Comprehensive Early Childhood Education Regulations
Benefit-Cost Analysis
Rhode Island Department of Education | April 2019

Introduction
Rhode Island is one of only three states nationally to meet all pre-kindergarten (pre-k) quality benchmarks set by the National Institute for Early Education Research (NIEER). RI currently has 60 state-funded pre-k classrooms, serving 1,080 4-year-olds. Our goal is to add more than 500 high-quality seats for 2019-2020 and to provide 7,000 high-quality seats by 2024. To meet this goal, modifications are needed to the Regulations on Comprehensive Early Childhood Education Programs to allow Rhode Island to expand and maintain high quality. RIDE has been engaging with state partners at the Department of Human Services to identify revisions for the Council’s consideration.

Scope
This analysis considers regulatory provisions where RIDE exercised discretion and does not analyze any provision mandated by state or federal law. The scope of the analysis is specific to three proposed amendments to the regulations and their impact on the current 60 classrooms and separately the impact on future programs should RI implement Universal pre-k to serve approximately 7,000 children. These changes will only impact programs who voluntarily seek Tier 2 Comprehensive approval.
Programs do not have to meet Tier 2 requirements to operate an early learning program. The costs are subtracted from the benefits to calculate a net benefit. To analyze benefits and costs RIDE used current national research as well as budgets from current programs meeting these regulations.

Summary
This analysis looks in depth at three regulatory amendments and computes cost and benefits. These provisions are (1) an increase in the required hours of operation for tier two programs from 13.75 to 30 hours, (2) an increase to the staff/child ratio and class size, and (3) an increase in staffing requirements for programs that have more than 10 classrooms. There were no other proposed amendments that will result in a fiscal impact.

Alternatives
Following the discussion of amendments analyzed, there is a discussion of regulatory alternatives that were considered for several of the provisions.

Conclusion
This analysis shows a positive net benefit for the proposed regulation amendments. As a reminder, classrooms and programs do not need to meet Tier 2 requirements to operate classrooms or programs, therefore any fiscal impact would be voluntary. The increased positive outcomes for children and the estimated return on investment for pre-k outweigh the investment necessary for the required increase in hours of operation. There is also a positive net benefit of increase staff child ratio and group size as the per-child costs of pre-k are reduced with the proposed amendments.
Determination
This analysis was drafted pursuant to R.I. Gen. Laws § 42-35-2.9. As required by this statute, RIDE has determined that the benefits of the proposed rule justify the costs and that the proposed rule will achieve the objectives of the authorizing statute in a more cost-effective manner, or with greater net benefits, than other regulatory alternatives.

Increase in Hours of Operation
Proposed Change
This amendment would require programs seeking to meet Tier 2 Comprehensive standards to operate a full school day each week. Hours of operation would increase from 13.5 hours to 30 hours per week.

Regulatory Citation
6.3 (B)(5)

Costs
This requirement takes effect upon promulgation. All current approved programs already meet the increased time for operation of 30 hours per week. There would be no impact on the current 60 classrooms.

However, RIDE has calculated projected costs if a program that is currently half day were to seek Comprehensive approval under the regulations based on the average costs of current programs. The costs of current programs to run a full day program range from $170,000 to $190,000 not including any in-kind contributions. The average costs of educators with benefits across current programs range from $116,000 - $175,000. It is estimated that half day programs costs would be $105,000 to $140,000 with reductions in staffing costs, food, and facilities costs. Based on the current full day and projected half day costs of classrooms it is estimated that requiring full day would result in classroom costs increasing at a range of $50,000 to $65,000 per classroom. If Rhode Island expands to 7,000 seats, we would be adding about 300-330 classrooms depending on class size over the next five years. If the regulation allowed providers to be part time, about five percent of them would choose to be part time. The potential cost associated with requiring all Tier II providers to be full time can range from $740,000 to $962,000 over the next five years.

Benefits
The increase in the hours of operation of the classrooms would result in more learning time for children within the high-quality pre-k classroom. A study by the National Institute for Early Education Research (NIEER) found that the benefits of full-day preschool over half-day programs are significant. The study compared children from low-income families in half-day and full-day public preschool programs. Results demonstrated that children attending full-day programs did better on mathematics and literacy tests than children in a 2.5 to 3-hour public preschool program and the achievement gains continued at least until the end of first grade. Another study of the Midwest Child-Parent Center found that full-day preschool children in the Midwest CPC had higher scores in 4 of 6 domains of school readiness skills—language, math, socioemotional development, and physical health—increased attendance, and reduced chronic absences by 26% to 45% over children in part-day services. Additionally, DeSiato and Gilberti, in a study of prekindergarten effects on school readiness from Syracuse, found that twice as many

children who attend full-day prekindergarten enter kindergarten at the appropriate academic level compared with peers with half-day or no preschool experience. These findings were consistent across measures of educational readiness, subsequent development, and literacy.

Although it is challenging to quantify the benefits of requiring all high-quality Pre-Ks to be full time, a total benefit of high-quality pre-k results in $2 to $17 per dollar invested. Hence, the benefits of this change will outweigh the potential costs.

Increase to the staff-to-child ratio and group size

Proposed Change

This amendment would require classrooms seeking Tier 2 Comprehensive approval to have a staff-to-child ratio of 1 to 10 with a maximum group size of 20 instead of a ratio of 1 to 9 with a maximum group size of 18.

Regulatory Citation

6.5 (C)(4)

Costs

This requirement takes effect upon promulgation. Because this change will lead to increased efficiency and reduced per-child cost for providers without additional staffing requirements, this change will only have marginal costs of providing instructional materials and food for the child, which is minimal in comparison with the benefits outlined in the next section.

Benefits

Research shows that staff-to-student ratios and class sizes impact student outcomes and overall pre-k program quality. However, increased class size within an appropriate range for Pre-K students has not been associated with decreased program quality. A 2017 meta-analysis which utilized data from a comprehensive database of early childhood education program evaluations between 1960 and 2007 to evaluate the relationship between class size, child teacher ratio and cognitive, achievement and social emotional outcomes for children. For class sizes larger than 15 (ranging from 6 – 20) the meta-analysis found no significant difference in either cognitive or socio-emotional outcomes based on increases in class size. Allowing the increase in group size and ratio is also consistent national best-practices prescribed by the National Institute for Early Education Research (NIEER). NIEER has developed a rating system for 10 preschool policy standards related to quality based on research to help guide policymakers seeking to enhance and support high quality. NIEER’s for benchmark class size and staff to child ratios are a maximum of 20 students with a ratio no larger than 1 to 10.

In addition to the class size and staff ratio amendments not impacting program quality and outcomes, there are also cost benefits: the per-child annual costs would be reduced. As stated previously the costs of current programs to run a full day program for 18 children range from $170,000 to $190,000 not including any in-kind contributions. This results in a per-child cost ranging from $9,444 to $10,555.

---

$10,556. If two additional children are added to the classroom the average budget would range from $177,500 to $197,500 with a per-child cost ranging from $8,875 to $9,875. This would result in an estimated per-child cost savings of $596 to $681. If RI expands to 7,000 seats to offer universal pre-k with the increased class size there would be an estimated savings of $4,172,000 to $4,767,000. Programs not being funding by the State would be collect tuition for the additional children. According to a survey sponsored by the Rhode Island Department of Labor and Training and the Rhode Island Department of Human Services, the mean weekly rate for preschooler programs in centers in 2018 was $209.68. The majority of programs are open 52 weeks per year so the total annual cost for a child would be $10,903.36 thereby covering any additional costs incurred by the program.

**Increased staffing requirements for programs with more than 10 classrooms**

**Proposed Change**

This amendment would require programs seeking Tier 2 Comprehensive approval which will operate more than 10 classroom to hire additional administrative staff to support the classrooms. There are options for staffing patterns as such staffing changes at individual programs due to this proposed change may vary.

**Regulatory Citation**

6.5 (C)(4)

**Costs**

This requirement takes effect upon promulgation. No current program exceeds the 10 classrooms which would require additional staffing. In addition, if RI expands to 7,000 seats to offer universal pre-k we do not anticipate than many programs would implement 10 classrooms as most often they do not have the space. We anticipate that there may be a few programs who do, particularly in the public schools. Costs to implement this change will vary based on the number of classrooms the program has, but based on the minimum 10 in the proposed regulations programs may add a part time administrative assistant or additional time from the administrator or education coordinator. Based on current program salaries program costs could increase $10,000 to $20,000 per program who serve 10 classrooms.

**Benefits**

Adequate staffing is necessary to provide programmatic and administrative support to classrooms and families. While there are no studies specifically related to the number of staff required to administer and support pre-k classrooms research does show that a strong curriculum that is well-implemented increases support for learning and development broadly, and includes specificity regarding key domains of language, literacy, mathematics, and social emotional development. To attain this, teachers will need time for ongoing training and support and education coordinators need adequate time to observe and provide feedback to teachers to improve practice. Overall cost benefits cannot be quantified for this proposed change.

---


7 See Alternatives section for details.


Benefits of High-Quality Pre-K

The benefits of high-quality pre-k for children has been well researched\textsuperscript{1011}. Research demonstrates that high-quality pre-k increases a child's chances of succeeding in school and in life. Children who attend high-quality programs are less likely to be held back a grade, less likely to need special education, and more likely to graduate from high school. They also have higher earnings as adults and are less likely to become dependent on welfare or involved with law enforcement. Cost benefit analysis of high-quality pre-k shows a range of $2 to $17 per dollar invested\textsuperscript{12}.

Alternatives

Increase in Hours of Operation

Alternative 1: The minimum requirement for hours of operation could continue to be half for Tier 2 Comprehensive approval.

Alternative 2: The minimum requirements for hours of operation could be 20 hours weekly.

Determination

Given that participation in full day Pre-K has measurable benefits over half day and the overall benefits of high-quality pre-k, the status quo and Alternative 2 were rejected.

Increase to the staff-child ratio and group size

Alternative 1: The minimum requirement for staff-to-child ratio and group size continue to be 1 to 9 with a maximum of 18 children for Tier 2 Comprehensive approval.

Alternative 2: The minimum requirement for staff-to-child ratio and group size continue to be 1 to 8 with a maximum of 16 children for Tier 2 Comprehensive approval.

Determination

Given the research supporting ratios up to 1 to 10 with 20 children, the higher outcomes for children and the reduced per student cost of participation in full day Pre-K, the status quo was rejected. This recommendation is consistent with the NIEER benchmark for pre-k of 1 to 10 with 20 children. Although there is research to support outcomes at lower ratios, the cost does not outweigh the benefits.

Increased staffing requirements for programs with more than 10 classrooms

Alternative 1: The staffing requirements could remain the same and not require additional staffing for programs with 10 or more classrooms.

Alternative 2: The minimum requirements could require programs with 15 or more classrooms to hire additional administrative staff.

Determination

Based on a review of the supervision plans of the current programs, the average amount of time

\textsuperscript{10} Center for Public Education. \url{http://www.centerforpubliceducation.org/research/starting-out-right-pre-k-and-kindergarten}. Accessed 1/14/2019.


administrators spend with each classroom per week is three hours. If a program were to have nine classrooms, 27 hours would be spent with classrooms, leaving the remaining time to complete other administrative responsibilities. If the requirement were 15 or more classrooms, the number of hours needed to support 14 classrooms would exceed the 35-40 hour work week. Given this information and the minimal impact this regulatory amendment requiring additional administrative staff for programs with over 10 classrooms is appropriate.