

# Cost Analysis of an Adolescent Pregnancy Prevention Program In-School Model Site

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## Preface

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Children's Aid Society (CAS) has been providing services to improve the well-being of the neediest children in the New York City area for more than 160 years. CAS services encompass the prenatal period through early adulthood and include such programming areas as enriched preschool, foster care, after-school programs, and health services. One of the signature CAS programs is the Children's Aid Society's Carrera Adolescent Pregnancy Prevention Program, which is known as CAS-Carrera. While the central focus of CAS-Carrera is to prevent teen pregnancy, the program also aims to improve other adolescent outcomes, such as improving academic performance and reducing risky behaviors. CAS-Carrera is a multicomponent intervention consisting of education, employment, mental and physical health services, Family Life and Sexuality Education (FLSE), Self Expression, and sports-related programming. The after-school model engages students in activities promoting these components following the regular school day. The in-school model incorporates the intervention activities into the regular school day in advisory and elective periods through a network of staff (Brigham and Nahas, 2008). While there are cost estimates for the after-school CAS-Carrera model, there are only preliminary estimates for the cost of the CAS-Carrera in-school model. This study analyzes the costs to implement the in-school model for one year for 880 students at one school district in Tulsa, Oklahoma. Cost information about CAS-Carrera's in-school model will be useful for replication and policymaking in Tulsa and other school districts and community organizations interested in implementation, and could be combined with evaluation data to form the basis for cost-benefit analysis of the in-school model for Tulsa in the future.

This research was sponsored by CAS and was undertaken within RAND Labor and Population. RAND Labor and Population has built an international reputation for conducting objective, high-quality, empirical research to support and improve policies and organizations around the world. Its work focuses on children and families, demographic behavior, education and training, labor markets, social welfare policy, immigration, international development, financial decisionmaking, and issues related to aging and retirement with a common aim of understanding how policy and social and economic forces affect individual decisionmaking and human well-being.

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## Summary

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For more than 160 years, Children’s Aid Society (CAS) has provided programs and services in the New York City area to promote the well-being of the most vulnerable children. One program that has garnered national and international recognition is the Children’s Aid Society’s Carrera Adolescent Pregnancy Prevention Program, which is known as CAS-Carrera. The primary goal of CAS-Carrera is to prevent teen pregnancy. However, the program also aims to improve other adolescent outcomes, such as improving academic performance and reducing risky behaviors. CAS-Carrera started in New York City more than three decades ago, and it is now serving nearly 4,000 young people throughout New York City and in more than a dozen states (Children’s Aid Society, undated-b). Rigorous research demonstrating that CAS-Carrera improves youth outcomes, including preventing teen pregnancy and reducing risky behaviors, is a likely contributor to the program’s popularity; plus, CAS-Carrera is listed on a number of evidence-based program registries (Pew-MacArthur Results First Initiative, 2015). CAS-Carrera was previously implemented in after-school settings. However, in the past decade, CAS has also developed an in-school model. Previous studies have estimated the costs of the after-school model (Top Tier Evidence, undated-a; WSIPP, undated-a). There are only preliminary estimates of the cost of the in-school model in one school district site partnership, and this report aims to fill that gap by providing a full accounting of the quantity of costs and resources needed to implement the in-school model in Tulsa.

We estimate the full resources required for the implementation of the CAS-Carrera in-school model from August 2014 to July 2015 in Tulsa, Oklahoma. The school district site partnership between Union Public Schools (UPS) and the Community Service Council (CSC) of Tulsa is the subject of this analysis. The George Kaiser Family Foundation and the Edna McConnell Clark Foundation are the primary funders for this site. CSC, a research and planning organization for mobilizing efforts to meet health and human service needs in the region, serves as the local CAS-Carrera program sponsor and financial manager. This partnership to deliver the CAS-Carrera program in UPS began in the 2011–2012 school year, and this analysis focuses on the 2014–2015 school year. As of the 2014–2015 school year, the CAS-Carrera program operated in three of the secondary schools with students in grades 6, 7, 8, and 9 at a target total enrollment of 880 students out of approximately 4,660 students in eligible grades. This analysis captures a snapshot of costs for one year of implementing CAS-Carrera at a given site and scale of operation. The costs do not capture start-up costs or the cumulative costs of serving a given cohort of children from 6th through 12th grades.

To estimate the costs of the in-school model at the Tulsa site, we relied primarily on reviews of documents and multiple interviews with CAS staff who reviewed a table of preliminary cost information and provided written replies to some written inquiries. Our approach involved enumerating the comprehensive set of resources, known as *ingredients*, required to

implement the program. We sought explicit on-budget resources required to deliver CAS-Carrera, as well as the in-kind and off-budget resources needed. So that the resources needed to implement the program would be transferable to other settings and time periods, we describe, where possible, the full resources required to implement the program in terms of both monetary costs and natural units. *Natural units* refers to the quantities of resources required rather than the dollar outlays, and an example of this would be number and type of staff rather than just salary costs. We include personnel costs, as well as other explicit costs, and we also capture in-kind resources that might not show up in the budget but are used to implement the program, such as time spent by school district-level management to authorize and coordinate implementation of the program and the school building facilities in which the programming occurs.

This study has several limitations. For example, this study only presents costs for this particular implementation and will only generalize to other locations to the degree that other locations have similar labor cost structures, facility availability, and other structural similarities. Our goal was to estimate the total economic costs incurred were a hypothetical program to replicate the services provided. We have aggregate administrative costs for the community organization's central office, and individuals at this organization did not provide disaggregated information related to the types and amount of resources devoted to administrative activities. We also do not have school-level expenditures. Interviewing individuals at the Tulsa school locations to gather such detailed information was beyond the scope of this study. Additionally, we do not have detailed information on how much health care utilization or other services were increased as a result of the program, so we undercount the additional resources that the program generates for these additional services.

The full report provides a detailed list of resources used to deliver the CAS-Carrera in-school model in Tulsa. The following summary table (Table S.1) reports resources by broad categories: personnel, personnel support, supplies and equipment, stipends to students, field trips, programming extensions, health-related services, facilities, and other direct costs. We estimate that the bulk of resources (84 percent) are from personnel costs.

The total cost to implement the CAS-Carrera in-school model in Tulsa, Oklahoma, for 880 students in grades 6 through 9 for the 2014–2015 school year was \$3,123,321. The total on-budget costs for the year was \$2,889,182, of which 84 percent of on-budget costs were personnel. We calculate that the on-budget cost per student per year is \$3,283, which is \$1,965 less than the reported on-budget cost per student per year of the after-school model (in 2015 dollars) (Top Tier Evidence, undated-a).

**Table S.1**  
**Tulsa CAS-Carrera Cost Subtotals by Category Summary**

Category	On-Budget		Off-Budget/In-Kind	
	\$	% of On-Budget	\$	% of Off-Budget
Personnel	\$2,429,770	84%	\$29,552	13%
Personnel support	\$221,752	8%		
Supplies and equipment	\$26,600	1%		
Stipends to students	\$113,020	4%		
Field trips	\$21,840	1%		
Programming extensions	\$45,600	2%		
Health-related services	\$11,600	<1%	\$27,882	12%
Facilities			\$176,705	75%
Other direct costs	\$19,000	<1%		
<b>Totals</b>	<b>Total</b>	<b>% of Total</b>	<b>Total</b>	<b>% of Total</b>
\$3,123,321	\$2,889,182	93%	\$234,139	7%

NOTE: As described in more detail below, these estimates do not account for the additional health care utilization that may have resulted from students' participation in CAS-Carrera. We also do not calculate the time that students spent in the program.



## Acknowledgments

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## Introduction

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Children's Aid Society (CAS) has been providing services to improve the well-being of the neediest children in the New York City area for more than 160 years. A hallmark of the services CAS offers is that the programming utilizes a comprehensive approach to supporting children and their families (Children's Aid Society, undated-a). CAS services encompass the prenatal period through early adulthood and include such programming areas as enriched pre-school, foster care, after-school programs, and health services.

One of the signature programs at CAS is the Children's Aid Society's Carrera Adolescent Pregnancy Prevention Program, which is known as CAS-Carrera. While the central focus of CAS-Carrera is to prevent teen pregnancy, the program also aims to improve other adolescent outcomes, such as improving academic performance and reducing risky behaviors. CAS-Carrera is a multicomponent intervention consisting of education, employment, mental and physical health services, Family Life and Sexuality Education (FLSE), Self Expression, and sports-related programming. The after-school model engages students in activities promoting the components following the regular school day. The in-school model incorporates the intervention activities into the regular school day in advisory and elective periods through a network of staff (Brigham and Nahas, 2008). Since CAS-Carrera commenced in New York City more than three decades ago, it is now serving nearly 4,000 young people in neighborhoods throughout New York City and at partnership sites in Connecticut, Washington, D.C., Delaware, Florida, Georgia, Illinois, Michigan, New Jersey, New Mexico, New York, Ohio, Oklahoma, West Virginia, and Wisconsin (Children's Aid Society, undated-b).

A likely contributor to the longevity of this program and its expansion beyond the original site is that CAS-Carrera can point to compelling evidence of its effectiveness. A large multisite, multiyear randomized trial evaluation that commenced in 1997 demonstrated that girls participating in CAS-Carrera's after-school pregnancy prevention program reduced pregnancies and births within three years of random assignment (Philliber et al., 2002). On its website, CAS writes: "The Carrera program is the only fully evaluated teenage pregnancy prevention program in the country with statistically proven effectiveness," (Children's Aid Society, undated-a). In addition, CAS-Carrera remains the only pregnancy prevention program listed as being evidence-based on the influential Coalition for Evidence-Based Policy's Top Tier website (Top Tier Evidence, undated-b). Despite this strong record of evidence, policymakers are increasingly supplementing program evaluation findings with cost information as part of the decisionmaking process, and the only existing cost estimates are for the after-school model of CAS-Carrera (WSIPP, undated-a). The CAS-Carrera program was originally implemented after school, five days a week throughout the school year, and this was the approach evaluated in the Philliber et al. (2002) study. Services were also provided on Saturdays and in the

summer. In the past several years, CAS-Carrera has also offered an in-school model, which incorporates all components of the intervention into the regular school day via study hall, elective periods, or advisory periods. The in-school approach also includes programming on Saturdays and in the summer. Sites in two school districts in Wisconsin and Oklahoma utilize the in-school model only; ten sites in New York, Michigan, and Washington, D.C., utilize either the in-school or after-school model; and 12 sites in Connecticut, Delaware, Florida, New Jersey, New Mexico, Ohio, and West Virginia utilize the after-school model only (Children's Aid Society, undated-b).

This report estimates the costs of the in-school model for one year in one school district partnership in Tulsa, Oklahoma. Cost information about CAS-Carrera's in-school model will be useful for replication and policymaking in Tulsa and other school districts and community organizations interested in implementation, and it could be combined with evaluation data to form the basis for cost-benefit analysis of the in-school model for Tulsa in the future. In the following sections, we describe the CAS-Carrera program, the context of the school district site partnership, and implementation of CAS-Carrera in Tulsa's Union Public Schools (UPS). This analysis captures a snapshot of costs for one year of implementing CAS-Carrera at a given site and scale of operation. The costs do not capture start-up costs or the cumulative costs of serving a given cohort of children from grades 6 through 12. In this report, we use the word *site* to refer to the entire CAS-Carrera programming in UPS. As of the 2014–2015 school year, CAS-Carrera programming in this Tulsa district was operating in three of the secondary school buildings with students in grades 6, 7, 8, and 9, and serving target total enrollment of 880 students out of approximately 4,660 students in grades 6, 7, 8, and 9.

In the remainder of this chapter, we provide more detailed information on the CAS-Carrera program and the Tulsa site. We also summarize previous research on CAS-Carrera at the end of this chapter. Chapter Two outlines the methods we use to conduct the cost analysis. Chapter Three presents the findings, and Chapter Four provides conclusions.

## The CAS-Carrera Adolescent Pregnancy Prevention Program

In keeping with the CAS philosophy of comprehensive approaches to improving children's well-being, the CAS-Carrera intervention employs multiple strategies designed to reduce teen pregnancy. CAS-Carrera emphasizes the importance of its professional staff establishing personal bonds with the students, in addition to fidelity to the program model. While CAS-Carrera teaches youth about pregnancy prevention and promotes life skills, the overarching program goal is to help each student recognize the potential opportunities that he or she can realize in a life path that does not include an early pregnancy. The idea is that a clear vision of the value of a positive life path will motivate the student to have the desire to avoid teen pregnancy, as well as promote other personal development achievements, including staying in school, avoiding alcohol and drug use, reducing violence and criminal activity, and receiving needed health care and dental care.

The intervention comprises these seven components, which are delivered daily or weekly:

1. **Education.** Daily activities include SAT preparation, tutoring, and development of individualized academic plans.



2. **Employment (Job Club).** A weekly class provides an introduction to employment-related topics, such as personal banking, employment options, financial literacy, and part-time jobs.
3. **Family Life and Sexuality Education (FLSE).** Weekly sessions cover sexuality education from a medically accurate perspective.
4. **Mental health services.** Social workers lead weekly Power Group discussions to improve self-esteem, socialization and learning, plus emergency services when needed.
5. **Medical and dental services.** Partnerships with local providers enable students to receive free vision and dental screening services.
6. **Self Expression.** Performing and visual art professionals help expose students to music, dance, drama, writing, and other art forms.
7. **Lifetime Individual Sports.** Activities include those that can be enjoyed throughout the lifecycle and that promote self-discipline, such as tennis, swimming, squash, and bowling.

CAS-Carrera typically delivers services to entire student cohorts from 6th through 12th grades. Typically, services begin in grade 6, and successive cohorts will be added over time as they enter 6th grade.

## The Tulsa In-School Implementation

The CAS-Carrera site in this report is a partnership between UPS and the Community Service Council (CSC) of Tulsa, with active funding support from the George Kaiser Family Foundation and the Edna McConnell Clark Foundation. The CAS-Carrera Program partnership in Tulsa began in 2011. CSC, a research and planning organization for mobilizing efforts to meet health and human service needs in the region, serves as the local CAS-Carrera program sponsor and financial manager. UPS is the CAS-Carrera demonstration site in the Tulsa area using the in-school model. Approximately 15,800 students, prekindergarten through 12th grades, were enrolled in 13 elementary schools and five secondary schools during the 2014–2015 school year. Programming in UPS began in the 2011–2012 school year serving a portion of 6th-grade students in the 6th- and 7th-grade middle school. During the 2013–2014 school year, the CAS-Carrera program was implemented in two schools serving 660 students in grades 6, 7, and 8, with approximately 220 students per grade level. As of the 2014–2015 school year, the CAS-Carrera programming in the Tulsa site was operating in three of the secondary school buildings with students in grades 6, 7, 8, and 9, and serving target total enrollment of 880 students out of approximately 4,660 students in grades 6, 7, 8, and 9.

Tables 1.1 and 1.2 display the demographics of students in the CAS-Carrera program compared with the eligible school population. Of the 880 students participating in CAS-Carrera, 51 percent are female and 49 percent are male. Of the 4,660 students enrolled in UPS grades 6 through 9, 47 percent are female and 53 percent are male. CAS-Carrera participants were 19 percent African-American, 20 percent white, 2 percent Asian, and 37 percent Hispanic or Latino. Students in eligible grades were 17 percent African-American, 37 percent white, 7 percent Asian, and 28 percent Hispanic or Latino.

The school administrators and 5th-grade teachers identify *at-promise* students (those who would likely experience the greatest academic and social-emotional gains from the CAS-

**Table 1.1**  
**Gender of Participants Compared with School Population**

Gender	CAS-Carrera Participants	UPS Population in Eligible Grades (Grades 6–9)
Female	51%	47%
Male	49%	53%

SOURCE: Union Public Schools, District Gender Stats by Race, accessed September 15, 2015, undated-a.

**Table 1.2**  
**Race/Ethnicity of Participants Compared with School Population**

Race/Ethnicity	CAS-Carrera Participants	UPS Population in Eligible Grades (Grades 6–9)
African-American	19%	17%
Asian	2%	7%
Hispanic/Latino	37%	28%
White	20%	37%

SOURCE: Union Public Schools, District Race and Ethnicity Summary, accessed September 15, 2015, undated-b.

NOTE: Percentages do not total 100%.

Carrera programming and support). CAS-Carrera provides guidelines that serve as a general framework to help identify these students who would benefit the most from the program, but it is intended only as guideline and not a prerequisite for student participation. The criteria include general factors, such as whether the student would benefit from a positive adult mentor; academic factors, such as below level in reading; mental health signs, such as known exposure to trauma; and other considerations. Selected at-promise students and their parents are invited to be a part of the program at the start of the next school year. Program staff aim to have a cohort of 220 students that includes a balanced mix of students by gender, race and ethnicity, academic achievement, and students with Individualized Education Program (IEP) status. The program is overenrolled at the beginning based on estimates of likely attrition during the year. Some students who are at-promise and therefore a priority to serve but not enrolled in CAS-Carrera at the beginning of the school year (either because of late enrollment in the district or program overenrollment) can be cycled into the program at natural transitions, such as right after a break, if attrition occurs. The program begins at the start of the school year (usually late August) and runs through the end of the school year (usually the first of June). The first semester of school is approximately 18 weeks with 80 instructional days. The second semester is approximately 20 weeks with 95 instructional days. Winter break is two weeks long between the semesters, and spring break is one week during the spring semester. Summer break is 11 weeks. Formal programming occurs on instructional days during the school year. Maintenance programming occurs during weekends and breaks, and a summer program runs for four weeks during the summer break. The summer programming is voluntary and different than the formal and maintenance programming. Attendance in the in-school model formal programming during the school year is expected of students and averages at least 85 percent

during instructional days. Attendance rates are lower during programming offered on breaks and during the summer when these offerings are not mandatory. The aim is to retain students from year to year, but the program is voluntary and attrition occurs, including attrition from students leaving the district and the program. During the middle grades (6 through 8) attrition ranges from 2 percent to 7 percent. However, at the transition to 9th grade, attrition may be near 20 percent, which reflects the school district attrition rate. In the in-school model at UPS, students choose to participate in CAS-Carrera as an elective course and study hall period.

The majority of staff managing and implementing CAS-Carrera in the Tulsa site are direct employees of CSC. The staff who are primarily academic educational staff (e.g., staff who provide tutoring services) and the program director are UPS employees contracted by CSC.

### **Previous Research on CAS-Carrera Pregnancy Prevention Programs**

There has been some debate in the literature regarding the long-term implications of teenage pregnancy. Early research supported a commonly held notion that teenage pregnancy leads to adverse outcomes, particularly in the areas of education, employment, and marriage (Card and Wise, 1978; Grogger and Bronars, 1993). However, recent studies employing more-rigorous methods have shown that at least a portion of these effects, in fact, may not be causally related to the pregnancy itself, but instead may be due to the disadvantaged socioeconomic circumstances of the teenagers when they become pregnant (Hotz, McElroy, and Sanders, 2005; Kane, Morgan, Harris, and Guilkey, 2013; Kearney and Levine, 2012; Levine and Painter, 2003). As a result, there is a growing consensus that the adverse effects directly attributable to teen pregnancy may be less than originally believed, particularly in the long term. Kearney and Levine summarize this argument in their 2012 article as follows:

Our reading of the totality of evidence leads us to conclude that being on a low economic trajectory in life leads many teenage girls to have children while they are young and unmarried and that poor outcomes seen later in life (relative to teens who do not have children) are simply the continuation of the original low economic trajectory. That is, teen childbearing is explained by the low economic trajectory but is not a cause of later difficulties in life. Surprisingly, teen birth itself does not appear to have much direct economic consequence. (p. 142)

This literature is consistent with the CAS-Carrera holistic approach toward the issue of teen pregnancy. That is, CAS-Carrera does not focus solely on preventing teen pregnancy through strategies specific to pregnancy, such as sexuality education. Instead, the CAS-Carrera model is clearly designed to alter what Kearney and Levine characterize as the “low economic trajectory.” The CAS-Carrera theory of change is based on the fundamental idea that by helping adolescents develop their personal capacities and desire for a productive future, the program will raise their motivation to avoid teen pregnancy as part of a constellation of positive outcomes on a better trajectory.

The CAS-Carrera program engages in several types of evaluation activities. For regular ongoing program management and continuous quality improvement purposes, data are collected on an ongoing basis from participating students, teachers, and CAS-Carrera program

staff. Student surveys collect information on a range of outcomes, including pregnancy, intercourse, substance abuse, and fighting. Teacher and staff surveys assess satisfaction with the program and perceptions of its effectiveness (Philliber Research Associates, 2011).

In addition to these regular evaluation activities that are for program management and continuous quality improvement, CAS-Carrera has also participated in rigorous external impact evaluations. A randomized trial was performed from 1997 through 2000 to evaluate the impact of the after-school model (Philliber et al., 2002). In this study, male and female adolescents 13 to 15 years old were randomized to the CAS-Carrera program or to an alternative after-school program. The study measured participants' sexuality-related knowledge, engagement in sexual intercourse, pregnancy, births, and use of contraception and certain health care services. At the end of the three-year study period, results for female participants showed that the program led to a statistically significant reduction in sexual activity and pregnancy, and a significant increase in the use of contraception and preventative health care services. Male adolescents were found to also have a statistically significant increase in the use of preventative health care services, but the program had no other significant effects on this group. Unpublished analyses of follow-up data from study participants suggest that seven years after randomization, CAS-Carrera participants were more likely to have graduated from high school or obtained a GED, and be enrolled in college, compared with the comparison group students (Top Tier Evidence, undated-a). CAS-Carrera is the only teen pregnancy prevention program listed as a top-tier program on the Coalition for Evidence-Based Policy's list of evidence-based programs (Top Tier Evidence, undated-b), and CAS-Carrera is one of a handful of programs over the past 40 years to demonstrate reduced teen pregnancy rates among participating youth (Philliber et al., 2002).

The after-school model costs approximately \$5,083 in 2012 dollars (\$5,248 in 2015 dollars) per student per year, not including any in-kind contributions (Top Tier Evidence, undated-a), and was the subject of a cost-benefit analysis by the Washington State Institute for Public Policy (WSIPP, undated-a). This analysis, based on the Philliber et al. (2002) results, found that the after-school model studied in the randomized trial evaluation had a total lifetime monetized benefit equivalent to \$2,797 (in 2012 dollars, and \$2,887 in 2015 dollars), which was realized primarily from increased earnings projected after high school for participants of the program. However, the total cost of the program over three years as estimated by WSIPP (\$14,498 per participant for three years in Washington state in 2012 dollars, and \$14,967 in 2015 dollars) outweighed these estimated benefits. This analysis showed that the net cost of the program was \$11,702 in Washington state (\$12,080 in 2015 dollars). In addition to earnings potential, this analysis included monetized benefits resulting from changes in outcomes related to crime and health care for the program participant. It also accounted for the outcomes for children of the participants, including child abuse and neglect, out-of-home child placement, and grade repetition (WSIPP, undated-b).

There have also been economic evaluations of other pregnancy prevention programs. A cost-benefit analysis was performed for the Pathways/Senderos Center program, a comprehensive teen pregnancy prevention program for adolescents (ages 11 to 18 years) modeled after the CAS-Carrera program. This analysis estimated that while the program would result in a net cost of \$1,600 per child in each year over the seven years of the program (in 2006 dollars, and \$1,881 in 2015 dollars), the total benefits of the program would exceed the costs by \$10,500 per child per year (in 2006 dollars, and \$12,345 in 2015 dollars) by age 30 (Rosenthal et al., 2009). The substantially higher estimate for benefits of the Pathways program is partly because of different

assumptions each study made regarding the downstream costs of teen pregnancy. For example, the analysis of the Pathways program projected reduced earnings for teen fathers, while the WSIPP analysis of CAS-Carrera assumed that earnings projections would not be different for teenagers who did or did not become fathers (Rosenthal et al., 2009; WSIPP, undated-b).

Wang et al. conducted a cost-benefit evaluation of Safer Choices, a two-year school-based program to prevent HIV, other sexually transmitted diseases, and pregnancy in adolescents (Wang et al., 2000). This study found that, from a societal perspective, every dollar invested in the program resulted in a savings of \$2.65 in medical and societal costs (in 1994 dollars, and \$4.24 in 2015 dollars) that included earnings and public assistance. Thomas (2012) used a modeling-based approach to examine the cost-benefit of a hypothetical teenage pregnancy prevention program based on outcomes from five evidence-based teenage pregnancy prevention programs in the United States. He estimated that from the perspective of the government, every dollar invested in teenage pregnancy programs results in \$2.46 savings (in 2008 dollars, and \$2.71 in 2015 dollars) from pregnancy care, infant medical care, and public assistance for children through age 5 (Thomas, 2012).

Cost-benefit analyses have also been conducted of other general youth prevention programs that target a range of outcomes, including sexual activity, pregnancy, high school graduation rates, alcohol, smoking and drug use, academic performance, truancy, crime, employment, and health care use. There is substantial variation in the goals, intensity, and targeted demographics of these programs; therefore, there is a wide range in estimates of their costs and benefits. For example, the Quantum Opportunities Program aims to improve behavioral, academic, and pregnancy-related outcomes in high school students at high risk for dropping out of school, and it is estimated to produce \$5,341 (in 2012 dollars, and \$5,514 in 2015 dollars) in lifetime cost savings (WSIPP, undated-a). In younger children, the Seattle Social Development Project targets youth in grades 1 through 6 and aims to strengthen social ties as a way to improve outcomes related to academic performance, drug and alcohol abuse, teen pregnancy, and crime. This program has been estimated to save society \$3,882 per participant (in 2012 dollars, and \$4,008 in 2015 dollars). In both of these programs, the majority of the savings were from increased earnings as a result of obtaining a high school diploma (WSIPP, undated-a). Cost-benefit analysis of the National Guard ChalleNGe program also found that the benefits to this youth development program exceeded the costs, with an estimated \$2.66 return for every dollar expended (Perez-Arce et al., 2012). ChalleNGe is an intensive residential program that provides high school dropouts with life skills to help them improve a spectrum of outcomes, such as health, crime, and employment. In general, in the wide range of analyses performed, programs that achieved cost savings generally did so through increased earnings and/or decreased crime rates.

As discussed earlier, in addition to the after-school implementation of the program, CAS-Carrera in recent years has also offered the option of implementing the program during the regular school day because the in-school model allows for implementation efficiencies and scaling not possible with the after-school model (Children's Aid Society, undated-a). In a report on early implementation of the in-school model in four schools in New York City, Washington, D.C., and Baltimore, Brigham and Nahas (2008) report that the schools provide a great deal of in-kind support to the program. They list these resources as being provided by the schools: space for CAS-Carrera staff, transportation, computers, technical support, designated classroom space, administrative space for CAS-Carrera staff and others. However, there are no existing published reports of the cost to implement the in-school model in a participating school site.



## Methods

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In this chapter, we briefly describe the methods we employed for estimating the cost analysis for the Tulsa site. To estimate the costs of the CAS-Carrera in-school model in Tulsa, we employed the resource cost model approach (Levin and McEwan, 2001). This approach captures the comprehensive set of resources or “ingredients” required to implement a program. We collected data on the costs of CAS-Carrera, information on explicit on-budget resources required to deliver the program, and the in-kind and off-budget resources needed. On-budget resources indicate the monetary expenditures required to operate a program. However, to capture the entirety of resources needed to implement a program, it is critical to also capture the required nonmonetary resources. Nonmonetary resources that are not part of the budget are often provided in-kind or are not reflected in the budget. Examples of these include the time that school staff need to spend planning, off-budget administrative costs required to implement the program, school facilities or equipment required to deliver the program, and any donated materials used to deliver services. A complete accounting of the costs of the program should also include costs borne by program participants, such as transportation or time requirements, and costs incurred by other organizations or individuals due to the program. However, data on these costs do not exist. Collecting this information was beyond the scope of this study, so we are not able to include these costs in the measure of resources required to implement the program.

Where possible, we describe the full resources required to implement the program for one year in terms of both monetary costs and natural units where possible. The term *natural units* refers to the quantities of resources required rather than the dollar outlays. For example, this might include full-time equivalents contributed by staff with particular levels of education and credentials rather than just labor costs, or the number of vision screenings conducted rather than the cost of those screenings. This allows us to value the resource quantities in a way that does not reflect differences in local costs and infrastructure, such as rent and labor, and the fact that costs might vary over time periods (e.g., gas price spikes and declines).

We undertook the following steps in the resource cost model approach to conduct the cost analysis:

- Produced a comprehensive list of ingredients required to implement CAS-Carrera, including the time involved for service delivery and training, in-kind resources, administrative resources, off-budget resources, and participant and partner organization resources
- Described and defined each resource in detail, with natural units, so a unit price or resource requirement can be associated with it

- Enumerated personnel resources by title and function, and indicated the time contribution for each staff member and activity associated with the program
- Listed nonlabor resources consumed and amounts required as part of program implementation
- Assigned a price to each item using relevant approaches, including market values (nonlabor resources and salaries), estimated costs (e.g., student time and travel costs), or prorated or adjusted costs (e.g., proportionate administrative costs)
- Calculated total costs by summing across individual ingredients.

To collect this data on resources required to implement the program, we relied on documents provided by and interviews with the central CAS-Carrera program management team. We asked CAS-Carrera program management at headquarters to provide specific cost and utilization data for the site in Tulsa, along with basic information about number of students served, hours of services each year (both in and out of school), and other background information. We repeatedly requested interviews with the site in Tulsa over a period of more than six months to confirm that the cost experiences of the site reflected the costs reported by headquarters; however, the site did not participate in any interviews. We also collected information on the costs borne by the CAS-Carrera headquarters to oversee sites in order to include these administrative costs in the full costs of operating a site.

To summarize, we obtained the following types of information for CAS-Carrera in Tulsa:

- Students served each week on average and over a school year, and average and total served during the summer
- Hours students spend in CAS-Carrera during the school year (e.g., per week or day) and summer, and whether these hours are a part of or outside of a typical school day
- Hours required for any field trips and whether other class time is missed for field trips
- Number, titles, education and training of staff delivering CAS-Carrera, and time each spends delivering the program, in program planning or coordination, or otherwise working on the program
- Salary budgets
- School administrators, counselors or other staff involved in program oversight, coordination or nonservice delivery activities and their number, titles, hours, and education and training required
- Training time spent by each staff person (e.g., travel to training, participating in training, etc.)
- Training costs (e.g., training curriculum, course materials, etc.)
- Staff transportation (e.g., to other meetings or to training)
- Supplies (consumables that are used up immediately)
- Materials (replaced within a year)
- Equipment (lasts more than a year and costs more than \$100)
- Communication costs
- Photocopying, printing, and mailing
- Food provided to participants and staff for program activities in and out of school
- Other goods provided to students
- Miscellaneous.



We developed a structured form for collecting resource utilization data for these types of categories (see Appendix A). Our peer reviewers and CAS-Carrera staff reviewed the form, and we modified it in response to their comments. We then used the revised form to collect data from documents provided by CAS-Carrera headquarters. We asked CAS-Carrera headquarters to review the information and provide additional detail to fill in gaps. We were not able to obtain some key information about resources used by the site program sponsor for site management and administration. We also discussed information we collected in additional interviews with CAS-Carrera headquarters staff.

## **Limitations**

We acknowledge that this study presents costs only for this particular implementation and will only generalize to other locations to the degree that other locations have similar labor cost structures, facility availability, and other structural similarities, as these will vary by location. The costs present an estimate that is as close as possible to the total economic costs that would be incurred were a hypothetical program to replicate the services provided. We have aggregate administrative costs for the community organization central office, and but individuals at this organization did not provide disaggregated information related to the types and amount of resources devoted to administrative activities. We also do not have school-level expenditures. Interviewing individuals at the Tulsa school locations to gather such detailed information was beyond the scope of this study. Additionally, we do not have detailed information on how much health care utilization or other services were increased as a result of the program, and so we undercount the additional resources that the program generates for these additional services.



## Cost Findings

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This chapter reports the findings of the cost analysis. First, we present the resources used to deliver CAS-Carrera in Tulsa by types of resource. Second, we indicate which costs were borne by the site versus other sources. The latter category also includes resources provided in kind to the Tulsa CAS-Carrera site and do not appear in the program budgets.

### Detailed Resources Used to Deliver CAS-Carrera

As is the case for many student and social services, the majority of costs required to deliver CAS-Carrera are in the category of personnel. For the Tulsa site, we estimate that approximately 84 percent of the on-budget costs are personnel costs. In order to respect the sensitive nature of employee salaries, we present personnel costs at an aggregate level where possible. Unless otherwise noted, personnel costs include salary plus fringe costs. Table 3.1 lists the costs by major categories for CAS, CSC, UPS, and other organizations. In Appendix B, we provide additional notes on cost categories and calculations.

Note that we do not estimate a value for students' time spent using an elective for CAS-Carrera during the school year. While spending an elective period in CAS-Carrera represents a cost in terms of having to forgo another elective, we assume that students do not forgo any earnings or need to expend any additional resources in order to participate. While students who participate in the summer do not expend out-of-pocket costs for the optional summer program, they experience higher opportunity costs in the summer. Students 16 or older might have the opportunity to work during the time in the summer that they attend CAS-Carrera. In the time period covered by these data, there were very few students 16 or older, so we do not explicitly account for that here. If one wanted to value older students' time spent in the program in the summer, using the teenage minimum wage would be a reasonable value. Furthermore, while the school provides transportation in the summer, students are likely to have to spend time to get to the program in the summer, whereas in the school year they would already be going to school.

As mentioned in Chapter Two, we quantify the natural units of staff in full-time equivalents (FTEs). An FTE is the number of hours worked by an employee on a full-time basis; we quantify one FTE to be 2,080 working hours in one year. The reported dollar value for personnel includes salary and fringe benefits.

**Table 3.1**  
**Tulsa CAS-Carrera Cost Details by Category**

Cost Category	Quantity (in FTE)	Dollar Value
<b>Personnel</b>		
<b>1. UPS Personnel</b>		
Director of CAS-Carrera program	1 plus on-call stipend	\$329,695 for these 5 positions
Education coordinators	4	
Teacher aides	12 at 0.83 FTE each	\$256,822 for 12 positions
District-level management <sup>a</sup>	4 at 0.05 FTE each	\$29,552 for 4 positions
<b>TOTAL UPS positions</b>	<b>15.16</b>	<b>\$616,069</b>
<b>2. CSC Personnel</b>		
<b>Administrative Management Positions</b>		
Includes finance manager, accounting, human resources, and other administrative assistance; details not available	Unknown <sup>b</sup>	\$ 65,130 for all positions
<b>CAS-Carrera Site Positions</b>		
Assistant director	1	\$186,273 for the positions of assistant director, community organizer, and program coordinator
Community organizer	1	
Program coordinator	1	
Job Club coordinator/business teacher	5	\$230,458 for 5 positions
Medical coordinator	2	\$92,210 for 2 positions
FLSE specialist	10	\$523,976 for 10 positions
Mental health specialist	10	\$576,420 for 10 positions
Self-Expression consultant	0.05	\$4,000
Lifetime Individual Sports consultant	0.1	\$8,000
<b>TOTAL CSC positions</b>	<b>30.15 plus CSC administration</b>	<b>\$1,686,467</b>
<b>3. CAS Personnel</b>		
National clinical social work supervisor	0.25	\$21,297
Senior assistant director for national expansion and quality assurance	0.3	\$31,983
Fidelity manager	1.0	\$78,306
FLSE content specialist	0.17	\$25,200
Founder and Developer	0.15	Included in CSC administrative overhead

Table 3.1 —Continued

Cost Category	Quantity (in FTE)	Dollar Value
Finance director	0.1	Included in CSC administrative overhead
Associate division director	0.15	Included in CSC administrative overhead
<b>TOTAL CAS Positions</b>	<b>2.12</b>	<b>\$156,786</b>
<b>Nonpersonnel</b>		
<b>Personnel Support</b>		
Educational materials for delivering CAS-Carrera, annual curriculum and updates	Curriculum for Job Club, mental health and FLSE components	\$15,000
Electronic license	Software access for 31 site staff, \$600 each	\$18,600
<b>Additional Technical Assistance and Fidelity Management</b>		
Travel	10 trips	\$9,000
Mileage	1,818 miles	\$1,000
Meetings	12 meetings	\$614
Office supplies	Office supplies for technical assistance and fidelity management office	\$718
Administrative fee	15% administrative fee	\$35,855
Direct costs for site staff to attend training	\$250 per staff member, for 47 staff members	\$11,750
Professional services	Ten swimming instructors and lifeguards; sports and Self-Expression staff support and training	\$31,900
Criminal background checks	CSC conducted nine background checks of newly hired staff	\$665
Staff mileage/transportation	Staff travel from the school to partner agencies and community; total 3,000 miles annually	\$1,650
CSC administrative overhead	Nonpersonnel costs, such as administration, human resources, payroll, carrying appropriate insurances, copies, mailing, and more	\$95,000
<b>TOTAL Personnel Support</b>		<b>\$221,752</b>

**Table 3.1 —Continued**

<b>Cost Category</b>	<b>Quantity (in FTE)</b>	<b>Dollar Value</b>
<b>Supplies and Equipment</b>		
Supplies, materials, equipment	Additional supplies not already provided by CAS in other categories	\$11,000
Lifetime Individual Sports equipment	Supplies for activities such as archery (arrows, bows, and targets), golf (clubs and balls), and swimming (swimsuits, caps, and goggles)	\$10,000
Telephone expenses	30 phones for CAS-Carrera personnel at UPS	\$2,000
UPS printing	District printing	\$1,500
UPS miscellaneous supplies	Items such as paper and copying	\$1,500
Postage and shipping	Postage and shipping handled by CSC	\$600
<b>TOTAL Supplies and Equipment</b>		<b>\$26,600</b>
<b>Stipends to Students</b>		
Initial student stipend	\$25 per student upon entry into the program	\$5,500
Student stipends (Job Club during school year)	\$12 per month of the school year for each student participating in Job Club	\$96,000
Student stipends during summer	\$12 per week of the 4-week summer for each student participating in summer	\$11,520
<b>TOTAL Stipends to Students</b>		<b>\$113,020</b>
<b>Field Trips</b>		
Field trips, including bank trips and career exploration trips	Two bank trips and two career exploration trips per year; total includes arranged transportation	\$21,840
<b>TOTAL Field Trips</b>		<b>\$21,840</b>
<b>Programming Extensions</b>		
Programming expenses for spring break	Spring break programming (supplies, food/snacks, admission to off-site activities) for 240 students for one week	\$7,200
Programming expenses for summer	Summer break programming (supplies, food and snacks, admission to off-site activities) for 240 students for 4 weeks	\$38,400
<b>TOTAL Programming Extensions</b>		<b>\$45,600</b>

Table 3.1 —Continued

Cost Category	Quantity (in FTE)	Dollar Value
<b>Health-Related Services</b>		
Vision screening <sup>c</sup>	One 0.5-hour vision screening in-school per year valued at \$2.50 per student	\$2,200
	Prevent Blindness Oklahoma in-school vision screening administrative fee	\$100
Dental screening*	One 0.5 hour dental screening in-school per year valued at \$29.07 per student	\$25,582
Other follow-up health services	Allocated to about 110 students who do not have insurance to cover follow-up services after screenings, if needed	\$8,800
Program coordinated travel for students	Travel related to any student needs; for example, taxis used by students for appointments	\$2,800
<b>TOTAL Health-Related Services</b>		<b>\$39,482</b>
<b>Facilities</b>		
Classrooms	8 classrooms total	\$84,960
Storage areas	4 storage rooms total	\$10,030
Office space for staff	16 offices total	\$57,230
Tutoring spaces	4 spaces total	\$24,485
Subsidiary space	Restrooms, parking, hallways, and others	[no value]
Sports facilities	School gymnasiums and swimming pool	[no value]
<b>TOTAL Facilities</b>		<b>\$176,705</b>
<b>Other Direct Costs</b>		
Evaluation	Program evaluation activities	\$19,000

NOTES: <sup>a</sup>UPS personnel district-level management is provided in-kind and costs are off-budget.

<sup>b</sup>CSC administrative management positions FTE per position are not provided.

<sup>c</sup>The vision and dental screening services are provided in kind and costs are off-budget.

## Resources by Broad Category

The total estimated cost of implementing the CAS-Carrera in-school model in the 2014–2015 school year in the case study site is \$3,123,321. The total on-budget costs equal \$2,889,182. The total off-budget costs equal \$234,139. The off-budget in-kind costs comprise three main items: the effort of district level management to support planning the CAS-Carrera in-school model program schedule and logistics with program staff; the annual vision and dental screen-

ings provided to participating students by outside organizations; and the school facilities utilized through the in-school model.

Based on a total enrollment of 880 students in the 2014–2015 school year at this in-school model site, we estimate that the on-budget cost per student is \$3,283 and the total cost (both on-budget and off-budget) is \$3,549.

We summarize the detailed costs in broad categories (Table 3.2): personnel, personnel support, supplies and equipment, stipends to students, field trips, programming extensions, health-related services, facilities, and other direct costs.

Total personnel costs (direct and in-kind) across CAS, CSC, and UPS total \$2,459,322 including salary and fringe benefits. UPS employs a program director and four education coordinators on full-time, 12-month contracts to directly manage and support the CAS-Carrera program at UPS. Additionally, UPS employs 12 teacher aides on full-time, 10-month contracts to provide support to the education coordinator and work directly with students individually or in small groups to address their needs. The 17 positions equal 14.96 FTE and cost \$586,517. At the beginning of and potentially periodically throughout the school year, district administrators, such as the superintendent, the assistant superintendent, a school principal, and a school assistant principal, convene with the CAS-Carrera site team to plan the programming schedule and logistics to implement the in-school model. Documentation from CAS-Carrera headquarters reported approximately 0.05 FTE of effort provided by these district-level management positions to the CAS-Carrera program at UPS, which equals \$29,552 in-kind support

**Table 3.2**  
**Tulsa CAS-Carrera Cost Subtotals by Category**

Category	On-Budget		In-Kind/Off-Budget	
	Amount	% of On-Budget	Amount	% of Off-Budget
Personnel	\$2,429,770	84%	\$29,552	13%
(CSC)	(\$1,686,467)			
(UPS)	(\$586,517)		(\$29,552)	
(CAS)	(\$156,786)			
Personnel support	\$221,752	8%		
Supplies and equipment	\$26,600	1%		
Stipends to students	\$113,020	4%		
Field trips	\$21,840	1%		
Programming extensions	\$45,600	2%		
Health-related services	\$11,600	<1%	\$27,882	12%
Facilities			\$176,705	75%
Other direct costs	\$19,000	<1%		
Totals	Total	% of Total	Total	% of Total
\$3,123,321	\$2,889,182	93%	\$234,139	7%



from four district administrators. The school principals and assistant principals of students participating in the program interact with participating students frequently throughout the school year, but these interactions would likely occur in the absence of the program and therefore are not included in the cost analysis.

CSC employs 32 individuals, of which 30 are full-time, 12-month contracts, to directly manage and support the CAS-Carrera program at UPS. These positions include an assistant director and program coordinator who support the UPS program director, a community organizer who serves as a contact between the program management and the participating students and families, two medical coordinators, five business teachers who lead the Job Club component, ten mental health specialists who lead the Power Group component, and ten FLSE specialists who lead the FLSE component. There are two consultants for Self Expression and Lifetime Individual Sports that work 0.15 FTE. The 32 positions equal 30.15 FTE and cost \$1,621,337. There are also administrators or managers within CSC administration that provide support to program implementation, and the personnel administrative cost of this support totals \$65,130. CSC personnel costs total \$1,686,467.

Four individuals employed at CAS headquarters provide support to the site program. These positions include a national clinical social worker supervisor, a senior assistant director for national expansion and quality assurance, a fidelity manager, and a FLSE content specialist. Together, these four positions provide 1.55 FTE, and cost \$156,786. Three directors, the founder and developer, the finance director, and the associate division director at CAS headquarters provide administrative support to the CAS-Carrera in-school model in Tulsa, totaling 0.4 FTE—the cost of which is part of the CSC administrative overhead fee.

Within the category of personnel support, we included such items as training, technical assistance, fidelity management, the curriculum for the Job Club, mental health and FLSE components, staff transportation, staff background checks, licensed access to the CAS-Carrera Management Information System (CMIS), and administrative fees, such as payroll, and human resources. Personnel support costs total \$221,752.

Within the category of supplies and equipment, we include telephones, sports equipment, printing, copying, postage, and other necessary program and office materials not already provided to the program in other categories. Supplies and equipment costs total \$26,600.

The CAS-Carrera program provides stipends to participating students throughout the program. Sixth-graders who are new students to the CAS-Carrera program receive an initial one-time stipend of \$25 per student. All students who participate in CAS-Carrera programming during the school year receive a \$12 stipend per month for ten months of the year totaling \$96,000. Students who participate in the CAS-Carrera summer programming receive a \$12 stipend per week for each of the four weeks of the summer program totaling \$11,520. In one year, the total amount provided to students through stipends is \$113,020.

The CAS-Carrera program provides participants with access to annual vision and dental screening services. Each year, students who participate in CAS-Carrera receive one vision screening and one dental screening provided by health professionals who visit the school; each visit is approximately 30 minutes in length. The vision screening is valued at a total cost of \$2,300, and the dental screening is valued at a total cost of \$25,582. The program allocated \$8,800 to supplement the follow-up health care costs of 110 students. The medical coordinator provides assistance to families to ensure children are enrolled in insurance programs. Additionally, the program allocated \$2,800 for transportation to receive needed medical services for students when families were unable to secure transportation. In one year, the total cost of pro-

viding vision screenings, dental screenings, follow-up health services, and health-related transportation coordinated through the program was valued at \$39,482. Of that total, an estimated \$27,882 (71 percent) in vision and dental screenings were provided by health professionals and organizations at no cost to the program.

Each year, all students who participate in the CAS-Carrera program go on two field trips to a bank and two additional field trips to learn about careers, small-business ownership, and entrepreneurial activities. The total cost of these field trips, including the transportation costs, is \$21,840. We have not valued the resources that the field trip host, such as the bank or other organization, incurs as part of the outing.

Students who participate in CAS-Carrera during the school year have the choice to also participate in additional programming during the spring and summer breaks. The programming extension activities are at the discretion of the site staff, but they include activities within CAS-Carrera components, such as the Job Club, FLSE, Self Expression, and Lifetime Individual Sports. Approximately 30 percent of students participate in the additional programming. The spring break programming costs \$7,200 for one week, and the summer programming costs \$38,400 for four weeks, totaling \$45,600.

Facilities utilized for programming is off-budget through the structure of the in-school model and implementation because programming occurs during the normal operating school day in the school facilities. The school district does not require CAS-Carrera to pay any fees to use the facilities. In order to place a value on the space used by the Tulsa in-school model, we estimated the commercial rental value of a comparable amount of space across the street from a UPS building where renters, such as academic tutoring companies, are renting. The available rental space as of October 2015 is at 8321 East 61st Street, Tulsa, OK 74133 for \$11.80 per square foot of rental space. We calculated eight classrooms, four storage rooms, four tutoring areas, and 16 offices to be 7,200 total square feet for a total of \$176,705 for core programming facilities. No value was assigned to subsidiary spaces, such as hallways, restrooms, or parking lot, gymnasium and swimming pool. Thus, we estimate that the CAS-Carrera program in-school model utilizes available space within the school facilities at no cost to the program, equivalent to \$176,705 in facility costs.

One additional item, evaluation, is included within the category of other direct costs. CAS budgets \$19,000 per year for evaluation activities.

## Conclusions

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This report describes the resources employed at the Tulsa in-school implementation of CAS-Carrera in the UPS district. The description in this chapter indicates the type and quantity of resources used during the 2014–2015 school year and also places a dollar value on these resources. The findings help promote the understanding of what is needed to implement the program at the Tulsa site. Additionally, we describe the resource quantities in addition to costs, so these findings will also help other sites implementing the in-school model to anticipate the types of resources they should expect to deploy as a part of the implementation process.

The components needed to administer the CAS-Carrera program in Tulsa, Oklahoma, are enumerated in a great deal of detail at the school district level. The resources that CAS devotes to overseeing and managing this site are also provided in a detailed manner. The resources that are used by CSC, the local administrative organization, are only available in the aggregate.

We have documented that the overwhelming majority of resources needed to implement the in-school CAS-Carrera model at this site are provided by the funding and are on-budget costs, representing 93 percent of the total resources needed to implement the program. The bulk of on-budget costs are from personnel, which accounted for 84 percent of the total on-budget costs at this site. Nevertheless, the site must have some necessary resources available that are not part of the budget to successfully implement the program. Most notably, the school district provides CAS-Carrera with space in school buildings, and we valued this in-kind resource at more than \$176,000 for the year, accounting for 75 percent of off-budget costs and 6 percent of total costs. Other in-kind resources used to implement the program were field trip services provided by banks and other organizations, and dental and vision screenings, which were provided by outside organizations at no cost to students or the CAS-Carrera site.

We calculated the total cost of this in-school model site program for one year to reach \$3,123,321 and the on-budget costs for one year to be \$2,889,182, for which most of the costs go to CAS for personnel, personnel support, and stipends to students. We calculated the off-budget costs that were provided in-kind to be \$234,139, for which most of the costs accrue to UPS for providing the space to implement the program in-school model.

As discussed in Chapter One, the after-school model cost was approximately \$5,083 per student per year (in 2012 dollars, and \$5,248 in 2015 dollars). The in-school model on-budget cost per student for the Tulsa in-school model, \$3,283 per student per year (2015 dollars), is lower than the estimated after-school model on-budget cost of \$1,965 per student per year.



## Data Form

### CAS-CARRERA ADOLESCENT PREGNANCY PREVENTION PROGRAM COST DATA FORM

Draft Form: April 7, 2015

12-month reporting period: August 2014–July 2015

Resource	Amount in Natural Units	Notes
Resources Incurred by CAS-Carrera Program		
<b>Personnel</b>		
For each oversight/management position:		
Hours per week during school year (classroom, plus administration, planning, and other)		Include additional time (homework help component)
Hours per week during summer (classroom, plus administration, planning, and other)		
Title		
Education, credentials		
Experience (years or months? in position? in related position?)		
Salary (include benefits, other)		
Time spent in CAS-Carrera training		
For each teacher/tutor:		
Hours per week during school year (classroom, plus administration, planning, and other)		
Hours per week during summer (classroom, plus administration, planning, and other)		

Resource	Amount in Natural Units	Notes
Title		
Education, credentials		
Experience (years or months? in position? in related position?)		
Salary (include benefits, other)		
Time spent in CAS-Carrera training		
For each licensed social worker:		
Hours per week during school year (classroom, plus administration, planning, and other)		
Hours per week during summer (classroom, plus administration, planning, and other)		
Title		
Education, credentials		
Experience (years or months? in position? in related position?)		
Salary (include benefits, other)		
Time spent in CAS-Carrera training		
For each additional position that conducts FLSE, Self Expression, Lifetime Sport, or employment programming:		
Hours per week during school year (classroom, plus administration, planning, and other)		
Hours per week during summer (classroom, plus administration, planning, and other)		
Title		
Education, credentials		
Experience (years or months? in position? in related position?)		
Salary (include benefits, other)		

Resource	Amount in Natural Units	Notes
Time spent in CAS-Carrera training		
<b>Facilities</b>		Note if difference at different times of year
Classrooms	Size and number of periods, minutes, requirements, features	
Subsidiary space: bathrooms, hallways, parking		
Storage areas	Size and any special requirements (e.g., shelves, air conditioned)	
Office space for staff	Size and requirements	
Rental or use of sports facilities (pool, fields, other)	Type, amount of use, requirements	
<b>Materials and Equipment</b>		
Workbooks, videos, or materials from CAS-Carrera		
Computers		
Cell phones (and plan)		
Overhead projector		
Other electronics		
Desks, other furniture		
Paper, writing utensils		
Condoms		
Training materials, or travel costs to go to training		
Costs of attending training (e.g., fees for participating)		
Sports equipment for sports activities		
Staff mileage/transportation		
<b>Other Inputs</b>		
Outreach materials and time		e.g., presenting to school board or parents
Student stipends		As part of Job Club
Food		
Incentives		
Field trips		
Transportation (for programming or field trips)		If not provided by UPS
Vision services		

Resource	Amount in Natural Units	Notes
Dental services		
Other health services		
Job postings/announcements		
Resources Contributed by Union Schools		
<b>Personnel</b>		
For each position that oversees CAS-Carrera:		
	Hours per week during school year (administration, planning, and other)	
	Hours per week during summer (administration, planning, and other)	
	Title	
	Salary (include benefits, other)	
HR services provided (e.g., background checks)?		
Other administrative services provided?		
Covered by school insurance?		
<b>Facilities</b>		
Anything not listed above?		
<b>Materials and Equipment</b>		
Copy machines?		
Bus transportation for field trips?		
Resources Contributed by Community Service Council		
<b>Personnel</b>		
For each position that oversees CAS-Carrera:		
	Hours per week during school year (administration, planning, and other)	
	Hours per week during summer (administration, planning, and other)	
	Title	
	Salary (include benefits, other)	



Resource	Amount in Natural Units	Notes
HR services provided (e.g., background checks)?		
Other administrative services provided by CSC?		
Covered by school insurance?		
<b>Facilities</b>		
What facilities do CSC staff use who engage with CAS-Carrera		
<b>Materials and Equipment</b>		
Copy machines?		
Outreach brochures?		
<b>Other Inputs</b>		
Resources Contributed by Participating Students		
Number of students that participate (grade, gender, other information)		
Time participating in CAS-Carrera		
Days/week in school year		
Hours/day in school year		
Days/week in summer		
Hours/day in summer		
Other time requirements (e.g., doing homework for this class)		
Extra time in referrals or talking to counselors?		
Any missed classes or school time to participate in CAS-Carrera?		
Transportation in summer?		
Need to use any extra school supplies?		
Cell phone?		
Resources Contributed by Community		
More dental visits?		
Service costs or insurance		
Transportation		
Family expenses		
More health care visits?		
Service costs or insurance		
Transportation		

Resource	Amount in Natural Units	Notes
Family expenses		
Volunteers		
Parent conferences		
Field trip resources		
Donations (e.g., sponsors, T-shirts, or key chains)		
Coordination meetings		
Parent approval process		
Local foundations providing resources in addition to funding (e.g., staff time)		
Resources Provided by Children's Aid Society		
Personnel		
Hours per week		
Hours per week (administration, planning, and other) specifically spent on Tulsa site		Note if difference at different times of year
Title		
Salary (include benefits, other)		
Portion of administrative overhead, facilities and IT		
Direct costs of materials and equipment		
Workbooks, videos or materials for programming		
Computers		
Cell phones (and plan)		
Other electronics		
Desks, other furniture		
Paper, writing utensils		
Training materials, or travel costs to go to training		
Costs of attending training (e.g., fees for participating)		
Sports equipment for sports activities		
Staff mileage/transportation		

## Cost Categories and Details

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This appendix provides additional notes to clarify the cost categories and cost details presented in Table 3.1 (Tulsa CAS-Carrera Cost Details by Category) in Chapter Three.

1. Regarding district-level management quantity and dollar value, CAS documentation reported district administrators provided macro-level planning related to CAS-Carrera site programming estimated at 1/20th of their effort. UPS public records online reported the average annual salary of district administrators. We then calculated the value of 1/20th the annual salary of four district administrators, superintendent, assistant superintendent, principal and assistant principal, to be \$29,552.
2. Regarding the Self-Expression consultant, CAS documentation reported the consultant provided 100 hours per year, which we converted to FTE assuming 2,080 hours per year. The result is 0.05 FTE for this position.
3. Regarding the Lifetime Individual Sports consultant, CAS documentation reported the consultant provided 200 hours per year, which we converted to FTE assuming 2,080 hours per year. The result is 0.1 FTE for this position.
4. Regarding the FLSE content specialist, CAS documentation reported the specialist provided 360 hours per year, which we converted to FTE assuming 2,080 hours per year. The result is 0.17 FTE for this position.
5. Regarding the vision screening and dental screening dollar values, the \$2.50 per student cost for vision screening was based on Oklahoma Health Care Authority Title XIX Fee Schedule fee for visual function screening (Procedure Code 99173; 2015-b), and the \$29.07 per student cost for dental screening was based on based on the Oklahoma Health Care Authority Dental Fee Schedule fee for comprehensive oral evaluation (Procedure Code D0150; 2015-a).
6. In order to place a value on the space used by the Tulsa in-school model, we estimated the commercial rental value of a comparable amount of space across the street from a UPS building where tenants, such as academic tutoring companies, are renting. The available rental space as of October 2015 is at 8321 East 61st Street, Tulsa, OK 74133 for \$11.80 per square foot of rental space. We calculated eight classrooms, four storage rooms, four tutoring areas, and 16 offices at 7,200 total square feet, totaling \$176,705 for core programming facilities.



## Abbreviations

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CAS	Children's Aid Society
CAS-Carrera	Children's Aid Society's Carrera Adolescent Pregnancy Prevention Program
CMIS	Carrera Management Information System
CSC	Community Service Council of Tulsa
FLSE	Family Life and Sexuality Education
FTE	full-time equivalent
IEP	Individualized Education Program
UPS	Union Public Schools
WSIPP	Washington State Institute for Public Policy



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