

JOINT STATE GOVERNMENT COMMISSION

General Assembly of the Commonwealth of Pennsylvania

RETURN ON INVESTMENT OF AFTERSCHOOL PROGRAMS IN PENNSYLVANIA

A report of the Advisory Committee

June 2021



*Serving the General Assembly of the
Commonwealth of Pennsylvania Since 1937*

REPORT

*2020 House Resolution 180
Return on Investment of Afterschool Programs in Pennsylvania*

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The Joint State Government Commission was created in 1937 as the primary and central non-partisan, bicameral research and policy development agency for the General Assembly of Pennsylvania.¹

A fourteen-member Executive Committee comprised of the leadership of both the House of Representatives and the Senate oversees the Commission. The seven Executive Committee members from the House of Representatives are the Speaker, the Majority and Minority Leaders, the Majority and Minority Whips, and the Majority and Minority Caucus Chairs. The seven Executive Committee members from the Senate are the President Pro Tempore, the Majority and Minority Leaders, the Majority and Minority Whips, and the Majority and Minority Caucus Chairs. By statute, the Executive Committee selects a chairman of the Commission from among the members of the General Assembly. Historically, the Executive Committee has also selected a Vice-Chair or Treasurer, or both, for the Commission.

The studies conducted by the Commission are authorized by statute or by a simple or joint resolution. In general, the Commission has the power to conduct investigations, study issues, and gather information as directed by the General Assembly. The Commission provides in-depth research on a variety of topics, crafts recommendations to improve public policy and statutory law, and works closely with legislators and their staff.

A Commission study may involve the appointment of a legislative task force, composed of a specified number of legislators from the House of Representatives or the Senate, or both, as set forth in the enabling statute or resolution. In addition to following the progress of a particular study, the principal role of a task force is to determine whether to authorize the publication of any report resulting from the study and the introduction of any proposed legislation contained in the report. However, task force authorization does not necessarily reflect endorsement of all the findings and recommendations contained in a report.

Some studies involve an appointed advisory committee of professionals or interested parties from across the Commonwealth with expertise in a particular topic; others are managed exclusively by Commission staff with the informal involvement of representatives of those entities that can provide insight and information regarding the particular topic. When a study involves an advisory committee, the Commission seeks consensus among the members.² Although an advisory committee member may represent a particular department, agency, association, or group, such representation does not necessarily reflect the endorsement of the department, agency, association, or group of all the findings and recommendations contained in a study report.

¹ Act of July 1, 1937 (P.L.2460, No.459); 46 P.S. §§ 65–69.

² Consensus does not necessarily reflect unanimity among the advisory committee members on each individual policy or legislative recommendation. At a minimum, it reflects the views of a substantial majority of the advisory committee, gained after lengthy review and discussion.

Over the years, nearly one thousand individuals from across the Commonwealth have served as members of the Commission's numerous advisory committees or have assisted the Commission with its studies. Members of advisory committees bring a wide range of knowledge and experience to deliberations involving a particular study. Individuals from countless backgrounds have contributed to the work of the Commission, such as attorneys, judges, professors and other educators, state and local officials, physicians and other health care professionals, business and community leaders, service providers, administrators and other professionals, law enforcement personnel, and concerned citizens. In addition, members of advisory committees donate their time to serve the public good; they are not compensated for their service as members. Consequently, the Commonwealth receives the financial benefit of such volunteerism, along with their shared expertise in developing statutory language and public policy recommendations to improve the law in Pennsylvania.

The Commission periodically reports its findings and recommendations, along with any proposed legislation, to the General Assembly. Certain studies have specific timelines for the publication of a report, as in the case of a discrete or timely topic; other studies, given their complex or considerable nature, are ongoing and involve the publication of periodic reports. Completion of a study, or a particular aspect of an ongoing study, generally results in the publication of a report setting forth background material, policy recommendations, and proposed legislation. However, the release of a report by the Commission does not necessarily reflect the endorsement by the members of the Executive Committee, or the Chair or Vice-Chair of the Commission, of all the findings, recommendations, or conclusions contained in the report. A report containing proposed legislation may also contain official comments, which may be used to construe or apply its provisions.³

Since its inception, the Commission has published over 400 reports on a sweeping range of topics, including administrative law and procedure; agriculture; athletics and sports; banks and banking; commerce and trade; the commercial code; crimes and offenses; decedents, estates, and fiduciaries; detectives and private police; domestic relations; education; elections; eminent domain; environmental resources; escheats; fish; forests, waters, and state parks; game; health and safety; historical sites and museums; insolvency and assignments; insurance; the judiciary and judicial procedure; labor; law and justice; the legislature; liquor; mechanics' liens; mental health; military affairs; mines and mining; municipalities; prisons and parole; procurement; state-licensed professions and occupations; public utilities; public welfare; real and personal property; state government; taxation and fiscal affairs; transportation; vehicles; and workers' compensation.

Following the completion of a report, subsequent action on the part of the Commission may be required, and, as necessary, the Commission will draft legislation and statutory amendments, update research, track legislation through the legislative process, attend hearings, and answer questions from legislators, legislative staff, interest groups, and constituents.

³ 1 Pa.C.S. § 1939.

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June 2021

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To the Members of the General Assembly of Pennsylvania:

We are pleased to release, *Return on Investment of Afterschool Programs in Pennsylvania*, as directed by House Resolution 180 of 2019. The report is a review of afterschool and out-of-school time (OST) programs in Pennsylvania, focusing on the types, funding, data, outcomes and return on investment that they provide to participants and the Commonwealth overall. HR180 directed that the Commission review the increases in positive behaviors and the decreases in negative behaviors that are shown by OST participants.

HR180 further directed that the Commission appoint an Advisory Committee of stakeholders in OST. The Advisory Committee was composed of the full spectrum of stakeholders, including PDE, statewide associations, advocates, providers, school district superintendents, parents, student representatives, a district attorney and a police chief. Several recommendations arose from Advisory Committee discussions. Most notable is the Advisory Committee's recommendation that the state provide a dedicated funding stream for OST. Others were focused on data collection and training.

The full report is available on our site at <http://jsg.legis.state.pa.us>.

Respectfully submitted,

Glenn J. Pasewicz
Executive Director

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EXECUTIVE SUMMARY

There is widespread agreement that afterschool and out-of-school time (OST) programs in Pennsylvania provide benefits to the young people who participate in them, to their families, and in the long term to the Commonwealth. Dozens of types of services span the providers' programs and are perhaps as diverse as the communities they serve. The patchwork variety demonstrates that programs are focused on the needs of their specific communities, which appears to provide the most benefit to their participants.

Despite differences in what services are provided, successful programs share certain characteristics. Research has demonstrated that using sequenced, active, focused, and explicit (SAFE) practices had positive effects on outcomes. Researchers have categorized programs into three general types: specialty, academic, and multipurpose. Specialty programs are focused on developing specific skill sets such as are found in sports, arts, and some specialized academic programs. More general academic programs focus on improving participants' academic performance, classroom behavior, and prospects for high school graduation. Multipurpose programs include those that cover a broad range of services designed to help young people increase their positive behaviors, such as leadership, community involvement, healthy lifestyle choices, and 21st century skills and job readiness, and to decrease negative behaviors that can lead to substance use, high school dropout, juvenile delinquency, and other dangerous behaviors. This report focuses its presentation on general academic and multipurpose programs.

The effectiveness of such programs can be measured by different means. One measure is to determine the return on investment, wherein a dollar value of program outcomes is compared against the dollar amount of funding a program receives. For this report, a Commission staff estimate of the return on investment (ROI) in Pennsylvania is approximately \$6.69 for each \$1 invested, which is based on potential benefits of reducing high school dropout rates, teen pregnancy rates, substance use disorder, and crime and delinquency. Calculations using data provided from the Boys and Girls Clubs of America estimate its Pennsylvania ROI as \$8.50. The Pennsylvania Statewide Afterschool Youth Development Network (PSAYDN) estimates that crime prevention programs can save the Commonwealth between \$7 and \$10 for each \$1 invested. The rationale for these estimates and the data in this report were gathered from dozens of academic journal articles, other states' studies, and Pennsylvania OST providers.

The Commonwealth does not provide a dedicated funding stream to OST programs. OST providers may be eligible for funding through sources such as the Child Care Development Block Grant Program (CCDBG) because of the populations they serve. Otherwise, programs are supported through myriad donations stemming from their fundraising activities, foundations, charitable giving, and participants' own families. The variability, uncertainty, timing, and competitiveness of funding combine to hinder providers' ability to plan and deliver services. Further, funders' requirements for reporting and evaluation often necessitate that staff devote valuable time on data entry rather than in working with participants.

The federal government provides funding through two primary sources: the Nita M. Lowey 21st Century Community Learning Centers (21st CCLC) and the Elementary and Secondary School Emergency Relief Fund (ESSER Fund and ESSER II). The latter are parts of the CARES Act and the American Rescue Plan (ARP). ESSER and ARP funding ceases in September 2024, which is of considerable concern to OST providers. 21st CCLC funds are awarded through the Pennsylvania Department of Education (PDE) to grantees to provide primarily academic support. ESSER funds are being distributed to public school districts and can be used for OST programs, including money to non-school grantees at the districts' discretion. Federal funding in the form of 21st CCLC appropriations to Pennsylvania has varied somewhat over the years but has increased at a rate of about 2.5 percent per year for the past 15 years; funding has averaged more than \$45 million annually since 2015. Other sources of funding may vary from year to year and from source to source. The amounts awarded to recipients are largely based on programs' efforts to secure funding, and it is often the case that many hours of data entry, grant writing, and communications result in relatively paltry monetary awards.

The report includes the Advisory Committee's recommendations for ways to build on the benefits accruing through OST programs. First and foremost, the Advisory Committee recognizes the need for the Commonwealth to establish a dedicated and reliable funding stream to OST providers. Second, the Advisory Committee recommends that the Commonwealth set up a means of collecting input and outcome data from OST providers. Presently, substantial time and effort is expended on submitting input data. Whether large research organizations, government entities, or charitable foundations, the emphasis on gathering information tends to focus on inputs like funding and outputs like staff qualifications and programs offered, for example, rather than on outcomes like graduation rates, post-program activities like community involvement, vo-tech training, or college attendance. New data initiatives should capture the trends in the increases in positive behaviors and decreases in negative behaviors. Third, the Commonwealth should provide training at a reasonable cost to OST program administrators that would focus on how to implement data gathering systems and how to collect the data on an on-going basis. Finally, school districts and OSTs should continue to develop clear methods of sharing pertinent data.

INTRODUCTION

The demand for activities and opportunities beyond what is provided for children and teenagers during the school day has led to an abundance of organizations that seek to fill the needs of young people and families in their communities. Some organizations provide for basic necessities, providing a safe shelter, supervision, and food until parents and guardians can take charge of their children at the end of the workday. Other organizations fulfill target roles, focusing on objectives such as academic performance, leadership, career readiness, community service, or crime prevention. National organizations leverage resources to reach many thousands of youngsters; local and community organizations meet their populations' needs where the national groups do not reach. Yet, despite the apparent abundance, there exist widespread unmet needs and in many places a paucity of resources available to address them.

Over the past several decades, it has become the norm that more and more families rely on dual-income earnings. While there are certainly many more resources available to these families than there had been in years past, research demonstrates the importance of investing in out-of-school time programs (OST). During unsupervised hours, notably between 3:00pm and 6:00pm, children are more likely to be involved in or victimized by violence, crime, and other risky behaviors such as drug use and sexual activity. In response to the increasing evidence of both the risks faced by unsupervised children and the rewards provided by evidence-based supplemental programs, policymakers and parents alike have championed the implementation of OST programs to provide children with a safer alternative during those unsupervised hours. Research supports initiatives to establish OST programs as providing broad societal and economic benefits. A 2017 report by the Rand Corporation identified three motivations for public funding:

1. Unsupervised children may engage in risky behavior.
2. Access to enrichment activities is highly dependent on family income.
3. Low-income students trail more affluent peers in academic achievement.⁴

OST programs—also referred to in relevant literature as afterschool programs—have evolved since their early iterations of simply providing a haven to disadvantaged children to providing programming that will contribute positively to the young people's growth and development. The programs are not simply reactive, but proactive in teaching life skills that will enable children to make positive choices that will affect their future. Programs often provide resources to improve academic performance, to enhance social and emotional learning, and to sharpen career readiness skills, all of which equip children to begin to plan their future aspirations and work toward these goals. The programs can also be utilized as tools for prevention. Reducing

⁴ Jennifer Sloan McCombs, Anamarie A. Whitaker, and Paul Youngmin Yoo, *The Value of Out-of-School Time Programs* (Santa Monica, CA: RAND Corporation, 2017), <https://www.rand.org/pubs/perspectives/PE267.html>, 3.

the hours that children are left unsupervised can reduce their access to dangerous situations, use of illegal substances, sexual activity, and unhealthy eating.

Although these benefits can be especially helpful for children from low-income families, barriers to quality OST programs remain. While many programs rely heavily on parental contribution through tuition and fees, most programs utilized by low-income families are publicly funded.⁵ The largest source of federal funding for OST programs is the Nita M. Lowey 21st Century Community Learning Centers (21st CCLC) grant. To receive public funds, OST programs must go through a rigorous data collection process to ensure that the grants are being used to improve participants' outcomes.

Grantees must uphold certain standards in their instruction of students, and then measure specific outcomes of this instruction to receive federal aid. Some outcomes are challenging to interpret year-to-year, as students generally benefit from extended involvement in a program, and some outcomes will not change significantly in one year. Further, some outcomes are difficult to even trace empirically. It can be a challenge to quantify the value to the community of a child learning better conflict resolution skills or decision-making skills. Adding a level of complexity to data collection is the fact that each funding source a program utilizes often comes with its own unique expectation of what data will be collected. Though some programs hire third party evaluators, this data collection can be a daunting task for smaller programs. In the extreme, these requirements can disrupt the time that program staff spends with participants.

Types of Out of School Time

The Centers for Disease Control and Prevention (CDC) uses three categories to organize the types of OST programs that are commonly available: specialty, academic, and multipurpose.⁶ The RAND Corporation, for example, uses these categorizations to guide its research on the value of such programs. Though individual programs can differ in various ways, these general categories pinpoint the primary intended outcomes of a program.⁷



Types of OST



• SPECIALTY • MULTIPURPOSE • ACADEMIC

⁵ Ibid., 3.

⁶ “Out of School Time,” CDC, accessed February 17, 2021, <https://www.cdc.gov/healthyschools/ost.htm>.

⁷ McCombs, *The Value of Out-of-School Time Programs*, 5.

SPECIALTY programs focus on developing and strengthening a specific set of skills. These programs are usually utilized by children of middle- and upper-income families and usually require a fee for the services provided. Specialty programs are set apart because the activities are tied directly to a specific outcome. There may be additional benefits for the cognitive development and life skills of the participant, but those have not received empirical attention due to the difficulties in quantifying the benefits. These programs receive less attention because they are more likely to be funded privately and vouched for by parents satisfied with observable outcomes.⁸

MULTIPURPOSE OST programs have broader scope than specialty programs. The typical programs meet four or five days out of the week throughout the school year for around three hours each day. The instructors for these programs are usually “youth workers,” and they facilitate providing students with snacks, time to work on homework, and time for an additional recreational activity of a student’s choice. Expected benefits of the category of programs include increased safety for students, health and wellness education, and homework support. Parents benefit from extra hours of supervision of their children so that they can continue to work during normal work hours.⁹

ACADEMIC OST programs are set apart having certified teachers and curricula to educate students. These programs can be remedial or accelerated and can be offered in the summer or during the school year. They are offered three to five days of the week typically for three hours a day during the school year. The time each day is split into 45-90 minutes of academic enrichment, and then the remaining time may include a meal or snack and other enrichment activities led by youth workers. In the summer, programs can be four to six days out of the week and academic instruction can last anywhere from an hour to two hours of a program that could be four to eight hours a day. Expected benefits of these programs is improved academic performance.¹⁰

Demographics

Nationally, a 2014 study by the Afterschool Alliance found that lower-and middle-income families were in the majority both in participation and demand. Ethnically, African American and Hispanic children were two times more likely than Caucasian children to be involved in the programs. African American and Hispanic children were also more likely to have an unmet demand for an OST program.¹¹ Communities of concentrated poverty had higher levels of participation in OST programs than the national average.¹² Nationwide, children in high-income families are more likely to play sports than those in lower-income families, with 59 percent versus 84 percent.¹³ A 2016 survey by the National Recreation and Parks Association of OST programs

⁸ Ibid., 5-7.

⁹ Ibid., 7.

¹⁰ Ibid., 7-8.

¹¹ *America After 3pm: Afterschool Programs in Demand* (Afterschool Alliance, 2014), http://www.afterschoolalliance.org/documents/AA3PM-2014/AA3PM_Key_Findings.pdf, 3.

¹² *Executive Summary: Afterschool in Communities of Concentrated Poverty* (Afterschool Alliance, 2014), http://www.afterschoolalliance.org/AA3PM/Concentrated_Poverty.pdf, 2.

¹³ McCombs, *The Value of Out-of-School Time Programs*, 4.

across the country found that 95 percent were summer camps, 69 percent were sports leagues, 39 percent were tutoring programs, and 22 percent were mentoring programs.¹⁴

Purpose of Out-of-School Time Care

The approaches and methods used in OST care have evolved over the years as programs played increasingly larger roles in participants' daily lives. Some researchers in the field of OST use a "generations" model to examine the different perspectives on the purpose of these programs.¹⁵ These researchers categorize the perspectives into three generations.

The first generation encompasses those who see OST care as a way to keep children out of harm's way as their parents complete their work days. This was the purpose of the original afterschool programs. In this perspective, adults provide structure and watch over the children's safety, but interact very little with them. They keep a wide view of all the children and ensure that everyone is present and accounted for and behaving well. The staff may characterize themselves as "police officers" or "babysitters."¹⁶

Second generation programs are those that, having been established long enough to have sustaining safe environments, implement plans to create enjoyable environments for the participants. The goal becomes the retention of participants by making OST programs something that the children look forward to. The staff takes on the role of leaders in fun group activities. Parents are often satisfied with this model because the children do not resist attending the program, and all involved are having positive experiences with the programs. Parents may even see the activities as educational when the activities are not meant to fill educational roles.¹⁷

OST programs that evolve as a means of instilling lifelong skills in the children comprise the third generation. The staff of these programs believe the programs can be leveraged to create a network for the child in the community and reinforce good social and emotional life skills. Building on the child's comfort, safety, and enjoyment of the services, the staff adds an element of social education to the daily activities. This difference is most obvious in conflict resolution. Staff will work with children to talk through conflict between children and discuss behavioral concerns instead of doling out time-outs or similar punishment. They will examine motives for misbehavior and create solutions that provide a learning experience for the children. The third generation also places a stronger emphasis on cultural diversity and awareness.¹⁸

¹⁴ *NRPA Out-of-School Time Survey Results* (NRPA, 2016), <https://www.nrpa.org/contentassets/c76ea3d5bcee4595a17aac298a5f2b7a/out-of-school-time-survey-results-report.pdf>, 2.

¹⁵ Laurie Ollhoff and Jim Ollhoff, *Keys to Quality Afterschool: Environments, Relationships, and Experiences* (Harrisburg, PA: Office of Child Development and Early Learning, 2012), <https://www.pakeys.org/wp-content/uploads/2018/02/Keys-to-Quality-Afterschool.pdf>, 4.

¹⁶ *Ibid.*, 4.

¹⁷ *Ibid.*, 5-6.

¹⁸ *Ibid.*, 7.

A 2012 best practices guide developed for Pennsylvania early learning professionals identifies five key needs that should be addressed in a third-generation afterschool program: empowerment, play, community building, maturity, and self-discipline.¹⁹

Methodology

House Resolution 180 directed the Joint State Government Commission, through the establishment of an advisory committee, to study the current return on investments regarding afterschool programs and provide feedback on developing a means to capture outcomes. Specifically, the resolution directed JSGC to focus on the following outcomes:²⁰

-
- **The improvement of social, emotional, academic, and career readiness competencies of school age children including 21st century skill building.**
 - **The reduction of other negative behaviors such as violence and crime, adolescent pregnancies, tobacco, alcohol and substance abuse, disengagement from school, school suspension and truancy, and health compromising behaviors.**
 - **Providing working families with a safe afterschool environment for their children and employment opportunities in this Commonwealth within the field due to an increased demand.**
-

Joint State was also directed to provide feedback on the feasibility of Commonwealth investments in afterschool programs and track the impact of after-school programs in this Commonwealth.

Joint State Government Commission staff conducted extensive reviews of existing research literature across the broad topic of afterschool and out-of-school programs. This review included publications from large public policy research institutes such as the Rand Corporation and The Wallace Foundation, academic researchers, and publications of afterschool consortiums such as the national Afterschool Alliance. Also given close study were other states' government reports that sought to better understand how afterschool and out-of-school time programs are functioning in their states. Literature reviews of reports by Pennsylvania organizations were given close examination, including a number of resources provide by the Pennsylvania Afterschool Youth Development Network (PSAYDN), the Allegheny Intermediate Unit's reports on the Commonwealth's 21st Century Community Learning Centers, and reports and information made available by Pennsylvania's program providers, including the Y, Boys & Girls Clubs, Schools & Homes in Education (SHINE), Sunrise of Philadelphia, APOST, and others. Further, the

¹⁹ Ibid., 9.

²⁰ House Resolution 180 of 2019.

Legislative Budget & Finance Committee 2016 report, *Afterschool Programs in Pennsylvania*, provided valuable insight into the funding of programs in Pennsylvania.

Research published by large national organizations, such as Rand and Wallace, as well as academic researchers, is primarily focused on how programs are structured in terms of their curriculum models and on the benefits to young people who participate. The large institutions are likely to conduct research into different models of afterschool programs to identify the components that are most likely to provide the desired outcomes. These components then are identified as best practices are shared with organizations such as the Afterschool Alliance and PSAYDN to disseminate to their member providers. Similarly, the advocacy organizations, like Afterschool Alliance and PSAYDN, conduct their own literature and research reviews to identify the practices that are mostly likely to help deliver the best outcomes for their members' respective communities. Some providers with a national presence, such as the Boys & Girls Clubs of America, have begun national initiatives to study their programs, to generate data and information that can be used to support evidence-based decision making at both the national and local levels of service.

The National Conference of State Legislators (NCSL) and the Education Commission of the States (ECS) provided valuable national and comparative data on OST programs.

Using HR180 as a guide, staff delved into research papers that addressed what is broadly considered positive behaviors and negative behaviors. Among the positive behaviors, staff sought to identify research results that showed improvements in social, emotional, academic, career readiness, and 21st century skills. Among the negative behaviors, staff collected research that showed the programs' effects on violence and crime, adolescent pregnancy, substance use, disengagement from school/truancy, and health compromising behaviors.

HR180 directed that an advisory committee be established that included stakeholders in out-of-school programs, including representatives of public schools, including classroom educators and superintendents, providers of afterschool and out-of-school programs, representatives of state government. The advisory committee met several times via Zoom because of the COVID-19 pandemic. It is important to note that, just as the pandemic shifted the Commission's work to a nearly full-time work from home model, the OSTs were challenged as never before with program closures, restructuring, the unavailability of meeting spaces and facilities, and staff shortages.

Meetings included presentations by providers (SHINE, BGCA, the Y) to help inform not only Commission staff, but also their fellow members of the advisory committee. The intent was that the presentations could open discussion among members. Moreover, the process of meeting and having open discussions among stakeholders representing different facets could spur cooperation and build collaboration to enhance the effectiveness of the programs even while they were participating in the report.

Staff conducted smaller Zoom meetings with subsets of the advisory committees that focused on particular interests and expertise of those members. To wit, discussions were held with school district superintendents, with those representing law enforcement, with providers, and others. These more focused discussions allowed deeper consideration of the topics.

PENNSYLVANIA OUT-OF-SCHOOL TIME PROGRAMS

The landscape of out-of-school time (OST) programming in Pennsylvania is constantly evolving as focus and desired outcomes shift. Currently, OST programming is focused on quality improvement efforts, enforced by the Keystone STARS Child Care Quality Initiative. The goal of STARS is “to promote continuous quality improvement in early learning and school age environments.”²¹ Providers also have access to quality assessment tools developed by the Pennsylvania Statewide Afterschool Youth Development Network (PSAYDN) and resources from the National Institute on Out-of-School Time.²²

Another recent emphasis of OST programs in Pennsylvania is Expanded Learning Time, which attempts to include additional instruction and activity time on top of the school day. Programs attempting to emulate this style must have eight important features, according to Afterschool Alliance: School-community partnerships; engaged learning; family engagement; intentional programming; diverse, prepared staff; participation and access; safety, health and wellness; and ongoing assessment and improvement.²³ The Boys and Girls Club in Harrisburg has in the last ten to twelve years moved from an emphasis on athletics to a much more balanced program that also includes academics and character and moved these to the forefront.²⁴

The Pennsylvania Statewide Afterschool Youth Development Network (PSAYDN) is the primary organization that provides resources, guidance, outreach, and advocacy for afterschool and out-of-school programs in Pennsylvania. With considerable experience and research behind it, the organization concluded that

There is a growing body of academic research revealing that OST programs have positive impacts on students’ academic growth. These programs are delivered to ensure certain critical elements are utilized to engage students and increase attendance, thus attaining an adequate “dosage” level for academic gains. Researchers differ only slightly in what they believe the critical elements are, yet there is growing consensus those include access to the program; alignment of program content with student academic and behavioral goals; trained and experienced staff; meaningful youth relationships with adults; and strong partnerships among the program and other places (school, home, etc.) where students are learning.²⁵

²¹ *Afterschool Programs in Pennsylvania* (Harrisburg, PA: Legislative Budget and Finance Committee, 2016), <http://lbfc.legis.state.pa.us/resources/documents/reports/558.pdf>, 4.

²² *Ibid.*, 4.

²³ *Ibid.*, 6.

²⁴ Phone call with District Attorney Fran Chardo and JSGC staff, November 25, 2020.

²⁵ PSAYDN, “Afterschool: Improving Lives in Pennsylvania,” <http://psaydn.center-school.org/wp-content/uploads/sites/34/2018/10/afterschool-improving-lives-in-pa.pdf>.

Research and experience show that certain elements need to be present in an OST program for it to be successful in achieving its objectives.²⁶ These elements include: structured and regular activities, engaged adult mentors, offer services outside traditional school time during all or most of the school year, and for at least five hours a day for six or more weeks during the summer, expect regular attendance, are affiliated with a school or center-based facility.

In Pennsylvania, approximately 322,000 students participate in OST programs. An additional 812,000 would participate in a program if one were available for them.²⁷

Science, technology, engineering, and mathematics (STEM) education is also an increasingly prevalent feature of OST programming in Pennsylvania. In 2016, sixty-seven percent of 500 OST programs surveyed by the Legislative Budget and Finance Committee (LBFC) had at least some STEM programming included in their activities. A small percentage of Pennsylvania programs can be characterized as enrichment programs, meaning they promote, music, theater, and the arts.²⁸

LBFC's survey shows that a majority of programs provide homework help, arts/music/cultural activities, recreation/physical fitness, and STEM. A smaller portion of programs provide mentoring and college and career readiness. The majority of the OST programs surveyed were located in public schools and licensed day care centers; others are based in private or charter schools, churches, and community centers.²⁹

Over half of the programs surveyed in the LBFC report operated in only one location, with about 25 percent having two to five sites and 20 percent having six. Programs mostly hosted older and younger elementary-aged students. Over 50 percent include middle schoolers and around 20 percent serve high schoolers. Thirty-two percent of programs had more than 100 participants, 24 percent had 31-60, and 25 percent had 11-30 participants. Most programs had more than 12 hours of programming in a week, and about half of the programs had summer hours. About 44 percent of programs had a ratio of between 6 and 10 to 1 between children and staff, with 49 percent having a ration of over 10 to 1.³⁰

Fifty-five percent of students took a bus from school to the programs. Thirty-six percent were picked up by the centers, and another 36 percent walked to the centers. The remaining 33 percent were transported by their parents to their programs.³¹ Almost 93 percent of programs provided snacks for students. Forty percent provided breakfast, 37 percent provided lunch, and 21 percent provided dinner.³² Forty-four percent of programs utilized the Child and Adult Care Food Program (CACFP) to provide the meals, and 55 percent did not.³³

²⁶ Ibid.

²⁷ "Afterschool in Pennsylvania," *Afterschool Alliance*, accessed March 26, 2021, <https://afterschoolalliance.org/policyStateFacts.cfm?state=PA>.

²⁸ *Afterschool Programs in Pennsylvania*, (LBFC), 7-8.

²⁹ Ibid., 53-64.

³⁰ Ibid., 43.

³¹ Ibid., 52.

³² Ibid., 58.

³³ Ibid., 39-59.

The YMCA

Pennsylvania's 59 YMCA (hereafter referred to as "The Y") locations were surveyed in February 2021 and 57 locations submitted responses. Forty-nine of the locations that responded offered OST Programs. The Ys varied widely in the number of children served, ranging from six participants to 13,500. The Greater Philadelphia Y recorded the 13,500 participants, which is a significant outlier. The second-highest number of participants was 915, served by the Greater Valley Y. The median number of participants among Y locations was 132. Twenty-five percent of The Ys had fewer than 64 participants, and 25 percent had more than 438 participants.

The Ys also differed substantially in the number of OST sites they operated, with a minimum of one and a maximum of 120, with 120 being an outlier that again came from the Greater Philadelphia Y. The median number of sites operated was three. Slightly more than one-third of The Ys had two or fewer sites, and one quarter had more than nine.

Annual costs of programs show big variations between The Ys. The amounts ranged from \$6,000 to \$20 million with a median of \$171,081.50. Twenty-five percent of the programs had costs under \$61,000, and 25 percent of programs cost more than \$728,000. Forty-three of The Ys partnered with their school district or school to provide programs.³⁴

The Y of Greater Brandywine in Chester County has 500 morning care attendees, 810 after care attendees, and 165 students in kindergarten wrap-around care, meaning children receive a half-day of schooling and then go to the after care. 70 children participate in Believe and Achieve, a fully funded program for children in the borough of Westchester. The program is located in 8 elementary schools, 4 of which have Kindergarten wrap-around care. Three Y facilities host programs. The program receives funding from a variety of sources: Child Care Works provides \$390,000, Full Pay Families provide \$1.7 million, STARS provides \$11,000, \$8,000 comes from grants, and \$92,000 comes from financial assistance.³⁵ The areas of focus are "provide enriching activities to enhance academic learning and success, developing self-confidence and independence, communication core values of caring, honesty, respect, and responsibility, creating lasting friendships and lifelong memories, encouraging learning and exploration in a supportive environment, infusing fun and good health into activities each day."

In recent years The Y's OST programs made a shift toward emphasizing character development. The staff focuses on growth in emotion management, empathy, personal development, relationship building, and responsibility, and how they can be a role model to the children. The way of thinking changed from impressing "skills and knowledge" to "qualities and characteristics." The Y uses multiple measures that evaluate different aspects of the program. These include site visits, Listen360, email surveys, Hello Insights, and the Youth Program Quality Assessment and School-Age Program Quality Assessment. The evaluations have led to change that focused on the quality of the programs and consistency throughout the organization. The program supports the staff in their interaction with the children. They are changing the language

³⁴ Survey administered to PA Ys in February 2021.

³⁵ Presentation by Tina Rydgren, Association Director of Youth Programs, The Y of Greater Brandywine, at JSGC Advisory Committee Meeting, September 24, 2020.

from “school age child care” to “school age child enrichment.” They share outcomes through their annual report and their presentations to school district staff, though previously they did not collect or share very much outcome data. The Pennsylvania Alliance of YMCAs is looking into how to collect and share more information to ensure the quality and consistency of the programs. The safety of the students is preserved with consistent training, safety protocols, and strategic programming that gives children choices of programs to participate in and improves safety because children are busier and less likely to cause trouble.³⁶

Pennsylvania Alliance of Boys & Girls Clubs

The Pennsylvania Alliance of Boys & Girls Clubs consists of 50 Boys & Girls Club sites throughout the state, serving nearly 55,000 school-aged youth annually through membership and community outreach. Boys & Girls Clubs provide programs for youth during before- and after school hours and during the summer. In 2019, for example, Clubs provided over 2 million healthy meals and snacks at no cost to participants. The Clubs’ programs provide safe, positive, and inclusive environments that are particularly important during after school hours of 3:00 p.m. to 6:00 p.m., which are documented as potentially risky times for young people to be unsupervised.

Through virtual and in-person settings, the BGCA’s objectives are to provide youth with opportunities to learn and grow and ultimately become ready for life and work. BGCA’s approach to positive youth development reflects knowledge, anchored in extensive research, that a quality afterschool environment can support the social, emotional, physical, and cognitive needs of young people in important ways. The staff works to help participants develop supportive, meaningful, and healthy connections with adults and peers. These experiences, which include paid internships and career readiness programs, are designed to build upon the youths’ strengths, foster a sense of belonging and purpose, and provide opportunities to lead and be heard as they enter adulthood.³⁷

21st Century Community Learning Centers

The Nita M. Lowey 21st Century Community Learning Centers (21st CCLC), the program that appropriates federal funding for OST care providers, released a summary of its 149 Pennsylvania grantees in funding year 2017-2018, which includes three different cohorts. The first of these cohorts, Cohort 7, had 61 grantees; Cohort 8 had 45; and Cohort 9 had 43. Forty-six percent were schools or districts or charter schools, and 31 percent were community-based or non-profit organizations. Funding for the 2017-2018 year includes the summer of 2017 and then the following fall and spring. To qualify for funding, programs had to provide services for a minimum

³⁶ Ibid.

³⁷ Emails and discussions with Dr. Lisa Abel-Palmieri, Boys & Girls Clubs of Western Pennsylvania, and Jerry McDonald, Caring People Alliance/Pennsylvania Alliance of Boys & Girls Clubs.

of 36 weeks at 12-15 hours per week. In total, 43,794 students were enrolled in programs in 470 locations.³⁸

Summer programs were offered at 205 of these locations, which typically took place during the day on weekdays, and averaged around 21 hours per week. Most of these operated four or five days out of the week. Four hundred fifty-one locations offered services during the school year. These centers typically operated four days a week and averaged 14 hours a week.³⁹

Ninety-seven percent of programs offered STEM or math and science, 93 percent offered music and art education, and 92 percent offered recreational activities. Most programs implemented reading and math activities daily. Fifty-one percent of students, on average, were regular attendees of these programs. As it is required for programs to offer support to parents also, a majority of the programs chose to offer open house activities for parents. The total number of parents participating in these programs was 14,162.⁴⁰ Philadelphia Research For Action conducted research on fifty 21st CCLC sites with eleven different providers in Philadelphia public schools. Elementary and middle school students showed fewer absences and suspensions and better reading scores than non-participants. High schoolers likewise had fewer absences and suspensions and had higher future earnings potential. The authors concluded that a “consistent positive relationship between desirable academic and behavioral outcomes and attendance in OST programs was found. The greater number of OST days attended predicted better outcomes for students.”⁴¹

PSAYDN’s report “Afterschool: Improving Lives in Pennsylvania” profiles a few programs for their high quality and the successes of their participants.⁴² The report goes on to highlight benefits to families by citing statistics:

- 62.9 percent of couples with children ages 6-17 have both parents working outside of the home.
- 40 percent of low income families report trouble in finding childcare during afterschool hours.
- Of the 1.4 million school age children in PA, 346,458 are in need of “supervised and structured” programs to reduce risks such as crime, teen pregnancy, and substance abuse.⁴³

In the Afterschool Alliance’s 2014 report, *Pennsylvania After 3PM*, 85 percent of parents indicated support for public funding of OST programs. Nineteen percent received government assistance for paying for OST. The average cost to PA families is \$111 per week, which is more than 14 percent of the median annual household income in PA.

³⁸ *21st Century Community Learning Centers Program 2017-18 State Evaluation Report* (Harrisburg, PA: Pennsylvania Department of Education, 2019), 16, 27.

³⁹ *Ibid.*, 1.

⁴⁰ *Ibid.*, 20.

⁴¹ *Ibid.*

⁴² PSAYDN, “Afterschool: Improving Lives in Pennsylvania.”

⁴³ *Ibid.*, 8.

Two programs affiliated with APOST (Allegheny Partners for Out-of-School Time) are presented in PSAYDN’s report.

APOST: Higher Achievement and Propel Charter Schools

Allegheny Partners for Out-of-School (APOST) is a “partnership of funders, intermediaries and providers dedicated to building a quality OST System that will contribute to the healthy successful development of young people as they progress through their school years, graduate from high school and enter into adulthood.”⁴⁴ APOST focuses on strengthening strategic partnerships between programs, students and parents, and schools and government. As of September of 2020, APOST was comprised of 59 Quality Campaign members that served 57,304 Allegheny County children. APOST encouraged advocacy by involving students in a contest to raise awareness about the importance of the census and also had students meet with the Lieutenant Governor and speak to how the pandemic had changed their education for the year. New strategic partnerships in 2020 include a Creative Learning Network and Creative Learning Rapid Response Team to help create and improve distance learning experiences, working with the McElhattan Foundation to fund in-person childcare during the summer of 2020, using funding from the Grable Foundation to study the implementation of social-emotional learning (SEL), and working with the developers of the Allegheny Child Care Finder to integrate OST programs onto the platform.⁴⁵

Higher Achievement

Higher Achievement is an afterschool and summertime academic program for middle school youth (grades 5-8). It operates in underserved and academically under-performing communities. On average, 93 percent of participants who complete the program advance to college. Data show that 74 percent maintain or rise to A/B grades in math, and 73 percent to similarly for reading. Higher Achievement participants who complete a year of the program had more increases in GPA and school attendance and had reductions in absences when compared to students from the same schools who do not participate in Higher Achievement.

Propel Charter Schools

Propel Charter Schools is one of Pennsylvania’s largest charter school systems and shows the highest academic achievement among public school districts in high poverty areas. Propel has afterschool programs at all 11 of its schools. Three of these are 21st CCLC sites. Attendance in the OST programs includes approximately 85 percent of Propel’s students. Demand exceeds availability and several sites have waiting lists. When compared to peers in the school districts where they live, Propel students are 38 percent more likely to be at grade level in science, 29

⁴⁴ “About,” *APOST*, accessed April 15, 2021, <https://www.afterschoolpgh.org/about-apost/>.

⁴⁵ Email from Jaron Paul, Operations and Training Coordinator, APOST, April 2, 2021.

percent more likely in reading and writing, and 25 percent more likely in math. Students enrolled in the afterschool program for at least 30 days at Homestead Middle School and Braddock Hills High School had fewer instances of suspensions and expulsion when compared with peers. Participants at Braddock Hills High School had fewer unexcused absences.

Schools and Homes in Education (SHINE)

Schools and Homes in Education (SHINE), an OST program administered by Lehigh Carbon Community College, has made considerable strides in improving outcomes for its participants since its inception in 2004-2005. At present, SHINE has 11 afterschool sites in Carbon and Schuylkill Counties, covers 750 square miles, and serves 700 children through evening programs. Across all K-12 programs, including those offered in the summer, 880 students were served during the 2017-2018 academic year.⁴⁶ The overall SHINE engagement covers grades K-12 and employs 119 certified classroom teachers. Fifty percent of the teachers have master's degrees. Program sites serve over 5,000 hot meals a month and provide transportation home (typically by school bus) for all participants. These services are provided Monday through Thursday for 36 weeks in a year.⁴⁷

The goals of SHINE are to improve academic performance, improve student behavior and classroom attendance, to increase knowledge of STEAM, to facilitate family involvement in each student's learning, and to and improve family literacy. SHINE works to ensure a continuum of combined services into after school hours, curriculum aligned with Common Core Standards, the ability to surround students in need of academic/social emotional help from the regular school day through evening hours, communication among the staff, and consistent instructional strategies. Because the teachers come from the school districts, it facilitates a good relationship between SHINE and the schools, making evaluating outcomes easier. The SHINE program also aligns with the students' school days, keeps a 1:7 student-to-adult ratio, and focuses its scheduling on the student. The programs focus on project-based learning and hands-on activities and strives to understand the cultural differences between students.

SHINE is a referral program; the instructors create an individual plan for each student based on the referral of that student. The instructional plans include student strengths, student challenges, reading goals, math goals, science goals, and social/emotional goals. The lesson plans must include meaningful STEAM learning, be aligned with Common Core standards, and include a daily outline of the OST schedule. SHINE also attempts to engage parents by having a STEAM family engagement night every month and providing a meal. They work with the parents to provide access to GED and ESL classes and financial aid. SHINE works with teachers on professional development and asks them to adopt a "whatever it takes" philosophy to best serve the children. All staff are evaluated based on their handling of transition periods during the day, homework organization, STEAM activity organization, and behavior management of students. Retaining

⁴⁶ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, SHINE: Schools and Homes in Education, Lehigh Carbon Community College, 25.

⁴⁷ Presentation by Rachel Miller Strucko, Director of the SHINE Program, at JSGC Advisory Committee Meeting, September 24, 2020.

quality staffing is crucial to providing the best service to the children. All students participating in the SHINE program stay after school because programs are housed in the schools. SHINE contracts with the districts to provide bussing home for students from the school, and this comprises \$122,000 of the budget for Cohort 10.

Further evaluation of the program is facilitated by data-driven programming. SHINE collects student report cards, student PSSAs, math checklists, EasyCBM checklists, individual student instructional plans, parent and student surveys, Harvard PEARS surveys, APR teacher surveys, school district administrative surveys, teacher and intern surveys, kindergarten assessments, and Career Academy and High School pre/post projects assessments. They utilize an outside evaluator to examine the data. The majority of funding comes as a result of the trend data, so it is important to correctly and effectively work with the collected data.

Attendance at SHINE is contingent on attendance at school. Improvements in school day attendance are rewarded for students and parents. During the period 2008 through 2015, 1,600 first through fifth graders participated.

- 79 percent improved academic performance.
- 62 percent improved classroom behavior
- 97 percent were promoted to the next grade
- 91 percent had satisfactory or exceptionally good school attendance
- 93 had satisfactory or above grades in science.

Further, from academic years 2005-2006 to 2017-1018, an average of 80 percent of participants attended SHINE programs for at least 30 sessions per year.⁴⁸

SHINE has established several mechanisms that help the program participants achieve positive outcomes.⁴⁹ These methods fall into two categories: the Early Warning System and the Prevention System. The Early Warning System monitors attendance and academic performance and has been successful because of a foundation that emphasizes positive relationships between families and SHINE teachers and administrators. It also relies heavily on data and information sharing. With regard to monitoring attendance, students' attendance is regularly recorded and reported to parents. Academic performances is also closely monitored, and information across ten data sources is shared between classroom and SHINE teachers so that each can help students who are exhibiting academic distress.

Prevention Strategies include instructional plans, teacher professional development, regular communications with parents, and hands-on activities. Instructional plans are developed for each participant.⁵⁰ Activities and programs that each student participates in at SHINE are aligned with the student's school curricula. Each plan is reviewed and refined as each student's needs arise and evolve. Teacher Professional Development is ongoing, and includes regular

⁴⁸ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, SHINE: Schools and Homes in Education, Lehigh Carbon Community College, 25.

⁴⁹ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, SHINE: Schools and Homes in Education, Lehigh Carbon Community College, 23.

⁵⁰ *Ibid.* 24.

meetings, communications, and Act 48 training. Regular communications with parents are vital to SHINE's students' success. Communication is meant to be proactive to stem problems before they occur. At-risk students are engaged with relevant and motivational hands-on activities. These programs typically provide leadership and mentoring opportunities in a mixture of academic and technical areas that lead to high-quality career readiness for participants. Outcomes that have been reported by parents and others include increased community involvement, self-confidence, and improved motivation and engagement.⁵¹

Home Visits and Summer Programs

The Home Visits Program provides trained visitors to spend time with pre-K and kindergarten children and their families. Assessments in basic recognition of letters, sounds, numbers, and matching quantities showed that the majority of participants achieved 100 percent mastery and 75 percent achieved 80 percent mastery.⁵²

Classroom Teacher Surveys

SHINE surveys classroom teachers in order to monitor participants' improvements throughout the school year. Since 2007-2008, 80 percent of students improved their homework completion, 41 percent improved their school attendance, 60 percent improved their classroom behavior, and 79 percent improved their academic performance. The measure for "Coming to School Prepared to Learn," is newer. Since the 2015-2016 academic year, an average of 59 percent of students have improved each year.⁵³

Report Card Grades

SHINE collects final report card grades for its participants. In math, an average of 91 percent of participants received a passing grade, while 63 percent were ranked at least Above Average/Superior. An average of only 9 percent earned grades of below average or failing.⁵⁴

School Attendance Data

The majority of SHINE participants had good school attendance, despite that school attendance is affected by factors that are outside of SHINE's and the school districts' control. Most SHINE students, since the 2007-2008 academic year, have attended at least 171 days of school per year. A relatively small percentage attended fewer than 161 days.⁵⁵

⁵¹ Ibid. 24.

⁵² Ibid. 28.

⁵³ Ibid. 31.

⁵⁴ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, SHINE: Schools and Homes in Education, Lehigh Carbon Community College. 35.

⁵⁵ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, SHINE: Schools and Homes in Education, Lehigh Carbon Community College. 40.

Grade Level Promotion Rate

Many SHINE students face academic challenges. In what is a particularly important measure of SHINE's influence on learners, an average of 97 percent of participants have advanced to the next grade level in each of the academic years from 2007-2008 to 2017-2018.⁵⁶

Social and Emotional Learning

Each student's social, emotional, and behavioral needs are, in part, assessed by their responses to pre- and post-surveys, before and after the program year, of their attitudes and behaviors. For pre-K and kindergarten students, the survey was administered by trained home visitors. The results showed that there were some small improvements overall.⁵⁷ In the elementary grades, positive attitudes toward positive ('good') behaviors remained relatively stable from pre- to post-survey, while students tended to increase their negative attitudes toward unhealthy traits such as hitting other, alcohol use, and copying others' work.⁵⁸

Science and Math Initiatives

Participants' attitudes toward math showed that they had largely positive feelings about it. Nearly 80 percent reported that math is exciting and that they liked to work on activities involving numbers. Approximately 85 percent reported that they like math; two-thirds answered that they disagreed with the statement that "math is not one of my strengths." Similar results were reported for questions about their attitudes regarding science.⁵⁹

Family Participation

SHINE, like many OST programs, includes family engagement and participation activities throughout its program year. Across over a dozen areas addressed by SHINE curricula, including academic areas like reading and math, social aspects like behavior and self-confidence, and career readiness, parents were surveyed on their attitudes and concerns. Results showed that parents saw some improvements in their children over the course of their participation.⁶⁰

Teacher Impact and Administrator Surveys

At the end of each program year, teachers and administrators are surveyed for their reactions and experiences with SHINE and how it works with their students who participate. Among respondents, 89 percent either strongly agree or agree that SHINE improved student

⁵⁶ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, SHINE: Schools and Homes in Education, Lehigh Carbon Community College. 42.

⁵⁷ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, SHINE: Schools and Homes in Education, Lehigh Carbon Community College. 47.

⁵⁸ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, SHINE: Schools and Homes in Education, Lehigh Carbon Community College. 48.

⁵⁹ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, SHINE: Schools and Homes in Education, Lehigh Carbon Community College. 52-54.

⁶⁰ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, SHINE: Schools and Homes in Education, Lehigh Carbon Community College. 57.

learning. With regard to family involvement, 96 percent either agreed or strongly agreed that SHINE helped them better understand the role of families in education. Moreover, 93 percent reported that they were consequently better prepared to communicate and work with families. All teachers surveyed agreed that integrating STEM through project-based activities will lead to improved student achievement.⁶¹

Almost 100 percent of the funding is 21st CCLC funding, but SHINE also receives support from EITC and grants, usually for STEM programs. SHINE's home office is in the community college and funding flows through the community college. Sustainability is important, so program administrators consistently search for other funding streams in case SHINE loses a funding source. SHINE has seen a return on investment in increased attendance, academic achievement, improved classroom behavior, and increased parent engagement and literacy. Technical schools see increased student interest, increased enrollment and dual enrollment, and a pipeline to technical schools. The community and local businesses see a STEAM pipeline into the workforce, STEAM literate students, and students with a capacity to fill job gaps in STEAM fields.⁶²

Philadelphia Office of Children and Families

The City of Philadelphia maintains a website for people to locate out-of-school time activities for children in grades per-K through 12.⁶³ The Office of Children and Families (OCF) provides direct program funding for services that are provided and administered by several city agencies. Four city agencies operate programs, including the Department of Human Services (DHS), Free Library of Philadelphia (FLP), Parks and Recreation (PPR), and Police Athletic League (PAL). The programs funded by DHS are aligned with the School District of Philadelphia and provide three levels of programs that coordinate with elementary school (literacy), middle school (career exposure) and high school career experience). OCF also funds specialty organizations that provide for targeted populations. The Philadelphia Youth Network serves child welfare and youth in the juvenile justice system through the WorkReady and E3 programs. WorkReady includes, among other pathways of career exposure, financial literacy and digital literacy activities. E3 Centers offer customized education and employment services to young people aged 16 to 24 to help them finish high school or attain an equivalency.⁶⁴

The OCF website contains a number of filters that people can use in their program search. Programs can be sorted by age, grade, zip code, and whether they are summer or school year programs. The website also allows people to sort programs based on whether they are in-person or remote. The filter uses seven program content focus areas: academic; sports, health and wellness activities; arts and culture; character education/positive youth development; community

⁶¹ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, SHINE: Schools and Homes in Education, Lehigh Carbon Community College. 58.

⁶² STEAM refers to science, technology, engineering, arts, and mathematics.

⁶³ City of Philadelphia, Office of Children and Families, "Out of School Time," <http://ost.phila.gov>.

⁶⁴ E-mail from Katie Englander to Commission staff June 10, 2021.

service learning; and STEM/STEAM. Finally, programs can be sorted based on the days they are offered, whether they have fees, transportation, and if registration is required.

Sunrise of Philadelphia

Sunrise of Philadelphia programs, which target the South and West Philadelphia areas, operate out of seven host schools, Southwark, Key, Kirkbride, Stanton, and Arthur Elementary Schools, as well as South Philadelphia High School and Science Leadership Academy Middle School. These areas face unique challenges as diverse communities with immigration from over 32 countries. Many families in the community are immigrants or refugees from Southeast Asia and Central America. In a typical program year, which is defined as summer and the following school year, the Sunrise programs serve about 1,000 youth across the different locations and programs. The two main sources of funding are the 21st Century Community Learning Center Grants and the City of Philadelphia Office of Children and Families. Sunrise programs also receive foundation support from the United Way of Greater Philadelphia and Southern New Jersey, Lenfest Foundation/ Drexel Promise Neighborhood, William Penn Foundation, and Philadelphia Youth Network among others.⁶⁵

PhillyBOOST

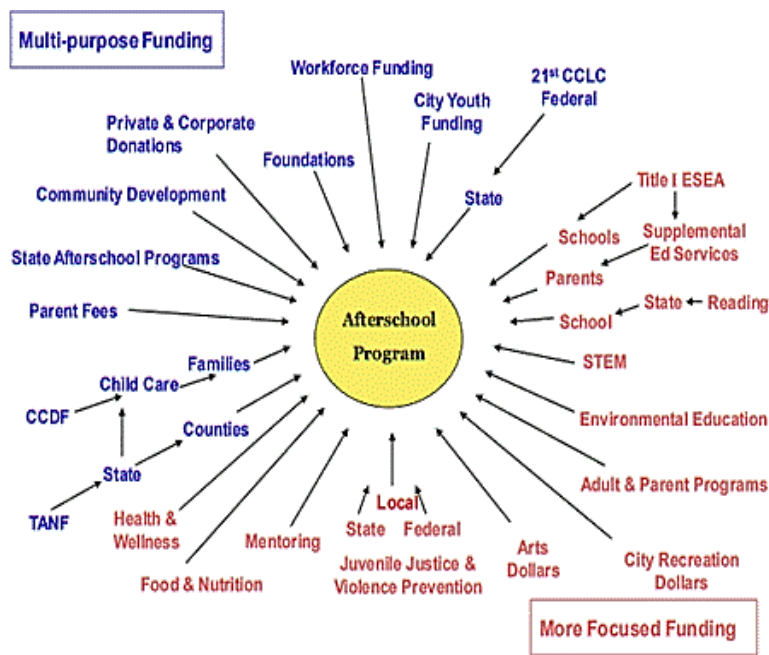
PhillyBOOST is a system of more than 70 city and community-based programs funded by DHS, Philadelphia Parks & Rec, Free Library of Philadelphia, Police Athletic Centers, 21st CCLC. PCCD found that \$2.7 million spent on delinquency prevention programs for 5,300 youth results in \$11.1 million in benefits through reductions in delinquency, substance use, and antisocial behavior. The ratio is approximately \$1 spent for saving \$4 in future costs.⁶⁶

⁶⁵ E-mail with Laura Johnson, Deputy Executive Director, Sunrise of Philadelphia, Inc, March 9, 2021.

⁶⁶ PSAYDN, “Afterschool: Improving Lives in Pennsylvania,” 8.

Funding for out of school time (OST) programs is a complicated mix. Different funds through the federal, state, and local government can be directed to OST programs. Programs are also able to tap into resources that fund different aspects of their programs, such as STEM activities or food and nutrition. Programs rely on different mixes of private, foundation, and parent fees to round out these funding streams. Infographic 1 captures the broad array of programs that are brought together to fund different afterschool programs. During the recent COVID-19 pandemic, states may also allocate a portion of their federal COVID relief funds to OST programs.⁶⁷

Infographic 1
Sources of Afterschool Funding



Source: *Afterschool Programs in Pennsylvania*, Legislative Budget and Finance Committee, (Harrisburg, PA:2016), <http://lbfc.legis.state.pa.us/resources/documents/reports/558.pdf>, and Joint State Government Commission staff.

⁶⁷ *Afterschool Programs in Pennsylvania* (Harrisburg, PA: Legislative Budget and Finance Committee, 2016), <http://lbfc.legis.state.pa.us/resources/documents/reports/558.pdf>, 13.

Federal Funding

The LBFC report identified more than 120 federal programs that can provide at least some level of funding for afterschool or summer programs. Because many federal funds for these programs actually pass through and are awarded by state agencies, sometimes there is confusion in distinguishing between state and federal funding for these programs.⁶⁸ Detail for several of the larger federal funding streams can be found below. Additional detail on other federal, state, county and nonprofit and corporate funding can be found in the LBFC report.⁶⁹

In response to the COVID-19 pandemic, the federal government provided emergency relief funds to Local Education Agencies to allow them to better address the impact COVID-19 has had on education.⁷⁰ The Elementary and Secondary School Emergency Relief Fund (ESSER Fund and ESSER II) are part of the federal CARES Act. The American Rescue Plan (ARP) builds on many of the measures in the CARES Act. The CARES Act became effective March 2020 and the ARP became effective March 2021.

Among many other possibilities, some of this new funding can be used for OST programs. Section 18003 (a) (11) of the CARES Act states that “Planning and implementing activities related to summer learning and supplemental afterschool programs, including providing classroom instruction or online learning during the summer months and addressing the needs of low-income students, students with disabilities, English language learners.”⁷¹ ESSER I, ESSER II, and ARP contain a provision that allows school districts to either provide OST programming themselves or work with an OST provider.

ARP enhances the focus on OST program by stating that an LEA will “reserve not less than 20 percent of such funds to address learning loss through the implementation of evidence-based interventions, such as summer learning or summer enrichment, extended day, comprehensive afterschool programs, or extended school year programs.”⁷²

⁶⁸ Ibid., 12.

⁶⁹ Ibid., 18-25.

⁷⁰ Local Education Agencies are school districts and public charter schools.

⁷¹ *Certification and Agreement for Funding under the Education Stabilization Fund Program Elementary and Secondary School Emergency Relief Fund (ESSER Fund)* (U.S. Department of Education, 2020), <https://www.education.pa.gov/Documents/K-12/Safe%20Schools/COVID/CARESAct/PAESSERFCertificationandAgreement.pdf>.

⁷² P.L. No. 117-2, Tit. II, §2001.

These sources of funding are one-time funds that will end September 30, 2024.⁷³ Advisory Committee members are optimistic about the benefits of ESSER and ARP but note that, without sustained investment, programs cannot achieve long term goals or reach full potential. To this end, Advisory Committee members expressed concerns that their programs may struggle to replace the ESSR funding when it ends. They sense that ESSER may be viewed as a replacement for other funding streams that will either dry up or will have been redirected by the time ESSER ends. Nonetheless, this funding demonstrates, through this unprecedented amount for OST, that the federal government sees value in OST programming and believes that it may contribute to student success.

The Every Student Succeeds Act of 2015 (ESSA) reauthorized and amended the Elementary and Secondary Education Act that governs K-12 education. The reauthorization was designed to maximize flexibility for states and localities to determine the best approach to offering an equitable, high-quality education to all students, with the inclusion of opportunities to provide OST learning programs.

Title 1 of ESSA provides more than \$15 billion to districts and schools serving a high percentage of children from low-income families throughout the U.S. OST programs can be incorporated into both targeted and schoolwide Title 1 programs.

Title IV, Part B of ESSA authorizes 21st Century Community Learning Centers (21st CCLCs). This is the most direct federal funding to states for OST programs. In FY2019, Congress allocated \$1.2 billion to 21st CCLC programs.

The federal government awards states 21st CCLC grants based on their share of Title 1 funding for low-income students. Table 1 shows the federal 21st CCLC appropriations to the Commonwealth for the years 2002 to 2021.

⁷³ “Elementary and Secondary School Emergency Relief Fund,” Office of Elementary and Secondary Education, accessed May 5, 2021, <https://oese.ed.gov/offices/education-stabilization-fund/elementary-secondary-school-emergency-relief-fund/>. Funds are authorized through September 30, 2023 but because of the Tydings amendment which extends federal funds 12 months, these funds will be available through September 30, 2024.

Table 1
Federal 21st Century Community Learning Centers
Appropriations to the Commonwealth
2002 - 2021

2002	\$11,544,215
2003	20,419,587
2004	35,669,414
2005	32,685,818
2006	35,462,939
2007	36,073,986
2008	42,354,446
2009	44,923,027
2010	45,045,841
2011	44,321,391
2012	41,145,417
2013	42,487,155
2014	42,806,153
2015	42,558,875
2016	42,265,238
2017	44,516,000
2018	47,196,885
2019	48,294,015
2020	47,191,978
2021	47,569,613

Source: Information compiled by NCSL and JSGC staff from *Education Department Budget History Table: FY 1980—FY 2021 Congressional Appropriations*, U.S. Department of Education, accessed May 28, 2021, <https://www2.ed.gov/about/overview/budget/history/index.html>.

States, however, award funds to grantees on a competitive basis. This competitive subgrant process must emphasize “the priorities of school-day academic alignment, enrichment activities and family engagement.”⁷⁴ The Pennsylvania Department of Education awards the 21st CCLC grants and has subcontracted with the Allegheny Intermediate Unit to evaluate the programs.

In the 2020-2021 fiscal year, more than \$47 million was awarded to 21st CCLC grantees in Pennsylvania, covering 217 grantees operating 600 sites. There were 43,790 student participants. For the Cohort 10 funding in 2019, grantees were awarded up to a cap of \$400,000. PDE realized that fewer grant applicants were located in rural counties as compared to suburban and urban districts and consequently launched a listening tour to find out why. The rural schools often lacked necessary resources, such as transportation, that would allow them to support OST programs. Therefore, PDE revised its criteria. Beginning with the 2020 funding year, rural districts were eligible for up to \$600,000 in 21st CCLC funding to help mitigate some of the obstacles that hampered their programs.

Grantees are awarded money based on the populations that they serve. The per pupil cost reimbursement is based on categories of whether a school is rural, suburban, or urban. Dollar amounts range from \$1,200 to \$1,500 per student in urban/suburban areas and \$2,000 to \$2,300 in rural areas.⁷⁵ Currently, approximately 14 percent of districts are rural, 51 percent are urban, and 34 percent are suburban. Further, the student population is divided into categories based on student needs, such as transportation needs, a focus on ESL, special needs. A grantee’s award is based on the proportion of students in different cost categories. ESL and special needs teachers, being more expensive, have heavier weights in the per pupil cost calculations.

Each grant applicant must provide a detailed budget that includes items such as the number of teachers that will be employed, the number of hours per week they will work, the amount of money used for IT, among others. Each budget must include at least 1 percent funding for a component for students’ parents, as required by federal Title I regulations. Budgets must place caps on money spent on administration salaries.

Grantees are permitted to obtain income outside of the 21st CCLC program, so long as they do not generate profits. Fundraising efforts must be approved by PDE on an annual basis, and monies must be used during the grant year. Donations, however, need not be reported to PDE and may be used at any time according to the donation agreement.

Grant money must be spent according to the terms of the contract. For example, funding provided for STEM activities must be spent on STEM. Budget revisions are permitted for certain exceptions. For example, during the COVID-19 shutdown, programs may be permitted to shift funding from transportation to technology. In other words, money that would have been spent to bus students to program sites could be used for remote learning.

⁷⁴ Adrienne Fischer, “State and Federal Investments in Afterschool Programs,” *NCSL LegisBriefs* 27, no. 42 (Dec 2019), <https://www.ncsl.org/research/education/state-and-federal-investments-in-afterschool-programs.aspx>.

⁷⁵ Email from Carmen M. Medina, Chief, Pennsylvania Department of Education, Bureau of School Support to Commission staff, July 31, 2020.

Around 2000, the then Department of Public Welfare created a juvenile delinquency prevention program that provided grants for afterschool programs. These grants were a new source of state funding and the first time OST programs received dedicated funding. The programs' focus was on at-risk children in grades 4 through 8. Program areas included summer programs, academics, recreation, and parenting. Approximately four years later, the first 21st CCLC grants were awarded.

The federal funding from the 21st CCLC grants were sent directly to the grantees, without a pass-through with the states. Two to three years later, the federal government was overburdened with the number of grants it was processing because all programs in all states were competing for grant funding *en masse*. Consequently, the federal government handed the awarding and oversight of the grant money to the states in the form of block grants.

A new requirement is that grantees that are relying on outside support must have a letter from the supporting funder showing its commitment to the OST program. In the past, it had happened that funders would verbally agree to provide support and then rescind their offer.

Currently, there is no line item in the Commonwealth budget for direct state funding for OST programs, although there are other funding streams that are used by programs to fund their operations.

The COVID-19 situation led school districts to conclude that they need to create programs where they had not had them before. PDE is asking grantees to work with districts who are new to afterschool programs.

The PA Department of Education is currently funding programs that are known as Cohort 10. Grantees are funded for five consecutive years, and the group of programs that is funded for those specific years is known as a Cohort. The subsequent year's funding is dependent on the continued availability of federal funding and satisfactory performance by the grantee. A full list of the Department's awards can be found on the Department's website.⁷⁶

The Child Care Development Block Grant Program (CCDBG) distributes formula-based grants to states to provide and improve childcare services. Many OST programs service children in this target population.⁷⁷

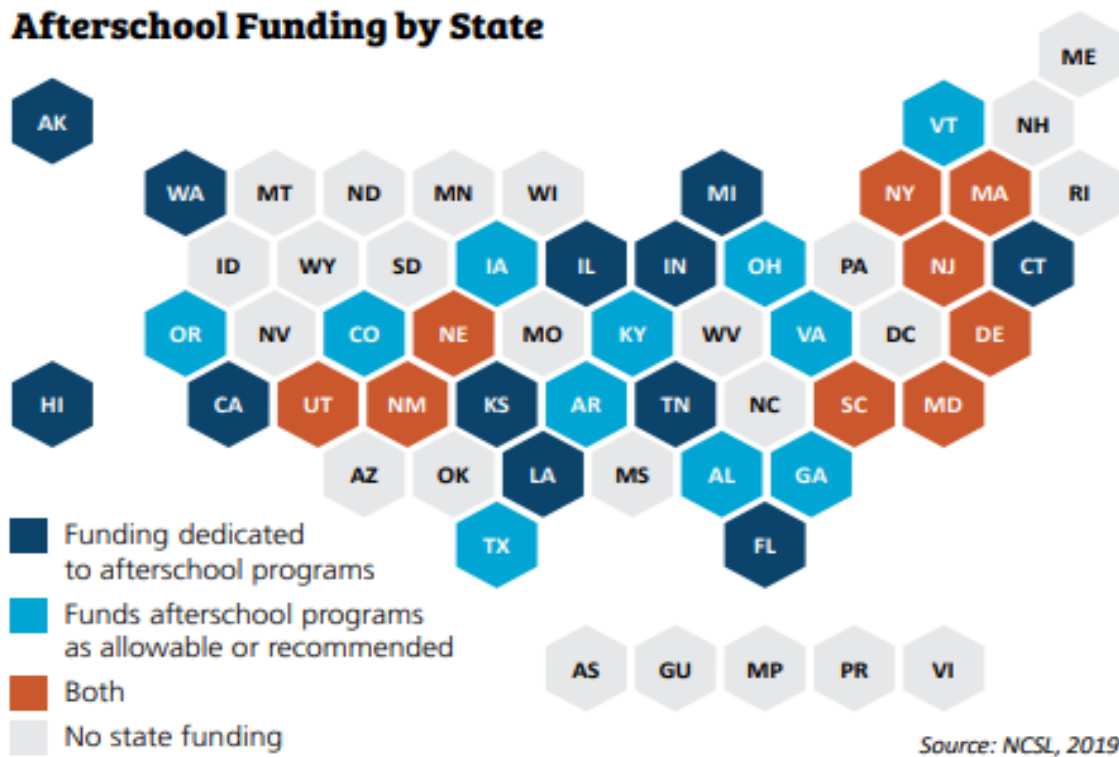
⁷⁶ "2019-24 Cohort 10," *Pennsylvania Department of Education*, accessed March 26, 2021, <https://www.education.pa.gov/K-12/21st%20Century%20Community%20Learning%20Centers/cohort/cohort10/Pages/default.aspx>.

⁷⁷ Unless otherwise noted, information in the preceding section was taken from a phone conversation between Carmen Medina, Division Chief at the Pennsylvania Department of Education and Commission staff in August 2020.

Other States

According to data collected by the National Conference of State Legislatures (NCSL), at least 27 states provided direct funding to OST programs in 2019. This combined investment of almost \$1.7 billion was distributed both directly through grant programs and line items for specific program and through broader initiatives that required, recommended, or allowed OST programs.⁷⁸

Infographic 2



Infographic 2 shows those states that have either dedicated funding to OST program or established state funding mechanisms through which OST programs may be funded, with those states that have no dedicated source of funding, a group that includes Pennsylvania.⁷⁹ The specifics from several states are given as examples in Table 2 to show the ranges of funding and methods.

⁷⁸ Fischer, “State and Federal Investments.”

⁷⁹ Ibid.

**Table 2
States' Funding of OST Programs
2019**

State	Program Details	Funding
Alaska	Alaska Positive Youth Development Afterschool Grants	\$1,250,000 per fiscal year
California	Afterschool Education and Safety Program	\$600 million in total. This \$50 million is “ongoing, approved annually.”
Colorado	Tony Gramscas Youth Services Program	--
Connecticut	After School Grant Program	Increased in 2019 to \$5.5 million, which now includes a set aside for small towns.
Hawaii	Resources for Enrichment, Athletics, culture, and Health (REACH) program	\$500,000 is allocated per year to this program
Illinois	Teen REACH (Responsibility, Education, Achievement, Caring and Hope) Program	In 2020 the estimated total program funding was \$14.5 million
Indian	School Age Child Care Grant and Indian Kids	School Age Child Care Grant \$766,506 per year to 41 school-age child care sites in 14 counties.
Kansas	Kansa After School Grants & Kansas Middle School After School Grants (KASEG)	In 2020, the total grants amounted to \$187,500 for the Kansa After School Grants. Each grant had to be a maximum of \$18,000. In 2020, the total amount for the KASEG program was \$125,000
Maryland	Learning in Extended Academic Programs (LEAP) Public School Opportunity Enhancement Grant Program (PSOE) Next Generation Robotics Grant Program	All were included in the FY levels in the FY21 budget proposed by the Governor. \$4.5 million for LEAP, \$4 million for PSOE, \$5 million for Next Gen and \$350,000 for Robotics.
Massachusetts	After-School and Out-of-School Time Quality Enhancement Grant (ASOST)	For FY19 and FY20 approximately \$2.5million is projected to be available for these grants.

**Table 2
States' Funding of OST Programs
2019**

State	Program Details	Funding
Minnesota	Financing formulas and grants	Through the full-service community schools, an eligible school site may receive up to \$150,000 annually.
Missouri	School Age Community Program Grant (SAC) TANF Funds	TANF transferred \$3 million from TANF to help fund afterschool and out-of-school support programs
Nebraska	Nebraska Expanded Learning Opportunity	1% of the Nebraska Education Improvement Fund created by lottery funds. The 2015 legislative fiscal analyst dollar estimate for the program is \$162,583 for fiscal year 2016, and \$169,270 for fiscal year 2017. An additional \$3,130 of lottery funds is included each year for operating expenses in the ELO grant program.
New Mexico	Per Pupil Reimbursement	This could provide up to \$150 million for extended learning, depending on how many districts opt into the program.
New York	New York Empire State Afterschool Program	As of SFY 2019-20, the program now receives \$55 million in funding
Ohio	Student Wellness and Success Initiative	As part of the operating budget for Fiscal Years 2020-2021 (House Bill 166), \$675 million of state funding was allocated
Oregon	Fund for Student Success	When fully implemented, the Student Success Act is expected to invest \$2 billion in Oregon education every two years; that is a \$1 billion investment in early learning and K-12 education each year
South Carolina	HB4000	\$1.5 million
Tennessee	Lottery for Educations Afterschool Programs (LEAPs)	In the 2014 LEAP Awards cycle, \$13.8 million was awarded to 79 programs. By 2016, the Tennessee General Assembly appropriated an additional \$10 million for a second grant competition (LEAP 2.0)

Table 2
States' Funding of OST Programs
2019

State	Program Details	Funding
Utah	Program Quality Enhancement Grant	Up to \$125,000 in General Funds
Vermont	The Afterschool for All Grants	Up to \$600,000 total will be awarded through the two-year grant process
Virginia	Grants to Advance Computer Science Education	Up to \$1.35 million
Wyoming	Wyoming Bridges Project	Funding block grant

Source: Data provided by NCSL.

New Mexico has multiple sources of funding for OST programs. In 2019, New Mexico enacted House Bill 145, which appropriated \$2 million to its Department of Education for afterschool and summer enrichment programs. Although this appropriation has been generally consistent, it is not funded every year. New Mexico revised its school funding formula for the 2019-2020 school year to include a per-pupil weight for districts participating in an extended learning program. Providing afterschool programming was one of three ways in which districts could qualify for the program.⁸⁰

Ohio also directed funding to go to these programs as part of a broader student wellness and success initiative. Districts could use funds for any combination of approved activities, including services to students before or after the school day or when school is not in session. In school years 2019-2021, funds for the initiative amounted to \$675 million over two years.⁸¹

New York provided funding to afterschool programs directly through the state-funded Empire State After-School Program. When funding for existing grantees is combined with funding for a new cohort, a total of \$55 million in state funding in fiscal year 2020 is dedicated directly to afterschool programs. Through this funding, the NY Office of Child and Family Services supports programs at over 300 sites that serve approximately 34,375 children.⁸² The Advantage After School Programs also received about \$33 million in state appropriations from the 2019-2020 budget, which will allow the NY Office of Child and Family Services to give contracts to programs and ensure OST services to 17,000 additional children in New York.⁸³

⁸⁰ E-mail with Ashley Wallace, NCSL, February 11, 2021.

⁸¹ E-mail with Ashley Wallace, NCSL, February 16, 2021.

⁸² E-mail Ashley Wallace, NCSL, February 11, 2021.

⁸³ "Advantage After School Program," *Office of Children and Family Services, New York State*, accessed March 19, 2020, <https://ocfs.ny.gov/main/contracts/tanf/aas/>.

Some states used creative means to fund afterschool programs. Tennessee channels unclaimed prize money from the Tennessee Lottery to the Lottery for Education Afterschool programs (LEAPs). In fiscal year 2018, \$15.2 million was placed in the afterschool account through this funding mechanism. South Carolina also used \$1.5 million in lottery revenue to an afterschool pilot program. Missouri transferred \$3 million from the federal Temporary Assistance for Needy Families (TANF) fund for use in afterschool and out-of-school support programs.⁸⁴

Pennsylvania Survey

In 2016, the Legislative Budget and Finance Committee (LBFC) surveyed OST providers in the Commonwealth, including both school districts and others. Of the 3,114 OST providers surveyed, 502 responded; of the 500 Pennsylvania school districts surveyed, 96 responded; of the county Child and Youth agencies surveyed, 25 responded; and of the 22 Workforce Development Boards surveyed, 8 responded.⁸⁵

PA OST Providers

LBFC surveyed OST providers about the amounts parents paid for their programs. In Table 3, parents’ responses are separated into quartiles for costs that range from \$0 to over \$100 per student per week. When LBFC’s Executive Director presented the report to the LBFC, he commented that, “while afterschool programs may be provided for free or at a low-cost to many low-income families, most afterschool programs depend on parent fees to provide 50 percent or more of their funding, with costs to parents often exceeding \$100 per week.”⁸⁶

Table 3				
OST Providers: What percentage of your parents pay:				
Answer Options	0-25%	26-50%	51-75%	Over 75%
Free	159	11	9	118
\$1 to \$50 per student per week	113	72	44	65
\$51 to \$75 per student per week	112	68	34	11
\$76 to \$100 per student per week	113	42	29	23
More than \$100 per student per week	116	27	12	27

Source: Afterschool Programs in Pennsylvania (LBFC), 44.

⁸⁴ Fischer, “State and Federal Investments.”

⁸⁵ *Afterschool Programs in Pennsylvania* (LBFC).

⁸⁶ Presentation to the Committee by Philip Durgin, Executive Director, June 15, 2016, accessed February 10, 2021.

Chart 1 aggregates responses from LBFC’s survey OST providers as to what percentage of their funding came from 8 different categories of funding. Detailed answers on what constitutes “other sources” are listed in the LBFC report.

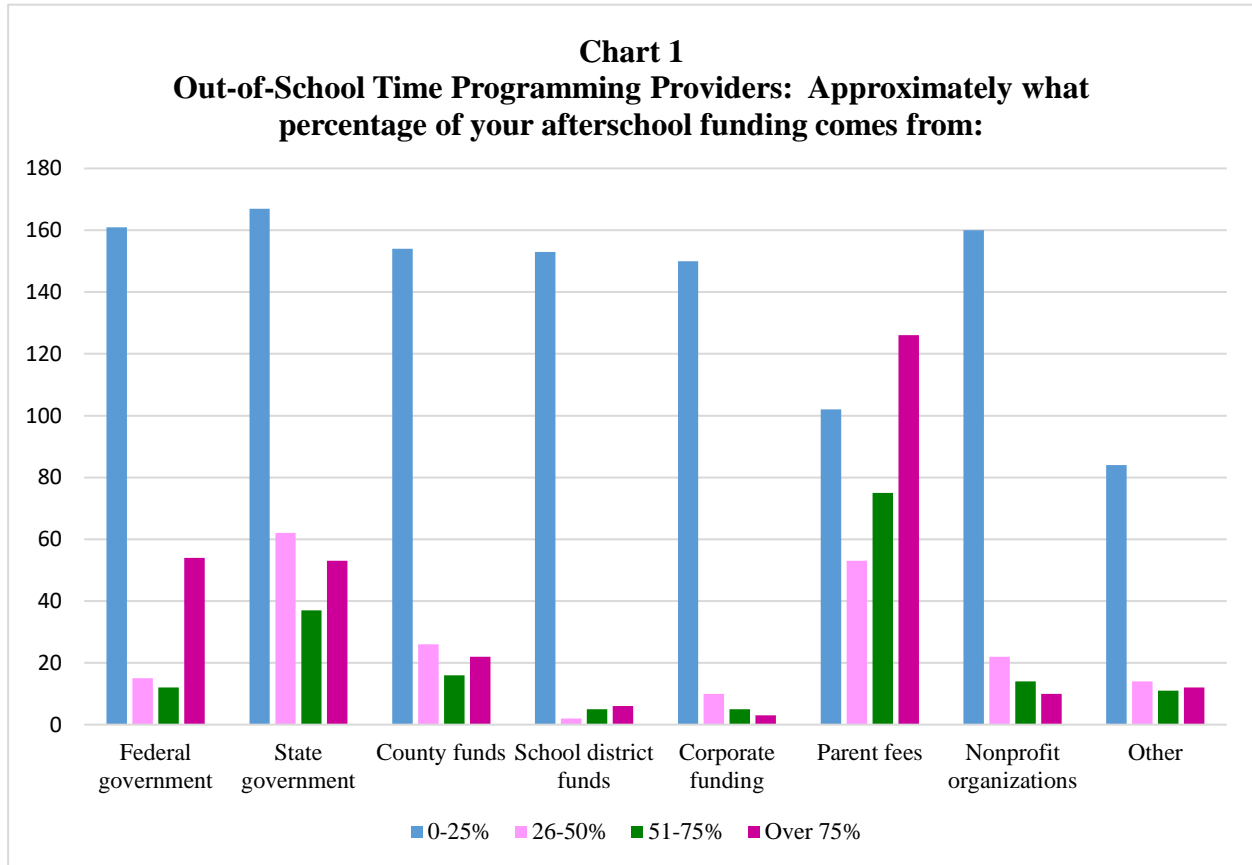


Table 4 shows the number of OST providers’ reported funding sources by proportionate share. Providers checked more than one response. For example, 161 providers reported that up to 25 percent of their funding came from the federal government. One hundred sixty-seven providers reported that up to 25 percent of their funding came from state government sources. One hundred and twenty-six providers, which was 75 percent of respondents, stated that over 75 percent of their funding come through parent fees. A much smaller number of providers stated that over 75 percent of their funding came from federal and state governments: fifty-four providers stated that over 75 percent of their funds came from federal government and fifty-three providers stated that over 75 percent of their funds came from state government. When combined, the number of providers getting more than 75 percent of their funding from federal or state government is substantially less than the number getting more 75 percent of their funding through parent fees. In other words, more than one-third of OST programs receive three-quarters of their funding from parents.

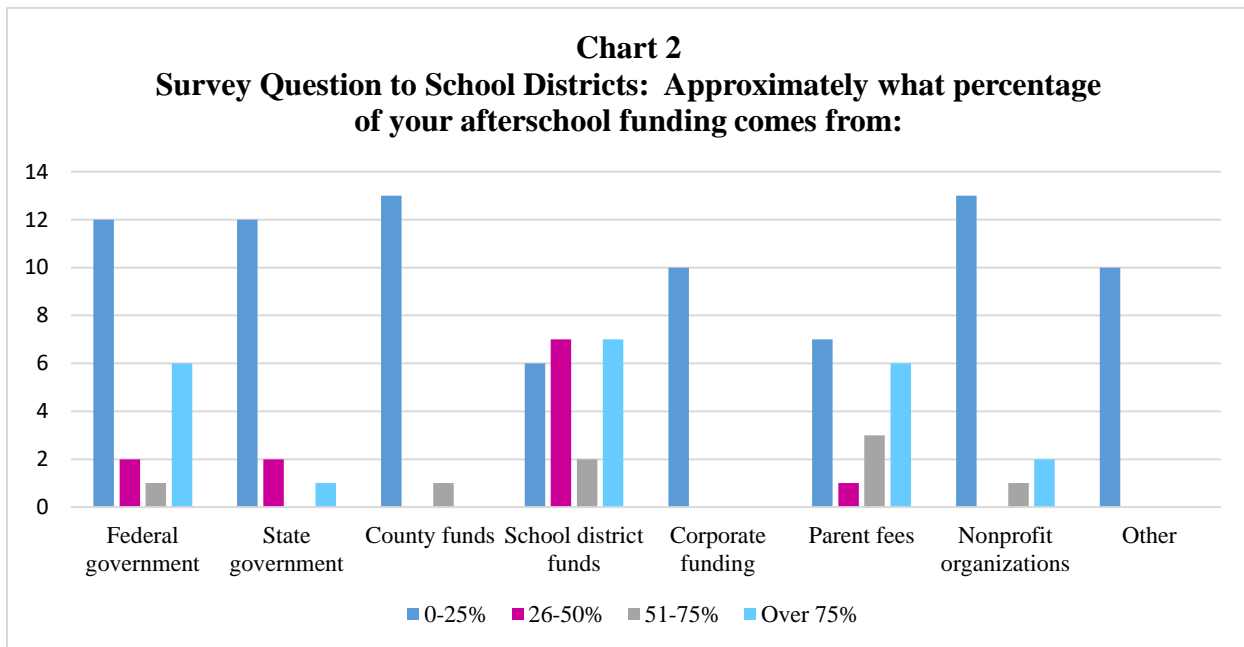
**Table 4
Number of OST Providers
Percent of Funding by Source
2016**

Funding Source	0-25%	26-50%	51-75%	Over 75%	Response Count
Federal government	161	15	12	54	242
State government	167	62	37	53	319
County funds	154	26	16	22	218
School district funds	153	2	5	6	166
Corporate funding	150	10	5	3	168
Nonprofit organizations	160	22	14	10	206
Parent fees	102	53	75	126	356
Other	84	14	11	12	121

Source: Afterschool Programs in Pennsylvania (LBFC), 45.

Funding for OST Programs in PA School Districts

**Chart 2
Survey Question to School Districts: Approximately what percentage
of your afterschool funding comes from:**



The LBFC report surveyed school districts about what percentage of their OST funding comes from various categories, including federal, state, county, school district, corporate, parent fees, nonprofit organizations or other. The survey asked them to characterize the funds as between zero and 25 percent, between 26 to 50 percent, between 51 to 75 percent, and over 75 percent. Table 5 shows that a relatively similar number reported that over 75 percent of their funding came from 3 separate entities: the federal government, school district funds, and parent fees, respectively. In the zero to 25 percent of funding, the responses were evenly split among the categories, with the two least chosen responses being school district funds and parent fees.

<p style="text-align: center;">Table 5 Number of School Districts' OST Programs Percent of Funding by Source 2016</p>					
Answer Options	0-25%	26-50%	51-75%	Over 75%	Response Count
Federal government	12	2	1	6	21
State government	12	2	0	1	15
County funds	13	0	1	0	14
School district funds	6	7	2	7	22
Corporate funding	10	0	0	0	10
Parent fees	7	1	3	6	17
Nonprofit organizations	13	0	1	2	16
Other	10	0	0	0	10

Source: Afterschool Programs in Pennsylvania (LBFC), 86.

LBFC added a further question to their survey that distinguished between funding for afterschool programs and funding for summer programs. Chart 3 and Table 6 focus only on summer programs offered through school districts.

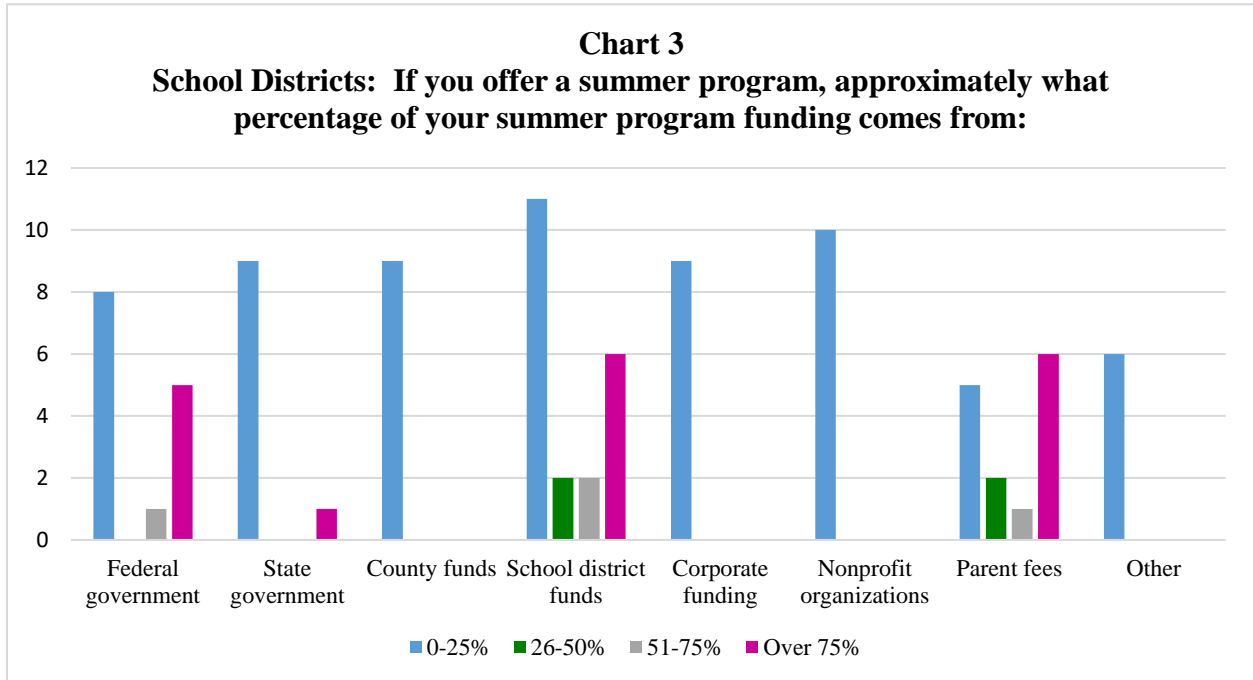


Table 6
Number of School Districts' Summer Programs
Percent of Funding by Source
2016

Answer Options	0-25%	26-50%	51-75%	Over 75%	Response Count
Federal government	8	0	1	5	14
State government	9	0	0	1	10
County funds	9	0	0	0	9
School district funds	11	2	2	6	21
Corporate funding	9	0	0	0	9
Nonprofit organizations	10	0	0	0	10
Parent Fees	5	2	1	6	14
Other	6	0	0	0	6

Source: Afterschool Programs in Pennsylvania (LBFC), 88.

Funding for OST Programs in PA County Children and Youth Agencies

The survey asked County Children and Youth Agencies if they funded center-based, afterschool program (not including pre-school only care). The majority, or 76 percent, responded that they did not. Six agencies said yes. Of those that did, the amount of funding varied a lot, from \$14,000 to \$320,000. Three responded that over 75 percent of the funding they provided came from state government. The largest grouping was five respondents who said that between 0 and 25 percent of their funding came from county funds. Chart 4 and Table 7 show the survey results.

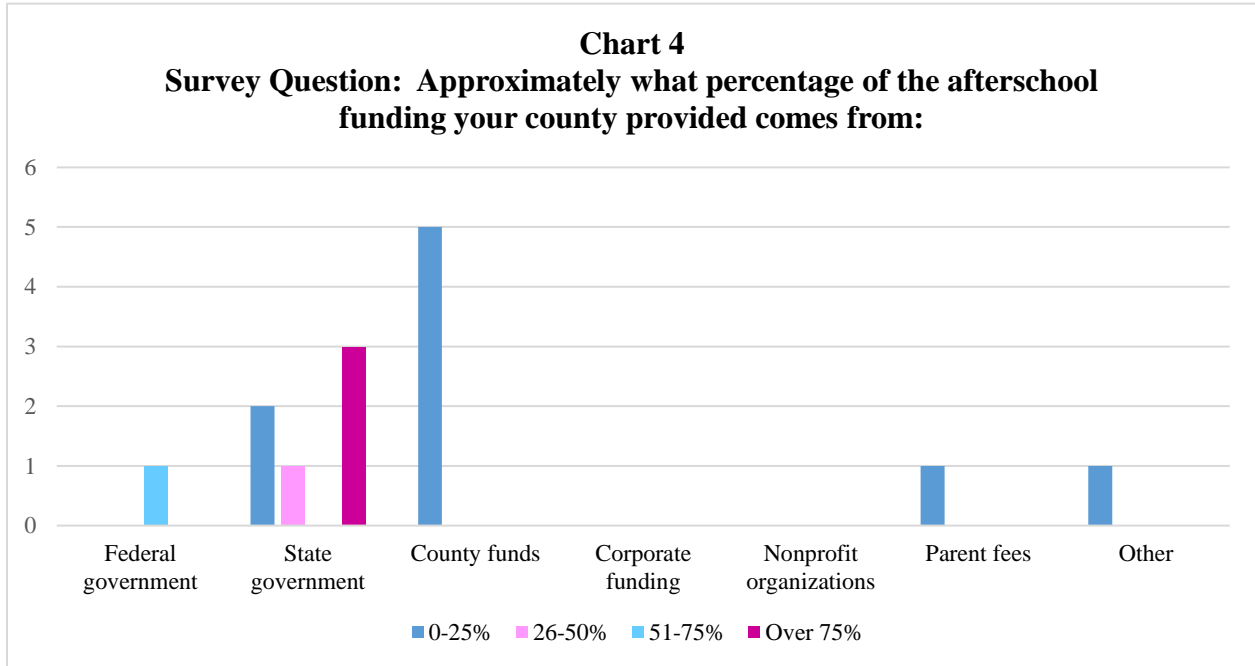


Table 7
Number of Counties' Children & Youth Agencies' Afterschool Programs
Percent of Funding by Source
2016

Answer Options	0-25%	26-50%	51-75%	Over 75%	Response Count
Federal government	0	0	1	0	1
State government	2	1	0	3	6
County funds	5	0	0	0	5
Corporate funding	0	0	0	0	0
Nonprofit organizations	0	0	0	0	0
Parent Fees	1	0	0	0	1
Other	1	0	0	0	1

Source: Afterschool Programs in Pennsylvania (LBFC).

Funding for OST Programs in PA Workforce Development Boards

Eight Workforce Development Boards were surveyed. When asked the question about workforce development board funding of OST programs, four replied that they funded OST and four replied that they did not. The top source of funding for the OST program was TANF funds.

An Example of Funding Sources for a Boys & Girls Clubs in Pennsylvania

Table 8 contains the distribution of revenue for the Boys & Girls Club of Western Pennsylvania and demonstrates the broad array of funding sources joined together to form a budget. In this example, government funds are the primary source of funding, almost one third of the overall budget. Private foundations are a close second source of funding, comprising 21.5 percent of the whole.

Table 8
An Example of Revenue
by Type and Percentage
Boys & Girls Club of Western Pennsylvania
Fiscal Year 2021

Revenue Source	Percentage
Government	27.1%
Private Foundations	21.5
Membership & Fees	13.4
Corporate	10.0
United Way	7.3
Trusts	6.3
Individual	6.3
Miscellaneous	3.2
BCGA	1.9
EITC	1.8
Rentals	1.5
Total	100.0

Source: Data provided by B&GC of Western Pennsylvania.

EMPHASIS ON EVIDENCE & DATA

The challenges of securing funding for out-of-school time (OST) programs and collecting evidence are intertwined. As demonstrated above, OST programs draw funding from a variety of sources, each of which has different expectations for the use of the funds. Federal funding, like 21st CCLC, is provided with an expectation that certain outcomes will be evaluated and reported annually. Other private sources may require the collection of similar data points, but it is often reported in a different format such that information cannot easily be transferred from one evaluation to another. The expectation for heavy data collection can overwhelm smaller or less experienced OST programs.

Data Collection

From 2012 to 2016, the Wallace Foundation provided direct grants and technical assistance to eight cities to improve their data systems with the goals of creating useful data for policymakers and practitioners. The grantees also focused on using improved data to increase access to and quality of the OST programs.

Data collection requires investment in:

People - Processes - Technology

Based on its research, the Wallace Foundation identified investments in **people**, **processes**, and **technology** as the three central pillars to developing capacity to collect and use data.⁸⁷ Over the course of the 2012-2016 study, the Foundation sought to answer questions such as which stakeholders were responsible for designing the system; how they identified technology needs and solutions; how they operated the data systems; how they prepared research staff and afterschool providers to collect and analyze data; and, how successful were they in using the generated data for the multiple intended purposes.⁸⁸

⁸⁷ Beth Gamse *et al.*, “Using Data to Strengthen Afterschool Planning, Management, and Strategy, Lessons from Eight Cities,” (Chapin Hall at the University of Chicago, 2019), <https://www.wallacefoundation.org/knowledge-center/Documents/2019-Using-data-to-strengthen-afterschool-planning-management-strategy.pdf>, 3.

⁸⁸ *Ibid.*, 4.

Stakeholder organizations identified in the study included school districts, city and county agencies such as parks and recreation programs, human services public agencies, libraries, and community-based non-profits. The data gathered fell into three categories: program attendance, program quality and youth development.⁸⁹

Programs varied in their approach to management information systems (MIS). Some adapted or used existing MIS that were in use prior to receiving the Wallace Foundation grants. Others, including Philadelphia, built new database systems. These systems were created either through external software developers or partnerships with a local research organization. In 2014, Philadelphia was using Efforts to Outcomes (ETO); Saint Paul, Minnesota used Cityspan.⁹⁰ By the end of the project, all cities had created staff positions to monitor data accuracy and quality. The responsibilities of these internal data managers included “training providers on data entry, developing data queries, removing outdated data from the systems, and communicating with providers about attendance data accuracy.”⁹¹

Philadelphia subsequently switched to Cityspan and at the time of this report has been using the system for about four years. The work is supported by Philadelphia’s Office of Children and Families (OCF) and Research in Action. Cityspan collects data from each program that receives funding from the OCF and deposits the information in a single database. The data are mostly demographic information, including statistics on attendance, participation, race, IEPs, juvenile justice, and income. Currently, the system does not incorporate much benchmarking data, but is continuing to expand this category of information. As it stands, in Philadelphia Cityspan collects output data and not outcomes like the those collected for 21st CCLC evaluations.⁹²

A significant challenge to programs was entering data consistently and reliably in the face of formidable obstacles such as dependable internet access and chronic staff turnover. According to the Wallace Foundation, “Staff of programs run by the Philadelphia Parks Department were not able to upload attendance data to a central system even within their agency. Rather, they kept track of attendance on paper, and then sent the data to the central office for entry.”⁹³

Formal agreements were crucial to operations of the data systems. Agreements specified level of access to information, data sharing, training, data entry and program management. Access to student-level educational data had to align with the school districts’ interpretation of the Federal Educational Rights and Privacy Act (FERPA).

⁸⁹ Ibid., 22.

⁹⁰ Ibid., 8.

⁹¹ Ibid., 17.

⁹² Meeting with Vincent Litrenta and Laura Johnson of Sunrise of Philadelphia, Inc, February 22, 2021.

⁹³ Gamse, “Using Data to Strengthen Afterschool Planning,” 21.

Systems staff endeavored to communicate data through custom-built applications such as dashboards and other simplified report formats. In certain cities, the data reports and communications were established to align with public policy priorities. Dashboards and standardized reports enabled providers to convey information that they had previously found hard to summarize and reliably report.

The Wallace Foundation established several lessons learned from the grant programs in the eight cities. These included:

- Recognize that a new system needs a systems-level focus.
- Collaboratively agree on meaningful indicators of early progress.
- Understand local circumstances, contexts, and expertise.
- Share progress and learning with relevant audiences.
- Realize that participating organizations share motivation yet may have different priorities.
- Anticipate that not everything will proceed as planned.⁹⁴

Federal Education Statute and Guidance

Concurrent with the massive push from private foundations for evidence to support the success of OST programs, the federal government was amending the Elementary and Secondary Education Act (ESEA) to increase specific guidance on the necessity of data to justify funding decisions.

The 2015 Every Student Succeeds Act (ESSA) encourages and sometimes requires that applicants for its various funding streams establish that their programs are backed by strong evidence of effectiveness. There are four categories or tiers of evidence of effectiveness. The top three tiers provide the most credible evidence, but the fourth tier can justify offering a program if it is also being evaluated.

The purpose of this guidance from the U.S. Department of Education is to provide state educational agencies, local educational agencies, schools, educators, and partner organizations with information to assist them in selecting and using “evidence-based” activities, strategies, and interventions, as defined in Title VIII of ESEA and amended by ESSA.

Federal Levels of Evidence:

Strong
Moderate
Promising
Hypothesized

⁹⁴ Ibid., 38.

Levels of Evidence

The ESEA requires at least one study on an intervention to provide strong evidence, moderate evidence, or promising evidence. Lacking strong or moderate evidence, promising evidence may suggest that an intervention is worth exploring. Interventions with little to no evidence should at least demonstrate a rationale for how they will achieve their intended goals and be examined to understand how they work.⁹⁵

Strong Evidence

To be strong evidence, or Tier 1 evidence-based practice, there must be at least one well-designed and well-implemented experimental study, such as a randomized control study, on the intervention.

An experimental study is designed to compare outcomes between two groups of individuals that are otherwise equivalent except for their assignment to either the intervention group or the control group. A common type of experimental study is a randomized control trial or RCT. A randomized controlled trial, as defined by Part 771 of the Education Department General Administration Regulations (EDGAR), is a study that employs random assignment of, for example, students, teachers, classrooms, schools, or districts to receive the intervention being evaluated (the treatment group) or not to receive the intervention (the control group). The estimated effectiveness of the intervention is the difference between the average outcomes for the treatment group and for the control group.⁹⁶

In addition, a support that provides strong evidence will show a statistically significant and positive effect on a student outcomes and not be overridden by statistically significant or negative evidence on the same intervention. These studies should have large and multi-site samples and those samples should also overlap with the populations and setting that would be served.

Moderate Evidence

To provide moderate evidence, or Tier 2 evidence-based practice, there must be at least one well-designed and well-implemented quasi-experimental study on the intervention.

A quasi-experimental study (as known as a quasi-experimental design study or QED), as defined by Part 77.1 of EDGAR, means a study using a design that attempts to approximate an experimental design by identifying a comparison group that is similar to the treatment group in important respects... An example of a QED is a study comparing outcomes for two groups of classrooms matched closely on the basis of student demographics and prior mathematics achievement, half of which are served by teachers who participated in a new mathematics professional development (PD) program, and half of which are served by other teachers. This study uses a nonequivalent group design by attempting to match or statistically control differences between the two groups. Another type of QED is a

⁹⁵ United States Department of Education, *Non-Regulatory Guidance: Using Evidence to Strengthen Education Investments*, (Sept. 16, 2016), <https://www2.ed.gov/policy/elsec/leg/essa/guidanceuseinvestment.pdf>, 4.

⁹⁶ *Ibid.*, 4.

regression discontinuity design (RDD), which uses a cutoff or threshold above or below which an intervention is assigned to individuals.⁹⁷

Studies that provide moderate evidence should also show a statistically significant and positive effect of the intervention on a student outcome and not be overridden by statistically significant and negative evidence on the same intervention from other findings in studies that meet WWC Evidence standards. In the same way as a Tier 1 evidence-based practice, the study should also have a large sample and a multi-site sample. However, for a Tier 2 or moderate evidence practice, the level of rigorousness is decreased, and the sample must either overlap with the population to be served or overlap with the settings. In Tier 1, both conditions must be met.

Promising Evidence

To be supported by promising evidence, there must be at least one well-designed and well-implemented correlational study with statistical controls for selection bias on the intervention. It should use sampling or analytic methods to reduce or account for differences between the intervention group and a comparison group. Also, the study should show a statistically significant and positive effect of the intervention on a student outcome and not be overridden by a statistically significant and negative evidence on that intervention from findings in other studies.

Demonstrates a Rationale

To demonstrate a rationale, the intervention should include a well-specified logic model that is informed by research or an evaluation that suggests how the intervention is likely to improve relevant outcomes.

“A logic model (also known as a theory of action), as defined by Part 77.1 of EDGAR, means a well-specified conceptual framework that identifies key components of the proposed process, product, strategy, or practice (i.e., the active “ingredients” that are hypothesized to be critical to achieving the relevant outcomes) and describes the relationships among the key components and outcomes, theoretically and operationally.”⁹⁸

There should also be an effort to study the effects of the intervention, ideally producing promising evidence or higher, that would happen as part of the intervention or is underway elsewhere to attest to the success of the intervention.

⁹⁷ Ibid., 4.

⁹⁸ Ibid., 4.

INCREASE IN POSITIVE BEHAVIORS

Regular participation in a quality out-of-school time (OST) program can lead to increase in positive behaviors. These outcomes can be measured by evaluating indicators in academic achievement, social and emotional development, and career building and 21st century skills. OST programs follow different designs, curricula, and philosophies in how they meet the needs of their particular communities. Generally speaking, however, there are programmatic structures that are recommended. Research demonstrated that using sequenced, active, focused, and explicit (SAFE) practices had effects on outcomes. A meta-analysis completed in 2010 indicated that children and teens who participated in OST programs that were designed to enhance personal and social skills showed, when compared to controls, statistically significant improvements in self-perceptions and bonding to school, positive social behaviors, social grades, and levels of academic achievement.⁹⁹

Importantly, the findings show that programs that follow the SAFE practices are significantly more beneficial than OST programs that do not.¹⁰⁰ Desirable changes occurred in feelings and attitudes, behavioral adjustment, and school performance. Further, participants in SAFE programs had test scores that averaged 12 percentile points higher than control groups. Not all OST programs were effective, however, and only SAFE programs showed effectiveness in any particular measure.¹⁰¹ For example, participants who receive programming in SEL (social and emotional learning) show higher academic test scores than those who do not. In the case of this meta-analysis, the increase was over two times larger for SAFE SEL programs than for academic programs that were not SAFE.¹⁰² The study concluded that, while dosage is an important component of whether an OST program is successful, a participant's engagement seems to have a similarly strong effect and can be used to predict positive outcomes on social and academic measures.¹⁰³

The consensus among researchers is “being explicit about program goals, implementing activities focused on these goals, and getting youth actively involved are practices of effective programs.”¹⁰⁴

There are different approaches to evaluating the effectiveness of OST programs. Generally speaking, these include studies of how programs are structured and how well they adhere to evidence-based guidance from research organizations and their funders. These types of evaluations are often said to measure a program's “fidelity of model,” that is, how closely a

⁹⁹ Joseph A. Durlak, Roger P. Weissberg, Molly Pachan, “A Meta-Analysis of After-School Programs That Seek to Promote Personal and Social Skills in Children and Adolescents,” *American Journal of Community Psychology* 45 (2010): 294–309, DOI 10.1007/s10464-010-9300-6, 295.

¹⁰⁰ *Ibid.*, 301.

¹⁰¹ *Ibid.*, 302.

¹⁰² *Ibid.*, 303.

¹⁰³ *Ibid.*, 303.

¹⁰⁴ *Ibid.*, 303.

particular program models the template it is intended to follow. For example, there are those studies that gather and analyze data to measure whether programs are structured as intended, how well they meet attendance and staffing goals, and how they fit the environment of the community or school population they serve. Similarly, researchers can place more emphasis on a program's outcomes, with less focus on the ways and means by which outcomes result by measuring the effects on participants, parents, and communities.

Evaluations are conducted, or sponsored, by the organizations that fund the entities and programs being studied. Organizations, whether governmental, large umbrella foundations with numerous funding interests and initiatives, and service providers themselves have a vested interest in knowing how their money is being spent. In the case of out-of-school programs, large funders and evaluators include federal and state governments and a number of foundations that have a focus on education, such as the Wallace Foundation, the William T. Grant Foundation, the Charles Stewart Mott Foundation, and the Open Society Foundation.

Academic

The Afterschool Alliance produced a compendium of studies of OST programs that occurred over the past ten years.¹⁰⁵ The studies evaluated nine topics of research and were organized into two groups of outcomes: academic and behavioral. Academic outcomes included:

- improved school attendance and engagement in learning,
- improved test scores and grades,
- students at greatest risk show greatest gains; and
- frequency and duration of afterschool participation increases benefits.

Improved School Attendance and Engagement in Learning

Highlighted studies that measured these outcomes showed that student participants had increased confidence about moving to the next level of their schooling. In Oakland, California, for example, 80 percent of students felt more confident about reaching the next grade level, 70 percent of middle schoolers felt more confident about starting high school, and 89 percent of high schoolers felt more confident about moving on to college. Another program in California demonstrated attendance rates among participants as being much higher than the rates for non-participants. For example, 70 percent of participants had a school day attendance rate of 96 percent or higher. By comparison, non-participants had an attendance rate of 56 percent. Further, a California program found that 91 percent of participants graduate from high school, which is a rate 50 percent higher than non-participant graduation rates (61 percent).¹⁰⁶

¹⁰⁵ *Evaluations Backgrounder: A Summary of Formal Evaluations of Afterschool Programs' Impact on Academics, Behavior, Safety, and Family Life* (Afterschool Alliance, March 2015), www.afterschoolalliance.org.

¹⁰⁶ *Ibid.*

Across the country in Chicago, 95 percent of participants in an OST program graduated from high school, which is double Chicago city schools' graduation rate. In some cases, students were shown to have attended more than 18 more school days per academic year than their non-participating peers and miss almost ten fewer days of school. In general, research demonstrates that participants are less likely to miss school days and more likely to graduate high school than are non-participants.¹⁰⁷

Improved Test Scores and Grades

Students who participated in The Y's High School Youth Initiative improved their grades and English language arts (ELA) and math standardized test scores. Over the course of one study, 31 percent of participants improved their grade point averages as compared to 20 percent of non-participants. In ELA, 17 percent vs. 6 percent improved standardized test scores; in math 4 percent improved as compared to 2 percent. Summer learning programs serving low income, urban school districts on were shown to have benefits in the following fall school year. Math scores improved by as much as 21 percent.¹⁰⁸

A meta-analysis of 68 programs concluded that participants in high-quality programs, when compared to non-participants, showed improvements in GPA and test scores, as well as in school day attendance and behavior. Another wide-ranging study, which included 3,000 afterschool participants in elementary and middle school grades, showed a two year, 20 percentile improvement in standardized test scores as compared to non-participants, many of whom were unsupervised during afterschool hours.¹⁰⁹

Students at Greatest Risk Show Greatest Gains

Struggling students are among those who show the highest gains when they participate in high quality OST programs. A North Carolina program showed an 83 percent improvement in promotion rates. Further, those who participated at least 280 hours per year demonstrated annual double-digit improvements in both math and reading proficiency scores. Similarly, an evaluation of summer learning programs showed that participants, 80 percent of whom performed below grade level, had improved markedly by the programs' end. Average percentile ranks in math and reading improved from 23rd to 32nd and 26th to 35th, respectively. Over the course of the summer program, middle school students gained up to 7.2 months of reading skills and 7.5 months of math skills, effectively learning a year's worth of material over the course of a summer program.¹¹⁰

Other long-term studies, some eight and ten years long, as well as meta-analyses that included as many as 35 studies, have concluded that high quality programs provide benefits to at-risk student populations, particularly in urban centers. Improvements were seen in participants who performed among the low percentiles on standardized testing, from elementary through high school grades. These academically at-risk participants made the greatest gains among their peers.

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

Frequency and Duration of Afterschool Participation Increases Benefits

Researchers commonly refer to the “dosage” that a young person receives through participation in OST programs. Those who participate the least, i.e., who receive the lowest dosage, are those who exhibit the least positive outcomes. Conversely, those who participate the most tend to enjoy the greatest improvements and more positive outcomes. Some research indicates that low-income participants who engage fully in programs can close the so-called math achievement gap between themselves and their higher-income peers. Moreover, research shows that the benefits’ impact increases the longer that students are engaged in programs.

21st CCLC Academic Impact

The federally funded 21st Century Community Learning Centers programs provide academic enrichment for children, particularly those who are enrolled in high-poverty low-performing schools. The intent is that the programs’ curriculum will help students meet state and local standards in core academic subjects. The federal funding is authorized through Title IV, Part B of the Elementary and Secondary Education Act (P.L. 107-110), as amended by ESSA of 2016.¹¹¹

PDE reports that:

- Students who regularly participate in Community Learning Centers improved their school attendance, class participation and behavior, homework completion, and reading and math achievement scores and grades.
- Regular participation in OST programs helped narrow the achievement gap between high- and low-income students in math, improved academic and behavioral outcomes, and reduced school absences.
- Students who engage in extracurricular programs like 21st CCLC have shown better academic performance and behavior and have shown to have statistically significantly higher test scores, bonding to school, and self-perception, with significantly lower problem behaviors when compared to students not in such programs.¹¹²

For example, nearly half (44 percent) of students attended 30 or more program days during the 2017-2018 program year, and according to teacher surveys, 70 percent of regular attendees improved their classroom performance. Thirty-two percent improved their reading and 32 percent improved their math report card grades. Overall, 21st CCLCs provided an estimated 130,499 school year program hours.¹¹³

¹¹¹ “Background on 21st CCLC,” *PDE*, accessed March 26, 2021, <https://www.education.pa.gov/K-12/21st%20Century%20Community%20Learning%20Centers/background/Pages/default.aspx>.

¹¹² *Ibid.*

¹¹³ “21st Century Community Learning Centers 2017-18,” Bureau of School Support, PDE.

The requirement that states evaluate their programs is directed through Title IV, Part B of the Elementary and Secondary Education Act, as amended, Sections 4202 (C) and 4203 (A) and Section H-5 of the 21st Century Community Learning Centers Non-Regulatory Guidance.

The Allegheny Intermediate Unit (AIU) was contracted by PDE to evaluate the programs' performance for 2017-18.¹¹⁴ Grantees are grouped into funding cycles, each of which is three years long. The grantees of each funding cycle are referred to as a cohort. There were 149 grantees in three funding cycles: Cohorts 7, 8, and 9. Three performance measures were examined: academic, social, and behavioral. Grantees established their own performance indicators.

Data sources used in the evaluation included the federal 21APR system, Pennsylvania Implementation Survey, PA Operations Spreadsheet, PA De-Identified Student Data Spreadsheet, other data from PDE and the Center for Schools and Communities (PA's contractor for 21st CCLC assistance).

The programs were evaluated based on which of the areas they addressed from a list of 15 included in Pennsylvania's program guidance.

Seven outcome areas were evaluated:

1. Reading report card
2. Math report card
3. Cross-year reading report card
4. Cross-year math report card
5. Teacher survey (academic results)
6. School attendance
7. School behavior

State Reading and Math Assessments

Evaluators examined current year (2018) snapshot state assessments, and progress results for students with prior year (2017) and current year (2018) data.

There were slight improvements from 2017 to 2018 in reading. Overall, more than half of students (57 percent) scored at the same level in 2017 and 2018. Seventeen percent dropped categories, and 3 percent did not need to improve. The percent of students who scored advanced increased from 6 percent to 7 percent. The percent of students who scored proficient improved from 29 to 30 percent. The number of students who scored in the basic range increased from 45 to 47 percent. The number of students who scored below basic decreased from 20 percent to 17 percent.¹¹⁵

¹¹⁴ *21st Century Community Learning Centers Program 2017-18 State Evaluation Report* (Harrisburg, PA: Pennsylvania Department of Education, 2019).

¹¹⁵ *Ibid.*, 4.

In math, there were essentially no overall changes reported from 2017 to 2018. In each year, 5 percent of students scored advanced. The improvement in the proficient category from 2017 and 2018 was from 15 percent to 16 percent. Twenty-nine percent scored in the basic category in both years. In 2017, 51 percent scored below basic whereas 50 percent scored below basic, an improvement of 1 percent, in 2018. Individual students moved between categories, however. Fifteen percent improved by one or more levels from 2017 to 2018. Seven percent moved from basic or below basic to proficient or advanced. Three percent scored advanced or proficient in both years. Most students, 64 percent, stayed in the same category.¹¹⁶

Reading and Math Report Card Results

Results for reading and math report cards were similar in both domains. Both reading and math improved for 29 percent of students, while about the same showed no change (40 percent in reading, 38 percent in math). Approximately the same percentage of students had grades drop in reading and math from fall to spring, with 22 percent of students' reading grades going down and 24 percent of students' math grades falling. In both subject areas, 9 percent of students either did not need to improve or maintained their grade.¹¹⁷

21st Century Teacher Survey

Results included teacher reports of student changes in academics, classroom performance, and behavior. Data were available for 65 to 68 percent of school year regular attendees of 21st CCLC programs.

Table 9
21st CCLC Teacher Survey
2017-2018 State Evaluation Report
Pennsylvania

	Improved	No improvement needed	No change	Declined
Academic performance	58%	18%	17%	8%
Satisfactory homework completion	53	24	17	7
Participation in class	55	21	20	4
Volunteering in class	44	30	22	3
Class attentiveness	50	23	21	7
Class behavior	39	33	20	8
Motivated to learn	48	23	24	6

Source: PDE, 21st Century Community Learning Centers Program: 2017-18 State Evaluation Report, March 2019.

¹¹⁶ Ibid., 4-5.

¹¹⁷ Ibid., 5.

School Behavior/Discipline and Attendance

Grantees reported school attendance results; programs that included behavior and discipline indicators were asked to report on those, as well. Improved attendance was reported for 37 percent of participants. Thirty-two percent showed worse attendance, 21 percent did not need to improve their attendance, and 10 percent showed no change. In terms of behavior, 63 percent did not need to improve behavior, while 13 percent improved, 12 percent showed worse behavior, and 12 percent showed no change.¹¹⁸

High School Credit Recovery

Thirty-six grantees reported in PA Implementation Survey that they had a credit or course recovery component in their programs. Seventy-one percent of participants recovered one or more credits. There were 866 students included in the survey data, with 245 being regular attendees and 641 having attended for fewer than 30 days. There were three credit recovery categories, literacy, math, and other. Of the 886 students, 641 recovered credit in one category, 193 recovered credit in two categories, and 52 recovered credits in all three categories.¹¹⁹

The report's authors concluded that the 21st CCLCs may be contributing to positive student outcomes. Some indicators, namely academic performance, school attendance, and state math assessments showed improvements. Others showed that declines in performance were slowing, which would seem to indicate a positive trend.¹²⁰

Social and Emotional

OST programs that teach and mentor positive behaviors are shown to improve participants' abilities to make good, productive decisions about their lives. A meta-analysis of Chicago-based programs found that participants improved in feelings and attitudes, behavioral adjustment, and school performance. Conversely, it was shown that aggression, noncompliance, and conduct problems decreased. Chicago studies also found decreases in drug use, selling drugs, and gang activity.¹²¹

The phrase "social and emotional learning" (SEL) is used to encompass an array of interpersonal skills and competencies that schools and employers are increasingly recognizing as critical to a young person's development through the school age years and into becoming a productive employee and contributor to society later in life. The Collaborative for Academic, Social, and Emotional Learning (CASEL) defines SEL as "the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for

¹¹⁸ Ibid., 6.

¹¹⁹ Ibid., 7.

¹²⁰ Ibid., 7.

¹²¹ *Evaluations Backgrounder* (Afterschool Alliance), 10.

others, establish and maintain supportive relationships, and make responsible and caring decisions.”¹²²

CASEL developed a framework of five core areas to categorize the goals of SEL programs: self-awareness, social awareness, responsible decision-making, self-management, and relationship skills.¹²³



GOALS OF SOCIAL & EMOTIONAL LEARNING

Self-awareness
Social awareness
Responsible decision-making
Self-management
Relationship skills

The Afterschool Alliance presents information from several sources that show as many as 93 percent of teachers understand the important of SEL both in terms of how it enhances and contributes to a student’s academic and social experiences in school, but how important it is for future employment opportunities. A similar survey showed that 99 percent of school principals share the teachers’ beliefs not only in terms of the benefit for individual students but also for the overall school climate.¹²⁴

Despite the importance that teachers and principals ascribe to SEL, accomplishing goals such as those set out by CASEL is nonetheless beset with challenges that hinder their school day efforts. Teachers cite two primary obstacles: a lack of time during the day and a lack of training on how to most effectively address and teach SEL competencies. School principals, having the benefit of oversight, agree with teachers on the lack of time and training, but see also the restraints of insufficient budgets for development and implementing SEL curricula.¹²⁵

Research shows that OST programs are, in fact, largely capable of filling the SEL role. The Afterschool Alliance cites work done by the Center for Applied Research and Educational Improvement that shows that program leaders and mentors view SEL as being one of their core functions.¹²⁶ The Afterschool Alliance reported on a study that demonstrated results of a survey of 100,000 school children aged kindergarten through 12th grade. Both short- and long-term benefits resulted from their participation in OST programs that used evidence-based SEL curricula. Improvements were shown in social and emotional competencies, empathy, and teamwork. Further, participants were less likely than those without SEL interventions to use drugs, report emotional distress, and have behavioral problems at school. They exhibited higher academic achievement and increased high school graduation rates.¹²⁷

¹²² “SEL is...,” *Collaborative for Academic, Social, and Emotional Learning (CASEL)*, accessed March 26, 2021, <https://casel.org/what-is-sel>.

¹²³ *An Ideal Opportunity: The Role of Afterschool in Social and Emotional Learning* (Afterschool Alliance, May 2018).

¹²⁴ *Ibid.*

¹²⁵ *Ibid.*

¹²⁶ *Ibid.*, 5.

¹²⁷ *Ibid.*, 4.

Hurd and Deutsch researched the SEL programs to determine which components are most likely to benefit participants. They cite research from the National Institutes of Health and the National Research Council as recommending eight components that are critical to the operation of high quality programs. These eight components are:

- physical and psychological safety
- appropriate structure
- opportunities to belong
- positive social norms
- support for efficacy and mattering
- opportunities for skill building
- integration of family, school, and
- community efforts, and
- nurturance and support

Physical and Psychological Safety

Chief among SEL programs, and in fact all OST programs, is the safety component. Adult staff must ensure that participants are being taught and cared for in safe locations, where they are assured of both physical and psychological safety. Establishing and maintaining safety includes providing a range of conditions, from safe transportation to healthy interactions with peers and adults.

Structure

People, especially youngsters, learn best in structured environments. The structure can alleviate anxiety and allow participants to process thoughts and mentally prepare themselves based on expectations. A structured learning process should provide opportunities to share experiences, listen to others' experiences, work together as teams, and think, discuss, and learn from the outcomes of their activities.

Structure provides clear and consistent expectations for behaviors. It sets limits and provides opportunities to learn from regulated behaviors. As participants mature, the structure can shift the boundaries of behavior. The parameters of expectations can be broadened to allow growth toward maturity. With age and experience, participants are guided through opportunities to make their own decisions within the program.

Belonging

In high-quality programs, staff places an emphasis on mentoring participants as they develop self-identities. The young people are shown that they belong in the group. The staff is trained to nurture participants' sense of how they are accepted and provide value to the group not in spite of but because of the difference they contribute to the group in terms of cultural and social background, gender, orientation, racial, ethnic, and religious backgrounds. Staff needs to mentor positive, appropriate interactions within and across groups of diverse participants. Along with structure, building belonging both bolster overall safety within the program.

Positive Social Norms

Staff should be trained and develop a culture that promotes behaviors that are appropriate to both the program’s goals and the participants’ backgrounds and levels of development. For example, peer-to-peer and youth-to-adult interactions should reflect positive language and actions. In conducting and monitoring activities, staff should maintain the focus that “prosocial norms are fundamental to constructive behavior.”¹²⁸

Efficacy and Mattering

Activities should be appropriate to the age and competencies of the participants. Being successful at accomplishing program tasks helps young people develop a sense of being a contributor and strengthens the perception of belonging. In short, they learn that they matter. They learn that their value benefits both the group and themselves. As they grow and mature, their activities can be turned more outward to their communities outside of the program. Through mentoring, the staff can help participants realize not only the importance of their contributions to society, but how they can, what steps they need to take, to realize those contributions.

Skill Building

Skill building is effective when programs follow an appropriately structured learning process. By this, a program will allow participants to “plan, practice, and perform” their tasks. Staff provides feedback and encourages participants to learn and grow without necessarily comparing themselves to their peers. An overarching objective is to have participants take an active role in their own learning.

Staff are effective when they themselves model SEL, set high expectations for both themselves and their participants, and use positive reinforcement to support the behaviors that are targeted for the youngsters. The program’s curriculum is informed by the participants’ social and cultural backgrounds, among other characteristics. The authors emphasize the importance of bicultural education, particularly in ways that it can help minority participants practice “code switching,” that is, “moving from one cultural style of interacting to another.”¹²⁹

Integration of Family, School, and Community

Staff should work to “bridge youths’ social contexts such as family, school, community, and workplace.” This is a two-way bridge. Staff plans appropriate steps to integrate the youths’ environments into the programming, while simultaneously helping adults in the surrounding community understand and reinforce the SEL values being delivered through the program.

¹²⁸ Noelle Hurd and Nancy Deutsch, “SEL-Focused After-School Programs,” *The Future of Children*, vol. 27, no. 1 (Spring 2017): 95-115, <https://files.eric.ed.gov/fulltext/EJ1145092.pdf>, 101.

¹²⁹ *Ibid.*, 102.

Nurturance and Support

Staff should maintain a natural focus on the youths' well-being. They need to be responsive to participants' psychological and physical needs in real-time in ways that reinforce the objectives of the SEL criteria. It is common for adult staff to be relatively close in age to participants and have similar backgrounds from similar communities. These characteristics can reinforce bonding and promote nurturing through familiarity. Nurturing and support are especially effective when staff can demonstrate that they had grown successfully from conditions that are perhaps similar to the youths' experiences.

Support for Program Staff

SEL programs generally try to deliver six SEL outcomes: emotion management, empathy, teamwork, initiative, responsibility, and problem solving. Research and collaboration among leaders in the field recognized that staff, to effectively deliver those outcomes, identified five strategies that improve training and support.¹³⁰

“First, programs should recruit young people who are more likely to benefit from participation.”¹³¹ This strategy boosts morale by creating conditions where staff can appreciate the value of their efforts when youth succeed.

“Second, programs should ensure that multiple staff members have appropriate training in practices to promote SEL.” Equality of training allows staff to support one another and more easily and effectively share knowledge and support for one another.¹³²

“Third, staff members need collaborative planning time before program sessions and interactive debriefing afterward to ensure that they can communicate with one another, prepare adequately for program sessions, and work together to respond to problems that arise.” There is value in providing nurturing and supportive environments for staff, just as there is for the program participants.¹³³

“Fourth, staff need organizational supports such as extended vacation after intensive periods of work, mental health services or referrals, resources for continued learning, and check-ins with supervisors to ensure the staff's general wellbeing.” A happy, healthy staff is more effective.¹³⁴

“Fifth, programs should support continuous improvement.” Continuous improvement through staff training and development and improved program resources is a cornerstone characteristic of high quality out-of-school programs.¹³⁵

¹³⁰ Ibid., 103-104.

¹³¹ Ibid., 102.

¹³² Ibid., 102.

¹³³ Ibid., 102.

¹³⁴ Ibid., 102.

¹³⁵ Ibid., 103.

The central question driving most research into SEL OST programs is whether and how effective they are at improving outcomes. As it turns out, researchers have had difficulty proving causation between SEL programs and successful outcomes, and a wide variety of outcomes has been reported.¹³⁶ There are a number of confounding variables that had clouded the results. For example, self-selection is difficult to control. Young people who are likely to participate in OST programs may be different from those who do not. Second, participation is nearly always voluntary, and therefore the level of consistent participation is difficult to control. Nonetheless, meta-analyses appear to show that participants exhibit improved academic performance, positive social behavior, and self-confidence. Negative behaviors, such as aggression and substance use tend to decrease with participation.¹³⁷ It is important to note that evidence based programs, particularly those that follow SAFE programming, (sequenced, active, focused, explicit objectives) are those that impart benefits to the participants.

Career Readiness and 21st Century Skills



The current economy and future trends indicate that students emerging into the workforce will need to develop and demonstrate skills that include the academic, technical, and “employability,” such as emotional and social skills.¹³⁸ Pathways to careers include postsecondary education and career and vocational opportunities. Often, developing and acquiring these skills will require training in workplace settings, whether real or simulated. In the sense of career readiness, employability skills are referred to as “21st century skills.”

Researchers and educators have identified and assigned 21st Century Skills to three categories: learning skills, literacy skills, and life skills. The learning skills include critical thinking, creative thinking, collaborating, and communicating. Information literacy, media literacy, and technology literacy are literacy skills, and life skills are flexibility, initiative, social skills, productivity, and leadership.¹³⁹

In addition to developing 21st century skills, students, particularly those from underserved backgrounds and those with less exposure to career opportunities, need to have positive exposure to work-based learning experiences, career development opportunities, and internships. In many cases, OST programs provide the primary exposure to these experiences.

¹³⁶ Ibid., 104.

¹³⁷ Ibid., 104.

¹³⁸ Marjorie D. Cohen, Susan Therriault, Jenny Scala et al., *Afterschool Programming as a Lever to Enhance and Provide Career Readiness Opportunities* (American Institutes for Research, September 2019).

¹³⁹ “What Are 21st Century Skills?” *Thoughtful Learning*, accessed March 26, 2021, <https://k12.thoughtfullearning.com/FAQ/what-are-21st-century-skills>.

Age-appropriate career development opportunities are available through out of school programs. Age-appropriate curricula follow a staged continuum that begins in early childhood and progresses through senior high school. These can include “exposure to and exploration of special interests, building relationships with trusting mentors, and career exploration and preparation.”¹⁴⁰

The authors provide the following illustration, which shows the continuum from early childhood through 12th grade. The early stages of career exploration start with learning about work, then proceed to learning through work, and graduate to learning for work. The curricula are designed for “increasing individualization as students connect their interests, skills, and goals with career possibilities.”¹⁴¹

Career awareness begins in kindergarten and extends through 6th grade. Participants learn through age-appropriate experiences that attempt to engage their interests. Field trips, “embedded career examples in learning materials,” provide early exposure through broad, general activities. Later, individual participants’ knowledge, skill, and abilities are matched to particular fields, industries, and occupations.

Middle school years are an extension and continuation of the career readiness that began in the earlier grades. Activities become less focused on the participant’s expressed interests and additionally include skills and personality tests to help guide them toward new career insights. Activities include service projects, student-run initiatives, and independent learning.¹⁴²

The high school years career readiness and preparation curricula are designed to prepare participants for hands-on, real-world work opportunities. Out of school programs further focus on individual direction and aptitudes by matching the participants to appropriate opportunities. Curricula and activities that are designed around internships, mentoring, and self-reflection give participants time to both develop their interests, skills, and aptitudes, and also allow them safe opportunities to change their minds. The connection between work world and academics allows participants to grow as they may apply their academics to their work and vice-versa. The potential exists for them to learn practical skills, such as: “planning, financing, problem solving, communications, teamwork, applying knowledge to solve problems, meeting workplace demands, and arriving on time.”¹⁴³

The authors, realizing that there are “challenges in leveraging afterschool programs for career readiness,” recommend ways that state leaders can address the challenges. These recommendations include:¹⁴⁴

1. Incentivize in-school teachers and staff to share career readiness and career pathways knowledge with afterschool instructors and staff.

¹⁴⁰ Cohen, *Afterschool Programming*, 8.

¹⁴¹ Ibid.

¹⁴² Ibid., 9.

¹⁴³ Ibid., 10.

¹⁴⁴ Ibid., 11.

2. Encourage and incentivize partnerships between OST programs and employers.
3. Increase funding for OST programs at the secondary level by braiding relevant funding streams.
4. Ensure that communities have support to develop high-quality programs that are relevant and engaging.
5. Focus on career readiness.

WorkReady Summer is a summer program that provides job opportunities for Philadelphia youth ages 12-24. The program had opened its application period only weeks before the COVID pandemic hit in March 2020. Consequently, 98 percent of the participating organizations were able to offer digital work experiences through 140 programs, and 85 percent of youth participants did so through virtual experiences. Out of 20,000 youth applicants, 15,000 were invited to enroll. Over 6,000 eventually participated, despite COVID restrictions and the civil unrest that embroiled the city.

The participants tended to be:

- 15-17 years old (64 percent)
- female (55 percent)
- African American (65 percent)
- in high school (73 percent)
- unemployed prior to the program (66 percent)

One in five reported never having had a job prior to participating in the WorkReady program.

The \$14.5 million program was funded through a variety of sources. Eighty percent of funding came from the public sector with \$11.5 million. Employers provided \$618,500, and foundations and individual donors contributed \$677,246. The Philly Summer Jobs Fund, established in 2020, generated over \$1.9 million in new funding.

Several programs at Sunrise of Philadelphia focus on career readiness. For middle schoolers, Sunrise operates a program where program participants complete strength inventories and identify jobs and careers that are of interest to them. Once they have identified the careers, student research the earning potential in that career, the cost of the education necessary and how people attain those positions. As a final project, students present a college and career fair where they tie together all of their research to recruit attendees to their dream job.

Sunrise of Philadelphia continues with a career readiness emphasis for high student students who participate in their program. High schoolers are exposed to a variety of career opportunities. Sunrise also provides SAT prep classes, financial aid workshops and college visits. Over the summer, students may be placed at job sites that will provide real world experience in a broad array of industries. During these placements, Sunrise provides weekly professional development sessions that include work on resume and practicing interview skills.¹⁴⁵

SHINE programming incorporates strong career readiness components into their programs. In 2011, SHINE established a five-week academy where students participated in hands-on activities using Computer Aided Drafting, Heating Ventilation Air Conditioning (HVAC) Green Energy, and Mass Transit/Logistics at the technical institute. Students were then invited to visit a college class of their choice at the Lehigh County Carbon Community College.¹⁴⁶

Another program incorporated 36 weeks of hands-on project-based-activities with a focus on STEAM and career exploration. The program focused on STEAM skills needed in the current and future job market. Program participants used state of the art technical labs and constructed a solar-powered shed.¹⁴⁷

¹⁴⁵ E-mail Laura Johnson, Deputy Executive Director, Sunrise of Philadelphia, March 15, 2021.

¹⁴⁶ The Institute for Public Policy and Economic Development, *SHINE by the Numbers: 2008-2018 Trend Data Report*, (SHINE: Schools and Homes in Education, Lehigh Carbon Community College), <https://drive.google.com/file/d/1IWbFaypwIwfP9KADUyMP3VkjaKpF7YZm/view>, 12.

¹⁴⁷ *Ibid.*, 13.

DECREASE IN NEGATIVE BEHAVIORS

In addition to the increases in positive behavior that out of school time (OST) programs can bring, programs can also result in reductions of negative behavior. The effects of OST programs on negative behaviors including violence and crime, adolescent pregnancy, substance use, attendance and engagement, and health-compromising behaviors have been studied empirically.

Violence and Crime

Youth violence encompasses a wide range of action and behaviors. It can include verbal abuse, bullying, hitting, and fighting as well as aggravated assault, robbery, rape and homicide. Being exposed to violence puts victims at higher risk for other physical and mental health problems such as an increased chance of smoking, obesity, high-risk sexual behavior, asthma, depression, academic problems, and suicide.¹⁴⁸ According to PSAYDN,

The Pennsylvania Commission on Crime and Delinquency has stated that an investment of \$2.7 million for delinquency prevention programs for approximately 5,300 juveniles results in \$11.1 million in benefits with a reduction in delinquency, drug use and antisocial behavior. For each dollar spent on prevention, there is an approximate savings of \$4 in future costs.¹⁴⁹

OST programs are one method available to help reduce youth violence. The hours immediately after school are considered peak hours for risky behavior. By filling these hours, OST programs have great potential to reduce youth violence. Literature focusing on OST programs displays two benefits relating to their ability to reduce youth violence. First, a major goal of OST programs is health and building social skills. Second, statistics show that OST programs improve children's psychosocial and academic outcomes, especially for low-income children.¹⁵⁰

¹⁴⁸ Cordero Tanner, *Reducing Youth Violence: The Role of Afterschool Programs*, School of Public Health, Georgia State University, August 11, 2015,

https://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1013&context=iph_capstone, 8.

¹⁴⁹ PSAYDN, "Afterschool: Improving Lives in Pennsylvania," <http://psaydn.center-school.org/wp-content/uploads/sites/34/2018/10/afterschool-improving-lives-in-pa.pdf>, 8.

¹⁵⁰ Cordero Tanner, *Reducing Youth Violence: The Role of Afterschool Programs*, School of Public Health, Georgia State University, August 11, 2015,

https://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1013&context=iph_capstone, 11.

Reducing Youth Violence: The Role of Afterschool Programs

A 2015 report, *Reducing Youth Violence: The Role of Afterschool Programs*, evaluated OST programs as part of a violence prevention strategy. The authors relied on social cognitive theory as the framework for their evaluation of OST programs in reducing youth violence: “Youth need to be placed in structures where they avoid violent situations, learn to solve problems nonviolently by enhancing their peer relationships, learn how to interpret behavioral cues, and improve their conflict resolution skills.”¹⁵¹

Factors Contributing to Youth Violence and Protective Factors

The report identifies multiple factors that contribute to youth violence. “These contributing factors are individual, relationship, community and societal risk and protective factors. When combined, all of these factors can either increase or decrease the likelihood that youth will be exposed to violence.”¹⁵²

Protective factors are the opposing forces that can decrease the chances that an individual will become either violent themselves or victimized. Examples of protective factors at an individual-level include things such as problem-solving, emotional control skills, and school readiness or academic achievement.¹⁵³ Healthy relationships, whether with adults, family, friends, or school personnel have been shown to decrease violent behavior.¹⁵⁴ The settings that surround youth and other community risk factors have also been shown to have an impact on participation in violence.¹⁵⁵

Research shows that individual-level risk factors include “impulsiveness, substance abuse, antisocial or aggressive beliefs and attitudes, poor academic performance, and a history of exposure to violence or abuse.”¹⁵⁶ Studies have shown that access to a firearm is also a risk factor of violence. When settings reflect residential instability, overcrowding in housing, a large presence of alcohol vendors, concentrated poverty, and poor economic growth, there is an increased risk of youth violence. High levels of crime, gang related activity, unemployment, and illegal drug sales, and substance abuse are examples of community risk factors that may increase the risk of youth violence.¹⁵⁷

Theoretical Basis for OST Programs

The report looks to social-cognitive models of youth violence to frame an evaluation of the public policy benefits of OST programs. “These models are about developing skills so that when youth are placed in social situations they will be able to process the following questions: What happened and what does this mean? What do I want? What are my options? What should I do? What are the consequences? Answers to these questions inform the actual actions they take in that

¹⁵¹ Ibid., 11.

¹⁵² Ibid., 16.

¹⁵³ Ibid., 17.

¹⁵⁴ Ibid., 18.

¹⁵⁵ Ibid., 18.

¹⁵⁶ Ibid., 17.

¹⁵⁷ Ibid., 18.

situation.”¹⁵⁸ The authors determine that “When implemented correctly, social-cognitive theory is a proven method to prevent youth violence in the United States.”¹⁵⁹

Examples of OST Programs Using a Social-Cognitive Model

The University of Chicago partnered with the organizations Youth Guidance and World Sport Chicago to develop a program “Becoming a Man – Sports Edition” (BAM). This program targeted disadvantaged male students in public schools. More than 2,000 at-risk disadvantaged male youths participated in the program that emphasized the development of social-cognitive skills. Program participants were in grades 7 through 10 and participated in either an in-school program or after-school program, a combination of both in-school and after-school activities, or the control group. Eligibility in the intervention was restricted to youth who were considered to be at medium risk. Medium-risk youth were categorized as those whose history indicated social-cognitive deficits (one-third of the sample had been previously arrested) and yet were still likely to attend program sessions.¹⁶⁰

The emphasis of the program was to teach participants social-cognitive skills such as: regulating emotions, controlling responses to stressful events, social-information processing (the ability to accurately infer the intentions of others), conflict resolution, goal setting and attaining, and personal integrity. Programs divided participants into small groups for the purpose of group counseling and mentoring and then relied on nontraditional sports activities.

Program evaluation reported a 44 percent decrease in violent crime arrests and a 36 percent decrease in crimes such as vandalism.¹⁶¹ In a separate study of the same program, the authors used arrest records with exact dates of arrests and were able to rule out that the effects were due merely to keeping youth busy (or voluntary incapacitation) on days when after-school activities occurred.¹⁶²

In Durlak, Weissberg and Pachan’s study focusing on 68 OST programs that incorporated social-cognitive theory into their program, participants showed a 12 percent reduction in problem behaviors and reductions in violence. Problem behaviors referred to the difficulty shown by program participants in controlling their behavior appropriately in social situations. Different types of behaviors ranging from noncompliance to “aggression, delinquent acts, disciplinary referrals, rebelliousness, and other types of conduct problems,” were observed as problem behaviors.¹⁶³

¹⁵⁸ Ibid., 19.

¹⁵⁹ Ibid., 22.

¹⁶⁰ Jean Rhodes, “An Effective Group Mentoring Program that Draws on Cognitive Behavior Therapy,” *The Chronicle of Evidence-Based Mentoring*, last modified October 22, 2017, <https://www.evidencebasedmentoring.org/an-effective-group-mentoring-program-that-draws-on-cognitive-behavior-therapy/>.

¹⁶¹ Ibid.

¹⁶² Sara Heller *et al.*, *Thinking, Fast and Slow? Some Field Experiments to Reduce Crime and Dropout in Chicago* (National Bureau of Economic Research, May 2015), accessed October 27, 2020, <https://urbanlabs.uchicago.edu/attachments/0bd9bbdea840ff8faddf10f8b30a372863ae1938/store/234ef5222cf43a9b9165d47d18ae984df8cc08279122e99cb4f287c4918a/Thinking%2BFast%2BAnd%2BSlow%2B-%2BNBER.pdf>.

¹⁶³ Joseph A. Durlak, Roger P. Weissberg and Molly Pachan, “A Meta-Analysis of After-School Programs That Seek to Promote Personal and Social Skills in Children and Adolescents,” *American Journal of Community Psychology* 45, (2010): 294-309, DOI: 10.1007/s10464-010-9300-6.

Types of OST Programs

In his article *Reducing Youth Violence: The Role of Afterschool Programs*, Cordero Tanner presents three typical breakdowns for OST programs: after-school educational programs, school-age childcare, and youth development programs. These programs are staffed by teachers, trained youth workers, or teenaged leaders.¹⁶⁴

Tanner presented two primary providers of OST programs: community-based organizations and schools. Programs vary in goals, content, structure, target population, and approach depending on whether they are provided by community-based organizations or schools.

Community-based organizations includes national youth-serving organizations, (such as the Boys & Girls Clubs or America), public agency sponsored programs (such as local library and parks and recreation centers), youth-serving organizations, (such as Little League Baseball or American Youth Soccer), multi-service organizations (such as religious institutions and adult services clubs) and independent youth organizations (which start at the grassroots level and provide many services to youth).¹⁶⁵

The implementation of OST programs by schools is a recent occurrence. School involvement occurs when a school administers the programs and outlines standards, usually standards that are in line with on-going classroom lessons. The overall focus of the programs tends to be more heavily on academics. In some situations, the two organizations share in involvement, the community-based program administers the program, and the school hosts the program. The final category involves a more integrated sharing with schools and community organizations working together to develop effective programs for the youth in their community.¹⁶⁶

Afterschool Systems

Tanner refers to the work done by The Wallace Foundation in the early 2000s on after-school systems to help the programs and communities. The purpose of the systems is to create buy-in from key sectors of the community. This buy-in strongly increases the chances of a program achieving its goals. By including all groups in the geographic area that have a stake in the quality of the program and focusing on the regulations and policies that influence interactions amongst the group, there is a natural emphasis on accountability and quality.

The author identifies intermediaries as a key component of an after-school system. Intermediaries are “a system by which the stakeholders in an after-school system are connected.”¹⁶⁷ Practically speaking, intermediaries provide training and technical assistance to programs. They also draw policymakers, funders, providers, and schools into communication and

¹⁶⁴ Cordero Tanner, *Reducing Youth Violence: The Role of Afterschool Programs*, School of Public Health, Georgia State University, August 11, 2015,

https://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1013&context=iph_capstone, 18.

¹⁶⁵ *Ibid.*, 24.

¹⁶⁶ *Ibid.*, 25.

¹⁶⁷ *Ibid.*, 26.

alliances around mutual goals. The author reviews programs in Baltimore, Chicago, and New York City to further highlight some of the benefits of after-school systems.

Guidance from a Study of Afterschool Systems

Having established the need to reduce youth violence and the viability of OST programs to do so, Tanner gives two recommendations. The first recommendation is that the federal government should increase federal funding for universal OST programs based on family income status. OST programs that receive federal funds should be required to have a three to one match for each federal dollar received. Increased tax breaks should be offered to private businesses that fund after-school programs. As they pursue private funding, OST programs should frame the outcomes of the program with values that might resonate with the funder. “For example, a local restaurant might be interested in funding an after-school program that emphasizes outcomes in the development of culinary skills.”¹⁶⁸

Tanner also suggests that OST programs highlight the current cost of youth violence in the U.S. to make their case for additional funding. According to the CDC, youth violence cost more than \$17.5 billion in medical care and out-of-work time in 2014.¹⁶⁹

The second recommendation is the establishment of a national OST system. Tanner details existing systems in Baltimore, Chicago and New York City and recommends the expansion of this model to a national system that would incorporate intermediaries from the US Department of Education, CDC, the Substance Abuse and Mental Health Services Administration (SAMHSA), the federal Health and Human Services’ Administration for Children and Families, and the global non-profit Cure Violence. This core group of experts could offer knowledge in two ways; first “to understand the ways that health disparities impact children, which issues in education that need to be addressed, youth physical activity needs, unique approaches to dealing with youth mental health issues, and methods to reducing exposure to violence.”¹⁷⁰ Additionally, the core group offers “needed expertise and technical skills in generating grant funds, strategic planning, research, program evaluations, and program quality improvement.”¹⁷¹

LA’s BEST Afterschool Enrichment Program

Another study on youth violence and OST programs is the 2007 study of the LA’s BEST Afterschool Enrichment Program. In 2006, the annual cost of juvenile crime in the US was \$56.7 billion.¹⁷² The authors of the LA’s BEST study present two research questions related to juvenile crime:

1. “Is there a difference in the students’ rate of committing juvenile crimes among LA’s BEST participants and non-participants?”

¹⁶⁸ Ibid., 32.

¹⁶⁹ Ibid., 32.

¹⁷⁰ Ibid., 36.

¹⁷¹ Ibid., 36.

¹⁷² Goldschmidt and Huang, *The Long-Term Effects of After-School Programming on Educational Adjustment and Juvenile Crime: A Study of the LA’s BEST After-School Program* (Los Angeles, California: CRESST, June 2007), 11.

2. What is the cost-effectiveness of LA's BEST in terms of students' long-term juvenile crime hazard?"¹⁷³

The authors assert that interest in OST programs and their evaluation has become widespread. Although many studies evaluate the short-term impact of OST programs, the purpose of this study is to fill the gap in evaluation of long-term impact. Their study has two key components that add value to the body of literature already existing in this area. First, their model is based on ten years of longitudinal data in achievement and crime. Second, the authors use a large sample size of more than 6,000 students. Because the program participants and control group primarily serve at-risk students in a large urban setting, the study results can be generalized to other large urban settings.

The Program

LA's BEST is the largest urban OST program in Los Angeles County. The program first started in the fall of 1988 under the auspices of the Mayor of Los Angeles, the Superintendent of the Los Angeles Unified School District (LAUSD), a board of directors, and an advisory board. The program is open to students in kindergarten through fifth/sixth grade and operates out of selected LAUSD elementary schools. Program sites are chosen based on high community need and must be requested in a letter from the school principal.

LA's BEST is free and open to all students at the selected sites on a first come, first serve basis. Students who sign up are expected to participate five days a week. In 2007, the program had approximately 30,000 participants.¹⁷⁴

The authors track the academic and juvenile crime histories for 6,000 students, approximately 2,000 of whom participate in LA's BEST and the other 4,000 of whom are matched control students not participating in the program.¹⁷⁵

Students with consistent attendance in LA's BEST program demonstrate a substantively significant reduction in juvenile crime compared to participants with inconsistent attendance and also when compared to students in the control group.

Risk Factors

The authors review literature, focusing on the risk factors associated with juvenile delinquency as well as buffer factors that protect juveniles and decrease the likelihood of their involvement in violence. Mayer argues that environments in the home, community and school are risk factors contributing to antisocial behaviors such as vandalism, aggression, defiance of adult authority, rule infraction and other violations of social norms. Hawkins and colleagues focus on a wide array of risk factors contributing to violence. Individual factors such as physical health and antisocial behavior, whether through actual involvement or just favorable beliefs are risk factors. Parent involvement and values and home stability are family risk factors. They break school risk

¹⁷³ Ibid., 11.

¹⁷⁴ Ibid., 17.

¹⁷⁵ Ibid., 10.

factors down into truancy, academic failure and low bonding to school. The final two risk factors are peer-related factors, such as sibling or peer aspirations and gang membership; and then community and neighborhood factors, which range from community disorganization and poverty to exposure to drugs, criminal adults, violence and racial prejudice. Carr and Vandiver focus on engagement in problem behaviors “such as dropping out of school, poor self-concept and low self-esteem, interpersonal inadequacy, poor educational expectations, troublesome attitudes, poor parenting and family stability, negative peer relationships, large number of siblings at home, drug use, and poor academics and school attendance.”¹⁷⁶

Buffers

OST programs are beneficial in the prevention of juvenile delinquency and building student resiliency. The authors identify multiple levels of these buffers in OST programs. Research shows the rates of crimes committed by juveniles and against juveniles peak between 3 to 6pm on school days. OST programs provide immediate and strong barriers against this because the students are supervised and occupied during these hours. Additionally, some OST programs are provided in school buildings and they increase students’ feelings of attachment to school and build the skills necessary to avoid delinquent behaviors. By reducing student truancy, OST programs provide a buffer to a key predictor of juvenile delinquency. The experiences in OST programs may improve the students’ social skills and classroom conduct, which can translate into higher academic achievement and increased self-confidence. The extra-curricular activities which students participate in have been linked to low rates of early school dropout and low rates of criminal arrest in young adulthood. Finally, students who participate in OST programs may have higher academic achievement, which makes them more likely to have ambitions to graduate from high school and attend college.

Program Evaluation

Since LA’s BEST’s beginning in 1988, the National Center for the Research in Educational Standards and Student Testing in UCLA (CRESST) has been conducting evaluations. CRESST has established a longitudinal database, including student demographics and academic information, on participants as well as on a comparison group of control students. The longitudinal database was combined with school level information obtained from the National Center for Education Statistics and the Los Angeles School Police data. The 1990 census data was also used to characterize the neighborhoods of the treatment and control schools.¹⁷⁷

The authors had to establish participation parameters which were measured for elementary students as the number of days attended during the academic year. Many students either dropped out or participated sporadically in the program. Those students who participated in the program less than four times per month were considered as untreated students. Those who participated at least 36 days or more are included in the treated sample of students.¹⁷⁸

¹⁷⁶ Ibid., 12.

¹⁷⁷ Ibid., 32.

¹⁷⁸ Ibid., 33.

Summary of Juvenile Crime Results

The results from the multilevel survival analyses indicates that LA's BEST positively impacts juvenile crime probabilities. The results are related directly to individual participation in the program. Students who are actively and intensely engaged benefit the most from LA's BEST, while students who are moderately engaged also benefit. Students who sporadically attended LA's BEST did not benefit from the program.

In a benefit-cost analysis,
a mathematical result greater than 1
demonstrates that program benefits outweigh the costs.

Benefit-Cost Results

The purpose of a benefit-cost analysis is to determine whether the present value of benefits accruing to program participants and society are greater than the program's costs. A mathematical result of more than 1 demonstrates that program benefits outweigh the costs. The stakeholders are participants in LA's BEST programs, taxpayers, victims, and funding agencies. The cost estimates associated with specific crimes and juvenile court costs are taken from Cohen and his collaborators (2000, 1998) and estimates of tangible costs to victims for specific types of crime are based on the National Crime Victimization Survey (NCVS) published by the Bureau of Justice Statistics.¹⁷⁹

Cost estimates in the benefit-cost analysis are based on actual program costs. The authors use 1998 dollars for both costs and benefits. Where necessary, they use the CPI to adjust 1994 annual program costs to 1998 dollars.¹⁸⁰ "The costs consist of victim costs, direct costs of adjudication, and probation."¹⁸¹ Program costs per student are estimated at \$568. The cost calculation includes an estimate of the cost of volunteers based on the hourly compensation of LA's BEST field staff. Students are only included if they attend a minimum of 36 days per school year, which equates to about once a week. Facilities and start-up costs are not included.

The authors present three distinct sets of benefit-cost ratios. The first is based on a student's participation in LA's BEST for one year, the next set is based on average exposure or the average number of years attended by students in the sample, and the third set is based on each year of exposure separately. In each of the three scenarios, they present benefit-cost ratios for low, high and lifetime crime estimates. "The low and high estimates are based on juvenile crime costs only, while the lifetime crime estimate is based on costs attributed to adult crime. Previous

¹⁷⁹ Ibid., 125.

¹⁸⁰ Ibid., 126.

¹⁸¹ Ibid., 127.

research indicates that between 4 percent and 16 percent of juveniles continue committing crimes after becoming adults.”¹⁸²

The expected total crime rate decreases by level of engagement over the study period, with the exception of students who are sporadically engaged. Students with low engagement have an estimated crime rate somewhat higher than the control group’s rate. Because of these results, the low engagement group in the LA’s BEST program is separated and considered to be part of the intent to treat (ITT) group.¹⁸³ The majority of the benefits of after-school programs rely on estimates or projections of avoided cost. These estimated benefits from crime avoidance are heavily influenced by victims’ costs, of which 60 percent are intangible costs.¹⁸⁴

Table 10 shows the influence that treatment has on expected crime cost per student. “For example, the expected avoided crime cost per student when comparing a student in the high engagement treatment condition to the control group, assume low crime costs, is \$4,888-\$3,058 = \$1,802.”¹⁸⁵ Engagement appears to be inversely proportional to crime.

Table 10
Expected Crime Cost Per Student
LA’s BEST Study
2007

<u>Treatment condition</u>	<u>Cost Assumption</u>			<u>Sample Avg.</u>
	<u>Low</u>	<u>High</u>	<u>Life</u>	
Control	\$4,888	\$19,668	\$64,776	\$7,212
Low engagement	5,588	22,485	74,053	8,190
Medium engagement	3,782	15,219	50,121	5,623
High engagement	3,085	12,416	40,891	4,523

The benefit-cost ratios vary substantially depending on assumptions made and how the groups are delineated. When all three treatment conditions are compared to the control group, and a low crime cost is assumed, each dollar invested in LA’s BEST returns only 58¢. Using the lifelong crime cost assumption, however, the return on each dollar invested increases to \$7.72. When the low engagement treatment conditions group is excluded, the benefit-cost ratios increase. See Table 11.

¹⁸² Ibid., 126.

¹⁸³ Ibid., 128.

¹⁸⁴ Ibid., 15.

¹⁸⁵ Ibid., 129.

Table 11
Net Expected Avoided Crime Cost Per Student
LA's BEST Study
2007

Treatment condition (vs. Control)	<u>Cost Assumption</u>			
	<u>Low</u>	<u>High</u>	<u>Life</u>	<u>Sample Avg.</u>
Low engagement	-\$700	-\$2,817	-\$9,277	-\$1,031
Medium engagement	1,106	4,450	14,655	1,629
High engagement	1,802	7,252	23,885	2,654
(vs. Low engagement)				
Medium engagement	1,806	7,267	23,932	2,659
High engagement	2,502	10,069	33,162	3,685

Using the benefits based on the sample average distribution of costs avoided, the authors assert that the benefit-cost ratio of 2.46 is most applicable.¹⁸⁶ See Table 12.

Table 12
Benefit/Cost Ratios by Cost Assumption
LA's BEST Study
2007

Treatment condition	<u>Cost Assumption</u>			
	<u>Low</u>	<u>High</u>	<u>Life</u>	<u>Sample Avg.</u>
(vs. Control)				
Low Engagement	-\$0.61	-\$2.47	-\$8.15	-\$0.91
Medium engagement	0.63	2.53	8.33	0.93
High engagement	0.57	2.29	7.53	0.84
Expected value vs. control	0.58	2.34	7.72	0.86
(vs. Control)				
Medium engagement	1.25	5.04	16.61	1.85
High engagement	0.56	2.26	7.44	0.83
Expected value vs. control	1.81	7.30	24.05	2.67
(vs. Low engagement)				
Medium engagement	2.05	8.23	27.12	3.01
High engagement	1.57	6.33	20.85	2.32
Expected value vs. low engagement	3.62	14.57	47.97	5.33

¹⁸⁶ Ibid., 134.

Program effectiveness relies on:

Exposure – Intensity – Engagement - Contact

The results imply that the program has consistently positive effects on juvenile crime and generally positive cost benefit ratios. Results are not specific to program or school sites but are directly related to individual student levels. When engagement increases, expected crime rates decrease. But it also makes clear that simple indicators of program participation do not yield a full picture of program impacts. *Exposure* (which is measured as years of participation), *intensity* (which is measured as total days of attendance), *engagement* (which is measured as average weekly attendance), and *contact* with additional adults during the day all impact program effectiveness. The results are subject to extreme variability depending on the assumptions.

The authors attempt to identify student factors that would moderate program effect. One example is to see if students whose parents had less education have a more or less pronounced program impact. The authors found that a parent's education level has no impact on program effects, even though parental education separately is significantly related to juvenile crime rate.¹⁸⁷

Key to student impact is student participation in LA's BEST. Student exposure is one to four or more years. Student engagement is classified as low (four to nine days of attendance per month), medium (10 to 14 days of attendance per month) and high (15 or more days per month). The results show that student with low engagement or sporadic attendance get very few benefits. From there, the benefits increase as engagement increase.

Results from the model used in this study imply that even "sporadic participation" in the program resulted in some reduction in crime hazards for students living in the poorest neighbors.¹⁸⁸ In very poor neighborhoods, protective buffers such as interaction with adults and a safe place after school are especially important in decreasing delinquent involvement.

Implications for Evaluating After-School Programs

Based on their study of LA's BEST Enrichment Program, authors Goldschmidt and Huang assert that OST programs need to regularly collect data that monitor indicators of implementation quality. Programs should carefully consider their theory of action so that they can monitor and collect data relevant to that theory of action. Also, student attendance is foundational to evaluation efforts as it heavily impacts outcomes.¹⁸⁹

Results from their longitudinal evaluation of LA's BEST Enrichment Program indicate that OST programs are potentially powerful in their ability to help reduce juvenile delinquency rates. Although attendance is crucial indicator of program success, it doesn't stand alone. Programs must engage students and that comes through a combination of attendance and adult interaction. Also, neighborhood poverty is at least as important as school context.

¹⁸⁷ Ibid., 142.

¹⁸⁸ Ibid., 143.

¹⁸⁹ Ibid., 137.

Out-of-School Time and Public Safety

The National League of Cities reported that crimes by juveniles are five times more likely in the afterschool hours than before 3 p.m. and after 10 p.m. Of crimes committed by juveniles, 63 percent happen on school days. One-fifth of those crimes happen between the hours of three and seven. With a proper investment in quality OST programs, juvenile violent crimes can be reduced by 44 percent and vandalism and weapons can be reduced by 36 percent.¹⁹⁰

Children want safe places to retreat to escape violence and crime perpetrated by others. Juveniles' risk of being victims of crime is 60 percent higher in the hours directly after school—3 p.m. to 7 p.m.—than from 8 p.m. to midnight. Sixty-six percent of students surveyed nationally said they wished there was a safe, fun place to play.¹⁹¹ Twenty-five percent of families rely on afterschool programs for their children to have supervision from the end of the school day until they are able to come home from work. Eighty-four percent of parents surveyed nationally support publicly funded afterschool programs.¹⁹² A California study of 83 programs found that 95 percent of high schoolers, 75 percent of middle schoolers, and 87 percent of elementary school students felt safer in their programs. Similarly, studies of New York City and New Hampshire programs found that 85 percent and 87 percent, respectively, of participants felt safer in their programs.¹⁹³

The Fort Worth After School and Intersections in Fort Worth, Texas is a structured afterschool program that serves about 9,500 students distributed over 79 sites. It is of no cost to participants and funded by a combination of commitments from the City of Fort Worth, the Fort Worth School District, and 21st CCLC grants. The program's 2016-2017 report found that 69 percent of participants said the program kept them out of trouble. Seventy-four percent said the program was "the best possible thing they could be doing after school."¹⁹⁴ Parents were also highly satisfied with the program, with 80 percent saying it kept their children out of trouble.¹⁹⁵

In South Salt Lake, Utah, the Promise South Salt Lake City initiative offers afterschool programs to over 2800 students in 14 locations throughout the city. The programs have dramatically reduced the risk of gang involvement among eighth graders, with the percentage dropping from 25.6 percent to 7.2 percent from 2007 to 2015. The crime rate during the hours of three to six have decreased by 64 percent.¹⁹⁶

Parents reflect their children's sentiments about safety in programs. A Texas study found that 94 percent of parents felt their children were less likely to engage in risky behaviors while in the programs; 45 percent felt their children would get in trouble if they were home alone. Statistics bear this out: a study of Los Angeles found that participants are 30 percent less likely to engage in delinquent behavior.

¹⁹⁰ *Afterschool and Summer Learning: A City Strategy for Public Safety* (Washington, D.C.: National League of Cities), 1.

¹⁹¹ *Ibid.*, 3.

¹⁹² *Ibid.*, 3.

¹⁹³ *Evaluations Backgrounder* (Afterschool Alliance), 10.

¹⁹⁴ *Afterschool and Summer Learning*, (NLC), 4.

¹⁹⁵ *Ibid.*, 4.

¹⁹⁶ *Ibid.*, 4.

Adolescent Pregnancy

Though the birth rate for girls aged 15-19 has steadily decreased since 2007, 2018 still saw 179,871 births from adolescent mothers, which amounts to a rate of 17.4 for each 1,000 girls within the age group.¹⁹⁷ A 1995 study found that students that did not participate in extracurricular activities were 37 percent more likely to become parents as teenagers.¹⁹⁸ This may be because many teens have sexual intercourse between three and six in the evening, times when many youth are unsupervised at home.¹⁹⁹ Research shows that some of the factors that reduce teen pregnancy are adult supervision, available alternative activities, and goals and ambitions for the future.²⁰⁰

As mentioned above, research finds that teenagers who are unsupervised for long periods of time participate more in risky sexual behavior. Likewise, more adult supervision is associated with lower rates of risky sexual behavior. Several studies of at-risk youth confirm that teens with lower amounts of unsupervised time during the day also had lower rates of initiation of a first sexual encounter.²⁰¹ Teens that had an alternative to sexual activity, such as extracurricular activities, had lower rates of sexual behavior and pregnancy than those who did not. Sports programs that incorporate religious programming can also be successful in delaying initiation of sexual activity. Another important factor for reducing teen pregnancy is future goals and incentives for preventing pregnancy. Students with career goals and students with high GPAs were found to be more likely to delay sexual initiation and use contraceptives when they did have sex.²⁰²

In 2004, the National Campaign to Prevent Teen Pregnancy conducted a review of experimental or quasi-experimental evaluations of twelve OST programs. Each program was from 1980 or after, in the United States or Canada and covered students between the ages of 9 and 18. There were three types of programs reviewed in this report: “curriculum-based sex education programs, youth development programs that also address sex education, and service learning programs.”²⁰³ Curriculum-based sex education programs were mostly shorter programs that incorporated abstinence and comprehensive instruction, which include role playing refusing sex and negotiating use of contraceptives. Youth development programs were more long term, taking place over several years, and included sex education coupled with career development and other life skills. The service learning programs listed reducing teen pregnancy as a goal, but did not place as much emphasis on sex education in the curriculum.²⁰⁴

¹⁹⁷ “U.S. and State Trends on Teen Births, 1990-2018,” *Center for Disease Control and Prevention*, accessed December 1, 2020, <https://www.cdc.gov/nchs/data-visualization/teen-births/>.

¹⁹⁸ *Afterschool Alert Issue Brief: Afterschool and Pregnancy Prevention* (Washington, D.C.: Afterschool Alliance, 2002), 1.

¹⁹⁹ Jennifer Manlove, Kerry Franzetta, Krystal McKinney *et al.*, *A Good Time: After-School Programs to Reduce Teen Pregnancy* (Washington, D.C.: National Campaign to Prevent Teenage Pregnancy, 2004), 2.

²⁰⁰ *Ibid.*, 3.

²⁰¹ *Ibid.*, 3.

²⁰² *Ibid.*, 3.

²⁰³ *Ibid.*, 3.

²⁰⁴ *Ibid.*, 4-5.

After reviewing the evaluations of these twelve programs, the report highlights a few key findings. First, programs from each of the above categories showed a positive effect, either through delaying initial sexual activity, increasing the use of contraceptives, or a decrease in pregnancies. Communities can use a variety of interventions to achieve a result, so program designers can choose a method that most aptly fits their community. Similarly, even programs that did not have an emphasis on sex education showed positive results. The report's authors note that this is an especially helpful discovery for communities where sex education can stir up controversy. There are a variety of afterschool programs that can reduce pregnancy and sexual activity without facing backlash from parts of the community.²⁰⁵

Another conclusion was that community programs not located in school buildings that take place after school have the best chance of reaching the students who are at the highest risk for pregnancy: youth who are not attending school. The report also concluded that long term programs and more intensive programs have higher rates of success. Shorter programs have limited short term success, but these effects do not always continue in the following years. However, it is important to note that the short programs still had a positive result. Communities with fewer resources can still see positive change by implementing the shorter sex education-based curriculum.²⁰⁶

One program mentioned in the report was the Children's Aid Society-Carrera Program in New York City. The program operates based on five principles: "Staff treat children as if they were their own (parallel family system); each young person is viewed as pure potential; a holistic approach is used (incorporating multiple services to meet comprehensive interests and needs); contact with participants is continuous and long-term (i.e., through high school); services aim to involve parents and other adults; and services are offered under one roof in the community in a nonpunitive, gentle, generous and forgiving environment."²⁰⁷ The activities included in the program are career awareness and preparation, academic help, a sexuality and family life course, and an art program. On top of that, participants receive access to mental health care and medical care.²⁰⁸ During the school year, the program runs for three hours, five days a week.²⁰⁹

A 2002 evaluation of this program showed positive results for female participants, and insignificant or even negative results for male participants. Females scored twice as high as the control group in reproductive knowledge. Seventy-five percent of females in the program responded that they refused sex when pressured, compared to 36 percent of the control group. Thirty-six percent of females in the program used highly effective contraceptives compared to 20 percent of the control group. Last, at the three year check-in, female participants were significantly less likely to be pregnant, with a percentage of ten where the control group's was 22. In contrast, male participants scored higher on the reproductive knowledge evaluation, but had statistically insignificant differences from the control group in many categories. Male participants were actually much less likely to use a condom coupled with a hormonal method, with only nine percent

²⁰⁵ Ibid., 5

²⁰⁶ Ibid., 5.

²⁰⁷ Susan Philliber, Jacqueline Williams Kaye, Scott Herrling *et al.*, "Preventing Pregnancy and Improving Health Care Access Among Teenagers: An Evaluation of the Children's Aid Society—Carrera Program," *Perspectives on Sexual and Reproductive Health* 34, no. 5 (2002), 245.

²⁰⁸ Ibid., 245.

²⁰⁹ Ibid., 245-246.

doing so compared to 20 percent in the control group. Four percent of male participants became fathers where only one percent of the control group did the same.²¹⁰

The evaluation of this program concludes that the program experienced success by viewing the program as “a marathon, not a sprint.”²¹¹ Staff maintains relationships with the participants as they move through the program and are available beyond the official program hours if participants need assistance. Participants with lower attendance and those that have continual behavioral problems are still always considered part of the program as it moves forward. Each program has a community organizer who works to involve parental figures in the growth of their child and also reaches out to participants who miss sessions to remind them that their presence is valued. The program also works creatively to solve scheduling conflicts so that participants will not be excluded for conflicts outside of their control.²¹² The cost of this program was \$4000 for each participant, which was less expensive than traditional afterschool care in New York City. The cost also covered medical and dental care for participants as well as stipends for participating in the Job Club and wages for service projects or internships.²¹³ The program continues to run in New York City and data collected up until 2009 continues to display positive outcomes.²¹⁴

Table 13 compares Pennsylvania results from the Boys and Girls Club National Youth Outcomes Initiative (NYOI) and the Center for Disease Control and Prevention’s Youth Risk Behavioral Surveillance System (YRBSS), which measure certain risk behaviors in high schoolers. Portions of the NYOI are designed to correspond with portions of the YRBSS, and these comparisons have been included in this report where they are relevant.

Table 13
Percentage of Youth Engaged in Selected Behaviors
Boys and Girls Club National Youth Outcomes Initiative (NYOI)
vs.
Centers for Disease Control and Prevention’s
Youth Risk Behavioral Surveillance System (YRBSS)
Pennsylvania
2019

<u>Risk Behavior</u>	<u>BCGA NYOI</u>	<u>CDC YRBSS</u>
Lifetime Sexual Activity	25.0%	40.6%
Currently Sexually Active (<i>last three months</i>)	25.0	30.4
Sexual Activity before Age 13	5.0	2.6
Alcohol or Drug Use Before Last Sexual Intercourse	27.0	15.4
Condom Use During Last Sexual Intercourse	41.0	51.4

Source: 2019 BGCA NYOI PA Survey Results, provided to Joint State by JR Kenny, Director of Government Relations, Boys and Girls Clubs of American; “2019 Pennsylvania Results,” High School YRBS, CDC.

²¹⁰ Ibid., 248-249.

²¹¹ Ibid., 250.

²¹² Ibid., 250.

²¹³ Ibid., 250.

²¹⁴ *A Decade of Research on The Children’s Aid Society Carrera Adolescent Pregnancy Prevention Program: 1999-2009* (New York: Philliber Research Associates, 2009), <https://www.childrensaidnyc.org/sites/default/files/document/researchsummary0809.pdf>.

Substance Use

The Afterschool Alliance reports that 1 in 5 young people are left unsupervised between the hours of 3 p.m. and 6 p.m., which increases their risk of participating in criminal behavior, being victimized, or engaging in unhealthy behaviors such as substance use. Further, research shows that young people who do not participate in structured out-of-school programs are three times more likely than participants to skip school and engage in risky behaviors.²¹⁵

Specifically, the Afterschool Alliance cites the following evidence that participation in structured out-of-school activities can lead to beneficial outcomes. For example, a study conducted through the University of California studied 3,000 elementary and middle school students over a period of 2 years. Participating middle school students reported lower rates of substance use than that of their unsupervised peers.²¹⁶

Additionally, a review of 43 studies of OST programs found decreases in drug use or arrests and/or changes in attitudes toward drugs.²¹⁷

University of Alaska Anchorage researchers found that students who participate in organized out-of-school activities at least once a week are 16 percent less likely to binge drink and 31 percent less likely to use marijuana. Students who participate at least two days a week show slight benefits from the increase, with 18 percent less likely to use alcohol, 39 percent less likely to use marijuana, and 28 percent less likely to miss class without permission.²¹⁸

According to data from Vermont's Youth Risk Behavior Survey, students who participate in extracurricular activities each week (up to 19 hours per week) are significantly less likely to use any alcohol, tobacco, or marijuana than those who did not participate in any activities.²¹⁹

Students who participate in Chicago's After School Matters program have lower rates than nonparticipants of engaging in risky behaviors such as selling drugs, using drugs, and taking part in gang activity.²²⁰

²¹⁵ Jen Rinehart, "This is Afterschool: Promoting Healthy Futures," *Afterschool Alliance*, last modified May 18, 2018, http://afterschoolalliance.org/afterschoolsnack/This-is-Afterschool-Promoting-Healthy-Futures_05-18-2018.cfm?utm_medium=pdf&utm_source=factsheet.

²¹⁶ Deborah Lowe Vandell, Elizabeth R. Reisner, Kim M. Pierce, *Outcomes Linked to High-Quality Afterschool Programs: Longitudinal Findings from the Study of Promising Afterschool Programs*, (Washington, D.C.: Policy Studies Associates, Inc., October 2007), ED499113.

²¹⁷ Rinehart, "This is Afterschool: Promoting Healthy Futures."

²¹⁸ McDowell Group, "Protective Factors for Youth Substance Abuse and Delinquency: The Role of Afterschool Programs," (January 2018)

<https://webcache.googleusercontent.com/search?q=cache:xslxvfYKC7AJ:https://safealaskans.org/wp-content/uploads/2018/07/2018-01-Protective-Factors-for-Youth-Substance-Abuse-and-Delinquency-The-Role-of-Afterschool-Programs.pdf+&cd=1&hl=en&ct=clnk&gl=us&client=firefox-b-1-d>.

²¹⁹ Rinehart, "This is Afterschool: Promoting Healthy Futures."

²²⁰ Ibid.

A 2007 study examined the effectiveness of out-of-school programs in urban settings that are designed to prevent adolescent substance use. In this case, a successful school day program modified and implemented in an afterschool setting. The intervention focused on adolescents' decision-making skills.²²¹ The school day program, Positive Youth Development Collaborative (PYDC) was adapted for out-of-school. Specifics in the program include:

- (1) program introduction and overview (one session);
- (2) understanding and coping with stress, and learning stress-reduction strategies (three sessions);
- (3) learning the steps of effective decision-making, including:
 - (a) defining the problem,
 - (b) brainstorming alternatives,
 - (c) identifying consequences and risks for each alternative,
 - (d) understanding personal values related to the decision making process,
 - (e) identifying social influences on decision-making such as peer pressure and the media, and how to deal with these when making decisions,
 - (f) learning how to obtain additional information if needed to make effective decisions
 - (g) making one's best decision (seven sessions);
- (4) learning essential information about tobacco, alcohol, and other drug use (two sessions);
- (5) applying the decision-making process to one's life through identifying positive personal attributes, dealing with job and school stressors, setting positive goals for healthy living, and enhancing one's social networks and resources (four sessions); and
- (6) program close and review (one session).²²²

The intervention was shown to be successful.²²³ Adolescents participating in the intervention were significantly more likely to view drugs as harmful at program exit (about 7 months after enrollment), and demonstrated a significantly reduced incidence of past-30-day use of alcohol, marijuana, or other drugs, as well as any drug use 1 year after program enrollment. Although substance use among program participants increased slightly over time, these increases were significantly less than those observed for the control group. Such reductions in the progression of substance use among adolescents have been found to protect against later increased or escalating use, and thus are an accepted indicator of prevention effectiveness.²²⁴

The comparison between NYOI and YRBSS results shows a difference in abstaining from substance use in Pennsylvania between the BCGA participants and the average Pennsylvanian high schooler.

²²¹ Jacob Kraemer Tebes, Richard Feinn, Jeffrey J. Vanderploeg *et al.*, "Impact of a Positive Youth Development Program in Urban After-School Settings on the Prevention of Adolescent Substance Use," *Journal of Adolescent Health* 41 (February 2007): 240, [https://www.jahonline.org/article/S1054-139X\(07\)00104-8/fulltext](https://www.jahonline.org/article/S1054-139X(07)00104-8/fulltext).

²²² *Ibid.*, 240-243.

²²³ *Ibid.*, 245.

²²⁴ *Ibid.*, 240.

Table 14
Percentage of Youth Engaged in Substance Use
Boys and Girls Club National Youth Outcomes Initiative (NYOI)
vs.
Centers for Disease Control and Prevention’s
Youth Risk Behavioral Surveillance System (YRBSS)
Pennsylvania
2019

<u>Risk Behavior</u>	<u>BGCA NYOI</u>	<u>CDC YRBSS</u>
Current Vapor Product Use (<i>last 30 days</i>)	8.0%	24.4%
Current Use of Cigars, Cigarillos, or Little Cigars (<i>last 30 days</i>)	5.0	5.9
Current Use of Chewing Tobacco, Snuff, or Dip (<i>last 30 days</i>)	3.0	3.9
Current Binge Drinking (<i>last 30 days</i>)	6.0	11.2
Current Cigarette Use (<i>last 30 days</i>)	3.0	6.6
Lifetime Inhalant Use	6.0	5.9
Current Alcohol Use (<i>last 30 days</i>)	9.0	25.6
Current Marijuana Use (<i>last 30 days</i>)	10.0	19.6
Lifetime Illicit Use of Prescription Pain Medicine	8.0	11.2

Source: 2019 BGCA NYOI PA Survey Results, provided to Joint State by JR Kenny, Director of Government Relations, Boys and Girls Clubs of American; “2019 Pennsylvania Results,” High School YRBS, CDC.

Attendance and Engagement

Attendance can be a factor in student achievement and conversely, student achievement can affect a student’s attendance. Just as students can struggle after missing school, students who struggle in school are less motivated to attend regularly. Therefore, increasing student school day attendance is often a stated or unstated goal of OST programs. However, research on OST programs shows that even when improving attendance is not a stated goal of an OST program, it often has that effect through the socialization aspects of programs, the emphasis on perseverance, and creating a link between “effort and results.”²²⁵ Research of OST programs broadly has not been able to demonstrate a strong link between afterschool programs and higher attendance rates. A 2015 systematic review and meta-analysis of attendance and externalizing behaviors synthesized sixteen studies on attendance and found no statistically significant effect of afterschool programs on attendance.²²⁶ The effects of certain programs on attendance are best represented and examined through individual program results. The following is a review of quality programs reporting increased school-day attendance.

²²⁵ “Making the Case: How Good Afterschool Programs Improve School-Day Attendance,” *Attendance Works*, 1.

²²⁶ Kristen P. Kremer, Brandy R. Maynard, Joshua R. Polanin *et al.*, “Effects of After-School Programs with At-Risk Youth on Attendance and Externalizing Behavior: A Systematic Review and Meta-Analysis,” *Journal of Youth and Adolescence* 44, no. 3 (November 2014): 14-15, DOI: 10.1007/s10964-014-0226-4.

A study on 763 sixth graders in a program called AfterZone in Providence, Rhode Island found that the middle schoolers that attended AfterZone had twenty-five percent lower absence rates than the students who didn't attend. The study also found that as students stayed in the program longer, their attendance rates increased. After one year in the AfterZone program, students missed 1.8 less days than their peers.²²⁷ After two years, students who participated in AfterZone missed around three weeks of school, while their counterparts missed four weeks.²²⁸

In a study of seventh and eighth graders from 10 Boys & Girls Clubs over two and a half years, rates of student truancy decreased when students attended the Boys & Girls Clubs 244 days or more, meaning the students attended the Clubs at least twice a week. In this study, reduced truancy was one of only three results that were associated with attending the Clubs two times a week or more. Most outcomes had recognizable changes with Club attendance once every week or once every other week.²²⁹

In a Boston program called Citizen Schools, their seven-year evaluation found that not only did middle schoolers participating in the program attend school 11 days more than those that did not, but attendance rates remained higher as the students advanced to high school, even though the program ended after middle school.²³⁰ Ninth graders who had attended the program attended nine more school days than matched nonparticipants. Tenth graders attended five more days, eleventh graders thirteen more, and seniors nine more days.²³¹

The California Afterschool Learning and Safe Neighborhoods Partnerships Program saw increased attendance: students that had missed five percent of their school days increased their attendance by 5.6 days, and those who had missed ten percent increased attendance by eleven days.²³² The Ohio Urban School Initiative School Age Child Care Project reported that first graders joining the program missed only three days of school, while average kindergartners missed eight. More significantly, eighth graders joining the program missed only five days, compared to the 18 they missed in the year before joining the program.²³³ Students participating for two years in Pathways to Progress, a Minneapolis and St. Paul program, averaged 18.4 days of attendance more than their peers who did not attend.²³⁴ A study of effects on attendance in the 1996-1997 school year found that schools with afterschool programs reported a 1.4 percent increase compared to a 0.3 percent in schools without afterschool programs. Chronic absences were reduced by 4.2

²²⁷ Tina J. Kauh, *AfterZone: Outcomes for Youth Participating in Providence's After-School System* (Public/Private Ventures, 2011), 34.

²²⁸ *Ibid.*, 40.

²²⁹ Amy Arbretton *et al.*, *Making Every Day Count: Boys and Girls Clubs' Role in Promoting Positive Outcomes for Teens* (Public/Private Ventures, 2009), 7-8.

²³⁰ "Making the Case," 1.

²³¹ J.D. Vile, E. Arcaira, and E.R. Reisner, *Progress Toward High School Graduation: Citizen Schools' Youth Outcomes in Boston* (Washington, D.C.: Policy Studies Associates, Inc., 2009), 10.

²³² "Making the Case," 2.

²³³ *Ibid.*, 2.

²³⁴ Kyla Wahlstrom, *21st Century Community Learning Centers, Pathways to Progress Project, Saint Paul Public Schools: Annual Evaluation Report* (University of Minnesota, 2001), 11.

percent in schools with afterschool programs while schools without one saw an increase of 1.44 percent.²³⁵

The Connected Learning Approach

Another way to increase student attendance and engagement is to demonstrate the relevance of classroom education to students. Connected Learning is an educational practice that focuses on the interplay between classroom education and the learning fostered in hobbies or interests outside of the classroom. As students become less engaged in classroom learning due to a variety of factors, one way to increase engagement is to demonstrate the relevance of what is taught in the classroom to a student's daily life. Connected Learning can lead to an increase of interest in the classroom and relationships with mentors and peers that have similar interests outside of the classroom.

Opportunities to be involved in extracurricular activities give children a chance to discover new passions and interests and make connections with peers and mentors, but often the involvement of children in these activities varies by income level. In 2012, parents in upper-class homes spent eleven times as much money as lower-income families did on out-of-school activities. Children from upper-class families were also more likely to play sports and have leadership roles on those sports teams, and be involved in theater and music programs.

Surveys also indicate an increased "engagement gap."²³⁶ In 2013, a Gallup Poll found that 28 percent of students were "not engaged in school," and seventeen percent were "actively disengaged from school."²³⁷ In a survey from the Center for Evaluation and Education Policy, two thirds of the students said they were bored every day in school. Forty-two percent of these students did not find the material relevant, and one third did not find it challenging. In another study by the Center for American Progress, 56 percent of students found their civics class to be too easy, 55 percent said that history was too easy, and 21 percent felt that math was too easy. Students become more disengaged as they move from elementary toward high school, with only 44 percent of high schoolers saying they are engaged in school. Engagement falls as they begin to question the utility of the material they learn or feel that it does not challenge them. Forty-two percent of students who thought about dropping out of high school indicated that they did so because "they did not see value in the work they were being asked to do."²³⁸

Connected Learning accepts that learning can take place anywhere, and makes efforts to encourage learning outside of the traditional classroom. This is accomplished by emphasizing connecting to peer networks, connecting to interests, and making the material relevant for a student's future. Students use peer networks as a way to practice engaging with others, thinking critically, and listening to different perspectives. When students can connect the concepts in the classroom to interests they have outside of school, they are more likely to gather with friends with

²³⁵ Joyce L. Epstein and Steven B. Sheldon, "Present and Accounted for: Improving Student Attendance through Family and Community Involvement," *The Journal of Education Research* 95, no. 5 (May 2002): 315, DOI: 10.1080/00220670209596604.

²³⁶ *Afterschool Programs: Inspiring Students with a Connected Learning Approach* (Afterschool Alliance, 2015), 4.

²³⁷ *Ibid.*, 4.

²³⁸ *Ibid.*, 6.

similar interests and “geek out” on their own time.²³⁹ When the interests and peer networks are established, they can be used to connect students to future opportunities. A study of participatory politics found that students participating in “interest-driven activity” were much more likely to take on political issues, interact with them, and share them with their peers.²⁴⁰

OST programs are positioned well to encourage students to find their interests and connect with others who have similar interests. They can serve to link the out-of-school interest and learning with what is taught in the classroom. One way OST programs can promote connected learning is focusing on providing a “production-centered environment.”²⁴¹ This allows students to take advantage of technology and digital tools to create. Createch Studio, located in Minneapolis, makes technology like computers, iPads, cameras, and 3-D printers accessible so students can use them to create and interact with peers who have similar interests. Createch also benefitted from a student advisory council, which helped to shape the opportunities offered at the studio based on the interest level of the youth involved.²⁴²

Pittsburgh Youth Media allows students who are interested in journalism to access resources from community partners, learn about the mediums used and the stories presented, and showcase their own stories. Students can also find stories by interviewing community partners or participating in events held by those partners. Participants also have opportunities to meet other students with similar interests.²⁴³

One way to bring together peers and mentors alike is a chess club, like Intermediate School 318 hosts in Brooklyn, NY. Players utilize critical thinking skills while playing a game, then go over the game with mentors or more experienced players to learn how to apply what they learned to another game in the future. Tournaments also provide an opportunity for players to travel and meet other peers that shared an interest, and work together as a team to bring home trophies from those tournaments.²⁴⁴

OST programs have the opportunity to be an excellent space for Connected Learning, which will likely increase student engagement in the classroom. These programs bridge the gap between out-of-school activities and the learning opportunities inherent within them. Students will benefit from using the things they learn in the classroom outside of the classroom and vice versa.²⁴⁵

²³⁹ Ibid., 8.

²⁴⁰ Ibid., 10.

²⁴¹ Ibid., 11.

²⁴² Ibid., 12.

²⁴³ Ibid., 13-14.

²⁴⁴ Ibid., 15.

²⁴⁵ Ibid., 17.

Health Compromising Behaviors

Over decades of research, medical science has concluded that debilitating chronic diseases, including heart disease, hypertension, and diabetes, are frequently linked to obesity and unhealthy lifestyles. Moreover, science is increasingly raising the alarm that because such conditions typically develop over years, it is critical that healthy lifestyle choices be taught and established in childhood and adolescence. Studies of OST programs have found that participants can improve their physical fitness and reduce their risk of obesity. Programs are known to promote healthful eating and can include education about good nutrition and healthy lifestyles both in the food and activities they provide for participants.²⁴⁶

Extracurricular programs, whether in the form of scholastic athletics or provided through out-of-school providers (such as The Y, Boys & Girls Clubs, etc.) are at the nexus of efforts that promote healthy physical activities, nutrition, and lifestyle choices. The Afterschool Alliance, in *America After 3PM*, reported in 2014 on the experiences of over 30,000 households whose children were enrolled in out-of-school programs.²⁴⁷ More than 70 percent of parents expect their children's out-of-school programs to provide healthy food, and, in fact, more than 70 percent are at least satisfied that their children's programs do provide the types of food expected. It should be noted that lower-income families regard the availability of healthful food as especially important when they decide if and where to enroll their children in programs. There appears to be a fairly consistent expectation from parents of children across different age groups. Roughly two-thirds of parents of younger and older children reported that food selection was an important factor in their afterschool enrollment decisions.²⁴⁸

The availability of physical activities has, and remains, a significant reason parents enroll their children in OST programs. Eighty percent of parents say that physical activities should be offered through programs, and about the same percent of parents say that their children's programs do so. The duration and intensity of programs varies, according to parents. Two-thirds say their children get at least 30 minutes of activity during a typical day in the program and 27 percent say their children receive at least 60 minutes per typical day. The split between parents of younger and older children is similar, with 80 percent of parents of younger children reporting that out-of-school programs should help their children stay physically active while 75 percent of parents of older children say the same. The differences in expectations are likely tied to the maturity and development of the children the other expectations held for out-of-school programs. And older child, for example, may be more focused on academics and career development, mentoring, and leadership opportunities. Further, scholastic athletics and personal inclinations may fill the role of physical activity.²⁴⁹

²⁴⁶ *Evaluations Backgrounder* (Afterschool Alliance), 11.

²⁴⁷ *Kids on the Move: Afterschool Programs Promoting Healthy Eating and Physical Activity* (Afterschool Alliance, 2015).

²⁴⁸ *Ibid.*

²⁴⁹ *Ibid.*

Table 15
Physical Activity
Boys and Girls Club National Youth Outcomes Initiative (NYOI)
vs.
Centers for Disease Control and Prevention’s
Youth Risk Behavioral Surveillance System (YRBSS)

Pennsylvania
2019

<u>Risk Behavior</u>	<u>BGCA NYOI</u>	<u>CDC YRBSS</u>
Physically Active for a total of at least 60 minutes on 5 or more days	57.0%	48.1%

Source: 2019 BGCA NYOI PA Survey Results, provided to Joint State by JR Kenny, Director of Government Relations, Boys and Girls Clubs of American; “2019 Pennsylvania Results,” High School YRBS, CDC.

Table 15 shows the increase in physical activity in students who participate in the Boys and Girls Club of America in Pennsylvania. While only 48.1 percent of Pennsylvania students overall are active for at least 60 minutes a day, 57 percent of Pennsylvania BGCA participants meet this same standard. These numbers indicate a decrease in the health compromising behavior of physical inactivity in OST participants.

BENEFITS TO FAMILIES

As work hours grow longer for many working families, school hours have maintained their traditional length. While some parents are working until 6:00 p.m. or maybe later, most students are dismissed from school by 3:00 p.m. For a family with two working parents, this arrangement presents a challenge of caring for and supervising children during the “afterschool gap.”²⁵⁰ Many children spend this time unsupervised or in lower quality OST programs when high-quality affordable care is not accessible to their families. Access to high-quality afterschool care not only provides benefits to students, but also to parents who worry about their child’s well-being during the afterschool gap. It has been repeatedly demonstrated that young people are most at risk for being involved in unhealthy or criminal behavior, are at risk for victimization, and are at risk of substance use problems during the hours between school dismissal and when parents arrive home from work. Good OST programs, those evidence-based programs that provide necessary care, supervision, and enrichment, are known to be beneficial to participants. Studies have shown that parental concern about afterschool arrangements can lead to increased job disruptions and negatively affect parents’ mental health.

Job Disruptions

The changing workplace has led to increased Parental Concern about After-School Time (PCAST), which is defined as “the degree to which employed parents are concerned about the welfare of their school-aged children during the after-school hours.”²⁵¹ Studies have reported that the gender of parents does not predict the level of PCAST; mothers and fathers are equally affected by the lack of quality after-school options. Job position is also not a distinguishing factor; PCAST is prevalent from the board room to the assembly line.²⁵²

Parents with older children experience more PCAST since older children are more likely to be unsupervised at home between the end of school and the end of the workday. About 27 percent of families surveyed in 2006 had children in formal afterschool programs, while many children were supervised by either relatives or non-relatives, and a significant portion of children had structured activities they attended after school. Children from Hispanic, Asian, or African

²⁵⁰ Rosalind Chait Barnett, Karen C. Gareis, Laura Sabattini *et al.*, “Parental Concerns About After-School Time: Antecedents and Correlates Among Dual-Earner Parents,” *Journal of Family Issues* 31, no. 5 (2010): 607.

²⁵¹ Karen Gareis and Rosalind Barnett, *After-School Worries: Tough on Parents, Bad for Business* (New York, New York: Catalyst, 2006), 6.

²⁵² *Ibid.*, 9.

American families were significantly more likely than Caucasian children to be involved in a formal after-school program.²⁵³

Parents who both worked long hours at less flexible jobs reported higher levels of stress regarding leaving their children unattended after school. These concerns led to higher rates of job disruption, including “being interrupted, distracted, or drained of energy at work; making errors; turning down requests for overtime or travel; and missing deadlines or meetings.”²⁵⁴

In a 1991 study, 15 percent of working mothers reported missing work, being late, or leaving early to cover a breakdown in childcare arrangements. This is the most obvious way that lack of childcare can affect one’s work performance, but there are other more subtle repercussions of parental concern in the workplace. Fifty-three percent of parents surveyed in one study reported that worry for their children had caused them to make mistakes or be distracted at work. These outcomes can result in a costly lack of productivity for a company.²⁵⁵ A national study estimated that afterschool programs can help reduce parents’ lost productivity in the workplace, which otherwise costs businesses between \$50 billion and \$300 billion per year.²⁵⁶

There is a body of evidence that shows how afterschool programs can help families by allowing parents to maintain their jobs. A California study found that 61 percent of participants’ parents were able to go to work or school because their children were enrolled in afterschool programs. Across the country in New York City, nearly three-quarters of parents felt that their children’s OST participation allowed them to keep their jobs, caused them to miss less work, and even work more hours because their children participated in programs. The After-School Corporation (TASC) reviewed New York state programs and found that parents reported that programs helped them balance work and family life. Sixty percent missed less work than they had before joining the program, fifty-nine percent thought the program helped them keep their jobs, and fifty-four percent were able to work more hours than they could before joining the program. About 30 percent of principals also noted that parental involvement at school events increased.²⁵⁷

Single parents often feel these pressures to an even stronger degree. Factors that can increase PCAST, like a child’s amount of unsupervised time after school, may be higher in a single-parent home. An analysis of the U.S. Census Bureau’s 2018 American Community Survey found that 415,373 families, or 33.1 percent, of all Pennsylvania families, are headed by a single parent. Twenty-four percent of these families are headed by a single mother, and 9.1 percent are headed by a single father.²⁵⁸ In 2019, percentages of single-parent households in Pennsylvania counties ranged from a low of 19 percent in Centre and Chester Counties to a high of 54 percent

²⁵³ Ibid., 18-19.

²⁵⁴ Barnett, “Parental Concerns About After-School Time,” 615.

²⁵⁵ Rosalind Chait Barnett and Karen C. Gareis, “Antecedents and Correlates of Parental After-School Concern: Exploring a Newly Identified Work-Family Stressor,” *American Behavioral Scientist* 49, no. 10 (June 2006): 1385.

²⁵⁶ *Evaluations Backgrounder: A Summary of Formal Evaluations of Afterschool Programs’ Impact on Academics, Behavior, Safety, and Family Life* (Afterschool Alliance, March 2015), www.afterschoolalliance.org. 11.

²⁵⁷ Ibid., 11.

²⁵⁸ Vince Tabarracci, “Cities With the Most Single Parents,” *Smartest Dollar*, last modified September 18, 2020.

in Philadelphia County.²⁵⁹ Access to quality OST programs can ease the PCAST of single parents as they work to support their families.

Studies show the importance of flexible workplace policies to allow parents to react to their child's needs and also emphasize the effect access to good quality after school care could provide to children and their parents.²⁶⁰

PDE reported on how families benefit from the 21st CCLC programs. Of the over 4,000 parents surveyed, 83 percent reported they were "very satisfied" with their 21st CCLC program. Ninety-six percent of parents surveyed either "agreed" or "strongly-agreed" that the 21st CCLC program "offered their child a variety of academic and enrichment activities." 21st CCLC program staff lead family engagement opportunities, utilizing open house events, family nights, and advisory board meetings and newsletters (93 percent overall), in addition to a variety of other formal and informal methods.²⁶¹

Psychological Impact

The stress that accompanies parental concern about their child's after school care can lead to negative psychological well-being outcomes in the parents. A 2006 study found a relationship between higher amounts of parental after-school stress and lower psychological well-being. The gender of the parent did not significantly affect this relationship, but interestingly, parents of daughters experienced a stronger relationship between the two data points than did parents of sons.²⁶²

²⁵⁹ "Single-parent Households with Children as a Percentage of Households with Children, Annual: Pennsylvania," *FRED Economic Data*, accessed April 15, 2021, <https://fred.stlouisfed.org/release/tables?rid=412&eid=360857&snid=360894>.

²⁶⁰ Barnett, "Antecedents and Correlates of Parental After-School Concern," 1395-7.

²⁶¹ "Background on 21st CCLC," *PDE*, accessed March 16, 2021, <https://www.education.pa.gov/K-12/21st%20Century%20Community%20Learning%20Centers/background/Pages/default.aspx>.

²⁶² Rosalind Chait Barnett, "Parental After-School Stress and Psychological Well-Being," *Journal of Marriage and Family* 68 (February 2006): 106.

RETURN ON INVESTMENT STUDIES

Return on investment (ROI) analysis is a technique widely used as a simple way to understand the value of an output based on the cost of the inputs required to produce it. Facing competition for limited resources, decision makers use ROI to help determine which products or programs are worth investing in and which have resources that should be redirected. Quantifying the relationship between the inputs and outputs allows decision makers to see if resources are being allocated efficiently and used to their full advantage. Mathematically, ROI can be expressed as

$$\left(\frac{\text{Outcome}}{\text{Input}} \right) = ROI.$$

*An ROI of greater than 1
indicates that the outcomes have a benefit that exceeds the value of the input.
In other words, the investment is worthwhile.*

ROI is a common measure used to evaluate out-of-school programs. Providing educational, vocational, and social services, however, frequently delivers intangible outcomes that might not be known until long after the inputs have been spent. For example, those who administer programs to provide young people with homework help, or demonstrate healthful lifestyle habits, or show young people how to create a resume might not know for months or years whether their programs meet their objectives.

Policy makers and researchers thus rely on proxy measures to quantify program outcomes. For example, a healthful eating program might compare obesity rates among participants and non-participants. A program that seeks to have young people avoid substance use disorders might compare arrests or overdose rates between participants and non-participants. Outcomes data are often stated as the dollar value of future costs that are avoided when people participate in programs. For example, the lifetime cost of treatment for a person with a substance use disorder might be viewed as costs avoided when participants successfully complete a program. Given the high rates of juvenile crime and victimization that occur during the hours of 3:00 p.m. and 6:00 p.m., when children are typically out of school before their parents are home, a program might show a reduction in the dollar cost of juvenile crime as being one of its measured outcomes. Similarly, a program that helps young people develop job networking skills might show its value as an assumption of tax revenue generated through participants' anticipated future earnings and productivity.

Program costs, although easier to quantify than program benefits, carry their own set of complexities. Many OST programs utilize adult volunteers. Some ROIs account for the cost of volunteer time while others do not. Location costs vary greatly depending on whether the program is part of an existing school setting, using a donated private facility or leasing. The Legislative Budget & Finance Committee afterschool programs report from 2016 found that costs varied widely, from a low of \$449 to a high of \$7,160 per child per year and attributed this large spread to “program characteristics and methodological differences in sample sizes, how costs are calculated, whether in-kind resources are taken into account, and whether startup, operating, and system-building costs are included.”²⁶³

To conduct an ROI analysis, the outcomes or benefits of participation are quantified, tallied, and divided by the program’s costs or investment. The result is often shown as a dollar-for-dollar ratio. For example, a program’s ROI might show outcomes worth \$6 for every \$1 of investment. Table 16 shows a sample of ROIs estimated for OST programs in other states. ROIs range from a low of Minnesota’s \$1.20 to Oklahoma’s high of \$12.00. Some studies deduct the amount of private funding and calculate ROI using only public funding, which inflates the impact of public funding. For example, by counting only public funding, Minnesota’s ROI doubles to \$2.40. To illustrate: A youth worker earns \$10 per hour, half of which is paid for with private funds. Assume the youth worker works 15 hours per week and the total cost is \$150 per week. If the private funds are not counted in the ROI calculation, the 15-hour workweek can be framed as costing the OST program \$75 rather than \$150, which appears to increase the ratio of outcomes to inputs.

Table 16 Summary of Other States’ ROIs		
State/Study	ROI	Notes
BGCA	\$9.60	--
BGCA of PA	8.50	PA cost data & national economic benefit assumptions
Vermont	2.18	Substance use disorder, school retention, Dropouts & high school graduation rate, Juvenile & adult crime, births to teens
Georgia	2.64	--
Maryland	3.36	Based on future taxable earnings and savings from reductions in juvenile and adult incarceration
Minnesota	1.20 – 2.40	Assumption of half of funding coming from private or donated sources drives the range
Oklahoma	8.00 – 12.00	Includes benefits from crime reduction. Without this, ROI decreases to \$3

Source: Compiled by JSGC staff.

²⁶³ *Afterschool Programs in Pennsylvania* (Harrisburg, PA: Legislative Budget and Finance Committee, 2016), <http://lbfc.legis.state.pa.us/resources/documents/reports/558.pdf>, 27.

Calculation of Pennsylvania's ROI

To determine a return on investment in OST programs, Joint State staff assumed an investment of \$50 million in state funding. According to PDE, each 21st CCLC participant costs up to \$2,300. Therefore, an additional \$50 million investment would allow at least 21,739 additional students to attend an OST program for a year.

Four negative behavior categories were then examined: Adolescent Pregnancy, Violence and Crime, High School Drop Out Rates, and Substance Use. For each category the reduction in negative behavior, as demonstrated by studies around the country, was applied to Pennsylvania negative behavior rates. The percentage of risk reduction was multiplied by the 21,739 additional students to determine the number of students diverted from negative behaviors by OST programming. The number of diverted students was then multiplied by the annual and lifetime dollar amounts these negative behaviors cost the Commonwealth per student to determine the amount of savings from each category. Finally, these savings were summed and divided by the investment of \$50 million to determine an ROI of \$6.69 for each \$1 invested in OST programs.

Adolescent Pregnancy

Joint State staff assumed a hypothetical investment of \$50 million by the state. Using the participant cost of \$2,300 provided by PDE²⁶⁴, the number of additional students that could participate in OST programs was 21,739 ($\$50 \text{ million} \div \$2,300 = 21,739$). In Pennsylvania in 2019, the rate of adolescent pregnancy was 1.3 percent.²⁶⁵ Studies have shown that participation in OST programs can reduce the risk of teen pregnancy by 33 percent²⁶⁶, which would result in a 0.4 percent difference in risk between those Pennsylvania students in OST programs and those not in OST programs ($1.3 \text{ percent} \times 33 \text{ percent} = 0.4 \text{ percent}$).

Joint State staff multiplied the additional students included in OST programming with the state investment by the difference in risk percentages to find that 93 students would be diverted from adolescent pregnancies ($21,739 \times 0.4 \text{ percent} = 93$). A 2010 report found the Medicaid cost of adolescent pregnancy in Pennsylvania is \$11,015 per birth.²⁶⁷ Nationally, the medical costs of care for the child from thirteen to 60 months is \$7,950.²⁶⁸ To find the savings to the state with each adolescent pregnancy diverted, Joint State staff multiplied the number of students diverted

²⁶⁴ The highest 21st CCLC pupil cost in the range provided (\$1,200- 2,300) was used to provide a conservative estimate of the ROI. The range was provided in an email between Joint State Staff and Carmen Medina, Division Chief at the Pennsylvania Department of Education, on July 31, 2020.

²⁶⁵ "Pennsylvania Data," *Power to Decide*, accessed May 13, 2021, <https://powertodecide.org/what-we-do/information/national-state-data/pennsylvania>.

²⁶⁶ *Investing in Expanded Learning Opportunities (ELOs) in Vermont (Vermont Afterschool)*, 8.

²⁶⁷ Jennifer J. Frost, Lori Frohirth *et al.*, *Contraceptive Needs and Services, 2010: Methodological Appendix* (Guttmacher Institute, July 2013), 20.

²⁶⁸ Jennifer J. Frost, Adam Sonfield *et al.*, "Return on Investment: A Fuller Assessment of the Benefits and Cost Savings of the US Publicly Funded Family Planning Program," *The Milbank Quarterly* 92, no. 4 (December 2014): 696-749,

DOI: 10.1111/1468-0009.12080.

by the cost of each birth and subsequent medical care to find a savings of **\$1,763,745** ($\$18,965 \times 93 = \$1,763,745$).

Violence and Crime

Staff made similar calculations for violence and crime assuming the additional 21,739 students who could participate in OST given \$50 million invested. In Pennsylvania in 2019, the juvenile allegation rate was 1.9 percent.²⁶⁹ A 2000 study found that if children are supervised from 3-6 p.m., juvenile crime goes down by 25 percent.²⁷⁰ The difference between children in OST programs and not in the programs in Pennsylvania would then be 0.475 percent (1.9 percent \times 25 percent = 0.475 percent). Pennsylvania does not quantify costs per individual in the juvenile justice system, so the cost was determined by multiplying the risk difference by the total annual cost of juvenile justice to find a savings of **\$932,118** by diverting students from violence and crime ($\$196,235,550^{271} \times 0.475$ percent = \$932,118).

High School Dropout Rate

The dropout rate in Pennsylvania for the 2018-2019 school year was 1.73 percent.²⁷² Studies have shown that participation in OST programs can reduce dropout rates by 22 percent.²⁷³ The difference in risk from students in OST programming and not participating is 0.3 percent (1.73 percent \times 22 percent = 0.3 percent). Joint State staff multiplied the risk difference by the 21,739 additional students participating in OST programs to find 82 additional students would be diverted from dropping out ($21,739 \times 0.3$ percent = 82). A student who drops out of high school can cost taxpayers \$292,000 over the course of student's life.²⁷⁴ The number of students diverted was multiplied by the lifetime costs of a high school dropout to find a savings of **\$23,944,000** ($\$292,000 \times 82 = \$23,944,000$).

Substance Use

Assuming there is not mutual exclusivity in teen substance use, the substance with the highest rates of use in Pennsylvania is commonly used to represent substance use rates in

²⁶⁹ *2019 Juvenile Court Annual Report* (Pennsylvania Juvenile Court Judges' Commission, 2019), <https://www.jcjc.pa.gov/Research-Statistics/Disposition%20Reports/2019%20Juvenile%20Court%20Annual%20Report.pdf>, 14.

²⁷⁰ S. A. Newman, J. A. Fox, E. A. Flynn, and W. Christeson, *America's After-School-Choice: The Prime Time for Juvenile Crime or Youth Enrichment and Achievement* (Washington, D.C.: Fight Crime, Invest in Kids, 2000).

²⁷¹ *2019 Pennsylvania Juvenile Justice and Delinquency Plan* (The Juvenile Justice and Delinquency Prevention Committee, January 2019), <https://www.pccd.pa.gov/Juvenile-Justice/Documents/2019%20Pennsylvania%20Juvenile%20Justice%20and%20Delinquency%20Prevention%20Plan.pdf>, 34.

²⁷² "Dropouts," *Pennsylvania Department of Education*, accessed May 13, 2021, <https://www.education.pa.gov/DataAndReporting/Dropouts/Pages/default.aspx>.

²⁷³ Brown *et al.*, *The Costs and Benefits of After School Programs: The Estimated Effects of the After School Education and Safety Program Act of 2002* (The Rose Institute of Claremont-McKenna College, September 2002).

²⁷⁴ Andrew Sum, Ishwar Khatiwada *et al.*, *The Consequences of Dropping Out of High School* (Northeastern University, October 2009), https://repository.library.northeastern.edu/downloads/neu:376324?datastream_id=content, 15.

Pennsylvania. Twenty-five percent of Pennsylvania teens currently drink alcohol.²⁷⁵ The National Center on Addiction and Substance Abuse (CASA) finds that one-third of teens who use substances are addicted. By this reasoning, 8.3 percent of Pennsylvania teens are suffering from substance use disorder (SUD). OST programming can reduce addiction rates by 50 percent²⁷⁶, which would mean a difference between students in OST programs and those not in programs of 4.15 percent ($8.3 \text{ percent} \times 50 \text{ percent} = 4.15 \text{ percent}$). Joint State staff multiplied the number of additional students in OST programming by the difference in risk percentage to determine that 902 students would be diverted from SUD ($21,739 \times 4.15 \text{ percent} = 902$). CASA reports that nationwide, each high schooler with SUD can cost \$7,000 annually.²⁷⁷ The annual cost of a high schooler with SUD multiplied by the students diverted by OST programs shows a savings of **\$6,314,000** ($902 \times \$7,000 = \$6,314,000$). Additionally, CASA reports that 25 percent of teens suffering from SUD will continue to do so as adults. Twenty-five percent of the students diverted from SUD in high school would mean 225 students will avoid adult SUD ($902 \times 25 \text{ percent} = 225$). The average lifetime cost for an individual's substance use is \$1,341,291.²⁷⁸ The number of students diverted from adult SUD multiplied by the cost for substance use shows a savings of **\$301,790,475** ($225 \times \$1,341,291 = \$301,790,475$).

Total ROI

The amount invested by the state is divided by the total of the savings from all four behavioral categories ($\$334,744,338 \div \$50,000,000$). **For every dollar the state invests, the state can expect a value of \$6.69 in benefits from OST programming.**

Review of Other Calculations

ROI for Boys and Girls Club of America (BGCA)

A 2016 national study of the ROI for BGCA compared costs to long-term benefits in economic terms. The analyses were intended to demonstrate ROI for the overall program experience as well as for particular programs. The hypothesis is that investment in target areas such as education, health, character, and citizenship will be cost-effective; the authors recognize that the empirical evidence is limited and needs to be updated to reflect available data.

²⁷⁵ "Pennsylvania 2019 Results," CDC, accessed May 13, 2021, <https://nccd.cdc.gov/youthonline/app/Results.aspx?LID=PA>.

²⁷⁶ S. A. Newman, J. A. Fox, E. A. Flynn, and W. Christeson, *America's After-School-Choice: The Prime Time for Juvenile Crime or Youth Enrichment and Achievement* (Washington, D.C.: Fight Crime, Invest in Kids, 2000).

²⁷⁷ *National Study Reveals: Teen Substance Use America's #1 Public Health Problem* (The National Center on Addiction and Substance Abuse (CASA) at Columbia University, June 29, 2011).

²⁷⁸ Mark A. Cohen and Alex R. Piquero, "New Evidence on the Monetary Value of Saving a High Risk Youth," *Journal of Quantitative Criminology* 25, no. 1 (March 2009): 46, DOI: 10.1007/s10940-008-9057-3. This number is an average of \$1,243,148.52 and \$1,439,435.12, adjusted with the CPI inflation calculator to 2021 dollars.

A review of existing literature on studies on BGCA programs noted that there is great variance between different programs and their results, and therefore smaller studies of specific programs or specific regions can become more insightful than national figures. A study of Central Florida BGCA showed that the ROI could be higher than \$10:\$1, particularly because the measures used included teenage pregnancies and juvenile arrests. It was estimated that the overall cost of providing programs in central Florida was \$51 million per cohort, with “downstream” benefits of potentially \$1 billion “if at least 50% of the positive outcomes are attributed to Clubs.”²⁷⁹ The ROI was still over 10 if even only 25 percent of positive outcomes could be attributed to the central Florida BGCA.

Studies of regional clubs in California, Arizona, and New Jersey found that cost benefit ratios measuring economic benefits yielded more than \$15 in benefits to every \$1 invested. In Puerto Rico, a study estimated that for \$5.3 million invested—including the value of volunteer hours—there was an economic benefit of more than \$9 million. Another study in Florida of “highly engaged Club members” noted better numbers in all of the measured outcomes compared to their peers who were not a part of clubs.²⁸⁰

The authors made use of the National Youth Outcomes Initiative (NYOI), which is an annual survey of BGC members that assesses “important” indicators of overall outcomes. Further, the authors made use of evaluations of specific programs, “Triple Play, Project Learn, Targeted Outreach, SMART Moves and Leaders, and Summer Brain Gain.” The authors of this study also incorporated newly developed methods of projecting economic benefits by linking adult and childhood outcomes. An overview of the methods explained that the costs of the programs are gathered from financial reports from clubs in Georgia, the outcomes are recorded by NYOI data, and lifetime economic benefit projections were calculated by methods used by the Washington State Institute for Public Policy (WSIPP). The authors measured their ROI through a cost-benefit equation, dividing “lifetime economic benefits” by “program costs.”²⁸¹

The major costs listed in the report include the costs of paying personnel, the opportunity cost of volunteer hours that could have been spent for paid labor elsewhere, material costs, and facility costs. The study did not include the costs of fundraising in its calculations.

The NYOI data were examined and the outcomes of students who participated in clubs were compared to the outcomes of those who did not. The outcomes of non-participants were extrapolated from national surveys—The Youth Risk Behavioral Surveillance System (YRBSS) and the National Survey of Drug Use (NSDU)—which the authors explained is appropriately representative of that population because only five percent of students participate in the clubs. The measures that both NYOI and YRBSS data sets included that can be compared to each other were: “cigarette smoking (past 30 days), alcohol use (past 30 days), marijuana use (past 30 days),

²⁷⁹ Daniel Eisenberg and David Hutton, *Estimating the Return on Investment for Boys and Girls Clubs* (Georgia: Boys and Girls Club of America, 2016).

²⁸⁰ Ibid.

²⁸¹ Ibid.

physical activity (past 7 days), and involvement in a serious physical fight (past year).”²⁸² The measures shared by NYOI and NSDU data sets were: “cigarette smoking (past 30 days), alcohol use (past 30 days), marijuana use (past 30 days), involvement in a serious fight (past year), grades at school (last semester or grading period), days skipping school (past 30 days), and arrests (past year).”²⁸³ The study used “propensity score weighting” to adjust for socioeconomic geographic differences.²⁸⁴

The authors of the study also mentioned the importance of knowing how many students would take advantage of a program in a given year. The number of engaged students—meaning they attend at least one club meeting a week—was about 279,000.²⁸⁵ Childhood benefits of specific programs were included as found in other studies.

The authors limited the scope of the analysis of lifetime benefits to four areas: “education, health (substance use and physical activity), juvenile justice, and parental earnings.”²⁸⁶ Regarding physical activity, the authors posited that since physical activity lowers body mass index and can reduce childhood obesity, they could extrapolate savings by calculating the healthcare costs of childhood obesity. The economic benefits of graduating high school were calculated using the methods of WSIPP. The authors estimated the impact of substance abuse intervention by noting the prevalence of dependence by those who are using substance under the age of eighteen. The authors posited that since the clubs reduce drug use among young people, the rate of use as adults should also be lower. Societal costs of substance use were also calculated.

The calculation for averted arrests included the costs of crimes, convictions, and corrections, as well as marginal costs of these actions. This information was categorized as either a cost to the taxpayer or to the victim. For those that were a cost to the victim, different kinds of crimes were tracked, and convictions and use of the corrections system were approximated using crime statistics. Taxpayer costs were counted by “arrests, courts, and prosecutors for convictions, and the corrections system,” in addition to marginal costs.²⁸⁷

A survey in which 36 percent of parents said the clubs enabled them to keep their jobs was used for the calculation of parental earnings. It was multiplied by the number of families involved in the clubs and the overall income level of these families was adjusted for inflation and then also multiplied by the number of families.

²⁸² Ibid.

²⁸³ Ibid.

²⁸⁴ Ibid.

²⁸⁵ Ibid. 12.

²⁸⁶ Ibid.

²⁸⁷ Ibid.

The results of the comparisons showed that club members had “higher physical activity and grades, and lower cigarette, marijuana, and alcohol use.”²⁸⁸ Involvement in serious fights and arrests was the same rate if not higher with club members, but due to the lack of compatibility of survey questions, these results were not dwelled upon.

The information found from the comparison was then calculated using the predetermined factors. The authors estimated that each minute of physical activity would result in \$38 of lifetime benefit, graduation from high school would provide \$1.2 million in benefits to the student as well as \$430,000 in benefits to the society at large. Substance use prevention for alcohol, marijuana, and cigarettes would add up to a \$32,100 lifetime benefit. Each arrest prevented would save about \$12,000, and parents would gain around \$5,400 if the participation of the children in the clubs allows the adults to continue working.²⁸⁹

The calculations of benefits as outlined above found \$13.8 billion in benefits. When this figure was divided by the estimated cost of \$1.4 billion, it provided an ROI ratio 9.6.²⁹⁰ In the analysis of specific programs, Project Learn had an ROI ratio of 8.0 and Triple Play of 1.4.²⁹¹

The weakness in this analysis and those like it is the number of assumptions made when building the equations. Some assumptions come from well-founded reports and studies, whereas others may come from studies with a weaker methodology. To increase the accuracy of the assumptions, the authors suggested that currently existing surveys require more specific information about students that can be more easily compared to other groups surveyed.

The authors cite important shortcomings of the study, however. For one, improvements (and avoidance of matters such as pregnancies and arrests) were reported by BGC staff, who might not have been aware of all situations. Second, there was a potential for sampling error in that participants with poor outcomes may have not been willing to participate in the survey of outcomes. Third, there could be misperceptions in the effectiveness of programs given that the outcomes were self-reported. Fourth, and perhaps most important, the BGC participants were compared with same-age youth who did not participate. Thus, it is possible that the BGC participants experienced positive outcomes not necessarily because of the programs but because they benefited from other supports and were not exposed to risk factors. Fifth, the authors note that alternative uses of BGC funds (e.g. for other out-of-school organizations and programs) could have produced similar benefits.

²⁸⁸ Ibid.

²⁸⁹ Ibid.

²⁹⁰ Ibid. 21.

²⁹¹ Ibid. 22.

*Estimating the Return on Investment
for Boys & Girls Clubs in Pennsylvania*

This analysis narrows the focus of the study “Estimating the Return on Investment for Boys & Girls Clubs of America” to programs in Pennsylvania. The figures for total cost are drawn from Pennsylvania sites in 2013 while the economic benefits assumptions are based on available national data. The economic benefits are then tied to the number of registered club members, by age, in Pennsylvania in 2013.²⁹²

Using this combination of the Pennsylvania and national data, the authors report that the Boys and Girls Clubs of Pennsylvania have a return on investment of \$8.50 in long-term benefits generated from each dollar invested. Annual economic benefits are estimated at \$233 million per year.²⁹³

Lifetime economic benefits are projected using other research estimating how childhood outcomes predict lifetime outcomes.²⁹⁴ The study uses indicators from education, health (substance use and physical activity) juvenile justice and parental earnings. Other indicators, such as teen pregnancy, financial literacy or general quality of life, are not included in these calculations. The methodology is conducted in two steps. Indicators including physical activity, cigarette smoking, alcohol use and marijuana use for Club members ages 12 to 18 in Pennsylvania are compared. These indicators for PA Club members who participated in the National Youth Outcomes Initiative (NYOI) survey were compared to similarly aged youth who participated in PA’s 2013 Youth Risk Behavioral Surveillance System (YRBSS). National data from the National Survey on Drug Use and Health (NSDUH) for benefits resulting from an increased GPA in school were used.²⁹⁵

²⁹² *Estimating the Return on Investment for Boys & Girls Clubs in Pennsylvania*, provided by Dr. David W. Hutton, Associate Professor of Health Management and Policy and Associate Professor of Global Health at University of Michigan School of Public Health, 1.

²⁹³ *Ibid.*, 3.

²⁹⁴ Daniel Eisenberg and David Hutton, *Estimating the Return on Investment for Boys and Girls Clubs*, 8.

²⁹⁵ *Estimating the Return on Investment for Boys & Girls Clubs in Pennsylvania*, provided by Dr. David W. Hutton, Associate Professor of Health Management and Policy and Associate Professor of Global Health at University of Michigan School of Public Health, 1.

Table 17
Translating Effects to Aggregate Lifetime Economic Benefits

Measure	Childhood Benefits (\$000)	Lifetime Economic Benefits (\$ millions)
Days/week with > 60 minutes of activity	\$4.53	\$1.5
Members averted smoking tobacco	0.33	4.1
Fewer members drinking	1.32	24.0
Fewer members smoking marijuana	1.00	2.1
GPA improvements (e.g., A vs B = 1 unit)	0.58	24.2
Subtotal of economic benefits to members	--	55.9
Parental job retention	5.88	177.1
Total Economic Benefits	--	233.0
Total Cost	27.5	--
ROI (BENEFIT-COST RATIO)	8.5	--

Source: Estimating the Return on Investment for Boys & Girls Clubs in Pennsylvania, provided by Dr. David W. Hutton, Associate Professor of Health Management and Policy and Associate Professor of Global Health at University of Michigan School of Public Health.

The impact of physical activity on costs is projected in steps. First, physical activity is linked to reduced body mass index. Then a study of the lifetime medical costs of childhood obesity is used to convert body mass index indicator into a lifetime dollar impact.²⁹⁶

The authors examine three types of substance use: alcohol, cigarettes, and marijuana. The authors use a study prepared by the Washington State Institute for Public Policy of national evidence that the authors then synthesize. Club participation reduces use of alcohol, tobacco, and marijuana in childhood as well as in adulthood. Use of each substance has a varying economic impact. The costs of alcohol use include the impact on earnings and health costs associated with societal costs such as interpersonal violence, property crime and traffic crashes. The costs of tobacco use include effects on earnings and healthcare. The costs of marijuana use include effects on earnings and also emergency department visits.²⁹⁷

Improved high school graduation is linked to improved lifetime earnings. According to a 2010 longitudinal study of two US school districts, when a student is retained, they are 91 percent more likely to drop out, but when there is a one grade level improvement, their risk of dropping out decreases by 14 percent. Using the national graduation rates as a baseline, the authors then use NYOI data and program evaluation estimates of Club retention and grades to forecast

²⁹⁶ Daniel Eisenberg and David Hutton, *Estimating the Return on Investment for Boys and Girls Clubs*, 16.

²⁹⁷ *Ibid.*, 17.

improvements in graduation rates for Club participants. A human capital approach is used to project the economic value of education.²⁹⁸

To compute the impact of parental job retention, the authors rely on the methods and survey of Damoei²⁹⁹ in which 36 percent of parents strongly agree that Clubs allow them to keep their jobs. In this study, the average income level of those who strongly agreed was \$27,871 in 2010 dollars. These survey results were corroborated by a national survey of parents in the 2014 America After 3PM report by the Afterschool Alliance. To calculate the result, the authors multiplied the number of families served by Clubs by 36 percent and then by inflation-adjusted income.³⁰⁰

Vermont

In a study published in 2014, Vermont Afterschool estimates that \$1 invested in Expanded Learning Opportunities (ELO) in Vermont results in a \$2.18 return.³⁰¹

An estimated 8,676 children in Vermont are currently benefiting from regularly participating in high-quality expanded learning opportunities. Researchers reached this estimation by measuring the population of public school students in VT (90,205) along with the number of ELO participants (21,690) as reported by Afterschool Alliance's 2014 *America After 3pm Report*. It was estimated that 40 percent of Vermont's ELOs are high quality, based on the state's STARS ratings. The study assumed an even distribution of students across programs and arrived at 40 percent x 90,205 = 8,676 of the total public school population (9.62 percent) enrolled in a high quality ELO program.³⁰²

The study considered the annual investment necessary to provide high quality ELOs to students who currently do not have access to the programs and concluded that \$50 million would allow 21,570 additional children and youth to participate.

Students who receive the recommended dosage are expected to experience reduced substance use disorder, increased rates of graduation and college attendance, reduced juvenile delinquency and adult crime, and reduced teenage childbirth.³⁰³

To determine average per pupil operating cost, annual expenditures of 21st CCLC programs were obtained. Programs were filtered by those that provide 15 hours per week during the school year and five day-40 hour/week-for six weeks over the summer. Annual operating costs were divided by the number of regular attendees for each program.

²⁹⁸ Ibid., 16.

²⁹⁹ J. Damoei, A.A. Damoei, *Valley of the Sun Boys & Girls Clubs. Enabling Young People to Reach Their Full Potential as Productive, Caring & Responsible Citizens* (Thousand Oaks, California: Damoei Global Research; 2011).

³⁰⁰ Hutton, *Estimating the Return on Investment for Boys and Girls Clubs*, 18.

³⁰¹ *Investing in Expanded Learning Opportunities (ELOs) in Vermont* (Vermont Afterschool, November 2014), <http://www.vermontafterschool.org/wp-content/uploads/2019/10/ROI-write-up-design-updated-10.2019.pdf>.

³⁰² Ibid., 1.

³⁰³ Ibid., 2.

The Afterschool Alliance reported that 33 percent of Vermont children who do not participate in a program would if they could. $(90,205-21,690) \times 33\% = 22,610$ students would be expected to participate.

The average program cost per participant was then calculated as \$2,318. $\$2,318 \times 22,610 = \$52,409,864$.

It was simplified to \$50 million, which would serve 21,570 students. The number of participants in high quality ELO (8,676) was added to the 21,570 additional students for a total of 30,246 participants in high quality programs. This would cover 33.53 percent of all VT students. $(30,246 \div 90,205)$

The \$50 million calculated above would result in short- and long-term benefits to the Vermont taxpayer of \$108,826,915 annually, for a net savings of \$58,826,195.

Substance Use Disorder (SUD)

Youth Risk Behavior Survey shows that at least 33 percent of youth recently used drugs or alcohol. According to National Center on Addiction and Substance Abuse, 33.33 percent of high school substance abusers fit the medical description of addiction. Therefore, 33 percent of 33 percent indicates that 11 percent of Vermont teens are addicted. Of 29,019 Vermont high schoolers, 3,082 are addicted (11 percent of 29,019).

The \$50 million would allow 9,395 high schoolers participate in ELO. Studies showed afterschool supervision can reduce risk of SUD by 50 percent. Therefore, the 9,395 students at risk would drop to 5.5 percent, which is 50 percent of 11 percent. In other words, 517 students would be expected to avoid SUD. The 18,624 students who do not participate in ELO would have an 11 percent risk, which is 2,048 students.

517 students combined with 2,048 students yields 2,565 with SUD, as compared to 3,082 with SUD. An outcome of the \$50 million investment would likely prevent at least 517 from developing SUD.

The CASA study found that the national level immediate costs of SUD is \$14 billion for 2 million high schoolers with SUD. The average cost per student is \$7,000. The decrease in costs to Vermont would be \$3,616,963, $(\$7,000 \times 517 \text{ students})$.

Twenty-five percent of young people with SUD become adults with SUD. This would be 770 of Vermont's high schoolers (25 percent of 3,082). The \$50 million might prevent 129 from experiencing adult SUD (25 percent of 2,565 = 641 SUD). Taken further, the calculation shows $770-641= 129$.

Lifetime costs of SUD range from \$964,330 to \$1,262,813.³⁰⁴

³⁰⁴ Ibid., 5.

School Retention, Dropouts, and High School Graduation Rate

Researchers took the retention rate for Vermont high schoolers and multiplied it by the estimated reduction in retention that is an outcome of high-quality ELO, which is 53.4 percent. The result for Vermont is a risk of retention of: $0.54\% = 1.15\% \times [1-53.4\%]$. (To find the BENEFIT of high-quality ELO, take the risk of retention *without* the ELO and multiply it by the risk of retention *with* the ELO. Since the risk reduction is 53.4%, the remaining risk is 1-53.4%, or 53.5%. The results were rounded to 54%.)

They arrived at the number of students who are retained: $987 \text{ students} = 8,676 \times 0.54\% + 81,529 \times 1.15\%$. With the additional \$50 million, they estimated that 854 students would be retained: $(30,246 \times 0.54\% = 59,959 \times 1.15\%)$. This means that 133 fewer students would be retained: $987-854=113$. Vermont's annual spending per pupil is \$13,524, which means a savings of $\$13,524 \times 133 = \$1,798,000$ per year.

The dropout rate is 2.68 percent, or 751 dropouts per year.

The risk of dropping out is reduced by 22 percent with ELO. The remaining risk is $1-0.22 = 0.78$. Therefore, $2.68\% \times 0.78\% = 2.09\%$.

$2.09 \text{ percent} \times \text{the number of high schoolers in ELO } 9,395 = 196$. The remaining 18,624 high schoolers have the old risk of 2.68 percent, which means 499 dropouts.

Total dropouts is $499 + 196 = 695$ dropouts. The \$50 million would reduce the number of dropouts from 751 to 695, which means 56 would stay in school. Vermont taxpayers would pay an additional \$757,344 to keep the students in school. $56 \times \$13,524 = \$757,344$.³⁰⁵

The *Journal of Quantitative Criminology* is cited as concluding that a high school dropout is likely to cost society \$482,165 to \$723,247 over a lifetime due to lack of "higher wages and productivity, non-market productivity, child development and nurturing, health status, social cohesion, charitable giving, etc."³⁰⁶ Researchers calculate that a reduction by 20 fewer dropouts would result in lifetime savings of between $\$482,165 \times 20 = \$9,452,246$ and $\$743,247 \times 20 = \$14,178,369$.

The authors assume "that the lifetime savings for one cohort of reduced high school dropouts is roughly equivalent to one year's worth of savings for all of the cohorts of high school dropouts today, it can be assumed that the long-term annual savings from the reduced dropout rate of high school seniors is \$9,452,246 to \$14,178,369. This is an average annual savings of \$11,815,308."³⁰⁷

They then discuss a "small cost" that is "associated with an increased number of high school graduates." The dropout rate for high school seniors would decrease from 3.69% to $(3.69\% \times [1-22\%])$, which is 2.88%.

³⁰⁵ Ibid., 6.

³⁰⁶ Ibid., 6.

³⁰⁷ Ibid., 6.

The current retention rate for seniors is 3.8 percent. Access to ELO would lower this rate to 1.78 percent. The new graduation rate would reflect that there are fewer dropouts and fewer retentions. 10 percent - 1.78 percent - 2.88 percent = 95.34 percent. In numbers, this is: 2,415 high school seniors would be able to participate in the expanded ELO and have a graduation rate of 95.34 percent. The remaining 4,787 seniors would have the old rate of 92.48 percent.

The predicted graduation class would increase by 69. $(2,415 \times 95.34\%) + (4,787 \times 92.48\%) = 6,729$. The previous class size would have been 6,660. $6,729 - 6,660 = 69$.³⁰⁸

Juvenile and Adult Crime

FBI arrest statistics were used to calculate victim costs for each crime, annual incarceration costs, probation costs, and case management costs for juvenile crimes. The average cost of Juvenile crime in Vermont has been \$4,819,513 (murder not included).³⁰⁹

Nearly 63 percent of juvenile crimes occur on school days, and one-quarter of all juvenile crime could be eliminated if the crime rate for 3 p.m. to 8 p.m. was reduced to school-time crime levels. In Vermont, 15.59 percent of all juvenile crime could be eliminated (62.35% x 25%)

With the additional \$50 million in ELO, 33.53 percent of Vermont school children could participate in afterschool ELO. They assume that 5.2 percent of all juvenile crime could be eliminated: (33.53% x 15.59%). This would save Vermont \$251,893 annually (5.2% x \$4,819,513).³¹⁰

Births to Teens

Research shows that teen pregnancy is reduced by 33 percent among teens who participate in ELO. Their calculations for Vermont indicate that 196 births could be prevented.

Georgia

The Georgia Statewide Afterschool Network (GASN) released a comprehensive report on the performance and effectiveness of programs in the state.³¹¹ That report used data from the federal fiscal year 2016. It concluded that every \$1 spent on afterschool and summer learning programs has an ROI of \$2.64 for Georgia taxpayers. The 21st CCLC programs are housed through the GA Dept of Education, and the Afterschool Care Program is run through the GA Division of Family and Children Services. Approximately 100,000 school children participate in 521 programs. Forty-two percent of Georgia counties have neither 21st CCLC nor Afterschool Care Program programs.

³⁰⁸ Ibid., 7.

³⁰⁹ Ibid., 7.

³¹⁰ Ibid., 8.

³¹¹ *Investing in Georgia's Youth, Why Afterschool Makes "Cents"* (Georgia Statewide Afterschool Network, September 2018), <http://www.afterschoolga.org/wp-content/uploads/2018/08/Investing-in-Georgias-Youth-FINAL-High-Resolution-PUBLIC-Reduced-File-Size.pdf>.

GASN reported improvements in academic performance and outcomes, finding that participating in afterschool increases probability of graduating by 11.6 percent. Further, students were 1.5 to 2 times less likely to dropout.

Also reported was that attendance improved. Research shows programs can “provide students with a sense of belonging and a connection to a caring adult who can help identify and address barriers to school day attendance.”³¹² Among other findings were that retention can be reduced by 53.4 percent.³¹³

Other benefits included reductions in negative outcomes. For example, juvenile crime was reduced. It costs \$91,126 per year to incarcerate a youth in Georgia, while afterschool programs cost \$633 per participant. Research into LA’s BEST program found participants were 30 percent less likely to participate in criminal activity. As engagement level increased, the probability of juvenile crime decreased. Afterschool programs can reduce substance use from 11 percent to 5.5 percent for regular participants. The report lists other benefits: supporting working families, creating the workforce of tomorrow, promoting healthy lifestyles.

Further analysis described the ROI for Georgia’s afterschool programs in terms of tax dollars spent and saved / “returned” to the state.³¹⁴

Four questions were posed:

1. How many students participate in Georgia’s afterschool programs and what proportion are regular participators?
2. How much does it cost to provide GA’s afterschool programs?
3. What impact on graduation rates is expected from participation in afterschool programs?
4. How much do the state and taxpayers benefit in the short- and long-term from this participation?

“The published literature indicates that most of the benefits will be accrued by those students that participate at a minimum level.”³¹⁵ The study differentiates between all participants and regular participants. Participation reduces the dropout risk, and thereby increases the most important benefits of afterschool programs.³¹⁶ The analysis assumes that an investment is made over a number of years and only regular participants benefit.

A sensitivity analysis was used to “demonstrate how large the ROI may actually be for investments in Georgia’s afterschool programs.”³¹⁷ A sensitivity analysis was done to avoid having one assumption outweigh the others. The parameters were varied in each of the eight calculations to determine the impact of each on the baseline results. The analyses were biased

³¹² Ibid., 9.

³¹³ Ibid., 10.

³¹⁴ Justin Ingles, “Return on Investment Analysis of Georgia’s Afterschool Programs,” Georgia Statewide Afterschool Network.

³¹⁵ Ibid., 1.

³¹⁶ Ibid., 2.

³¹⁷ Ibid., 3.

toward more conservative estimates. The bias was toward higher costs per student to account for “lost” costs on non-regular participants. Benefits were shifted toward regular participants through the assumption that only regular participants would benefit. The bias was toward lower benefits.

The result is that benefits may be higher than was the study presents.

“It is impossible to disentangle the impacts of a program from other outside factors or other programs that participating students may be likely to participate [in].”³¹⁸(*sic*). Only one longitudinal study used control groups, Goldschmidt, Huang, et al 2007.

Cost benefit streams were discounted because they “should not weight as heavily in decision making as those spent of saved today.”³¹⁹ A discount rate of 5 percent was used, with boundaries of 3 percent and 7 percent used for the sensitivity analysis.

Grade levels were separated because some benefits are more likely to accrue from older kids. For example, juvenile crime is more of a problem with high school age participants than for elementary school participants. 21st CCLC data was useful because it provides participation data that can be sorted by age group.

Regular participation was set as at least 30 days per year, which is the definition used by 21st CCLC. Page 7 of the report provides the calculations for the Total Number of Participating Students and Regular Participants. The study assumed that students who accrued benefits and costs were those who participated for three years, and that they were regular participants.³²⁰ The report lists some potential benefits, both long term and short term: reduction in teen violence and property crime, lower truancy would lead to savings, including lower administrative burden, reduced costs if grade retention is reduced by better attendance.

The largest benefit would be from school performance and graduation rates because of higher lifetime earnings, tax payments, reduced reliance on public welfare, and reduced risk of interaction with criminal justice system.

Impact on Graduation Rate

Students that participate in programs may have higher or lower baseline graduation rates than the overall graduation rate.³²¹ This is important because one needs to know the starting point, “baseline,” to know the effectiveness of the program on graduation rates. “...using graduation rate data available from the Georgia Department of Education, the expected baseline graduation rate was adjusted. Analysis of this (*sic*) data found that the ratio of the graduation rate for students defined as low socioeconomic status to the graduation rate for all students was 0.953.”³²²

³¹⁸ Ibid., 3.

³¹⁹ Ibid., 4.

³²⁰ Ibid., 8.

³²¹ Ibid., 10.

³²² Ibid., 10.

The dropout rate for participants has been shown to be between 1.5 and 2.0 times smaller than nonparticipants.

Reduced Juvenile Crime

The study of LA's BEST showed that the biggest short-term benefit was through reduced juvenile crime among regular participants.

Increased Schooling Costs

Improving graduation rates leads to increased education costs. The report took the per student cost and multiplied it by the marginal cost for adding an additional student, which is estimated in Georgia as being 32 percent of the per pupil cost.³²³

Drug & Alcohol Addiction

GASN reported national figures showing substance abuse in juvenile justice costs \$14 billion with 2 million high schoolers addicted.

Net Fiscal Contribution

The report combines reduced crime and reliance on welfare programs and reports that a study showed the average high school dropout will cost Georgia taxpayers \$292,000 in lower tax revenues, higher cash and in-kind transfer costs, and imposed incarceration costs relative to an average high school graduate. Discounted at 5 percent and adjusted for inflation to 2017 dollars, the present value was \$69,002.

Kansas

The Kansas Enrichment Network (KEN) reports that participants in high-quality afterschool programs in Kansas have an expected high school graduation rate of 99.94 percent, while those who do not participate in afterschool programs have a graduation rate of 86 percent.³²⁴ KEN further estimates that 16 percent of all juvenile crime in Kansas would be eliminated with broad access to high quality afterschool programs.

The report states that Kansas spends in excess of \$50 million per year to incarcerate youth or place them outside of their homes. It estimates that spending \$50 million on afterschool programs would save \$42 million in juvenile and adult crime costs, \$7 million in substance use disorder, and \$18 million in "fewer retention cases and higher graduation rates." According to the report, it costs \$91,433 per year to incarcerate one youth in Kansas, while high quality afterschool programming costs \$805 per student per year.

³²³ Ibid., 12.

³²⁴ "Investing in Youth Today . . . for a Brighter Tomorrow," *Kansas Enrichment Network*.

Ninety percent of high-quality afterschool programs in Kansas offer STEM activities, which prepares participants for careers in growing fields like healthcare, education, scientific, and technical services.

Maryland

The Maryland Out of School Time Network (MOST) presented findings on the return on investment for funding programs.³²⁵ The theory is that funding programs saves money in the long term by reducing costs associated with high school dropouts, crime, and lost productivity. Students who attend the programs also attend school more regularly, are more likely to graduate high school, and are less likely to participate in risky behavior and juvenile crime. Their research shows that every \$1 invested in OST programs results in a \$3.36 benefit in the form of future taxable earnings and savings from reductions in juvenile and adult incarceration.

MOST cited other studies showing:

- a. \$2.50 in crime savings (UCLA study)
- b. \$2.99-\$4.05 in non-crime benefits (Claremont Rose study)
- c. \$4.47 in benefits from a Minnesota study

MOST hypothesized a 20 percent increased investment on afterschool participation. MOST then multiplied this increase with the current Maryland student dropout rate, followed by a research-based, anticipated reduction in dropout rates due to afterschool programming.

The resulting figure was multiplied by the collective cost for each high school dropout over the course of their working life. This total estimated future cost savings was divided by the initial investment in a 20 percent increase in the average cost of afterschool participation in Maryland to yield the return on investment. For this project, MOST engaged Sharp Insight, LLC, an independent evaluation firm. They relied on data from the October 2009 America After 3PM report, as well as Maryland data from 2013. The estimated cost per participant is \$1,300.

MOST's return on investment calculations were estimated based on the cost of one year of program dosage. This determination was made due to the absence of peer-reviewed research documenting the optimal number of years (dosage) necessary to receive maximum program benefit. If such research is found in the future, this formula would need to be recalculated. Additionally, recent Maryland legislation increased the minimum for high school dropout ages, which were not factored into future projections. Finally, as more detailed data from program evaluations and financials become available, more complete and accurate return-on-investment studies will be completed.³²⁶

³²⁵ "Expanding Opportunities, Improving Lives: Maryland's Out of School Time Programs," *Maryland Out of School Time Network*, www.mdoutofschooltime.org.

³²⁶ *Ibid.*

Minnesota

A study of Minnesota's OST programs found that at the time of the study costs were estimated at \$3,000 per participant. The study, prepared for the Minnesota governor's Afterschool summit, was finalized in 2008. Public funding is "leveraged" with private donations, resources, and fees paid by families. The leveraging increases the ROI for public funding. Apparently, this means that less public funding is needed, which consequently lowers the denominator in the benefit/cost ratio.

Outcomes were measured, converted to dollars and showed improved school performance, increased workforce preparedness, reduced juvenile and adult crime, reduced need of social services, and improved health outcomes.

The present value of graduating from high school instead of dropping out is estimated to be \$263,000 in income and \$98,000 in taxes paid. The saved social cost of avoiding a year of residential treatment in a juvenile correctional facility is \$75,300.

A social return on investment is calculated as follows: "If a program for 100 youth costing \$3,000 per youth is able to help just one youth graduate who would not otherwise, that program returns a \$1.20 for every dollar invested. The result was the sum of the \$263,000 present value of high school graduation and the \$98,000 in taxes paid, and then divided by the sum by the cost of the program: $\$361,000/\$300,000 = \$1.20$. If half the investment comes from private or donated sources, the return on investment for public dollars is \$2.40. If one assumes the program also helped raise grade point averages or keeps even one youth out of residential treatment, the return goes up even higher.³²⁷

Oklahoma

A report from the Oklahoma Afterschool Network (OKAN), issued in February of 2011, states that Oklahoma realizes a high ROI from afterschool programs through lower high school dropout rates, crime reduction, teen pregnancy prevention, and better preparation for participants to be high wage earners in the workforce.³²⁸

Unemployment and Workforce

According to the OKAN, the Oklahoma Department of Commerce reported that increasing the percentage of Oklahoman youth who graduate from high school could increase annual earned income by \$830 million; increase revenues by \$76 million, save \$12 billion in lifetime healthcare costs, and save \$63 million in crime-related costs.

"Afterschool programs enhance academic achievement and connect students with local business and industry through learning partnerships."³²⁹

³²⁷ Paul Anton, *Economic Return of Afterschool Programs* (University of Minnesota, May 1, 2008).

³²⁸ *Making the Case for Afterschool, ROI: Economic Return on Investment in Afterschool* (Oklahoma Afterschool Network, Issue Brief, February 2011).

³²⁹ *Ibid.*

Crime Prevention

The report states that violent juvenile crime triples between “3:00 p.m. and 8:00 p.m.,” dropouts are 3.5 times more likely than graduates to be arrested in their lifetimes, and 75 percent of U.S. prison population are high school dropouts.

“Quality afterschool programs are supported by law enforcement because of their effectiveness in reducing gang involvement and juvenile crime.”³³⁰

Adolescent Pregnancy

Teen childbearing in Oklahoma cost taxpayers \$149 million in increased welfare expenditures and lost tax revenue. Research shows that youth who do not participate in afterschool programs are 37 percent more likely than participants to become teen parents. The most common time for youth to engage in sexual intercourse is between 3:00 p.m. and 6:00 p.m.

“Afterschool programs help prevent teen pregnancy by encouraging good decision-making, providing health education and positive role models in supervised afterschool settings.”³³¹

Lifetime Earnings

The present value of high school graduation “instead of dropping out” was estimated at \$163,000 in income and \$98,000 in taxes paid. High school graduates earned \$9,245 more per year than high school dropouts did.

“Afterschool programs provide students with hands-on learning activities that motivate and elevate academic achievement, keeping them from dropping out.”³³²

Oklahoma’s Results

The report concludes that Oklahoma taxpayers save approximately \$3 for each \$1 spent on afterschool programs. When benefits from crime reduction are included in Oklahoma’s experience, the overall benefits increase the savings to \$8 - \$12 for each \$1 invested.³³³

³³⁰ Ibid.

³³¹ Ibid.

³³² Ibid.

³³³ Ibid.

RECOMMENDATIONS

When a study involves an advisory committee, the Commission seeks consensus among the members. As a result of analysis and experiences, the advisory committee has developed the following recommendations.

- Recommendation 1:*** Pennsylvania Out-of-School Time (OST) programs should receive a more reliable source of funding to provide sustainability and confidence in program planning. The need for OST providers to find sufficient funding through a variety of sources, each of which has unique reporting requirements, places strain on overwhelmed providers. In addition, the timing of federal funding from 21st CCLC causes providers to be uncertain about the amount of funding they will receive each year. State funding with standardized data collection requirements could contribute to forming an accurate representation of the benefits OST programs provide to Pennsylvanians.
- Recommendation 2:*** A statewide, comprehensive, and stable source of funding should reflect the diversity of the Commonwealth's OST programs. Community-based OST providers should have equitable access to the funding.
- Recommendation 3:*** The collection of outcomes data in Pennsylvania OST programs varies widely based on the program structure and the funding it receives. Standardized expectations of what data should be collected and providing an accessible platform to store this information will increase providers' ability to track their programs' successes and present outcomes to stakeholders. With a statewide funding source, the Commonwealth could create expectations about specific behavioral outcomes each program should be tracking. With clear expectations and a framework for standardized reporting, smaller programs could better manage collection processes.
- Recommendation 4:*** The increase in expectations for data collection may present new challenges to smaller OST programs and test the expertise of larger programs. The Commonwealth should provide training at a reasonable cost to OST programs administrators that would focus on how to implement data gathering systems and how to collect the data on an on-going basis.

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE RESOLUTION

No. 180 Session of
2019

INTRODUCED BY WHEATLEY, TOOHL, HILL-EVANS, SCHLOSSBERG,
DAVIDSON, KINSEY, FREEMAN, MURT, LONGIETTI, KIM, DEASY,
STURLA, KAUFER, DALEY AND MEHAFFIE, APRIL 2, 2019

REFERRED TO COMMITTEE ON CHILDREN AND YOUTH, APRIL 2, 2019

A RESOLUTION

1 Directing the Joint State Government Commission to establish an
2 advisory committee to conduct a study of the Commonwealth's
3 current return on investments regarding after-school programs
4 and provide feedback on developing a means to capture
5 outcomes for the purpose of bolstering return on investments
6 for after-school programs.

7 WHEREAS, After-school programs offer many opportunities to
8 complement and enhance the academic learning that takes place in
9 school; and

10 WHEREAS, These programs provide strategic enhancements for
11 the engagement of children and youth in a variety of positive
12 social, recreational and academic activities; and

13 WHEREAS, Available resources and access to these
14 opportunities do not exist universally and many poor youths do
15 not have access to after-school programs; and

16 WHEREAS, It is necessary to set up a process to gather
17 statistics and data on the return on investment for after-school
18 programs when looking to find dedicated funding sources from the
19 General Assembly is a challenging task due in part to not having

1 statistics on the return on investments for after-school
2 programs in this Commonwealth; and

3 WHEREAS, It is the responsibility of the General Assembly to
4 govern this Commonwealth in a manner that aids and assists the
5 residents of this Commonwealth; and

6 WHEREAS, After-school programs have the power to aid in that
7 mission and propel our youth into the future; therefore be it

8 RESOLVED, That the House of Representatives direct the Joint
9 State Government Commission to establish an advisory committee
10 to conduct a study on the return on investments for after-school
11 programs as they relate to the following outcomes:

12 (1) the improvement of social, emotional, academic and
13 career readiness competencies of school-age children
14 including 21st century skill-building;

15 (2) the reduction of other negative behaviors such as
16 violence and crime, adolescent pregnancies, tobacco, alcohol
17 and substance abuse, disengagement from school, school
18 suspension and truancy and health-compromising behaviors; and

19 (3) providing working families with a safe after-school
20 environment for their children and employment opportunities
21 in this Commonwealth within the field due to increased
22 demand;

23 and be it further

24 RESOLVED, That the Joint State Government Commission provide
25 feedback on the feasibility of the Commonwealth investing in
26 after-school programs and track the impact of after-school
27 programs in this Commonwealth; and be it further

28 RESOLVED, That the Joint State Government Commission
29 establish an advisory committee consisting of:

30 (1) one police chief;

- 1 (2) one juvenile public defender or district attorney;
- 2 (3) one representative from the Department of Health or
- 3 State Health Improvement Plan Task Force;
- 4 (4) one rural school superintendent;
- 5 (5) one suburban school superintendent;
- 6 (6) one urban school superintendent;
- 7 (7) one school board member;
- 8 (8) one certified public school teacher;
- 9 (9) one parent of a student enrolled in a public school;
- 10 (10) one individual representing the interests of
- 11 juveniles and of students with disabilities;
- 12 (11) one representative from the Pennsylvania Statewide
- 13 Afterschool/Youth Development Network;
- 14 (12) one representative of the Juvenile Justice and
- 15 Delinquency Prevention Committee of the Pennsylvania
- 16 Commission on Crime and Delinquency;
- 17 (13) one representative of the Pennsylvania Department
- 18 of Education;
- 19 (14) one representative of two Statewide nonprofit
- 20 organizations that offer after-school programs;
- 21 (15) one individual from a qualified 501(c)(3)
- 22 organization that is affiliated and in good standing with a
- 23 national congressionally chartered organization that adheres
- 24 to the organization's standards and provides activities
- 25 designed for recreational, educational and character-building
- 26 purposes for children between 6 and 17 years of age;
- 27 (16) one representative of the State Board of Education;
- 28 (17) one representative who is a youth being served by
- 29 an after-school program;
- 30 (18) one representative who is a director of a

1 Pennsylvania after-school program; and
2 (19) one representative who is a field staff member of a
3 Pennsylvania after-school program;
4 and be it further
5 RESOLVED, That the Joint State Government Commission report
6 to the House of Representatives the result of the study and
7 recommendations regarding the return on investments for after-
8 school programs in this Commonwealth and file the report with
9 the Chief Clerk of the House of Representatives no later than
10 365 days after adoption of this resolution.