



Rhode Island Cost Calculator

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INTRODUCTION

The Rhode Island Afterschool Plus Alliance (RIASPA) asked Augenblick, Palaich, and Associates (APA) in May 2008 to create an afterschool programming cost calculator.¹ The purpose of the calculator is to allow existing and potential afterschool programs in Rhode Island to estimate the costs of necessary program elements. This paper describes background and development of the cost calculator, including an illustration of how the calculator works.

In March 2005, APA created and field tested (Augenblick, Palaich, DeCesare, & Ziebarth, 2005) a method for state policymakers and education leaders to use to estimate the costs of high-quality after-school programs. This step-by-step method requires states to first determine personnel costs (including program operation, time, student/staff ratios, and additional non-student time), the student population, and the costs of facilities, administration, supplies/materials, insurance, substitutes, and student transportation (Augenblick, Palaich, DeCesare, & Ziebarth, 2005). APA also recommended that states account for differences in rural, suburban, and urban settings and in elementary, middle, and secondary schools settings for each of the program elements. The method relies on the professional judgment of experienced educators and program leaders to determine each of the component costs (Augenblick, Palaich, DeCesare, & Ziebarth, 2005).

Other research on the costs of afterschool programming includes a national report called *The Costs of Out-of-School-Time Programs*, conducted by the Finance Project and Public/Private Ventures. This report discusses the importance of accurate cost estimates for out-of-school programming. According to this report, reliable up-to-date cost information gives policymakers, program providers, and funders the ability to make informed decisions about how to allocate scarce resources to support high-quality out-of-school-time programs (Grossman, Lind, Hayes, McMaken, & Gersick, 2008). In addition to discussing the importance of accurate cost estimates, this report describes factors that may account for cost variations among different program types and offers cost estimates for a number of different types of out-of-school programs (Grossman, Lind, Hayes, McMaken, & Gersick, 2008).

The variations in afterschool programs make it very difficult to develop accurate estimates on a national scale. Such variations may include regional cost differences, hours of operation, types of provided services, number of children served, ages of the children, special needs of the children, and staff-to-youth ratio, among many others (Grossman, Lind, Hayes, McMaken, & Gersick, 2008). A cost calculator allows the state to define assumptions about afterschool programs, such as number of staff per student, type of staff in addition to staff salaries and benefits. Rhode Island can obtain much more precise cost estimates from a customized cost calculator than any other source. A cost calculator can be used to project and plan for the implementation of new programs, improve or expand existing programs, and conduct cost benefit analyses of programs.

¹ The benefits of afterschool programming are discussed in other RIASPA-sponsored publications.

The ability of the cost calculator to account for a variety of program variations and to develop customized estimates also improves RIASPA's ability to support individual program providers. As the relationship between costs and quality are better understood, RIASPA can help programs strategically allocate resources in ways which are most likely to improve quality. In addition, the cost calculator can help RIASPA anticipate and address potential budgetary problems before they occur.

The cost calculator also allows RIASPA to calculate the costs of both continuing and expanding afterschool programming across the state, including the cost of desired program elements and the need to serve special student populations. Working with precise estimates not only allows RIASPA to plan for future program maintenance and expansion, but can increase the likelihood of including afterschool programming into state budgets.

DEVELOPMENT OF THE COST CALCULATOR

The creation of the cost calculator began with meetings between APA and RIASPA staff. APA relied on RIASPA's expertise to determine existing personnel and other operating expenditure categories for Rhode Island afterschool programs. Rhode Island afterschool programs operate under two different staffing models. One model is a "fully-staffed" model with full- and part-time employees providing essentially all program services and functions. The second model is a "core staff" model which includes some core employees as well as some contractors who provide particular services. APA therefore created two sets of expenditure categories, one for the fully-staffed model and one for the core staff model.

After these initial lists were determined, APA convened a professional judgment panel to refine the lists and estimate expenditures in each of the expenditure categories. A professional judgment panel determines the resources needed to deliver a specified quality level of afterschool services. The professional judgment panel included 10 Rhode Island afterschool program directors and leaders. A list of panelists is available in Appendix A. Panelists reviewed and modified the lists of spending categories. They also determined existing salaries, benefits, and number of staff in each personnel category as well as current expenditures for each non-personnel category (e.g. technology). Because expenditures are likely to differ for programs with different enrollment numbers, it was necessary to make assumptions about enrollment in order to estimate expenditures. Panelists were asked to estimate resources for a program with 200 students, including 45 Limited English Proficient (LEP) students, 30 at-risk high-intensity students, 20 students who have on-going contact with the juvenile justice system, and 120 students enrolled in the summer program. In addition to estimating the resources needed for the base cost for students without special needs and not enrolled in summer programs, panelists also estimated the resources needed to provide supplemental services for students with special needs and those enrolled in summer programs.

As part of the professional development panel meeting, panelists also estimated expenditures necessary to meet high-quality afterschool program standards. These program standards were based on a report called the Guide to After-School Quality Standards, a document by the Providence After School Alliance (PASA) that all panelists were asked to read before the professional judgment meeting (Providence After School Alliance, 2008). At the conclusion of the meeting, panelists had produced resource estimates for

four different models: 1) fully-staffed existing resources model; 2) fully-staffed high-quality resources model; 3) core staff existing resources model; and 4) the core staff high-quality resources model.

APA then used the professional judgment panel estimates and notes from the meeting to develop a draft cost calculator to calculate per student and total costs. Both RIASPA and professional judgment panelists reviewed the draft and recommended adjustments. Their recommendations were integrated into the final version of the Rhode Island Cost Calculator.

The calculator begins with a decision page that allows the user to enter new data into or modify five categories:

- **Staffing model:** Users can select either the fully-staffed option or the core staff (with contractors) option to reflect the staffing configuration employed by the program.
- **Adjustment for size:** This allows users to specify whether or not an adjustment is necessary for the program to reach economies of scale.
- **School year and summer program student enrollments:** Users can utilize the 2 enrollment fields to enter the number of students enrolled during the school year and during the summer.
- **Special need student enrollments:** There are a total of 4 special need student enrollment fields, 2 each for the school year and summer. Specifically, these fields require the user to input the percent of enrolled students who are LEP and the percent who are at-risk high-intensity.
- **Students working with Juvenile Justice:** This field asks users to enter the percentage of students during the school year and the summer who have contact with Juvenile Justice.
- **Existing expenditures or high-quality standards expenditures:** Users can choose to calculate costs using either existing expenditures or the expenditures designed (by the professional judgment panel) to meet the PASA high-quality program standards.
- **Transportation:** This allows users to select whether or not they want to include estimated transportation costs in the calculations.

The data that is entered in or modified in each of these categories affect the estimated afterschool programming costs.

ILLUSTRATION OF THE COST CALCULATOR

To illustrate the utility of the afterschool cost calculator, the following example demonstrates how the calculator might operate in practice. Table presents student enrollments for a particular afterschool program. This program anticipates enrolling 150 students in the school year program and 75 students in the summer program. The program estimates that 25% of enrolled of these students will be limited English proficient (e.g. $25\% * 150$ school year students= 38; $25\% * 75$ summer students= 19), 10% will be at-risk high intensity (e.g. $10\% * 150$ school year students= 15; $10\% * 75= 8$), and 5% will require contact with the juvenile justice system (e.g. $5\% * 150$ school year students= 8; $5\% * 75$ summer students= 4).

TABLE : ESTIMATES OF STUDENT PARTICIPATION		
	School Year Program	Summer Program
Enrolled Students	150	75
Limited English Proficient	38	19
At-Risk High Intensity	15	8
Juvenile Justice Contact	8	4

Table presents the weights used to calculate the costs of afterschool programming for students with particular characteristics. The base cost of a student with no special needs enrolled during the academic school year is 100%. The additional cost weights represent the supplementary costs of providing afterschool programming to students with special needs or in special programs above and beyond the base costs. These percentages were calculated by identifying the expenditures associated with afterschool programming for students in each of the categories and then dividing by the number of students and the base cost per student. The percentages also reflect the following assumptions:

- Salaries, benefits, and non-personnel expenditures remain at the existing levels
- The program uses the fully-staffed model
- There is no cost adjustment based on size of the program
- Transportation costs are not included.

TABLE : WEIGHTS USED FOR SPECIAL STUDENT NEEDS AND PROGRAMS	
Base Cost Weight	
Academic Year Student	100%
Additional Cost Weights	Weights
Limited English Proficient Student	29%
At Risk High Intensity Student	89%
Juvenile Justice Contact Student	81%
Summer Program Student	19%

The student enrollments in Table and the weights in Table are used to calculate the overall program costs presented in Table . Table presents the cost of afterschool programming for each student without special needs and not enrolled in special programs (base cost per student), and the cost of each student with special needs or enrolled in special programs (weighted cost per student). Program costs are the total costs estimated for the program including the cumulative costs for all weighted and non-weighted students and transportation costs.

TABLE : ESTIMATED AFTERSCHOOL PROGRAM COSTS			
	Summer Program	School Year Program	Total Costs for Both Programs
Per Student Costs			
Base Per Student Costs	\$388	\$2,097	
Weighted Per Student Costs	\$467	\$2,519	
Program Costs			
Weighted Program Costs	\$34,994	\$377,914	\$412,908
Transportation Costs	\$0	\$0	\$0
Total Program Costs	\$34,994	\$377,914	\$412,908

The primary advantage of the cost calculator is that a “user” is allowed to re-specify the model to represent the situation he or she is interested in costing out. When the situation and assumptions are re-specified, the costs are recalculated. This cost calculator provides a tool to estimate the costs of afterschool programming that can be used by policymakers, advocates of afterschool programming, and program providers to improve, expand, and evaluate afterschool programs.

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Providence After School Alliance (2008). *Guide to After-School Quality Standards*. Providence, RI: The Education Partnership.

APPENDIX A: PROFESSIONAL JUDGMENT PANELISTS

- Tracy Cheney, Vice-President, Dr. Daycare Family
- Erin Combs, Child Care Director, YWCA Greater Rhode Island
- Tina Darling, Child Care Director, Kent County YMCA
- Elizabeth Devaney, Director of Quality Initiatives, Providence After School Alliance
- **Bradley Fesmire**, Program Director and Painting Studio Supervisor, RiverzEdge Art Project
- Erin Gilliatt, Executive Director, Boys and Girls Club of East Providence
- Lydia McManus, Program Director, Feinstein 21st Century Community Learning Center program
- Joseph V. Tomchak, Director of Program Services & Outreach, Boys and Girls Clubs of Pawtucket
- Deb Tungett, Coordinator, Jamestown Teen Center