative cap. As a strategy to address this, their staff in center leadership positions were taking on administrative responsibilities, reducing time available for management activities.

Several contractors mentioned the McCleary Act/SEBB as placing a strain on staffing costs, noting the following:

- Entire ECEAP budget goes towards staff salaries
- Contract amount has not increased at the same level as salary and benefits
- Difficult to recruit and retain qualified staff
- Increase in salary and benefit costs, but not in per slot rates

A multi-site provider working with school districts reported that districts subsidize many ECEAP. Similarly, a contractor reported that there is not enough ECEAP funding to operate ECEAP without subsidy from school district, Head Start, community, and fundraising.

Comments related specifically to per slot rates included:

- Slot rate for School-Day does not adequately fund the slots
- Per slot rates have not kept up with cost to maintain high-quality services
- Full-day programs cost more than part-day due to increased staffing requirements

Some providers operating in **rural areas** noted their lack of resources create special operating challenges:

- Parent policy council almost impossible to implement
- Harder to recruit and retain qualified staff to serve rural areas
- Costly to provide on-site services, coaching, and mentoring due to travel costs
- Travel time/costs make it difficult for staff to attend staff meetings

A general comment describing various strategies for dealing with lack of funding included:

- Emergency loans
- Fundraising
- Increasing private pay tuition
- Cutting personnel
- Increasing staff: child ratios
- Reducing material, supply and operating costs

V. Conclusion/Summary

1. Summary of Findings

Based on the results of the review of other state preschool programs and the cost survey, the study found:

1.1 Peer State Comparison Findings

- In a comparison across states, after adjusting for regional price differences, the **total per-pupil preschool spending of approximately \$8,969 from all sources for Washington's ECEAP program is eleventh among all states**, when both state and federal funds are taken into account.
- Among the states reviewed, only Oregon's preschool program **offers the type of comprehensive service model** that ECAP provides, spending approximately \$10,140 per child (13% more than ECEAP).
- In Washington, as in most peer states, the **preschool compensation/parity policies are determined at the local level**. Within the mixed delivery model, there is no standard state-wide policy requiring that preschool staff be compensated in parity with public school teachers. The peer state review revealed that Alabama is the only one of the peer states with a mixed delivery model that has this parity requirement. Multiple programs require parity for preschool teachers in public schools, including New Jersey, New Mexico, and Oklahoma.
- Key drivers of personnel costs are widely understood to include group size and staffing ratio standards, as well as teaching staff qualifications. The peer state review highlighted that **group size and staffing ratio for Washington ECEAP classrooms are similar** to those in most of the states in this peer comparison group. On the other hand, **most of the peer states reviewed require a bachelor's degree with early child specialization for lead teachers, while WA requires an associate's degree for this position**.
- Detailed **information is not available for how peer states determine their per-child rates**; however, Oregon is the only peer state that has explicitly reported using a cost-analysis method (cost of quality calculator) to determine rates.

1.2 Cost Study Findings

- Per-pupil **costs are estimated at levels that are above ECEAP reimbursement rates** for both community-based and school-based programs for both part-day and school-day program models.
- **Costs for community-based programs were consistently higher than costs for school-based programs**, due in part to having more staff and higher facility and maintenance costs. Further exploration of the data is required to identify potential reasons for this difference, but possible explanations are that schools bring economies of scale in administering the ECEAP program and that schools may not have fully captured the costs of services funded by sources outside of the ECEAP contract

- **Compensation levels tend to be higher for school-based programs than community-based programs**, with the exception of assistant teachers and program directors.
- For both school-based and community-based programs, **wages among the programs responding to the survey are higher in urban areas than in rural areas**. This finding is consistent with wage data reported by the Department of Labor for preschool and child care staff.
- The study found a strong, positive and **significant relationship between salaries and the length of time teachers and assistant teachers have been with an ECEAP program** in both community-based and school-based programs.
- Labor costs are typically the most significant cost that preschool programs encounter, but Washington's **ECEAP rates may not reflect the variation in labor costs** by region.
- **ECEAP contractors and sites identified multiple challenges related to implementing ECEAP**, including challenges in maintaining staffing requirements, maintaining staff that are effective at managing children with challenging behaviors, funding the additional personnel costs that stem from the McCleary Act/SEBB, the need to subsidize ECEAP programs with other funding sources (e.g., Head Start, school district, or community fundraising), meeting Early Achievers standards, providing cost-effective transportation, and challenges related to the time required for attending to ECEAP documentation.
- Both contractors and sites identified **strategies that they implement to address the challenges**, including use of emergency loans, increasing private tuition for children not in ECEAP, reducing personnel, increasing staffing ratios, reducing material, supply and other operating costs.

A number of limitations are identified that call for caution when using the data from the survey to inform policy development. Small sample sizes limit the ability to drill down to subgroups of interest. The ability to track and report costs for specific sites may vary across programs, and programs that operate multiple sites may have applied different methods to allocate contractor-level costs to each site. It is particularly important to keep in mind that program operators reported their staffing allocations as retrospective estimates – these findings may differ if these questions are assessed with a different approach in future.

2. Policy Considerations and Next Steps for Cost Modeling

Based on the findings above, it is likely that current ECEAP reimbursement rates do not reflect variations in cost across geographic locations and program settings. To further examine rate disparities and develop new rates that more accurately reflect the cost of care, Washington can use the cost model developed in connection with this study to develop model-based cost estimates, similar to those in other states (e.g., Oregon). The cost model developed for this project is an adapted version of the Provider Cost of Quality Calculator and is driven by assumptions that are specific to ECEAP.

The **cost and staffing data collected in this study provide Washington with baseline estimates of the per-child cost of care** by program type and program model that DCYF can use to inform the development of a cost model analysis for ECEAP. It also provides estimates

of the percentage of time that programs allocate to meet specific groups of ECEAP standards. **The data analysis presented in this report are aligned with the assumptions that feed into a cost model developed for ECEAP** that DCYF can use to model both the baseline cost of care and a normative funding level by setting, program model and geographic region. DCYF can maintain and revise the model to assess the impact of various policy options, such as modeling the cost impact of modifying specific ECEAP standards, modeling the funding needed to achieve teach pay parity, modeling the costs of serving child populations that face high levels of environmental risk, as well as other policy changes. DCYF can **engage stakeholders to refine and strengthen the cost model** for use in modeling both the current cost of care for different program profiles and normative funding levels required to achieve new policy options. To further develop the cost model, the ideal steps would include:

- Form **ECEAP stakeholder group to advise and provide input into the cost modeling analysis**. This group should include participants who are familiar with implementing the ECEAP program and who also are familiar with finance and budgeting. It should include representatives of all model types and program settings and different regions of the state.
- Meet with stakeholders to **review the results from the ECEAP Cost Study** to identify areas in which additional data collection may be needed (e.g., additional data on salaries from DCYF sources or U.S. Bureau of Labor) and to refine the base assumptions that inform the cost model.
- Update the cost model based on any new data and assumptions from the above step **and prepare model-based cost estimates** based on specific program characteristics, which might include program setting, program model, geographic region, program enrollment size or other characteristics.
- Review the model-based estimates with the ECEAP stakeholder group and **make adjustments based on stakeholder feedback**.
- Prepare **summary report to recommend a new rate structure** based on the final model-based estimates. The rates could be updated on a periodic basis using a combination administrative data collected by DCYF and secondary data sources, such as the U.S. Bureau of Labor Statistics

With the above steps, DCYF can move toward developing a reimbursement structure that is more reflective of the true cost of providing ECEAP services for young children in Washington.

References

- Barnett, S. & Kasmin, R. (2017). *Teacher Compensation Parity Policies and State-Funded Pre-K Programs*. The National Institute for Early Education Research and Center for the Study of Child Care Employment, University of California, Berkeley.
- Center on the Developing Child at Harvard University (2007). *A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children*. <http://www.developingchild.harvard.edu>.
- Center on Enhancing Early Learning Outcomes. Cost of Preschool Quality & Revenue Calculator. National Institute for Early Education Research. <http://ceelo.org/cost-of-preschool-quality-tool/>
- Evans, G., Li, D., & Whipple, S. (2013). *Cumulative risk and child development*. Psychological Bulletin 139: 1342–1396.
- Friedman-Krauss, A. H., Barnett, W. S., Garver, K. A., Hodges, K. S., Weisenfeld, G. G. & Gardiner, B. A. (2020). *The State of Preschool 2019: State Preschool Yearbook*. National Institute for Early Education Research. <http://nieer.org/state-preschool-yearbooks/2019-2>.
- Heckman, James J. (2007). The economics, technology, and neuroscience of human capability formation. *Proceedings of the National Academy of Sciences*, 104(33), 13250–13255. <https://doi.org/10.1073/pnas.0701362104>
- Institute of Medicine & National Research Council. (2015). *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation*. Washington, DC: The National Academies Press. Retrieved from <https://www.nap.edu/catalog/19401/transforming-the-workforce-for-children-birththrough-age-8-a>.
- Karoly, L. A. (2019). *Advancing investments in the early years: Opportunities for strategic investments in evidence-based early childhood programs in New Hampshire*. Santa Monica, CA: RAND Corporation. Retrieved from https://www.rand.org/content/dam/rand/pubs/research_reports/RR2900/RR2955/RAND_RR2955.pdf.
- Karoly, L. A. & Gomez, C. J. (2019). *Cost Analysis of the South Carolina Child Early Reading and Development Education Program*. RAND Corporation. <https://doi.org/10.7249/RR2906>.
- McLean, C., Dichter, H., & Whitebook, M. (2017). *Strategies in Pursuit of Pre-K Teacher Compensation Parity: Lessons from Seven States and Cities*. Center for the Study of Child Care Employment, University of California, Berkeley and The National Institute for Early Education Research.
- North Carolina Department of Health and Human Services. (2017). *Study of the Costs and Effectiveness Associated with the North Carolina Prekindergarten Slots*. Retrieved from <https://buildthefoundation.org/wp-content/uploads/2017/02/Costs-Associated-with-NC-PreK-Study.pdf>

Totenhagen, C.J., Hawkins, S.A., Casper, D.M., Bosch, L.A., Hawkey, K.R., & Borden, L.M. (2016). *Retaining The Early Childhood Workers: A Review of the Empirical Literature*. *Journal of Research in Childhood Education*, 30(4), 585-599.

U.S. Department of Commerce, Bureau of Economic Analysis. (2020). *Regional Price Parities by State and Metro Area*. Retrieved from <https://www.bea.gov/data/prices-inflation/regional-price-parities-state-and-metro-area>

U.S. Department of Labor, Bureau of Labor Statistics. (2019). *Occupational Employment Statistics*. Retrieved from <https://www.bls.gov/oes/tables.htm>

Washington Department of Children Youth and Families. (2019). *Administrative Data on ECEAP Lead Teacher Education for 2018-2019*.

Whitebook, M., Phillips, D., & Howes, C. (2014). *Worthy Work, STILL Unlivable Wages: The Early Childhood Workforce 25 Years after the National Child Care Staffing Study*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from <http://cscce.berkeley.edu/files/2014/ReportFINAL.pdf>.

Whitebook, M., & Sakai, L. (2004). *By a Thread: How Child Care Centers Hold on to Teachers, How Teachers Building Lasting Careers*. WE Upjohn Institute.

Appendix A – Program Staffing Detail

Table A.1. Summary of Staffing for Part-Day – Community-Based

Positions	Average Number of Positions - Part Day	Average Salary	Percent Eligible for Benefits	Average Hours Worked
Lead Teacher	2.1	\$32,655	80%	38
Assistant Teacher	2.4	\$24,022	67%	34
Director	1.3	\$56,745	80%	39
Assistant Director	1.7	\$34,185	73%	39
Coaching & Program Support	5.4	\$30,715	72%	34
Administrative Staff	3.5	\$45,783	81%	38
Other Classroom Staff	2.1	\$19,689	63%	31
Support Staff	4.3	\$25,835	75%	36

Table A.2. Staffing Summary for School Day – Community-Based

Positions	Average Number of Positions – School Day	Average Salary	Percent Eligible for Benefits	Average Hours Worked
Lead Teacher	2.1	\$39,595	73%	40
Assistant Teacher	2.5	\$29,524	69%	39
Director	1.0	\$73,582	92%	43
Assistant Director	1.5	\$35,378	75%	40
Coaching & Program Support	6.4	\$39,316	87%	38
Administrative Staff	2.8	\$47,614	78%	38
Other Classroom Staff	2.4	\$22,847	32%	26
Support Staff	4.4	\$24,958	77%	37

Note: ECEAP Cost Survey, October 2020

Table A.3. Summary of Staffing for Part-Day – School Based

Positions	Average Number of Positions - Part Day	Average Salary	Percent Eligible for Benefits	Average Hours Worked
Lead Teacher	2.1	\$39,828	88%	38
Assistant Teacher	2.4	\$24,446	79%	32
Director	1.2	\$78,831	91%	41
Assistant Director	1.0	\$63,227	100%	40
Coaching & Program Support	3.7	\$48,080	86%	37
Administrative Staff	2.1	\$71,197	92%	37
Other Classroom Staff	1.0	\$28,975	86%	34
Support Staff	1.9	\$27,056	43%	29

Table A.4. Staffing Summary for School Day – School Based

Positions	Average Number of Positions – School Day	Average Salary	Percent Eligible for Benefits	Average Hours Worked
Lead Teacher	1.6	\$30,263	75%	40
Assistant Teacher	1.6	\$21,116	81%	36
Director	1.0	\$77,217	100%	43
Assistant Director	1.3	\$66,089	75%	40
Coaching & Program Support	3.5	\$36,682	66%	37
Administrative Staff	1.8	\$32,159	79%	36
Support Staff	2.8	\$29,984	24%	38

Note: ECEAP Cost Survey, October 2020

Appendix B – Additional Cost Detail

Table B.1. Median Cost Per Child for School-Based Part-Day Programs by Cost Category

Setting and Program Model	Total Costs
N	41
Personnel Costs – Wage	\$ 4,382
Personnel Costs – Benefit	\$ 1,724
Non-Personnel Costs – Supplies & Equipment	\$ 63
Non-Personnel – Professional Services	\$ 353
Non-Personnel – Business Expenses	\$ 134
Non-Personnel – Facility and Maintenance	\$ 89
Non-Personnel – Food & Kitchen	\$ 30
Non-Personnel – Subcontractors	\$ 0
Non-Personnel – Travel	\$ 29
Non-Personnel – Indirect	\$ 268
Total Cost Per Child	\$ 8,614

Note: ECEAP Cost Survey, October 2020

Table B.2. Median Cost Per Child for School-Based School-Day Programs

Setting and Program Model	Total Costs
N	3
Personnel Costs - Wage	\$ 8,397
Personnel Costs - Benefit	\$ 2,086
Non-Personnel Costs – Supplies & Equipment	\$ 14
Non-Personnel – Professional Services	\$ 172
Non-Personnel – Business Expenses	\$ 104
Non-Personnel – Facility and Maintenance	\$ 183
Non-Personnel – Food & Kitchen	\$ 0
Non-Personnel – Subcontractors	\$ 0
Non-Personnel – Travel	\$ 42
Non-Personnel – Indirect	\$ 327
Total Cost Per Child	\$ 11,956

Note: ECEAP Cost Survey, October 2020

Table B.3. Median Cost Per Child for School-Based Part-Day Programs by Cost Category

Setting and Program Model	Total Costs
N	41
Personnel Costs - Wage	\$ 4,382
Personnel Costs - Benefit	\$ 1,724
Non-Personnel Costs – Supplies & Equipment	\$ 63
Non-Personnel – Professional Services	\$ 353
Non-Personnel – Business Expenses	\$ 134
Non-Personnel – Facility and Maintenance	\$ 89
Non-Personnel – Food & Kitchen	\$ 30
Non-Personnel – Subcontractors	\$ 0
Non-Personnel – Travel	\$ 29
Non-Personnel – Indirect	\$ 268
Total Cost Per Child	\$ 8,614

Note: ECEAP Cost Survey, October 2020

Appendix C – Cost Survey Instrument and Guidance