PROFESSIONAL DEVELOPMENT SYSTEM COST ANALYSIS BRIEF

The need for a knowledgeable, skilled workforce responsible for providing care and education for young children, birth to age five, has been well documented. In its seminal report, the National Academy of Science's, *Transforming the Financing of Early Care and Education* states, "High-quality early care and education for children from birth to kindergarten entry is critical to positive child development and has the potential to generate economic returns, which benefit not only children and their families but also society at large" (NAS, 2018).

Teachers, caregivers and home visitors provide the cornerstone of quality in early childhood programs. Ensuring quality early learning experiences rests in part on the ability of early educators to access a continuum of professional learning and support activities, including the acquisition of credentials and degrees in early childhood. Early educators who have access to additional educational and professional opportunities are better equipped to incorporate new research findings into their work and to achieve career satisfaction.

Because of this, early childhood leaders responsible for professional development (PD) systems—state and local—are focused on efforts to advance the credentials of the field in a coordinated and strategic manner. It is essential that there are tools and resources to help these system leaders determine the current status of their workforce as well as the investments needed to improve their PD system. This brief is designed to support system leaders in this work.

The actual cost for state, territory, or tribe PD systems to increase the knowledge and skill of the workforce may seem difficult to pin down, however, data is available that can assist states and territories with planning strategies for increasing the credentials of the early childhood and school-age workforce. Walking through the steps outlined here will provide states and territories with tools they can use to analyze needs and develop cost projections.

WHY CONDUCT A PROFESSIONAL DEVELOPMENT SYSTEM COST ANALYSIS?

A PD system cost analysis can help leaders to understand current investments and target resources for PD systems and initiatives that will result in a well-qualified early childhood and school age workforce.

With this process, planning for PD can be informed by:

- Data analyses related to workforce qualifications and PD investments
- Workforce investment estimates at the individual, employer, and system levels
- Cost estimates to move the workforce from one educational milestone to the next

A PD system cost analysis can be used to:

- Record estimates of workforce qualifications and compare to national data
- Set workforce education milestone goals and generate the funding to achieve those goals
- Generate data reports and graphs that describe workforce investments
- Analyze reports to adjust public investments to best achieve workforce goals

This process has been conceived and developed to support leaders at every point of the early childhood system—program, community, state, tribal and federal—to build a systemic approach to the very important work of increasing the competence and skills of early childhood professionals serving children and families.

PREPARATION OF MATERIALS AND SUGGESTED DATA SOURCES

Prior to using this process, gather as much data about your workforce as possible. At a minimum you should have the **total number of people in the early education workforce** you will be using to develop your estimates. You may also wish to have that number defined by:

- Sectors—e.g., childcare, Head Start/Early Head Start, early intervention, pre-K
- Settings—e.g., center based, home based, or school based
- Roles—e.g., caregivers, home visitors, teachers, technical assistance staff, providers
- Ages served—e.g., infant/toddler, preschool, school age
- Educational milestones—e.g., state or national credential, associate or baccalaureate degree

You may also want to have data available on the state-level workforce positions that currently lead and support PD in your state or program to fully represent current systems investments.

> **DATA SOURCES**
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> There are several potential data sources to assist you in completing an analysis. State/territory workforce registries, licensing systems, teacher certification, training delivery/attendance databases, or a recent market rate survey may all provide essential information.
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> If data is not available to provide at least an overall number of people in the workforce for use in this analysis, you can use projected or estimated numbers based on a state/territory sample, national sample, or related data source.

STEP-BY-STEP: PROFESSIONAL DEVELOPMENT SYSTEM COST ANALYSIS PROCESS

There are four major steps that a state/territory/program can use to develop a PD system cost analysis:

1. Estimate current workforce qualifications and additional demographics
   - This step helps answer: What qualifications does our workforce currently have?

2. Identify state/territory/program goals for workforce qualifications (educational milestones)
   - This step helps to answer: What qualifications do we need or want the workforce to have? What is the gap between the current workforce qualifications and our goal for workforce qualifications?

3. Identify and categorize details of current PD initiatives and PD system investments
   - This step helps to answer: What PD and workforce supports are we currently funding and how effective are they at closing the gap between the current workforce qualifications and our goal for workforce qualifications?

4. Review and explore different estimates of public and private shares of annual costs to advance towards your goals for each workforce educational milestone
   - This step helps to answer: What do we need to target to help meet our goals to build and retain a qualified workforce?

Below you will find detailed information about each step in the process, along with detailed definitions and estimates for you to consider when determining costs.

STEP 1: CURRENT WORKFORCE ESTIMATES—ESTABLISHING THE BASELINE

In this step, you will gather baseline data about your workforce. This step helps answer: What qualifications does our workforce currently have?

This is also helpful information for communicating needs to state or local policy makers, early childhood stakeholders, or colleagues.

You can compare your data to the data collected in the National Survey of Early Care and Education (NSECE) to get a sense of how your workforce compares to the national estimates for the field as a whole. The NSECE documents the nation's current utilization and availability of early care and education (including school-age care) and was created to deepen the understanding of the extent to which families' needs and preferences coordinate well with offerings and constraints of the early care and education system. The NSECE collected data from a nationally representative sample including interviews in all fifty states and Washington, D.C. These early care and education (ECE) workforce data developed in the NSECE focuses on individuals providing direct care and education for children birth through five years and not yet in kindergarten. Findings are based on over 10,000 questionnaires completed in 2012 by a sample of individuals representing about one million center-based classroom staff, as well as about one million paid and about 2.7 million unpaid individuals regularly providing home-based ECE to children other than their own. The survey will be updated through the NSECE 2019. The NSECE 2019 will collect data in a manner that facilitates comparisons with data collected in the NSECE 2012 and allows for examination of the changing landscape of child care and early education programs during that 7-year period.

Additional information on the NSECE data collection and sampling methodology is available at:
https://www.acf.hhs.gov/sites/default/files/documents/opre/nsece_wf_brief_102913_0.pdf

https://www.acf.hhs.gov/opre/project/national-survey-early-care-and-education-2019-2017-2022-overview

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STEP 2: WORKFORCE GOALS—IDENTIFYING THE GAP BETWEEN THE BASELINE AND THE DESIRED OUTCOME

Step 2 is designed for you to identify workforce qualification or educational milestone goals. This step helps you answer: What qualifications do we need or want the workforce to have? What is the gap between the current workforce qualifications and our goal for workforce qualifications?

The need to identify and express workforce goals may be based on a variety of needs: state/territory or local funding source requirements, such as Child Care and Development Fund (CCDF) plans; Head Start/Early Head Start requirements; Head Start Collaboration Plans; licensing regulations; federal funding program proposals or plans (eg: Race to the Top-Early Learning Challenge or Preschool Development Grants); State Advisory Council reports or plans; and/or other ECE initiative strategic plans.

The task in Step 2 is to determine how many people in the ECE workforce already have achieved the desired credential status and how many would need supports to advance to a higher education milestone level. This is necessary to ensure appropriate estimates for the costs of supporting your target workforce toward education milestone goals during the target year, number of credit/clock hours, and PD delivery methods.

Based on the data you have gathered in the first step, you can then choose what percentage or number you wish to target, and the PD delivery method preferred. This step is important because it will affect the cost modeling. For example, credit-based PD is estimated at a higher cost than clock hours.

Consider the following education milestone levels as you determine your state/territory workforce goals for advancing a percentage of the workforce from one education milestone to the next:

- High School diploma (or GED) or less
- Minimum health and safety training only
- Specific state/territory credential or career pathway level
- Child Development Associate (CDA) Credential™
- Associate's degree
- Specific number of college credits in addition to an Associate's degree
- Bachelor's degree
- Specific number of college credits in addition to a Bachelor's degree
- Master's degree
- Doctorate or higher

STEP 3: IDENTIFYING COSTS OF PROFESSIONAL DEVELOPMENT SYSTEM INVESTMENTS

At this step in the process, you will gather data on current PD system investments separated by specific initiative (i.e. school-age, quality rating and improvement system, infant-toddler), PD system staff data, and indirect costs.

This step is intended to help you categorize details of current PD system initiatives and investments that can be leveraged to help finance progress toward your goal. This is an opportunity to scan and collect information on PD and workforce supports for each of the sectors, settings, and roles. Collect as much detail as is possible and available about the goals, types, targets, participation, results, funding sources and levels of each PD system initiative. This process can be very useful to generate reports and information when presenting the initiative to key stakeholders (e.g., providers, legislators, philanthropy, etc.) about what investments are currently available to potentially retarget toward the goal and to document gaps in funding that you will need to fill to help meet your goal.

STEP 4: COST ESTIMATES

In this final step you will review the cost estimates based on workforce data, education milestone targets, and delivery details. This step helps you to answer: What do we need in order to meet our goals to build and retain a qualified workforce? It is important to keep in mind that in order to meet goals for the workforce, you should consider not only costs to the individual educator, but also costs to the employer and to the PD system as a whole.

For this proposed process, these costs are categorized in this way:

INDIVIDUAL-LEVEL COSTS

- Tuition and training participation
- Access
- Supports

EMPLOYER-LEVEL COSTS

- Compensation
- Workplace conditions

SYSTEM-LEVEL COSTS

- PD system leadership staffing
- Workforce data system
- Additional PD system administrative functions, services, and infrastructure

RESEARCH-BASED DEFINITIONS AND COST ESTIMATE CONSIDERATIONS

In an ideal situation, state/territory/program leaders would have access to actual estimates for each specific cost included in the analysis for their state or territory. Unfortunately, access to this data isn't always available or easily accessible. In those cases, we can use estimates based on current research studies like the NSECE and/ or federal databases like those managed by the Bureau of Labor Statistics. References to these research studies and federal databases can be found at the end of this document. Below you will find definitions and cost estimate considerations for individual, employer and system-level costs. These are based on data current as of Spring 2020. Regional adjustments can be applied to the cost estimates based on Regional Price Parities (RPPs) that measure the differences in the price levels of goods and services across states and metropolitan areas for a given year. Additional links and information about regional adjustments can be found in the resources section of this brief. In addition to regional variability, these estimates are constantly changing, so they should be treated as considerations and used with an understanding that they are projected estimates rather than actual costs.

INDIVIDUAL-LEVEL COSTS

TUITION AND TRAINING PARTICIPATION

Definition: Tuition and/or fee for each individual to enroll in the PD program

For example: Cost per required training/workshop, course credits, assessment fees, etc. as determined by the PD provider

EDUCATIONAL MILESTONE	COST ESTIMATE CONSIDERATIONS
Health and Safety Training Package	If delivered online: $164.66 per person for a 20-clock-hour training If delivered face-to-face: $153.68 an hour per person **Consider any regional adjustment identified by the state/territory
Specific state/territory credential or career pathway level	▪ If clock hours: $6.59 per clock hour
No credential to CDA Credential™	▪ If online clock hours: $923.54 per person + $425 assessment fee = $1,348.54 per person, multiplied by a regional adjustment ▪ If online credit hours: $1,785 + $425 assessment fee = $2,210.27 per person, multiplied by a regional adjustment ▪ If face-to-face clock hours: $185.86 + $425 assessment fee = $610.86 per person, multiplied by a regional adjustment ▪ If face-to-face credit hours: $1,104.67+ $425 assessment fee = $1,529.67 per person, multiplied by a regional adjustment
Specific state/territory credential or career pathway level equivalent to or exceeding the CDA Credential™	▪ If clock hours: $6.59 per clock hour, multiplied by a regional adjustment
CDA Credential™ to an Associate's Degree	Estimate assumes 1/3 of a full year's course load (average of 9-10 credit hours per year) plus institutional program fees, multiplied by a regional adjustment. The national average costs for in-state public college for a full course load = $3,729.99 per year; 1/3 course load = $1,243.33.
Associate's to a Bachelor's Degree	Estimates assume 1/3 of a full year's course load (average of 9-10 credit hours per year) plus institutional program fees, multiplied by a regional adjustment ▪ If in-state public university: National average cost per year for in-state public universities = $10,440 for a full course load; 1/3 course load = $3,480 per person ▪ If private university: National average cost per year for private universities = $36,879.99 for a full course load; 1/3 course load = $12,293.33 per person

EDUCATIONAL MILESTONE	COST ESTIMATE CONSIDERATIONS
Bachelor's to a Master's Degree	Estimates assume 1/3 of a full year's course load (average of 9-10 credit hours per year) plus institutional program fees, multiplied by a regional adjustment • If in-state public university: National average cost per year for in-state public universities = $8,890.01 for a full course load; 1/3 course load = $2,996.67 per person • If private university: National average cost per year for private universities = $31,140 for a full course load; 1/3 course load = $10,380 per person
Master's to a Doctorate Degree	Estimates assume 1/3 of a full year's course load (average of 9-10 credit hours per year) plus institutional program fees, multiplied by a regional adjustment • If in-state public university: National average cost per year for in-state public universities = $11,379.99 for a full course load; 1/3 course load = $3,793.33 per person • If private university: National average cost per year for private universities = $45,380.01 for a full course load; 1/3 course load = $15,126.67 per person

ACCESS

Definition: Expenses that enable a person to participate OR costs associated with a person's participation in PD.

For example: transportation, books, technology, etc.

EDUCATIONAL MILESTONE	COST ESTIMATE CONSIDERATIONS
Health and Safety Training Package	• If online: $0 • If face-to-face: $115.26 per person for materials and transportation, multiplied by a regional adjustment
Specific state/territory credential or career pathway level	• If clock hour: $5.76 per clock hour based on national average costs associated with transportation and materials for CCR&R trainings, multiplied by a regional adjustment • If credit-based: $219.55 per 3 credits assumption based on national in-state public 2-year college student budgets, multiplied by a regional adjustment
No credential to CDA Credential™	• If online clock hours: $126.24 per person, multiplied by a regional adjustment • If online credit hours: $204.18 per person, multiplied by a regional adjustment • If face-to-face clock OR credit hours: $0 per person (because costs are part of the training and/or tuition fee)
Specific state/territory credential or career pathway level equivalent to or exceeding the CDA Credential™	• If clock hours: $5.76 per clock hour based on national average • costs associate with transportation and materials for CCR&R • trainings and other entity trainings, multiplied by a regional • adjustment • If credit hours: $219.55 per 3 credits assumption based on national in-state public 2-year college students' budgets, multiplied by a regional adjustment
CDA Credential™ to an Associate's Degree	Books and supplies, transportation, and other related expenses (such as technology) for in-state public 2-year college, national average costs = $5,700 per person, multiplied by a regional adjustment corresponding to the user-identified state/territory
Specific Amount of College Credits in Addition to an Associate's Degree	$219.55 per 3 credits assumption based on national in-state public 2-year college students' budgets, multiplied by a regional adjustment

EDUCATIONAL MILESTONE	COST ESTIMATE CONSIDERATIONS
Associate's to a Bachelor's Degree	▪ If public in-state university: Books and supplies, transportation, and other related expenses (such as technology) national average cost = $4,640 per person, multiplied by a regional adjustment ▪ If private university: $4,110 per person, multiplied by a regional adjustment
Specific Amount of College Credits in Addition to a Bachelor's Degree	$164.66 per 3 credits assumption based on national in-state public 4-year college students' budgets, multiplied by a regional adjustment
Bachelor's to a Master's Degree	▪ If public in-state university: Books and supplies, transportation, and other related expenses (such as technology) national average cost = $4,754 per person, multiplied by a regional adjustment ▪ If private university: $4,154 per person, multiplied by a regional adjustment
Master's to a Doctorate Degree	▪ If public in-state university: Books and supplies, transportation, and other related expenses (such as technology) national average cost = $4,754 per person, multiplied by a regional adjustment ▪ If private university: $4,154 per person, multiplied by a regional adjustment

SUPPORTS

Definition: Supplemental services to help an individual complete the PD program and/or apply new learning

For example: Estimates include technical assistance (coaching, mentoring, career advising, etc.)

EDUCATIONAL MILESTONE	COST ESTIMATE CONSIDERATIONS
Health and Safety Training Package	$242 per person cost of in-house mentoring by master teacher (1/100 of teacher salary or 20 hours of mentoring x $12.10 an hour rate = $242), multiplied by a regional adjustment
Specific state/territory credential or career pathway level	Three 1-hour onsite TA support visits (e.g., coaching, mentoring, etc.) a month for 12 months at a rate of $33 per hour/onsite = $1,188.33, multiplied by a regional adjustment
No credential to CDA Credential™	No cost (provided by the credential program; costs are part of training and assessment fees) Three 1-hour onsite TA support visits (e.g., coaching, mentoring, etc.) a month for 12 months at a rate of $33 per hour/onsite = $1,188.33, multiplied by a regional adjustment
Specific state/territory credential or career pathway level equivalent to or exceeding the CDA Credential™	Three 1-hour onsite TA support visits (e.g., coaching, mentoring, etc.) a month for 12 months at a rate of $33 per hour/onsite = $1,188.33, multiplied by a regional adjustment
CDA Credential™ to an Associate's Degree	No cost (provided by the degree program; costs are part of tuition and fees)
Specific Amount of College Credits in Addition to an Associate's Degree	Three 1-hour onsite TA support visits (e.g., coaching, mentoring, etc.) a month for 12 months at a rate of $33 per hour/onsite = $1,188.33, multiplied by a regional adjustment
Associate to a Bachelor's Degree	No cost (provided by the degree program; costs are part of tuition and fees)
Specific Amount of College Credits in Addition to a Bachelor's Degree	Three 1-hour onsite TA support visits (e.g., coaching, mentoring, etc.) a month for 12 months at a rate of $33 per hour/onsite = $1,188.33, multiplied by a regional adjustment

EDUCATIONAL MILESTONE	COST ESTIMATE CONSIDERATIONS
Bachelor's to a Master's Degree	No cost (provided by the degree program; costs are part of tuition and fees)
Master's to a Doctorate Degree	No cost (provided by the degree program; costs are part of tuition and fees)

EMPLOYER-LEVEL COSTS

COMPENSATION

Definition: Salary and benefits (salaries or hourly wages and financial supports provided to practitioners for participating in and completing education or training or other reasons; health, short-term disability, leave, and other benefits)

For example: Estimates assume an incremental increase per progression toward or attainment of a credential or degree (salary schedule based on role and qualification)

EDUCATIONAL MILESTONE	COST ESTIMATE CONSIDERATIONS
Health and Safety Training Package	No compensation increase expected for meeting this milestone.
Specific state/territory credential or career pathway level	$0.22/hr (roughly 2%) compensation increase from the NSECE average salary for center-based staff with high school diploma or less ($11/hr) for completion of a credential or level beyond high school/GED completion but less than a CDA Credential™ or state/territory equivalent.
No credential to CDA Credential™	▪ $0.50/hr (roughly 5%) compensation increase from the NSECE average salary for center-based staff with high school diploma or less ($10/hr) ▪ Assumption does not include an increase for completion of previous credentials or career pathway levels since they are "not required" in the tool or nationally; assumes a compensation increase for advancing from high school/GED to CDA Credential™
Specific state/territory credential or career pathway level equivalent to or exceeding the CDA Credential™	▪ $0.50/hr (roughly 5%) compensation increase from the NSECE average salary for center-based staff with high school diploma or less ($10/hr). Assumes a compensation increase for advancing from a high school/GED to CDA Credential™ equivalency or higher, less than an associate degree ▪ Additional specific state/territory credentials or career pathway levels equivalent to or exceeding a CDA Credential™ 2-5 include a compensation increase of $0.22 (roughly 2% of the estimated compensation rate for the first state/territory credential/level equivalent to or exceeding a CDA Credential™)
CDA Credential™ to an Associate's Degree	▪ $1.14/hr compensation increase (roughly 10%) for progress towards/completion of an Associate's degree ▪ Assumption builds on previous estimates for a total of $24,044.08 salary with the goal of approaching compensation parity for the overall workforce with preschool teachers with a minimum of an Associate's degree (BLS data median salary of $27,000)
Specific Amount of College Credits in Addition to an Associate's Degree	▪ $1.27/hr compensation increase (roughly 10%) for completion of a post-associate's- degree program ▪ Assumption builds on previous estimates for a total of $26,510.60 salary with a goal of approaching compensation parity for the overall workforce with preschool teachers with a minimum of an AA/AS (BLS data median salary of $27,000)

EDUCATIONAL MILESTONE	COST ESTIMATE CONSIDERATIONS
Associate's to a Bachelor's Degree	▪ $2.97/hr compensation increase (roughly 20%) for progress toward or completion of a bachelor's degree ▪ Assumption builds on previous estimates for a total of $32,032 salary with a goal of approaching compensation parity for the overall workforce with preschool/kindergarten/other primary teachers with a minimum of a bachelor's degree (BLS data median salary of $54,000)
Specific Amount of College Credits in Addition to a Bachelor's Degree	▪ $1.66/hr compensation increase (roughly 10%) for completion of a post-baccalaureate program ▪ Assumption builds on previous estimates for a total of $34,922.80 salary with a goal of approaching compensation parity for the overall workforce with preschool/kindergarten/other primary teachers with a minimum of a Bachelor's degree (BLS data median salary of $54,000)
Bachelor's to a Master's Degree	▪ $4.58/hr compensation increase (roughly 25%) for progress towards or completion of a master's degree ▪ Assumption builds on previous estimates for a total of $44,137.60 salary with a goal of approaching compensation parity for the overall workforce with preschool/kindergarten/other primary teachers with a minimum of a Bachelor's degree (BLS data median salary of $54,000)
Master's to a Doctorate Degree	▪ $6.87/hr compensation increase (roughly 30%) for progress toward or completion of a PhD ▪ Assumption builds on previous estimates for a total of $57,533.60 salary achieving compensation parity for the overall workforce with preschool/kindergarten/other primary teachers with a minimum of a bachelor's degree (BLS data median salary of $54,000)

WORKPLACE CONDITIONS

Definition: A stable and supportive work environment sustained by effective management and leadership practices

For example: Release time and substitutes

EDUCATIONAL MILESTONE	COST ESTIMATE CONSIDERATIONS
Health and Safety Training Package	Average cost of a substitute ($9.90/hr) to cover 1/2 of the training hours (assumes the remaining training hours are in-service with program or during non-program time) = $132.04 per person
Specific state/territory credential or career pathway level	Average cost of a substitute ($9.90/hr) to cover 3 hours of school/trainings a week for 12 weeks = $356.50 per person
No credential to CDA Credential™	Average cost of a substitute ($9.90/hr) to cover 3 hours of school/trainings a week for 12 weeks = $356.50 per person
Specific state/territory credential or career pathway level equivalent to or exceeding the CDA Credential™	Average cost of a substitute ($9.90/hr) to cover 3 hours of school/trainings a week for 12 weeks = $356.50 per person
CDA Credential™ to an Associate's Degree	Average cost of a substitute ($9.90/hr) to cover 3 hours of school a week for 30 weeks = $891.24 per person

EDUCATIONAL MILESTONE	COST ESTIMATE CONSIDERATIONS
Specific Amount of College Credits in Addition to an Associate's Degree	Average cost of a substitute ($9.90/hr) to cover 3 hours of school/trainings a week for 12 weeks = $356.50 per person
Associate's to a Bachelor's Degree	Average cost of a substitute ($9.90/hr) to cover 3 hours of school a week for 30 weeks = $891.24 per person
Specific Amount of College Credits in Addition to a Bachelor's Degree	Average cost of a substitute ($9.90/hr) to cover 3 hours of school/trainings a week for 12 weeks = $356.50 per person
Bachelor's to a Master's Degree	Average cost of a substitute ($9.90/hr) to cover 3 hours of school a week for 30 weeks = $891.24 per person
Master's to a Doctorate Degree	Average cost of a substitute ($9.90/hr) to cover 3 hours of school a week for 30 weeks = $891.24 per person

SYSTEM-LEVEL COSTS

PD SYSTEM LEADERSHIP STAFFING

Definition: Content and management expertise and support staff to administer the PD system

States have reported that the typical staffing for PD system leadership and administrative needs include the following roles:

- PD System Director
- Education Director
- Training Coordinator
- Technical Assistance Coordinator
- General Support Staff
- Fiscal Support Staff

WORKFORCE DATA SYSTEM

Definition: A system, such as a workforce registry, that tracks the size and characteristics of the workforce, including longitudinal data to monitor changes over time and levels on the state's career pathways.

There are five workforce data system options to be considered:

1. In-house development, and ongoing maintenance and operation (Would include first-year development costs)

2. Off-the-shelf/purchased software, and ongoing maintenance and operation (Would include first-year development costs)

3. In-house, already developed, ongoing maintenance and operation ONLY (Estimate for this already developed option would not account for any additional enhancements and would only include estimated costs for maintenance and troubleshooting of an existing system)

4. Off-the-shelf, already developed, ongoing maintenance and operation ONLY (Estimate for this already developed option would not account for any additional enhancements; only estimated costs for maintenance and troubleshooting of an existing system)

5. No workforce data system ($0 estimate), though it is important to note that costs will still be incurred related to personnel time and other internal systems for tracking data requirements.

States have reported that the typical staffing for workforce data system leadership and administrative needs include the following roles:

- Agency Director
- Registry Director
- Registry Coordinator
- Database Administrator
- Transcript Reviewer(s)
- Support Staff

More information about registry costs may be obtained through the National Workforce Registry Alliance. *https://www.registryalliance.org/*

Personnel cost estimate considerations:

1. Size of the workforce: Depending on the size of the state/territory, the number of individuals that make up the workforce will vary significantly, and this will impact PD system and workforce data system staffing needs.

2. Regional variations: Salary estimates will vary depending on the area of the country and whether or not the state is primarily urban or primarily rural. For example, urban areas often pay higher salaries than rural areas.

3. Mandatory benefits: Includes costs for workers' compensation, unemployment, and disability benefits, which can vary from state to state. Information on required benefit amounts is typically found on states' labor department websites. Benefits for each role should be estimated at 30%.

Obtaining salary estimates can be a difficult, but not impossible task. Some data sources for obtaining salary estimates include:

1. Bureau of Labor Statistics (BLS): The State Occupational Employment and Wage Estimates are available at: *https://www.bls.gov/oes/current/oessrcst.htm*. You can find wage data by state—sorted by occupation code—for the positions that are similar to the typical positions necessary to staff a PD system and/or workforce data system. For example, a PD System Director is a similar type of position as the Training and Development Manager indicated in the BLS (Occupation Code: 11-3131)

2. Workforce studies: Some states have recent workforce study data that can be used to inform salaries. Workforce studies may link salary information with QRIS levels or with qualifications.

ADDITIONAL PD SYSTEM ADMINISTRATIVE FUNCTIONS, SERVICES, AND INFRASTRUCTURE

Definition: PD system infrastructure, facilities, resources, and other functions

For example: Estimate for items such as space/facilities, resource utilization, marketing, general evaluation, etc.

Cost Estimate Considerations:

1. Operating costs including items such as supplies, rent, phone system/installation, phone, internet, communication tools, printing and copying, postage and shipping, etc. based on stage and type of PD and workforce data system and overall number of workforce targeted to advance on all milestones

2. Minimal in- and out-of-state travel based on overall number of workforce participants targeted to advance on all milestones

3. Technology costs including computers, printers, copiers, and variable costs for web design, server fees, application development, and software maintenance

4.   Additional fees based on stage and type of data system and overall number of workforce participants targeted to advance on all educational milestones

5.   Administrative overhead percentage of the PD system leadership staffing plus the workforce data system costs.

CONCLUSION

While it may be time-consuming and challenging at times, a PD system cost analysis can be transformative for leaders as they work to understand current investments and to develop workforce goals and target resources for PD systems and initiatives that will result in a well-qualified early childhood and school age workforce. States/territories are encouraged to share their experiences with one another and use the cost analysis process to ensure that public investments are used wisely with the ultimate goal of providing the best early care and education services for children and families.

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REGIONAL ADJUSTMENT NOTES:

Regional adjustments can be applied to the cost estimates based on Regional Price Parities (RPPs) that measure the differences in the price levels of goods and services across states and metropolitan areas for a given year.

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Source for regional adjustments for territories: U.S. Office of Personnel Management. (2020). Nonforeign area cost-of-living allowances: COLA and locality pay rates in nonforeign areas 2009-2020. Retrieved from:
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ADDITIONAL RELATED RESOURCES

- *Articulation*
- *Professional Development Frameworks*
- *Recruitment/Retention*
- *Workforce Registries*
- *Early Care and Education Coaching*
- *Health and Safety Training*
- *Preschool Credentials Overview*
- *Infant Toddler Credentials Overview*
- *Supporting Diverse Populations within the Early Childhood Workforce*
- *Early Childhood Education Credential Planning and Implementation Guide*