Results

An Evaluation of Communities In Schools Of Greenville

Final Evaluation Report

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Executive Summary

The United Way of Greenville County (UWGC) received an award in the 2014 Social Innovation Fund (SIF) grant competition to support its OnTrack Greenville initiative, a collective impact dropout-prevention program for middle grades students between the years of 2015 and 2018. Communities In Schools of Greenville, a Sub-Grantee, provided tiered, individualized support services to students to help them meet their personal goals in attendance, behavior, and course performance. The Riley Institute at Furman University served as the third-party evaluation contractor for the SIF-funded evaluation of OnTrack Greenville, including Communities In Schools of Greenville (CIS). CIS offered its Student Support Services at four Title I middle schools in the White Horse Community of Greenville County, South Carolina.

At each of the four treatment school sites, CIS Student Support Specialists provided three tiers of service to the students and schools in which they worked: Tier I, Tier II, and Tier III. Tier I services were typically school-wide programs designed to foster a positive school climate, while Tier II and Tier III services consisted of case management, either in group or individualized settings. CIS Student Support Specialists worked with school administrators and each school's OnTrack Team to identify, case-manage, and monitor students needing Tier II and Tier III support services. Each Student Support Specialist case-managed a targeted group of 10 – 30 students who were identified by the OnTrack Team as at-risk and needing support outside of the classroom. These students received intensive one-on-one support, home visits, after-school opportunities, and other services and interventions necessary to help students meet their personal and academic goals. Additionally, the Student Support Specialists took part in their school's respective grade-level OnTrack Team, helping monitor the progress of students and determining if students identified by the OnTrack Team were receiving appropriate interventions.

CIS Student Support Specialists worked with students to set individualized goals related to attendance, behavior, and course performance. Through participation in Tier II or Tier III case management, CIS intended for students to make progress toward meeting their individualized goals in one or more of these areas. In addition to these academic impacts, the CIS model aimed to strengthen student relationships with caring adults and improve student engagement at school, attitude toward learning, and educational self-perception.

In both academic years examined in this study, the actual number of students CIS served was slightly below program targets. The CIS national quality standards instruct affiliate programs to provide Tier II/III services to 10% of the school population in schools with fewer than 1,000 students. In academic year 2016-17, the combined student enrollment at the four treatment school sites was 1,934 students. The target Tier II/III caseload was 195 students, and the actual total caseload was 170 students. In academic year 2017-18, the combined student enrollment at the four treatment school sites was 2,136 students, the target Tier II/III caseload was 215 students, and the actual total caseload was 184 students.

Prior evaluations of Communities In Schools have created a preliminary body of evidence for the model's effectiveness. A national study of the CIS model at the elementary, middle, and high school levels using a quasi-experimental design found that treatment middle schools implementing the intervention with a high level of fidelity showed significant improvement in 8th grade math and reading achievement (ICF International, 2008). However, there were no significant differences for treatment schools implementing the intervention with low fidelity. A separate randomized controlled trial of the

middle school model found that CIS treatment students experienced initial gains in core subjects, but effects were not significant in the long-term (ICF International, 2010). Apart from these findings related to course performance, a recent study found that CIS Student Support Services contributed to more trusting relationships with friends and adults and greater participation in organized networks of support for students in the CIS treatment group (Corrin, Parise, Cerna, Haider, & Somers, 2015).

The incoming level of evidence for CIS's Student Support Services was preliminary, and this study targeted a moderate level of evidence. The prior evaluations of the national CIS model utilized rigorous methodologies and found significant positive results of the program, which typically would merit a moderate incoming level of evidence. The Sub-Grantee CIS affiliate intended to adjust program implementation; therefore, initiative stakeholders classified the incoming level of evidence as preliminary to account for these modifications to the model. With the availability of administrative data to measure student impacts in attendance, behavior, and course performance for students across the district and state, researchers were confident in their ability to conduct an evaluation with a quasi-experimental design, adding robust and technically sound results to expand the evidence base for the intervention and achieve a moderate level of evidence. Due to the limited geographic scope of the initiative and the inability to randomly assign students to treatment and control conditions, researchers were not able to design a study to target a strong level of evidence. This study advances the evidence base of the CIS model by examining how the addition of grade-level Student Support Specialists influences program implementation and outcomes.

In order to achieve a moderate level of evidence, this study utilized a single-site, non-randomized group design with groups formed by propensity score matching. For confirmatory impact research questions, there were three comparison groups. Treatment students were matched to (1) other students in the *treatment schools* who did not participate in the intervention; (2) other students in the *same school district* attending district schools; and (3) other students attending *Title I schools across the state* of South Carolina. The use of these multiple comparison groups improved the overall internal and external validity of the study, as each comparison group presented different threats to validity. Researchers matched students using a propensity score model that included race, gender, grade level, English proficiency, special education status, free and reduced meal eligibility, and baseline outcome variables. Researchers conducted separate matching procedures for each data source, administrative data and survey data. At the conclusion of the matching process, researchers ensured that there were no significant differences between the treatment and comparison groups on pre-treatment covariates.

To assess the impact of Communities In Schools on student attendance, as well as exploratory outcomes, researchers created nine matched comparison groups. It was necessary to create nine distinct, matched comparison groups due to (1) the three different comparison school populations (treatment schools, district schools, and state schools), (2) the two different sources of outcome data (administrative data and student survey data), and (3) two years of analysis (2016-17 and 2017-18).[1] Table 1 below shows the final sample size numbers of all treatment and comparison groups.

[1] Only 2016-17 administrative data were available for the state match.

Table 1. Final Sample Size Numbers of Treatment and Comparison Groups

Academic Year	Type of School Comparison Group	Group	Administrative Data	Survey Data
2016 - 2017	Treatment Schools	Treatment Students	127	60
		Comparison Students	379	217
	District Schools	Treatment Students	122	59
		Comparison Students	398	242
	State Schools	Treatment Students	103	---
		Comparison Students	471	---
2017 - 2018	Treatment Schools	Treatment Students	128	78
		Comparison Students	435	286
	District Schools	Treatment Students	136	81
		Comparison Students	482	322

Note: This table shows the number of unique students matched for each comparison.

The study drew on quantitative administrative and survey data to measure impacts and secondary outcomes. Through data-sharing agreements with Greenville County Schools and the South Carolina State Department of Education (SCDE), researchers received access to student administrative and test data to measure academic impacts. The primary intended impacts of CIS were to improve student attendance, behavior, and course performance. Drawing on administrative data, researchers used the following measures: *average daily attendance, chronic absenteeism, any behavioral referral*, *number of behavioral referrals*, *any in-school suspension*, *number of hours of in-school suspension*, *any out-of-school suspension*, *number of days of out-of-school suspension,* and *state standardized test scores in math and ELA*. Researchers administered a school-wide pre- and post-survey at treatment and within-district comparison schools to measure CIS's secondary outcomes. This survey included seven validated measures of student perceptions of school climate and academic ability: *academic self-confidence, academic perseverance, valuing education, relationships with caring adults, relationships with teachers, school engagement,* and *school belonging*.

To answer confirmatory research questions, researchers compared the treatment and control groups on outcomes of interest to provide an estimate of the causal effect of participating in Communities In Schools. Researchers conducted multivariate regressions with the matched groups to allow for the inclusion of covariates to increase precision. Effect sizes and significance tests are presented for these results.

The ***confirmatory research question for attendance*** was: *Did students who participated in Communities In Schools have improved attendance when compared to matched comparison students?* Researchers rejected the hypothesis that CIS students would have improved attendance when compared to matched comparison students. Key findings for this outcome included:

- There were no significant differences in average daily attendance or chronic absenteeism between CIS students and matched comparison students at treatment schools or district schools in academic year 2016-17.
- Communities In Schools students had lower average daily attendance than matched students at state schools ($p < 0.05$) in academic year 2016-17.
- In academic year 2017-18, Communities In Schools students had lower average daily attendance ($p < 0.01$) and were more likely to be chronically absent ($p < 0.01$) than matched comparison students at treatment schools.

- There were no significant differences in attendance outcomes between Communities In Schools students and matched comparison students at district schools in academic year 2017-18.
- There were 10 total tests (average daily attendance rate and chronic absenteeism for each of the five matches using the administrative data). Before adjustments for multiple comparison were made, three of the tests indicated statistically significant differences between Communities In Schools students and comparison students. After adjusting for multiple comparisons, two results remained statistically significant. These results were not in the hypothesized direction.

The ***confirmatory research question for behavior*** was: *Did students who participated in Communities In Schools have fewer behavioral incidences when compared to matched comparison students?* While results varied by academic year and type of behavioral incident, researchers rejected the hypothesis that Communities In Schools students would have fewer behavioral incidences than matched comparison students. Key findings included:

- Overall, Communities In Schools students had more behavioral incidences when compared to matched comparison students at treatment and district schools. For example, Communities In Schools students were more likely to have had any behavioral referral than matched comparison students ($p < 0.05$) and had 0.77 more total behavioral referrals, on average, than their matched counterparts at treatment schools in spring semester 2017 ($p < 0.01$). Communities In Schools students also were more likely to have had any in-school suspension ($p < 0.05$) and any out-of-school suspension ($p < 0.05$) than matched comparison students at treatment schools in spring 2017.
- Conversely, Communities In Schools students generally had fewer behavioral incidences when compared to matched comparison students at district schools in academic year 2016-17. CIS students were less likely to have had any in-school suspension than matched comparison students ($p < 0.10$). Communities In Schools students served 3.06 fewer total hours of in-school suspension, on average, than matched comparison students at district schools ($p < 0.001$). In addition, CIS students had 0.76 fewer total days of out-of-school suspension than matched comparison students ($p < 0.05$).
- There were 30 total tests (any referral, any in-school suspension, any out-of-school suspension, number of referrals, hours of in-school suspension, and days of out-of-school suspension for the five matches using the administrative data). Before adjustments for multiple comparison were made, 20 of the tests indicated statistically significant differences between Communities In Schools students and comparison students. After adjusting for multiple comparisons, 17 results remained statistically significant. Three of the 17 results were in the hypothesized direction, while the other 14 significant results were not in the hypothesized direction.

The ***confirmatory research question for course performance*** was: *Did students who participated in Communities In Schools have improved course performance when compared to matched comparison students?* Researchers partially confirmed the hypothesis that CIS students would have improved course performance when compared to matched comparison students, though results were mixed and varied by assessment and academic year. Key findings included:

- Communities In Schools students scored higher on the MAP math assessment in spring 2017 than matched comparison students at treatment schools ($p < 0.05$) and district schools ($p < 0.10$).
- Communities In Schools students had significantly lower scores on the spring 2017 SC READY math assessment than matched comparison students at district schools ($p < 0.10$) and state schools ($p < 0.05$).

- Communities In Schools students also had significantly lower scores on the spring 2017 SC READY ELA assessment than matched comparison students at state schools ($p < 0.10$).
- In academic year 2017-18, there were no significant differences in spring 2018 SC READY ELA or math assessment scores between treatment and matched student at either comparison school.
- There were 14 total tests (MAP Reading, MAP Math, SC READY ELA, and SC READY math for the treatment and district 2016-17 matches, and SC READY ELA, and SC READY math for the 2016-17 state match and the 2017-18 administrative data matches). Before adjustments for multiple comparison were made, five of the tests indicated statistically significant differences between Communities In Schools students and comparison students. After adjusting for multiple comparisons, none of the results remained statistically significant.

The ***exploratory secondary outcome research question for relationships with adults*** was**:** *Did students who participated in Communities In Schools have improved relationships with adults when compared to matched comparison students?* Researchers confirmed the hypothesis that CIS students would have improved relationships with adults when compared to matched comparison students. Findings included:

- In academic year 2016-17, students who participated in Communities In Schools reported significantly stronger relationships with teachers when compared to matched comparison students in district schools ($p < 0.01$).
- In academic year 2017-18, Communities In Schools students reported having stronger relationships with teachers ($p < 0.10$) and caring adults ($p < 0.10$) than matched students at treatment schools.

The ***exploratory secondary outcome research question for educational self-perception*** was: *Did students who participated in Communities In Schools have improved educational self-perception when compared to matched comparison students?* Researchers rejected the hypothesis that CIS students would have improved educational self-perception when compared to matched comparison students. In both academic years of the study, there were no significant differences in either survey measure of educational self-perception between Communities In Schools students and matched comparison students attending treatment or district schools.

The ***exploratory secondary outcome research question for school engagement*** was: *Did students who participated in Communities In Schools have improved school engagement when compared to matched comparison students?* Researchers partially confirmed the hypothesis that CIS students would have improved school engagement when compared to matched comparison students. Key findings included:

- In academic year 2016-17, Communities In Schools students reported higher levels of school engagement ($p < 0.05$) and school belonging ($p < 0.10$) than matched comparison students at district schools.
- Student levels of school engagement did not vary significantly between CIS students and matched comparison students at treatment schools in academic year 2016-17 or academic year 2017-18.

The ***exploratory secondary outcome research question for attitude toward learning*** was: *Did students who participated in Communities In Schools have an improved attitude toward learning when compared to matched comparison students?* Researchers rejected the hypothesis that CIS students would have an improved attitude toward learning when compared to matched comparison students. There were no significant differences in student attitude toward learning between CIS students and matched comparison students in either comparison group.

The ***implementation research questions for fidelity of activities*** were: *To what extent were the five CIS case management elements happening in the four schools? How did the five CIS case management element processes vary across Student Support Specialists and the four OnTrack Greenville schools?* The CIS logic model includes five CIS case management elements that provide the structure for Student Support Specialists on how to engage with their assigned caseload of students. For each case management element, the majority of Student Support Specialists (6-8 out of 10) indicated success. That is, at the end of each academic year, the 10 Student Support Specialists across the four sites were mostly positive about their implementation of the five elements of case management.

The ***implementation research questions for fidelity of outputs*** were: *What Tier II/III services did the 185 targeted students receive? Were 185 students identified for Tier II and III services and what were their identified needs? To what extent did identified students remain active in the CIS case management process for the entire year and beyond?* Key findings included:

- Fewer than 185 students were served in both years of implementation. 170 students were served in academic year 2016-17 and 161 students were served in academic year 2017-18.
- Identified needs included: students having high risk peer groups, showing a lack of effort in school, exhibiting poor social skills, not participating in any extracurricular activities, exhibiting emotional/mental health concerns, among others.
- In 2018, 77% of students reported meeting with a CIS Student Support Specialist "almost every day" or "about once a week" or "about once or twice a month."
- The average number of "check-ins" per student, across sites, was 8.0 in 2016-17 and 5.7 in 2017-18. There was a school-wide decrease from 2016-17 to 2017-18 in the average number of supports.

The ***implementation research questions for feedback for stakeholders*** were: *What were the perceptions of the CIS School Team, the CIS staff, teachers, and participating students about the value of CIS Activities and how the program could be improved (e.g., relationship between CIS staff/school staff, use of early warning indicators, match of interventions to student needs)?* CIS case-managed students, classroom teachers, and principals at the four sites generally had positive perceptions of CIS and the impact of the program.

As shown, the results for confirmatory impact analyses were mixed, with several significant negative findings preventing this study from achieving a moderate level of evidence. Positive significant results for exploratory secondary outcomes, like student relationships with teachers and caring adults, were consistent with prior research and added to the evidence base for the model. The impact study will continue for two additional years, allowing researchers to examine further the long-term academic and social-emotional impacts of receiving tiered student support services. Program leaders will continue to strengthen model fidelity, working to enroll more students in the beginning of the academic year, monitoring CISDM data routinely to monitor caseloads, and achieving greater consistency across sites in the number and types of services provided to students at each tier of the intervention.

There were few key updates to the evaluation timeline, budget, program, or research team. The major update was the change in evaluation timeline due to the lack of Social Innovation Fund continuation funds to complete the final two years of program implementation and evaluation. As such, researchers executed a contingency plan to end the study after Year 3 (AY 2017-18). Members of the research teams at the Riley Institute at Furman University and the SERVE Center remained constant, as did staff

members on the CIS of Greenville project team. There was some turnover among CIS Student Support Specialists at program sites, which was not unexpected.

This final report satisfies evaluation requirements for United Way of Greenville County's Social Innovation Fund grant award. Local leaders have committed to funding the initiative and evaluation for the final two years of the project in the absence of Social Innovation Fund continuing funding; therefore, evaluation next steps include the continuation of data collection and analysis as planned for academic years 2018-19 and 2019-20. Researchers will begin to disseminate preliminary results as early as 2019, but expect final results and a more robust dissemination plan to be available in March 2021.

I. Introduction

This final report describes both the implementation and impact evaluation of Communities In Schools of Greenville, a Sub-Grantee intervention within United Way of Greenville County's SIF-funded OnTrack Greenville initiative. This is a final report submitted to the Social Innovation Fund to satisfy grant evaluation requirements and it addresses all implementation and impact research questions from the Sub-Grantee Evaluation Plan (SEP). The intended audience of this report is the Social Innovation Fund as well as Grantee and Sub-Grantee stakeholders.

Leaders from nonprofits, the school district, and the community implemented OnTrack Greenville, a collective impact approach that includes the implementation of an Early Warning and Response System (EWRS) in four target middle schools. The EWRS uses real-time data to identify and flag students at-risk of disengaging from school. An EWRS team, also known as an OnTrack Team, meets weekly and includes a team of educators and student support specialists who discuss the unique needs of identified students and match them with appropriate response interventions, tracking each student's progress over time. OnTrack Greenville's federally supported Social Innovation Fund (SIF) portfolio funded five Sub-Grantee interventions to ensure students had access to evidence-based interventions and supports. These five interventions included (1) a summer learning program for rising sixth grade students; (2) student case management; (3) a semester-long character development course; (4) school-based health centers; and (5) literacy coaching for teachers. This report examines one of these Sub-Grantee interventions: Communities In Schools of Greenville Integrated Student Support Services.

A. Program Background and Problem Definition

1. Description of Community and Program Need

Since United Way of Greenville County applied for this Social Innovation Fund grant in 2014, the local community has continued to experience significant growth and development. After the biennial census in 2010, the population of Greenville County grew by 12.7% to more than 500,000 people.[2] With a blossoming downtown, the city of Greenville has appeared on several national lists of best cities to live in or visit (Walker, 2018). The unemployment rate in the county dropped from 5.6% in February of 2014 to 2.5% in May of 2018.[3] At the same time, the county-wide poverty rate has decreased from 15.2% in 2014 to 12.4% in 2018.[4] A broad look at community indicators suggests many county residents are experiencing improved economic conditions.

A closer look reveals that not all residents have shared in this growth, especially in the White Horse Community, the geographic area targeted by OnTrack Greenville. As community developers have worked to revitalize neighborhoods close to the city center, low-income residents have continued to relocate to the White Horse Community, which straddles the edge of the city of Greenville. A recent assessment of neighborhood needs and assets revealed that many neighborhoods located in the

[2] U.S. Census Bureau 2018 Population Estimates
[3] U.S. Department of Labor 2018 Labor Force Statistics
[4] U.S. Census Bureau 2018 Small Area Income and Poverty Estimates (SAIPE)

White Horse Community, despite their wealth of community assets, continue to face challenges with unemployment, family poverty, income inequality, housing, and access to healthcare and childcare, among others (Cohen et al., 2017).

Public schools in the White Horse Community are part of the Greenville County Schools district. The largest district in the state of South Carolina and 45th largest district in the nation, Greenville County Schools consists of 101 schools and centers serving 76,900 students with 6,000 teachers. Approximately half of Greenville County Schools students are living in poverty (52%) and/or are eligible for free or reduced-price meals (52%).

OnTrack Greenville serves four middle schools located in the White Horse Community. These middle schools serve a higher proportion of low-income and minority students than other schools in the district. In academic year 2017-18, each of these OnTrack Greenville sites had at least 79% of students living in poverty and 100% of students eligible for free or reduced-price meals. Three of the four treatment middle schools receive Title I funds, while the fourth site is technically a school program and ineligible for Title I funds despite a high proportion of students living in poverty. Across these three sites, the Title I funds have been used for items such as: teacher salaries, instructional technology, instructional materials, social workers, nurses, parent and family engagement coordinators, translators, tutoring, and other student services. The Title I funding can also enable schools to reduce the size of some classes by providing additional support staff.

The demographic characteristics of OnTrack Greenville treatment school student populations varied from the characteristics of the entire district[5]. In academic year 2017-18, OnTrack Greenville treatment schools were home to a high percentage of Hispanic or Latino students. The percentage of Hispanic students attending OnTrack Greenville treatment schools ranged from 27% to 55%, higher than the district average of 18%. In addition, OnTrack Greenville schools generally had a higher percentage of Black or African American students (23% to 55%) than the district average of 23%. OnTrack Greenville schools also had a higher poverty index than the overall district poverty index. The percentages of male and female students attending OnTrack Greenville treatment schools were reflective of the district average.

Table 2. School Enrollment by Gender, Race or Ethnicity AY 2017-18, 180th Day

Site	Enrollment (2017-18)	Gender		Race/Ethnicity				Poverty Index
		F	M	Black	White	Hispanic	Other	
District	75,220	49%	51%	23%	54%	18%	8%	53
Treatment School - Maximum	746	55%	57%	55%	26%	55%	9%	88
Treatment School - Minimum	109	43%	45%	23%	16%	27%	1%	79

One key academic indicator for predicting early disengagement among middle school students is course performance (Balfanz & Fox, 2011). Overall, students attending OnTrack Greenville middle schools placed well behind their peers on the South Carolina standardized assessment in ELA and

[5] Greenville County Schools Population Statistics 2017-18 180th Day Enrollment Summary https://www.greenville.k12.sc.us/About/main.asp?titleid=statistics1718

math (SC READY) in academic year 2017-18. As shown below in Table 3, the percentage of students who met or exceeded state standards in ELA ranged from 6.3% to 25.7% at OnTrack Greenville schools, while the percentage of students who met or exceeded state standards in math ranged from 3.6% to 25.7%.[6] These ranges of scores were well below the district and state averages in both subject areas.

Table 3. Percentage of Students who Met or Exceeded State Standards in ELA and Math AY 2017-18

	Number of students	SC READY ELA	SC READY Math
State of South Carolina	340,478	41.7%	44.6%
District	34,220	48.9%	52.5%
Treatment School - Maximum	654	25.7%	25.7%
Treatment School - Minimum	112	6.3%	3.6%

Source: SC School Report Cards, 2019

In order to help students stay on track in attendance, behavior, and course performance, Communities In Schools provided tiered, individualized support services to students. At each treatment school site, the grade-level CIS Student Support Specialists worked with assistant principals and the EWRS team to identify, case-manage, and monitor students needing services. Each Student Support Specialist case-managed a targeted group of 10–30 students who were identified by the EWRS team as being at-risk and needing support outside of the classroom. These students received intensive one-on-one support, home visits, after-school opportunities, and other services and interventions necessary to help them meet their personal and academic goals. Additionally, the Student Support Specialists participated in their school's respective grade-level EWRS teams, helping monitor the progress of students and determining if students identified by the EWRS were receiving appropriate interventions.

More specifically, CIS Student Support Specialists provided three tiers of service to the schools and students with which they worked: Tier I, Tier II, and Tier III. Tier I services were typically school-wide programs designed to foster a positive school climate. Tier I services benefited the entire student population and included activities such as family nights and motivational speakers who presented to the entire school. In addition, CIS provided Tier II and Tier III services to case-managed students. Tier II support services typically were provided in a group setting to students with a common need, while Tier III support services included intensive, individualized services typically provided in a one-on-one setting to students with highly specific needs. Detailed records of students' services as well as their progress toward individual goals were documented in a data management tool (CIS-DM). If a Student Support Specialist observed that a student was not making adequate progress toward his or her goal(s), the specialist could recommend the student for the next tier of services, as appropriate. A full description of the program model follows.

2. Description of Program Model

Communities In Schools is a national model founded by Bill Milliken in New York City in the 1970's. He envisioned bringing community resources inside public schools, where they could be accessible, coordinated, and accountable following the logic that "It's relationships, not programs, that change

[6] South Carolina Department of Education 2018 South Carolina College- and Career-Ready Assessments (SC READY) Test Scores https://ed.sc.gov/data/test-scores/state-assessments/sc-ready/2018/

children..." and that "...young people thrive when adults care about them on a one-to-one level and when they also have a sense of belonging to a caring community." Working directly in 2,300 schools in 25 states and the District of Columbia, CIS aims to build relationships that empower students to remain in school and succeed in life.[7]

Within a school, the overall implementation of the CIS Model follows these five steps:

1. Needs Assessment: Using school and community data, stakeholder interviews and surveys, and identified school priorities, CIS conducts a needs assessment in collaboration with school staff to determine the priority needs for the community and student populations that the CIS Student Support Specialist(s) can address.
2. Annual Support Planning: The CIS Student Support Specialist, working with the identified School Support Team, develops a School Support Plan outlining all goals and planned supports for the school year. Supports are tied directly to the needs identified in the needs assessment, and they have clear objectives and measurable outcomes and processes for evaluating effectiveness and making necessary adjustments.
3. Three Tiers of Support: The CIS Model includes three tiers of support:
    a) Tier I Support: Widely available services designed to foster a positive school climate and address school-level risk factors.
    b) Tier II Support: Targeted services typically provided in a group setting to students with a common need.
    c) Tier III Support: Intensive, individualized services typically provided in a one-on-one setting to students with highly specific needs.
4. Monitoring and Adjustment of Services: A key component of the CIS Model is that all supports, both school-wide and individual, are monitored to determine effectiveness and adjusted as necessary. This process is completed as part of on-going reporting and coordination with school staff and leadership.
5. Evaluation: The support provided by CIS is evaluated regularly based on program goals for the outcomes for the school and individual students. These evaluations help to demonstrate results and determine what resources are needed to meet desired outcomes.

The following section describes in detail the CIS program model as implemented through OnTrack Greenville, including the number of participants, inputs, activities, outputs, and key outcomes as outlined in the CIS logic model (Appendix B).

Program Inputs

As shown in the logic model, the implementation of Communities In Schools involved six different inputs: (1) CIS program staff, knowledge, and experience; (2) collaborating schools and staff; (3); existing community and school resources; (4) financial resources from the UWGC Social Innovation Fund Sub-Grant, Greenville Partnership for Philanthropy, and other match sources; (5) Early Warning and Response System and internal data system to identify eligible students, track students' progress, and provide ongoing feedback; and (6) OnTrack Greenville collective impact resources and support.

1. The CIS model, particularly at Tier III, is an individualized process as opposed to a one-size-fits-all program. As such, the knowledge and expertise of the CIS staff is critical. In order to

[7] Parise et. al. (2017) stated, "The ultimate goal of the CIS model is to reduce dropout rates by integrating community and school-based support services within schools" (p. ES-1).

make this intervention a success, an input of seven new CIS Student Support Specialists was necessary, bringing the total number of Student Support Specialists to ten. In order to provide one Student Support Specialist per grade level, School 3 and School 4 received two additional Student Support Specialists per school. Three Student Support Specialists were placed at School 1 and one Student Support Specialist was placed at School 2, as CIS previously had not served students at either of these sites.

2. CIS's individualized student interventions occurred within each of the four target schools during the school day, requiring a large amount of coordination and communication between school and CIS staff. At each of the four treatment schools, students were to meet with their CIS Student Support Specialist at various times throughout the day, either during designated "OnTrack" class periods or at other times deemed appropriate by CIS staff and the school administration.

3. A fundamental element of the CIS model is the utilization of existing community and school services such as transportation, affordable housing, healthcare, after-school opportunities, career and college preparation, and one-on-one counseling. Rather than provide these diverse services directly, CIS Student Support Specialists assessed individual students and assisted them by connecting them to the appropriate services/interventions. Without strong existing services, CIS would not be able to wrap the students and their families in the comprehensive support they require for optimal success. Examples of services specific to Greenville County include transportation services provided by Greer Christian Learning Centers and health-related afterschool activities provided by the LiveWell Greenville initiative.

4. Increasing CIS program capacity in the treatment schools required $683,060 per fiscal year. The Social Innovation Fund Sub-Grant contributed $341,529, with the remaining $341,531 coming from the Greenville Partnership for Philanthropy and other match sources.

5. The EWRS allowed schools to quickly and regularly identify students who were at risk of, or who already were, sliding off track. Using a color-coded dashboard, the EWRS helped school staff members easily recognize early warning signals for their students, such as a decrease in attendance or increase in disciplinary referrals. In addition, the data provided by the EWRS was aggregated to show trends across the school, across grade levels, and across student subgroups. By giving teachers and other school staff members access to real-time data related to attendance, behavior, and course performance, the EWRS was an essential tool for assessing individual students' strengths and needs, and then using that information to provide students with the appropriate interventions.

6. OnTrack Greenville is a community-wide initiative to ensure middle school students stay on track toward high school graduation. The initiative worked with treatment schools, implementation partners, nonprofits, community members, government officials, funders, and other stakeholders to achieve the common goal of keeping students on track towards high school graduation and future success. OnTrack Greenville consistently convened school leadership, implementation partners, and funders to coordinate and implement key aspects of the initiative for the coming school year, while also building a shared vision, governance, and accountability for OnTrack Greenville. Engaging with the community, families, students, other nonprofits, and grassroots organizations contributed to the overall collective impact of the initiative.

Activities and Outputs

With these six inputs, CIS implemented five separate case management activities: (1) identify at-risk students for Student Support Services; (2) provide student-level needs assessment to identify individual specific needs; (3) develop case plans to address student needs; (4) provide/coordinate services as specified in student case plan; and (5) complete ongoing monitoring of student progress and adjust services based on student needs. The program unit is the "check-in," the name given to the Student Support Specialists' meetings with students to monitor progress.

1. Case Management Element 1: Identification of At-Risk Students for Student Support Services. Students were identified for CIS services through various channels including referrals by teachers or other school staff and/or by being flagged as being at-risk in the EWRS.

2. Case Management Element 2: Student Needs Assessment to Identify Specific Needs. During this step, CIS conducted a thorough needs assessment that involved conversations with the teacher or staff member who made the referral, the student, and parent/family member. CIS staff also reviewed student records to ascertain the student's level of need. CIS of Greenville utilized a Student Assessment template from the national CIS office that included information about studens' attendance, behavior, grades, and standardized test scores.

3. Case Management Element 3: Development of Student Support Plans to Address Student Needs. The Student Support Specialist developed a Student Support Plan for each case-managed student. During this step, CIS staff documented a student's needs, assets and strengths, goals, and plans for the academic year. The national CIS office provided a Student Support Plan template that captured the information gathered. The Student Support Specialists and their case-managed students jointly developed the goals and benchmarks for measuring progress. CIS Student Support Specialists coordinated the provision of various school- and community-based services for each student on his/her caseload. Examples of these services included coordination of transportation to/from medical appointments or assistance with obtaining affordable housing.

4. Case Management Element 4: Provision/Coordination of Services as Specified in Student Support Plan. Based on the Student Support Plan developed, CIS provided services in any of eight categories: (1) academic, (2) behavior, (3) attendance, (4) social/life-skills, (5) resources to meet basic needs, (6) college/career preparation, (7) enrichment/motivation, and (8) family-related services. At CIS of Greenville sites, the Student Support Specialists provided most of the Tier II and III services. In some instances, services like mentoring and tutoring were provided by a community partner, but the Student Support Specialists regularly checked in with students and made sure their needs were being met.

5. Case Management Element 5: Ongoing Monitoring of Student Progress and Adjustment of Services Based on Student Needs. The CIS of Greenville Student Support Specialists monitored student progress on an ongoing basis and conducted formal student check-ins at least once a month. These check-ins ensured ongoing engagement, participation, and progress towards established goals. The "check-in" served as the program unit.

CIS implementation expected to (1) identify a minimum of approximately 185 students (10% of the total student population at the four target middle schools) for Tier II or III Student Support Services;

(2) provide a minimum of approximately 185 students with needs assessments; (3) develop a minimum of approximately 185 new student case plans; and (4) connect a minimum of approximately 185 new students to Tier II or Tier III services.

Outcomes and Impacts

Through the provision of these activities, the CIS model intended to achieve the secondary outcomes of helping at-risk students: (1) build relationships with caring adults; (2) be more engaged at school; (3) improve their attitude toward school and learning; and (4) improve their educational self-perception.

These secondary outcomes ultimately were to contribute to the intended impacts of CIS and broader OnTrack Greenville interventions: (1) decreased number of student disciplinary incidences; (2) improved math and ELA course performance; and (3) increased student attendance at the four treatment middle schools.

B. Overview of Prior Research

Research on academic motivation and self-perception during adolescence has found that children's feelings about educational achievement, as well as their confidence in their academic capabilities, decline significantly in middle school (Eccles & Midgley, 1990). An examination of longitudinal data of 1,329 middle school students and their mathematics teachers found that the majority of students experienced a dramatic shift in their perceptions of teacher efficacy. In other words, when these students transitioned to middle school, they went from being in elementary classrooms with teachers who had high expectations and positive perceptions about their students' abilities to classrooms with teachers who had low expectations and negative perceptions of their students' abilities. Results showed that this shift contributed to students having lower expectations for themselves when they entered middle school, which may help to explain the downward spiral in educational motivation and self-perception that seems to characterize the middle school years (Eccles & Midgley, 1990). These findings highlight the importance of positive relationships between middle school students and school staff and the effect these relationships can have on academic outcomes.

To help mitigate these challenges, an important component of individualized case management programs, like Communities In Schools, is the opportunity for students to form close, personal relationships with caring adults at school. Previous studies have found that when students have strong relationships with an adult outside of their homes, they are less likely to demonstrate behavior problems and more likely to be engaged in school (Murphey, Bandy, Schmitz, & Moore, 2013). Similarly, students who progressed through the many challenges presented by middle school "consistently say that what most helped them thrive in spite of these challenges was the quality of relationships they developed with adults in their schools" (Parsons & Taylor, 2011; p. 10). In addition, these types of relationships with adults lead to greater student engagement in school, as well as positive attitudes toward school and learning (Parsons & Taylor, 2011).

The close relationships and improved academic outlook supported by wrap-around student support programs have made these models a popular part of school reform efforts. Research on school turnaround efforts found that "schools that successfully turn around offer wrap-around services to

help support all the needs of their students and, where possible, their families and communities" (Miller & Brown, 2015). These results show that CIS's model of wrap-around services is likely to promote positive outcomes, both behaviorally and academically, for the students it serves.

Prior evaluations of Communities In Schools have created a preliminary body of evidence for the model's effectiveness. A national study of the CIS model at the elementary, middle, and high school levels using a quasi-experimental design found that treatment middle schools implementing the intervention with a high level of fidelity showed significant improvement in 8th grade math and reading achievement (ICF International, 2008). However, there were no significant differences for treatment schools implementing the intervention with low fidelity. A separate randomized controlled trial of the middle school model found that CIS treatment students experienced initial gains in core subjects, but effects were not significant in the long-term (ICF International, 2010). Apart from these findings related to course performance, a recent study found that CIS Student Support Services contributed to more trusting relationships with friends and adults and greater participation in organized networks of support for students in the CIS treatment group (Corrin et al., 2015).

C. Overview of Evidence Level and Impact Study

The incoming level of evidence for CIS's Student Support Services was preliminary and this study targeted a moderate level of evidence. The prior evaluations of the national CIS model utilized rigorous methodologies and found significant positive results of the program, which typically would merit a moderate incoming level of evidence. The Sub-Grantee CIS affiliate intended to adjust program implementation by placing three grade-level Student Support Specialists at each school rather than one; therefore, initiative stakeholders classified the incoming level of evidence as preliminary to account for these modifications to the model. With the availability of administrative data to measure student academic impacts in attendance, behavior, and course performance for students across the district and state, researchers were confident in their ability to conduct an evaluation with a quasi-experimental design, adding robust and technically sound results to expand the evidence base for the intervention and achieve a moderate level of evidence. Further, this evaluation examined the promising program modification referenced earlier – the placement of three grade-level Student Support Specialists at each school rather than one school-level Student Support Specialist – and the results potentially could inform program implementation at CIS affiliate sites throughout the nation.

Researchers were not able to target a strong level of evidence for several reasons. First, the geographic scope of OnTrack Greenville was not large enough to support a national- or state-wide multi-site research design that typically is required to achieve a strong level of evidence. Second, the Early Warning and Response System (EWRS) used to identify and match students to interventions did not lend itself to conditions in which randomization was feasible. The EWRS uses a wrap-around approach in which educators match a student to an intervention given the student's unique early warning indicators and needs. The identification and matching process is time intensive and intended to provide the best array of services to students. Initiative stakeholders expressed ethical concerns about withholding treatment to identified students in order to support random assignment, as the collective portfolio-level goals of the initiative were to improve academic achievement and engagement for all identified students at the target schools. Further, the number of students potentially identified for treatment through the EWRS was relatively small. Randomly assigning

identified students to treatment and control groups would have decreased the sample size and threatened the study's statistical power.

For confirmatory impact research questions, there were three comparison groups. Treatment students were matched to (1) other students in the *treatment schools* who did not participate in the intervention; (2) other students in the *same school district* attending district schools; and (3) other students attending *Title I schools across the state* of South Carolina. The use of these multiple comparison groups improved the internal and external validity of the study, as each comparison group presented different threats to validity. Researchers matched students using a propensity score model that included race, gender, grade level, English proficiency, special education status, free and reduced meal eligibility, and baseline outcome variables. Researchers conducted separate matching procedures for each data source, administrative data and survey data. At the conclusion of the matching process, researchers ensured that there were no significant differences between the treatment and comparison groups on pre-treatment covariates.

Researchers assessed exploratory secondary outcome research questions using a school-wide pre/post-student survey at treatment and district comparison schools, with data collection occurring in October and May of each academic year. The school-wide survey included the following secondary outcome measures: *academic perseverance, academic self-confidence, valuing education, relationships with teachers, relationships with caring adults, school engagement, and school belonging*.

D. Research Questions

1. Impact Research Questions

Researchers designed this study around the following types of research questions: (1) confirmatory impact research questions, and (2) exploratory research questions related to secondary outcomes.

The questions below are the *confirmatory impact research questions*:

> **RQ1**. *Did students who participated in Communities In Schools have improved attendance when compared to matched comparison students?*
>
> **RQ2**. *Did students who participated in Communities In Schools have fewer behavioral incidences when compared to matched comparison students?*
>
> **RQ3**. *Did students who participated in Communities In Schools have improved course performance in math and ELA when compared to matched comparison students?*

The next set of questions are *exploratory research questions* related to the *secondary outcomes*:

> **RQ4**. *Did students who participated in Communities In Schools have improved relationships with adults when compared to matched comparison students?*

RQ5. *Did students who participated in Communities In Schools have improved school engagement when compared to matched comparison students?*

RQ6. *Did students who participated in Communities In Schools have an improved educational self-perception when compared to matched comparison students?*

RQ7. *Did students who participated in Communities In Schools have an improved attitude toward learning when compared to matched comparison students?*

2. Implementation Research Questions

The implementation study research questions allowed researchers to examine the implementation fidelity of activities and outcomes and provide feedback for program improvement.

Focus Area #1: Implementation Fidelity of Activities

RQ8. *To what extent were the five CIS case management elements happening in the four schools?*

RQ9. *How did the five CIS case management element processes vary across Student Support Specialists and the four OnTrack Greenville schools?*

Focus Area #2: Implementation Fidelity of Outputs

RQ10. *What Tier II/III services did the 185 targeted students receive?*

RQ11. *Were 185 students identified for Tier II and III services and what were their identified needs?*

RQ12. *To what extent did identified students remain active in the CIS case management process for the entire year and beyond?*

Focus Area #3: Feedback for Improvement

RQ13. *What were the perceptions of the CIS School Team, the CIS staff, teachers, and participating students about the value of CIS Activities and how the program could be improved (e.g., relationship between CIS staff/school staff, use of early warning indicators, match of interventions to student needs)?*

E. Contribution of the Study

1. Level of Evidence Generated by the Study

The design of this study targeted a moderate level of evidence and the use of multiple comparison groups helped reduce threats to internal and external validity. After adjusting for multiple

comparisons, the negative outcomes for student attendance and behavior outweighed the positive findings for student behavior; therefore, this study was not able to achieve a moderate level of evidence. The positive significant results for secondary outcomes, such as relationships with teachers, relationships with caring adults, and school engagement, do allow researchers to confirm a preliminary level of evidence for the model. While researchers did not adjust for multiple comparisons for the secondary outcome analyses, positive significant findings across years of the study and comparison group were consistent with prior evaluations of the model (Parise et al., 2017).

The primary barrier to achieving a moderate level of evidence was the shortened timeframe of the impact study. Originally, the impact study of Communities In Schools was designed to cover four academic years. With the loss of Social Innovation Fund continuation funding, researchers executed a contingency plan to conclude the impact study after only two years. These important student impacts in attendance, behavior, and course performance are long-term in nature and it is possible the shorter study timeline did not allow researchers enough of an opportunity to examine the long-term effects of participation in the program. Further, some minor challenges with implementation resulted in the enrollment of students during the second semester of the academic year, a broad treatment definition, and, ultimately, a slightly lower sample size than expected. With a stricter treatment definition and a larger sample size, it is possible that there would have been fewer negative results of the impact study. This study will continue without support from the Social Innovation Fund. If these barriers are mitigated in the next two years, it is possible that this study ultimately will achieve a moderate level of evidence.

2. Strengths and Limitations of the Study

There were many strengths to this study. The use of these multiple comparison groups improved the overall internal and external validity of the study, as each comparison group presented different threats to validity. The majority of positive significant findings were detected with the matched students attending district comparison schools. One strength is that these schools shared the same district and community context. Moreover, students in this comparison group were likely to have participated in the Communities In Schools program if it had been available to them at their school. These schools did not share the same school or neighborhood contexts, though, presenting a threat to internal validity.

In addition, a thorough implementation study strengthened the implementation of the course and allowed researchers to confirm a sufficient degree of model fidelity. The lessons learned through the implementation study were valuable to project stakeholders and helped shine a light on program strengths and possible areas of improvement.

However, there were several limitations to the study. First, researchers were not able to identify a subset of state Title I middle schools with student population demographics similar to the treatment schools. The Sub-Grantee Evaluation Plan called for including only state comparison schools with a poverty index of 85% or higher and Hispanic students representing 10% of the student body. Only 13 schools met these inclusion criteria to be considered as state comparison schools—many were charter schools or special designation schools serving students with disabilities and were substantially different from the treatment schools. Researchers opted to loosen the inclusion criteria and include all Title I middle schools in South Carolina in the state school comparison group.

Another limitation of the study is that researchers did not have the ability to assess if comparison students at district and state schools had received similar program services, such as other integrated student support services. Researchers were able to confirm through the state Communities In Schools network that no other Title I middle schools included in the state comparison group were CIS school sites. While it is possible that a number of schools in the state comparison group offered programs similar to Communities In Schools, the number of matched students who attended these schools likely was very small and the inclusion of these students as matches would not have influenced the results of the study significantly.

In addition, the treatment schools simultaneously were implementing formal and informal school-wide initiatives to improve student attendance, behavior, and course performance. These school-wide efforts were confounding factors that may explain the lack of significant effects when comparing Communities In Schools students to in-school matched comparison students. These school-wide efforts also increased the likelihood that the positive significant effects of the program identified when examining district school matches may not be fully attributable to the Communities In Schools program.

Further, the absence of positive significant findings for in-school matches may be related to missing data on student participation in other OnTrack Greenville interventions. Apart from the school-wide models discussed above, OnTrack Greenville includes four other formal implementation partners and several informal partners, some of whom are working to improve the same student outcomes as the Communities In Schools course. It is possible that some of the in-school matches selected for the present study participated in other OnTrack Greenville support programs that influenced student behavior. This study originally intended to control for participation in other OnTrack Greenville support programs to address this limitation; therefore, this represents a deviation from the Sub-Grantee Evaluation Plan.

3. Connection of this Study to Future Research

While this is a final report to the Social Innovation Fund to satisfy grant requirements, the impact study of Communities In Schools will continue for two additional years. Researchers intend to conduct additional analyses to assess if long-term participation in Communities In Schools leads to improved student outcomes in attendance, behavior, and course performance over time. In addition, Communities In Schools of Greenville recently scaled to serve students attending a high school in the White Horse Community feeder pattern. It is possible that researchers will be able to study a small number of students into high school to assess additional long-term exposure to the program model. One could argue, however, that long-term participation in Tier II or Tier III services indicates that a student still demonstrates a high number of needs that have not been resolved through prior participation in the program.

The significant positive results for student perceptions of relationships with teachers and caring adults are consistent with prior research and indicate that students are developing stronger relationship skills with the support of their Student Support Specialists. Future research endeavors on the characteristics of these relationships will help Communities In Schools provide better training and resources to Student Support Specialists around the best practices of relationship-building. A better understanding of how these relationships grow and influence students will help program leaders pinpoint the specific skills needed, instead of viewing relational skills as something a Student Support

Specialist either has or does not have. In the final year of this study, the inclusion of qualitative data collection may provide a richer understanding of student relationships with adults in schools.

Researchers also intend to conduct a higher-level impact analysis of the comprehensive OnTrack Greenville initiative to attempt to tease out which significant findings are attributable to individual interventions and which are related more to broader school-wide policy and culture change at treatment schools. Communities In Schools surely is an important component of the OnTrack Greenville initiative and future research should consider how Communities In Schools, other response interventions, and a broader collective impact framework work together to support student academic and social-emotional learning.

4. Changes to Sub-Grantee Evaluation Plan

The primary change to the SEP was the loss of a key outcome measure of course performance, MAP assessment scores in ELA and math. Prior to academic year 2017-18, the local school district administered the MAP assessment in grades 3 through 8 at least two times per year, in the fall and spring. Some schools opted to administer the assessment a third time, in winter. The district opted to end its contract with MAP and began administering Mastery Connect in the fall of 2017. At present time, researchers do not have access to Mastery Connect data and remain uncertain if data from this assessment will serve as an acceptable outcome measure in the study. Researchers only were able to examine end-of-year SC READY assessment scores in math and ELA for academic year 2017-18.

One modification was made to the treatment definition for the study. Previously, researchers proposed that students would need to be enrolled at least 51% of the academic year at the treatment schools in order to be included in the treatment group. It proved challenging to measure this given the structure of the attendance data; therefore, researchers removed this inclusion criteria from the treatment definition.

The outcome measures for the behavior variables were modified slightly. Originally in the SEP, researchers proposed including continuous behavior variables: number of behavioral referrals, number of hours of in-school suspension, and number of days of out-of-school suspension. In addition to these continuous measures of student behavior, researchers also added dichotomous categorical variables: any behavioral referral, any in-school suspension, and any out-of-school suspension.

Researchers modified the student survey outcome measure for the exploratory secondary outcome of student attitude toward learning. Researchers originally proposed using a four-item scale, *Valuing School,* that measured a student's beliefs about the importance of school (Rockman et al, 2013). Researchers also included a similar scale on the student survey from a prior evaluation of Communities In Schools (Corrin et al., 2015). After the first wave of data collection, researchers assessed the psychometric properties of both scales and ultimately opted to retain the entire latter scale, with the addition of one item from the former scale. Researchers conducted exploratory factor analysis to examine the factor structure of the new scale, discussed later in this report in Section II.B.2.

There was a change in the timeline for receiving administrative data from the South Carolina Department of Education for the state comparison group analyses. Researchers anticipated receiving

the state dataset in October or November for the prior academic year. However, the dataset for academic year 2016-17 was not available until February 2018 and researchers still do not have access to data from academic year 2017-18. This delay in receiving state data prohibited researchers from conducting the 2017-18 state comparison group analyses for this report.

Researchers also had to alter the inclusion criteria for state comparison schools. In the SEP, researchers originally proposed to select state schools with a poverty index of 85 or higher and a Hispanic student population of at least 10%. At the time of writing the SEP, South Carolina calculated the poverty index based on the number of students eligible for free or reduced meals. After the introduction of the community provision for free and reduced meals, state officials introduced a new measure of poverty that included students who met any of the criteria: homeless or migrant during the academic year; Medicaid enrollment at any time during a three year period; SNAP enrollment at any time during a three year period; TANF enrollment at any time during a three year period; or foster care enrollment at any time during a three year period. This change in the poverty index affected and, in general, reduced the reported poverty levels of treatment schools and all schools across the state. When researchers searched for state comparison schools using these two criteria, only 13 schools appeared as possible comparison schools from which to draw matched comparison students. Of these schools, several were charter schools or schools serving exceptional learners and were not appropriate to serve as comparison schools. As such, researchers relaxed the inclusion criteria for state comparison schools and included all Title I middle schools in the state of South Carolina outside of the local district.

In addition, researchers were not certain if they would be able to administer the OnTrack Greenville Student Survey outside of the treatment schools. The local district allowed researchers to administer this pre- and post-survey at the four district comparison schools, allowing researchers to analyze student survey outcomes using matched comparison students. This change to the SEP strengthened the study's design for the analysis of secondary research questions. Survey administration proceeded as described in the SEP, though it was not possible to administer the pre-survey in September of each academic year due to the testing schedule and the amount of time needed to distribute parent opt-out letters before preparing survey materials. Instead, the student survey administration window occurred typically during the first two weeks of October each academic year of the study.

To examine possible attrition from the study, researchers proposed in the SEP assessing how students who attrited from the study through leaving the state dataset differed from students who remaining in the study. Students were to be compared based on demographics, pre-treatment outcomes measures, and post-treatment outcome measures when possible. Evaluators proposed examining the possibility of differential attrition between treatment and control groups based on these factors as well. Researchers did not conduct these comparisons as proposed, as the structure of the data files and the matching procedure meant there were very few students for whom attrition occurred after students were matched. A comparison of the number of students matched and the number of students in each regression with the matched sample demonstrated that attrition of this type was not a widespread challenge for this study.

There were some modifications to the matching procedure. The SEP noted that researchers would trim observations with propensities less than 0.1 and greater than 0.9, if sample size permitted. This was not done to ensure larger sample sizes. In order to increase balance and overlap, researchers used matching with replacement, rather than matching without replacement which was specified in the SEP. This necessitated the use of frequency weights in the matched analyses.

Further changes were made to the impact analysis plan. While the SEP stated that the main analyses would focus on the "treatment-on-the-treated" (TOT) effect, the researchers also suggested an "intent-to-treat" (ITT) analysis might also be performed if data were available. The evaluation team did not have access to the EWRS data in a format that would allow the researchers to compare those who were identified to receive CIS services, as opposed to those who actually received those services. Therefore, an ITT analysis was not possible. In addition, there were some challenges in estimating the proper standard errors in the regression analyses post-match. Researchers used a bootstrapping method, rather than clustered standard errors. The bootstrap standard errors were very similar to robust standard errors. Other modifications were implemented to maximize the number of observations to be included in the analyses. The proposed final regression model in the SEP included pre-treatment, or baseline, measures of the outcome as a covariate. The analyses presented here used that approach for the attendance, behavior, and test score analyses. Researchers did not control for a pretreatment measure of the outcome for the survey analyses. Doing so would have required students to have complete "pre" and "post" survey data. Given the response rates for the surveys, this would have limited severely the sample size. Therefore, pretreatment outcome measures were not controlled for in the survey outcome analyses.

In the SEP, researchers stated that they would use one-tailed tests with a significance level of $\alpha \leq .05$ to determine statistical significance. In this evaluation, researchers also considered the possibility that receiving CIS Tier II or Tier III services could decrease student academic performance. Therefore, researchers used a two-tailed, 0.10 alpha level. In terms of identifying a positive CIS effect to support a moderate level of evidence, the two approaches are equivalent.

This evaluation was complicated by the presence of multiple, simultaneous interventions occurring in the OnTrack Greenville schools. In the SEP, researchers suggested that participation in the other student-level interventions could be controlled for in the final regression models. Data on the timing of participation in the various interventions was not detailed enough to ensure that participation in these other programs occurred prior to receiving CIS services. Given that controlling for post-treatment covariates can bias estimates of causal impacts (Montgomery, Nyhan, & Torres, 2018), researchers did not adjust for participation in the other OnTrack Greenville programs as proposed in the SEP. A full analysis of the effects of participating in different intervention combinations is better suited for the cumulative impact study, rather than this evaluation.

There were few changes to the implementation study from what researchers originally proposed in the SEP. The most notable change was the discontinuation of the Case Management Services Checklist. Researchers attempted to use this Checklist to assess model fidelity of the five case management elements, but determined that the process of pulling and reviewing case files was too onerous on program staff and did not yield feedback that was useful for learning. Instead, researchers analyzed datasets pulled directly from the CISDM to assess model fidelity and relied heavily on interviews and surveys with Student Support Specialists as intended to examine implementation of the case management elements.

II. Study Approach and Methods

A. Impact Evaluation Design

This study used quasi-experimental methods to examine the effect of participation in Communities In Schools. While a randomized control trial (RCT) would have been ideal, it was not feasible for this study. Instead, researchers used nearest neighbor propensity score matching to estimate the effect of the Communities In Schools program on students at the four treatment schools. Matching techniques are popular in observational education research when a RCT is not feasible, and previous research has found that the results from matching can replicate RCT results if a number of assumptions are met (Bifulco, 2012; Cook, Shadish, & Wong, 2008; Fortson, Verbitsky-Savitz, Kopa, & Gleason, 2012).

This analysis compares Communities In Schools students to three different comparison groups. First, Communities In Schools students were matched to other students attending OnTrack Greenville middle schools who did not participate in the program. This is the "treatment school" comparison group. A second matching procedure compared Communities In Schools to students in four other Greenville County public schools that did not participate in OnTrack Greenville. This is the "district school" comparison group. Lastly, a third matching procedure compared the Communities In Schools students to public school students who attended Title I schools across the state of South Carolina. This is the "state school" comparison group. Table 4 presents a summary of these groups and the threats to internal validity posed by each group.

At the first stage of the matching process, the "treatment" was defined. Researchers used internal program records from Communities In Schools to generate a total pool of students who received services from Communities In Schools in academic years 2016-17 and academic year 2017-18. Then, researchers limited inclusion in the treatment group to students in the treatment schools who met the following parameters: 1) the student's parent(s)/guardian(s) agreed to their child participating in the study, and 2) students received Tier II or Tier III Student Support Services during the academic year.

In order to estimate the true effect of participation in Communities In Schools, researchers considered the observed and unobserved factors that may have affected participation in the program and the outcomes of interest. This "first-stage" regression model included race, gender, free and reduced meal status, special education status, English proficiency, grades, average daily attendance, student behavior measures (i.e., if the student had an in-school suspension, out-of-school suspension, or any other type of discipline incident), and a variety of standardized test scores covering multiple subjects. Researchers pulled data for each of these variables from the academic year prior to student participation in Communities In Schools to ensure that the data were not affected by CIS participation.

Researchers estimated a logistic regression using these covariates to produce a predicted probability of receiving treatment for each student separately for the treatment school group, district school group, and state school group. After creating propensity scores, treatment students were matched to comparison students. Like the estimation of the propensity scores, the matching of students occurred independently for each comparison group. Each Communities In Schools treatment student was matched to five comparison students.

Table 4. Summary of Treatment and Comparison Groups

	Inclusion	**Schools**	**Similarity to Treatment Group**	**Threats to Internal Validity**
Treatment Group	Participates in CIS	Four Title I OnTrack Greenville treatment schools		
Within-school Comparison Group	Matched to treatment student Did not participate in CIS	Four Title I OnTrack Greenville treatment schools	Share same school context From similar neighborhoods Equal access to participate in CIS Access to all outcome measures	Possibility that selection bias is exacerbated by having few high propensity students in comparison group EWRS may encourage all high propensity students to participate in CIS, leaving few good matches in comparison group Possibility of spillover effects
Within-district Comparison Group	Matched to treatment student	Four schools identified by the district to serve as comparison schools Schools do not offer CIS	Share same district and community context Students who would have participated in CIS if it was available to them would be in the control group Access to all outcome measures	Do not share the same school or neighborhood contexts
State Comparison Group	Matched to treatment student	Any Title I middle school in the state Schools do not offer CIS	Students who would have participated in CIS if it was available to them would be in the control group	Do not share the same school or neighborhood contexts Did not have access to some outcome measures

Once the propensity scores were estimated and student matches were made, researchers examined the strength of the matches. Ideally, the samples of treatment and non-treatment students should be similar to each other, or *balanced*, in terms of the variables used to estimate the propensity score. When samples were not similar, the researchers estimated a new propensity score model using interactions and higher order terms, continuing this process until proper balance was achieved.

At the conclusion of the matching process, researchers ensured that there were no significant differences between the treatment and comparison groups on pre-treatment covariates. Importantly, researchers examined the standardized difference in means and variance ratios between the treatment and comparison groups. Researchers then performed multivariate analyses to provide an estimate of the causal effect of participating in Communities In Schools.

As detailed below, the matched analyses examined outcomes from both administrative and survey databases. Because of survey nonresponse, the populations of students with complete data were different for the analyses of the outcomes from administrative data and those from the survey data. Therefore, researchers performed separate matching procedures for the outcomes from these different sources. In total, this evaluation includes nine matched comparisons:

1) 2016-17 Communities In Schools students versus treatment school comparison students on administrative data outcomes,
2) 2016-17 Communities In Schools students versus treatment school comparison students on survey data outcomes,
3) 2016-17 Communities In Schools students versus district school comparison students on administrative data outcomes,
4) 2016-17 Communities In Schools students versus district school comparison students on survey data outcomes,
5) 2016-17 Communities In Schools students versus state comparison students on administrative data outcomes,
6) 2017-18 Communities In Schools students versus treatment school comparison students on administrative data outcomes,
7) 2017-18 Communities In Schools students versus treatment school comparison students on survey data outcomes,
8) 2017-18 Communities In Schools students versus district school comparison students on administrative data outcomes, and
9) 2017-18 Communities In Schools students versus district school comparison students on survey data outcomes.

B. Sampling, Measures, and Data Collection

1. Sampling

Sampling Plan

This evaluation of Communities In Schools was an analysis of a model of Integrated Student Services to improve student attendance, behavior, and course performance in high-poverty middle schools with a significant population of Hispanic students. The average poverty index for the treatment

schools was 83 in academic year 2017-18.[8] The results of this study are generalizable to similar high-poverty schools. The inclusion of two external comparison groups, which consisted of students in moderate-poverty schools in the same school district and high-poverty schools across the state of South Carolina, increased the external validity of this study. Further, this evaluation focused on middle school students, so the results of the evaluation may not apply to the introduction of the Communities In Schools in elementary or high schools.[9]

Researchers first defined the "treatment" for this study. Researchers used internal program records from Communities In Schools to generate a total pool of students who received services from Communities In Schools in academic years 2016-17 and 2017-18. Then, researchers limited inclusion in the treatment group to students in the treatment schools who met the following parameters: (1) the student's parent(s)/guardian(s) agreed to their child participating in the study and (2) students received Tier II or Tier III Student Support Services during academic year 2016-17 (n = 170) or 2017-18 (n = 184).

Students in the within-school comparison group also were enrolled in the four treatment schools for the majority of the school year and these students also had parental permission to participate in the study. However, to be eligible for the within-school comparison group, students could not have ever participated in Communities In Schools. Final inclusion in the within-school comparison group was determined by the matching process described above.

The population of potential external comparison group students consisted of students in: 1) four other Greenville County Schools middle schools and 2) Title I schools throughout the state of South Carolina. In partnership with researchers, district leaders at Greenville County Schools selected the four within-district schools to serve as comparison schools for the evaluation. There were 19 middle schools in the district during project implementation and all of the Title I schools in the district were participating in OnTrack Greenville. Absent other high-poverty middle schools, Greenville County Schools selected the four middle schools with student demographics most similar to OnTrack Greenville schools and a moderate level of student poverty. In academic year 2016-17, 3,398 middle school students attended the district comparison schools, while in academic year 2017-18, 3,568 students attended these schools.[10]

The state comparison students attended Title I schools in districts across South Carolina. Students in Greenville County Schools were excluded from the population of potential state matches, as the presence of OnTrack Greenville programs in the district did not create a "business as usual" comparison and non-treatment Greenville County Schools were included in the first external

[8] The SC State Department of Education poverty index is based on Medicaid Enrollment, TANF Enrollment, SNAP Enrollment or Foster Care Services within three years (February 2014 to January 2018) or flagged as migrant or homeless in PowerSchool for academic year 2017-18 (135 Day Census Count).

[9] It is important to note that only students in the treatment and comparison groups with similar propensity scores were included in the analysis. This analysis examines the effect of the CIS program for students in which there is overlap in the propensities of participating in CIS. The estimate of the effect may be different than the overall effect of participating in CIS for the full sample. This may limit somewhat the external validity of the results, but the comparison between students with similar propensity scores increases the internal validity of the study design.

[10] Greenville Count Schools Population Statistics for 180th day of attendance, https://www.greenville.k12.sc.us/About/main.asp?titleid=statsarchives

comparison group. In academic year 2016-17, 45,013 middle school students attended a Title I school in South Carolina.

The population of possible external comparison group students included those students who were enrolled in the comparison schools and did not have missing data on the variables used in estimating the propensity score. Following the matching procedure described above, external comparison students were matched with treatment students. It is important to remember that this evaluation was a student-level, not a school-level, analysis. However, as a means to increase the internal validity of the study, schools were selected such that external comparison students attended somewhat similar schools as the treatment students attended.

For each year of the study, comparison group, and data source, study participants flowed through several stages in which they either were included or excluded from the study. First, researchers received the roster data for the entire treatment school population. Then, researchers received the roster of students who participated in the intervention from the Sub-Grantee. Researchers only included program students moving forward who met the treatment definition used in the study. The resulting treatment roster was merged with the school population roster. In rare occasions, treatment students did not appear on the school roster and were excluded from the study. Researchers then checked to see which remaining treatment students had complete data for the variables used in propensity score matching. Not all students were successfully matched, as discussed later in this report. Finally, each regression analysis only included students who had data for the outcome variable. Table 5 presents the flow of study participants in academic year 2016-17 for students matched to comparison students in treatment schools using administrative data. Given missing data on the dependent variable, the total number of students included in the final analyses varied somewhat. The values in Table 5 and the other flow charts for the number of students included the final analyses pertain to the most common sample size for the confirmatory analyses. The sample sizes for the other outcomes can be seen in the individual results tables. Similar flow charts for other years, comparison groups, and data sources appear in Appendix C.

Researchers performed a power analysis to assess the relationship between sample size and the minimum detectable effect size (MDES), given a number of assumptions, as part of the Sub-Grantee Evaluation Plan. In the evaluation presented here, the smallest number of CIS students included in the main confirmatory impact analyses was 122. The minimum sample size value included in the SEP power analysis was 85 students. While above the minimum sample size value included in the SEP power analysis, the sample size in this study is on the lower end of the SEP estimate. Post hoc analyses are uninformative, but one can perform sensitivity analyses that provide the minimum effect size a study could detect given the actual study sample size and a number of assumptions (Perugini, Gallucci, & Costantini, 2018). Using G*Power, a power analysis software program, researchers produced two sensitivity analyses (Faul, Erdfelder, Buchner, & Lang, 2009; Faul, Erdfelder, Lang, & Buchner, 2007). Researchers assumed a one-tailed test with an alpha level of 0.05 and power of 0.80. First, researchers assumed a sample size of 244, which would entail a one-to-one control to treatment ratio. Using this value, researchers estimated that the MDES is d = 0.32. Second, researchers adjusted for the fact that five comparison students were matched to each CIS student in this study. Using this five-to-one control to treatment sample size ratio, researchers estimated that the MDES for the study design is 0.18.

Table 5. CIS Participant Flow Chart at Treatment Schools AY 2016-17 (Administrative Data)

Study Time-point	Total number students	Number students included	Number students not included	Notes
Treatment Students				
1. Program Roster	170	---	---	
2. Appeared on School Roster	170	156	14	
3. Met Treatment Inclusion Criteria	156	156	0	Received Tier II/Tier III Services
4. Had Full Matching Data	156	135	21	
5. Matched	135	127	8	
6. Included in Analysis	127	127	0	
Comparison Students				
1. School Roster	5,267	---	---	
2. Met Treatment Inclusion Criteria	5,267	1,763	3,966	Treatment School, Didn't receive CIS services
3. Had Full Matching Data	1,763	1,449	314	
4. Matched	1,449	379	1,070	Unique students (note: matching was done with replacement)
5. Included in Analysis	379	379	0	

Recruitment and Retention

As students were identified for CIS's Student Support Services based on student and family need, there was no formal recruitment of participants. Additionally, students were dismissed from their Student Support Specialists' caseloads based on adequate progress and mastery of the goals in their individual case plans. These students remained in the study as treatment students. However, if the student moved outside of the attendance zones of any of the four treatment schools, he/she would no longer be receiving CIS's intervention, and thus were not retained in the study sample. If they moved within one of the four schools, they remained in the sample.

In order to maximize participation in the study, the research team employed an opt-out approach to parent consent for the OnTrack Greenville Student Survey administered at treatment and district schools. Parental consent was not needed for the use of student outcome data housed in district and state administrative datasets, as they data were accessed through formal data-sharing agreements.

Attrition and Missing Data

Attrition is a challenge for all longitudinal evaluations. This evaluation used a number of means to minimize the effect of attrition. The evaluation team was able to track students who transferred to any other public school in the state. Therefore, these students continued in the study as treatment or comparison students. Further, since the main outcomes of interest were available in PowerSchool, the state's data system, regardless of the school a student was attending, there were few cases of attrition within comparison groups due to students transferring schools. If study participants were no longer in the state dataset, however, they were considered attrited from the study. Given that

consent was a precondition for participating in the treatment group, the evaluators found that consent had little effect on attrition. Parental consent was not needed for the use of administrative data for treatment, district, or state comparison students. Consent from parents of the treatment and district comparison group for the student survey was an opt-out consent, which maximized the number of students participating in this study.

Missing data poses a challenge in every evaluation. The goal of the evaluation team was to limit the amount of missing data, as all adjustments for missing data are suboptimal and impose tradeoffs. Missing data could have occurred in three ways for this study.

First, data could be missing on the receipt of treatment. This threat was small, as CIS Student Support Specialists were trained on correctly recording their interactions with students in the CIS mandated data entry system, CISDM.

Second, data could be missing on the main independent variables, including those used for the propensity score analysis. The covariates used in this study, including race, gender, low-income status, and baseline test scores, were all available to the evaluation team in the statewide database for all public school students. Using unique student identification numbers, the evaluation team was able to find the vast majority of students in their dataset regardless of what school(s) a student had previously attended. The state dataset had a few missing cases on the demographic variables, and the evaluators were able to "backfill" any missing data for the permanent demographic variables with datasets from subsequent years. Analyses of some of the secondary outcomes required students to fill out a "baseline" questionnaire. School staff ensured that students completed these questionnaires.

Third, incomplete data could exist on the dependent variable. As the outcomes of greatest interest in this evaluation were included in the statewide, public student records database (e.g., attendance, suspensions, and test scores), the evaluators encountered few instances of missing data on the dependent variable when using the administrative database. Incomplete data was a greater issue when examining the survey outcomes. When such cases occurred, the observations were dropped from the analysis (i.e., listwise deletion). Using U.S. Department of Education's What Works Clearinghouse standards, Puma et al. (2009) recommends case deletion in instances in which post-test or outcome data are missing.

2. Measures and Instruments

Socio-Demographic Variables and Covariates

The following socio-demographic variables were used for propensity score matching and as covariates in impact and outcome analyses: (1) poverty status, (2) race, (3) gender, (4) English proficiency, and (5) disability status.

Poverty status. Student poverty status was measured through free and reduced meal eligibility. As determined by the National Free Lunch Program, students with a family income at or below 130% of the poverty threshold are eligible for free meals, while students with a family income between 130% and 185% of the poverty threshold are eligible for reduced meals (United States Department of Agriculture, 2015). Despite the known limitations for using free and reduced meal eligibility as a

proxy for poverty status (Harwell & LeBeau, 2010), this measure could be tracked easily by the Greenville County Schools and was readily available for use. Using free and reduced meal eligibility, researchers categorized students as "eligible for free meals or reduced meals" or "not eligible for free or reduced meals." Data on student free and reduced meal eligibility was accessed through district and state administrative records.

Race. Researchers used four categories for student race: "African American," "Caucasian," "Hispanic," and "Other." Student race was accessed through district and state administrative records.

Gender. Student gender was split into two groups, "male" and "female." Student gender was captured in district administrative records.

English proficiency. Measures of English proficiency consisted of two primary categories, "English language learners" and "non-English language learners." Student English proficiency was accessed through district and state administrative records.

Disability status. The South Carolina Department of Education (SCDE) defines child disability status in accordance with the Individuals with Disabilities Education Act (IDEA) as "having an intellectual disability, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance (referred to in this part as ''emotional disturbance''), an orthopedic impairment, autism, traumatic brain injury, other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services." In the present study, students were categorized as having "no identified disability" or having at least one "identified disability." Student disability status was accessed through district and state administrative records.

Independent Variables

Treatment. The treatment group consisted of all students in treatment schools who met the following parameters: 1) the student's parent(s)/guardian(s) agreed to their child participating in the study, and 2) the student received Tier II or Tier III Student Support Services from Communities In Schools during academic year 2016-17 or 2017-18.

Primary Impact Variables: Confirmatory

Average daily attendance. This measure of school attendance was a calculation of the number of days of school attended divided by the number of days of school enrolled.

Chronic absenteeism. Chronic absenteeism occurs when a student is absent more than 10% of the academic year, including both excused and unexcused absences. At the school level, the number of chronically absent students is often more telling than the average daily attendance rate, as a school could boast an acceptable attendance rate and still have a large number of students chronically absent given the distribution of absences (Balfanz & Byrnes, 2012). Though not commonly tracked by school districts, this measure is growing in popularity, especially due to its utility as an early warning indicator (Balfanz, Herzog, & Iver, 2007). In the present study, chronic absenteeism is a dichotomous categorical variable with students either "chronically absent" or "not chronically absent."

Behavioral referrals. The primary measure of student behavior was the total *number of behavioral referrals* per student. The number of behavioral referrals was available in the district dataset. The state dataset included the number of discipline incidents, so that is the outcome used for the state analyses. Previous research has found office behavioral referrals to be a meaningful source of data for designing and evaluating behavior interventions (Putnam, Luiselli, Handler, & Jefferson, 2003; Sugai, Sprague, Horner, & Walker, 2000). Gottfredson & Gottfredson (1999) found that the test-retest reliability of office discipline referrals ($r = 0.56$, $p < 0.01$) exceeded that of teacher reports using a behavior checklist ($r = 0.36$, $p < 0.01$). In addition to a student's total number of behavioral referrals, researchers used a dichotomous categorical variable for student behavioral referrals, with students either having "no behavioral referrals" or "one or more (any) behavioral referral(s)." The present study examined these measures over two overlapping periods of time, (1) each academic year; and, (2) the spring semester of each year. Greenville County Schools tracks disciplinary referrals in an online Incident Management System (IMS). Researchers accessed student behavioral data through this system.

In-school suspensions. This measure included the total *number of hours of in-school suspension* served by the student within the academic year. The number of hours of in-school suspension was available in the district dataset. The state dataset included the number of in-school suspensions, so that was the outcome used for the state analyses. In addition, researchers slightly modified the SEP to use a dichotomous categorical variable for student in-school suspension in the analysis, with students either having "no in-school suspensions" or "one or more in-school suspensions." Given that the treatment occurred during the fall semester, the present study examined these measures over two periods of time, (1) each academic year, and (2) the spring semester of each year.

Out-of-school suspensions. This measure included the total *number of days of out-of-school suspension* served by the student within the academic year. For the state analyses, the total number of out-of-school suspensions was used. In addition, researchers slightly modified the SEP to include a dichotomous categorical variable for student out-of-school suspension in the analysis, with students either having "no out-of-school suspensions" or "one or more out-of-school suspensions." Given that the treatment occurred during the fall semester, the present study examined these measures over two periods of time, (1) each academic year, and (2) the spring semester of each year.

Math and reading course performance. Data from the SC Ready and Measures of Academic Progress (MAP) standardized test measured math and reading course performance. The SCDE began administering the SC READY to students in grades 3 through 8 in Spring 2016. This standardized test serves as the state's primary measure of proficiency in math and ELA. Scale scores are generated individually for each of the subjects. In addition, scores are classified into categories, "exceeds," "meets," "approaches," and "does not meet." Researchers accessed SC READY scores through district and state administrative records.

Northwestern Evaluation Association's (NWEA) MAP assessment is a computerized adaptive test for students in grades 2 – 10. Administered up to three times per year, the MAP assessment measures student math and reading achievement and provides immediate results to teachers on student capabilities. Both content area scale scores have shown strong marginal and test-retest reliability in the middle grades and strong concurrent validity when compared to state assessment scale scores (Northwest Evaluation Association, 2004). Further, a confirmatory factor analysis of MAP scale scores across grades and states provided additional support for the construct validity of the instrument (Wang, McCall, Jiao, & Harris, 2012). Through academic year 2016-17, Greenville County Schools

administered the MAP assessment to all students in grades 6 – 8 two times per year, in September and April. However, the district stopped administering this assessment at the beginning of academic year 2017-18. MAP assessment data were available for most district treatment and comparison students.

Secondary Outcome Variables: Exploratory

Students build relationships with caring adults. This construct was measured by two scales, Relationships with Caring Adults (Corrin et al., 2015) and Positive Relationships with Teachers (Corrin, Sepanik, Rosen, & Shane, 2016). The six-item Relationships with Caring Adults scale measured the extent to which students related to school personnel and included items such as "At my school there is an adult who really cares about me" and "At my school there is an adult who always wants me to do my best." Items were scored on a four-point, Likert-type scale ranging from "not true" to "true." This scale demonstrated strong internal reliability in prior studies ($\alpha = 0.89$) and in the current study ($\alpha = 0.89$).

The eight-item Positive Relationships with Teachers scale measured the perceived relationships of students with their teachers and classmates and included items such as "Students at my school get along well with teachers" and "My teachers really listen to what I have to say." Items were scored on a four-point, Likert-type scale ranging from "not true" to "true." This scale demonstrated strong internal reliability in prior studies ($\alpha = 0.86$) and in the current study ($\alpha = 0.85$).

Students are more engaged at school. This construct was measured using the School Engagement scale (Rockman et al, 2013) and the School Belonging scale (Corrin et al., 2015). The four-item School Engagement scale measured the degree to which a student felt connected to his or her school and education (Rockman et al, 2013). It included items such as "I like school" and "I participate a lot in class." Items were scored on a four-point, Likert-type scale ranging from "not true" to "true." This scale demonstrated strong internal reliability in prior studies ($\alpha = 0.68$) and in the present study ($\alpha = 0.74$).

The five-item School Belonging scale measured the extent to which a student felt accepted and supported within the school environment (Corrin et al., 2015). It included items such as "I feel close to people at my school" and "I feel like I am a part of my school." Items were scored on a four-point, Likert-type scale ranging from "not true" to "true." This scale demonstrated strong internal reliability in prior studies ($\alpha = 0.84$) and in the present study ($\alpha = 0.83$).

Students improve their educational self-perception. This construct was measured by two scales, the Academic Perseverance scale and the Academic Self-Confidence scale (Rockman et al, 2013). The six-item Academic Perseverance scale measured having a hopeful outlook on studying and completing schoolwork and included items such as "I keep doing schoolwork even when it is hard" and "When I study, I set goals for myself." Items were scored on a four-point Likert-type scale ranging from "not true" to "true." This scale demonstrated strong internal reliability in prior studies ($\alpha = 0.79$) and in the current study ($\alpha = 0.76$).

The six-item Academic Self-Confidence scale measured the ease with which students felt they were learning and included items such as "Homework is easy for me" and "I understand what we are learning in school as much as my friends." Items were scored on a four-point, Likert-type scale

ranging from “not true” to “true.” This scale demonstrated strong internal reliability in prior studies (α = 0.75) and in the current study (α = 0.78).

Students improve their attitude toward learning. This construct was measured by a modified version of the Valuing Education scale (Corrin et al., 2015). Originally, this was a six-item scale measuring a student’s beliefs about the importance of school and included items such as “My education will be valuable in getting the job I want” and “Being a good student is important to me.” Researchers added one additional item on the importance of attending college to make this a seven-item scale. Items were scored on a four-point, Likert-type scale ranging from “not true” to “true.” The original scale demonstrated strong internal reliability in prior studies (α = 0.79). In the present study, the modified scale was tested using exploratory factor analysis with oblimin rotation and was found to have a unidimensional factor structure, as predicted, with strong internal reliability (α = 0.84).

3. Data Collection Activities

The measures used in the impact study for propensity score matching, covariates, independent variables, and primary impact variables were collected routinely by Greenville County Schools using the PowerSchool data management platform. The impact study drew on student data from both Greenville County Schools and the South Carolina Department of Education. Researchers collected data to explore the secondary outcomes via the administration of electronic student surveys.

Student data from the South Carolina Department of Education. The South Carolina Department of Education (SCDE) mandates the use of PowerSchool and provides districts technical manuals and support to improve the internal reliability of data collected. The SCDE routinely collects and aggregates data from all districts and houses it in the South Carolina Education Data System (SCEDS). The Riley Institute currently has a Memorandum of Agreement with SCDE that dictates the terms and conditions of the transfer of PowerSchool data from SCDE to the Riley Institute, including provisions for maintaining, protecting, and destroying datasets. The inclusion of these data allowed researchers to examine a group of comparison students from schools across the state of South Carolina.

Student data from Greenville County Schools. A research and data sharing agreement (RDSA) with Greenville County Schools also provided administrative data for the study. This data sharing agreement describes (1) the research and information usage terms and conditions; and (2) the purpose and design of the study, including type(s) of data requested, data collection schedule, plan for reviewing and sharing results, and methods of securing and destroying data.

OnTrack Greenville Student Survey. The research team administered the OnTrack Greenville Student Survey to collect data for secondary outcome measurement. Teachers administered the survey to students electronically in October and May of academic years 2016-17 and 2017-18. The Research Team obtained passive parental permission by sending home an opt-out letter at the beginning of the academic year. Opt-out consent was sufficient, as the survey did not include any identifiable information.

In order to link the survey data to the PowerSchool dataset, researchers created a unique survey ID number for each student who was not opted-out by their parents. Researchers maintained a separate database that linked the survey ID numbers with each student’s PowerSchool ID number. In

preparation for survey administration, the researchers created individual notecards for each student, which included the student's name and unique survey ID. Researchers organized the notecards in packets by school and teacher and distributed the packets to the schools in-person, along with survey administration instructions, before the survey administration window opened. Teachers passed out the notecards to each student whose parents did not opt them out of the survey (teachers were provided a list of those students who had been opted out) and provided oral instructions on how to complete the survey. To begin, students navigated to the electronic survey on a computer and entered their unique survey ID to link their answers to their PowerSchool data. Students then were given permission to opt themselves out of the survey if they decided they did not want to take it. Survey completion took between 10 and 20 minutes, with an average student completion time of 12 minutes. Following administration, the teacher collected all survey ID cards and returned them to their survey packet. Researchers then destroyed all of the ID cards. The OnTrack Greenville Student Survey is located in Appendix D.

Information on the response rate of the OnTrack Greenville Student Survey appears in Tables 6 and 7. All students attending treatment and district schools were invited to participate in the pre- and post-survey. The parent opt-out rate was slightly higher at treatment schools than comparison schools, largely due to differences in distributing the passive parental permission form. At treatment schools in academic year 2016-17, the permission form was sent home with students at the beginning of the academic year along with other first-day-of-school forms. Many of these forms had to be returned with a parent signature, so researchers suspect that many parents signed and returned the opt-out form to decline their child's participation in the study without reading the form completely. At comparison schools, however, the passive parental permission form was sent home with students a few weeks after the start of the academic year and fewer forms were returned. For that suspected reason, the rate of student opt-out was 5% at treatment schools and 1 – 2% at comparison schools in the 2016–2017 academic year.

Table 6. Response Rate of OnTrack Greenville Student Survey AY 2016-17

	Pre-Survey Fall Semester 2016				Post-Survey Spring Semester 2017			
	Treatment Schools (n = 4)		Comparison Schools (n = 4)		Treatment Schools (n = 4)		Comparison Schools (n = 4)	
Total # Invited to Participate	1921	100%	3369	100%	1886	100%	3368	100%
Parent Opt-Outs	212	11%	91	3%	195	10%	208[1]	6%
Student Opt-Outs	89	5%	47	1%	90	5%	65	2%
Excluded Cases[2]	238	12%	560	16%	384	20%	445	13%
Total # Valid Survey Responses	1382	72%	2671	79%	1217	65%	2650	79%
Average Completion Time	13 minutes		11 minutes		13 minutes		11 minutes	

[1]Mid-year transfer students who never received a parental permission form were treated as parent opt-outs at comparison schools.
[2]Excluded Cases includes students who were absent the day of the survey, duplicate survey starts, incomplete survey responses, etc.

Students who were absent the day of survey administration did not have an opportunity to complete the survey at a later date. In addition, individual schools decided not to offer the survey to students with severe learning and/or intellectual disabilities. When cleaning the data, researchers used list-wise deletion to eliminate cases with missing data. In academic year 2017-18, after excluding these students and cases, the total percentage of valid survey responses for each treatment group at each survey administration ranged from 65 – 72% at treatment schools and was 79% at comparison schools in the 2016–2017 academic year. Treatment school students took an average of 13 minutes to complete the OnTrack Greenville Student Survey, while comparison school students took an average of 11 minutes to complete the survey.

For the 2017-18 OnTrack Greenville Student Survey, the total percentage of valid survey responses for each treatment group at each survey administration ranged from 70 – 75% at treatment schools and from 71 – 81% at comparison schools in the 2017-18 academic year. Treatment students took an average of 12 minutes to complete the OnTrack Greenville Student Survey in the 2017-18 academic year, while comparison students took an average of 10 minutes.

Table 7. Response Rate of OnTrack Greenville Student Survey AY 2017-18

	Pre-Survey Fall Semester 2017				Post-Survey Spring Semester 2018			
	Treatment Schools (n = 4)		Comparison Schools (n = 4)		Treatment Schools (n = 4)		Comparison Schools (n = 4)	
Total # Invited to Participate	2040	100%	3692	100%	2069	100%	3498	100%
Parent Opt-Outs	45	2.2%	82	2.2%	43	2.1%	292[1]	8.3%
Student Opt-Outs	127	6.2%	91	2.5%	168	8.1%	117	3.3%
Excluded Cases[2]	348	17.0%	536	14.5%	397	19.2%	599	17.1%
Total # Valid Survey Responses	1520	74.5%	2983	80.8%	1461	70.1%	2490	71.1%
Average Completion Time	11m 45s		10m 45s		12m 15s		9m 30s	

[1]Mid-year transfer students who never received a parental permission form were treated as parent opt-outs at comparison schools.
[2]Excluded Cases includes students who were absent the day of the survey, duplicate survey starts, incomplete survey responses, etc.

III. Implementation Study

A. Implementation Study Design and Measures

SERVE Center at the University of North Carolina at Greensboro was contracted by the Riley Institute at Furman University to evaluate the implementation of the Communities In Schools of Greenville (CIS) model of Integrated Supports. As of the end of the 2017-18 school year, CIS had implemented its Student Support Services model at four sites for three years. The first year of implementation (2015-16) was considered a pilot year, thus, the implementation evaluation design gathered qualitative information from focus groups and interviews on how the implementation was proceeding and any challenges or issues arising that needed attention. In academic years 2016-17 and 2017-18 (Years 2 and 3 for CIS, respectively), OnTrack Greenville operated in full implementation mode. Researchers used five sources of data to describe implementation fidelity (activities and outputs) and stakeholder satisfaction. The five sources of data were: (1) CIS Student Support Specialist Online Survey; (2) End-of-Year Online CIS Student Survey; (3) OnTrack Greenville Educator Survey; (4) Principal/Assistant Principal Interview Protocol; and, (5) CISDM Data Reports (provided by CIS of Greenville).

Table 8 below shows how the data sources aligned with the implementation dimensions assessed. The first dimension of implementation fidelity examined the extent to which the five case-management elements outlined in the CIS logic model under Activities were used in the delivery of Tier II and III Student Support Services. The second aspect of implementation fidelity was the Outputs that focus on the extent to which the target population of students received services. The third component of the implementation evaluation addressed Stakeholder Perspectives (e.g., perceptions of CIS students, teachers, and principals).

Table 8. Evaluation Instrument/Data Source Alignment with Implementation Dimensions

Instrument or Data Source	Implementation Dimension Addressed		
	Fidelity of Activities	Fidelity of Outputs	Stakeholder Perspectives
Student Support Specialist Online Survey	✓	✓	
End-of-Year Online Student Survey	✓	✓	✓
CISDM Data Reports	✓	✓	
OnTrack Greenville Educator Survey			✓
2018 Principal Interviews			✓

1. Student Support Specialist Online Survey

The Student Support Specialist Survey was designed by SERVE Center to gather information about the Student Support Specialists' work during the current academic year and inform program improvement. CIS of Greenville administered the survey by email (online link) in April 2017 and March 2018. Across the four sites, 9 Student Support Specialists responded to the survey in 2017 and 10 Student Support Specialists responded to the survey in 2018. The Student Support Specialists' responses resulted in quantitative ratings of implementation of the five case management elements used in the delivery of Tier II/III Student Support Services: (a) identification, (b) student-level needs assessment, (c)

development of Student Support Plans, (d) provision/coordination of services as specified in Student Support Plans, and (e) ongoing monitoring of student progress and adjustment of services based on student needs. Data analysis of the surveys was descriptive in nature (means, percentages, etc.). (Appendix E)

2. End-of-Year Online Student Survey

SERVE Center developed the CIS Student Survey to collect data from the case-managed students on the types, quantity, engagement with, and perceived quality/value of the support services received. In addition, given research on CIS indicating that length of time (multiple years) in the program is associated with better outcomes (Porowski & Passa, 2011), the survey asked students about longevity in the program. Riley Institute translated the survey into Spanish and the students were offered an opportunity to choose Spanish or English (based upon his/her response to the language spoken at home).

SERVE worked with the CIS of Greenville Project Director to plan the administration of the Spring 2018 survey. A Qualtrics link was sent by the CIS of Greenville Project Director to the Student Support Specialists. The Student Support Specialist at each site administered the online survey to students either during an individual or small group session. The Student Support Specialists did not administer the online surveys to their own case-managed students. After accounting for student exits, alternative placements, and other unforeseen circumstances that prevented student participation, a total of 260 student surveys were completed over the two implementation years. Data analysis included descriptive summaries of survey responses. (Appendix F)

3. CISDM Data Reports

The CIS Data Management tool (CISDM) was developed by the national CIS office and is in use at the four CIS sites. The tool was recently revised and is currently referred to as CISDM 2.0; each Student Support Specialist received training on the new data management system from CIS of Greenville. CISDM has the capability of generating site-level and program-level reports including summaries of data on case-managed students' Attributes/Risk Factors/Assets, Family Characteristics, Goals/Metrics for Progress, and Planned and Delivered Support Services. SERVE requested de-identified data from CIS of Greenville on the needs, goals, and services received by the case-managed students. Data analysis resulted in descriptive tables on various aspects of students served.

4. OnTrack Greenville Educator Survey

The OnTrack Greenville Educator Survey was administered by the Riley Institute at Furman University to teachers across the four CIS sites in May 2017 and 2018 via email (online link). In 2017, 175 teachers completed the survey, but six did not answer the CIS set of items; therefore, results from 169 cases are included. In 2018, 162 teachers completed the survey, but nine did not answer the CIS set of items; therefore, results from 153 cases are included. Across both years, results for 322 cases are included. The survey included implementation and impact questions about all the OnTrack initiatives. SERVE developed the CIS questions by adapting items from one of the measures described in *Communities In Schools Teacher Support Study*[11]. The survey included questions on teacher perceptions of: CIS

[11] ICF International. (2009). *Communities in schools teacher support study*. Retrieved from Communities In Schools

alignment with other student services, CIS effectiveness in addressing students' problems, Student Support Specialists relationship with students, and Student Support Specialists' impact on school climate. Data analysis included descriptive results of the survey items (means, percentages) by site. (Appendix G)

5. Principal Interviews

Researchers conducted phone interviews with all four OnTrack Greenville principals in summer 2017 and three of the four OnTrack Greenville principals in May/June 2018. The interview protocol focused on: strengths and challenges of CIS implementation and principal perceptions of CIS/school characteristics most conducive to successful implementation the model. Themes emerging from the interviews are described later in this report. (Appendix H)

B. Implementation Fidelity of Activities/Fidelity to Program Design

Focus Area #1: Implementation Fidelity of Activities: To what extent were the five case management elements described in the Logic Model Activities happening in the four schools? How did these case management processes vary across Student Support Specialists and the four schools?

1. Case Management Components

As previously described, the CIS logic model identified five CIS case management elements on which the Student Support Specialists were trained as the structure for engaging with their assigned caseload of students. Student Support Specialists completed a survey in spring 2018 that included items on the extent to which they were able to implement the five case management elements. For each case management element, Student Support Specialists rated how well the element was implemented. For example, for Case Management Element 2, "Student Needs Assessment to Identify Specific Needs," the question read: "Please rate, on a scale of 1-4, how well you have implemented the processes for student needs assessment to identify specific needs this year." The response scale was:

- 1 = I have major unresolved implementation challenges to work out.
- 2 = I have minor unresolved implementation challenges to work out.
- 3 = I need minor adjustments, but they will be easy to make.
- 4 = I have been successful this year with no changes needed.

As can be seen in Table 9, their perspectives on implementation varied by item. They reported the most success with Case Management Element 2, which involves conducting a needs assessment on the students referred (8 of 10 rated their work in this area a "4"). Case Management Element 3, the development of the plan for services for each student was perceived by three Student Support Specialists as having some minor but easy adjustments. Case Management Element 5, the ongoing monitoring of student progress, also received high implementation ratings.

website: http://www.communitiesinschools.org/media/uploads/attachments/The_Communities_In_Schools_Teacher_Support_Survey_1.pdf

Case Management Element 1 was handled in part by the EWRS Team (of which the Student Support Specialists were members), with referrals to CIS for students needing Tier II/III services coming from these weekly meetings; however, referrals could also come from other sources. All ten Student Support Specialists rated Case Management Element 1 a "3" or "4." Case Management Element 4, is the core of the process, the provision of the services in the plan to the student; it was rated by all Student Support Specialist as either a "3" or "4." In prior interviews, the Student Support Specialists had reported challenges finding space and time for meeting with students; however, this year, all the schools provided flexible time and three out of the four provided CIS space so the Student Support Specialists could work with students.

Table 9. Student Support Specialist Ratings of Case Management Element Implementation

Please rate, on a scale of 1-4, how well you have implemented...	(1) Major unresolved challenges		(2) Minor unresolved challenges		(3) Minor, but easy adjustments		(4) Successful, no challenges	
Academic Year	AY 16-17	AY 17-18	AY 16-17	AY 17-18	AY 16-17	AY 17-18	AY 16-17	AY 17-18
Case Management Element 1: Identification of At-Risk Students for Student Support Services	0	0	1	0	4	4	4	6
Case Management Element 2: Student Needs Assessment to Identify Specific Needs	0	0	0	1	1	1	8	8
Case Management Element 3: Development of Student Support Plans to Address Student Needs	0	0	2	0	2	3	5	7
Case Management Element 4: Provision/Coordination of Services as Specified in Student Support Plan	2	0	1	0	2	4	4	6
Case Management Element 5: Ongoing Monitoring of Student Progress and Adjustment of Services Based on Student Needs	0	0	0	1	3	2	6	7

2016-17 Data Source: 2016-17 Student Support Specialist Online Survey (N=9)
2017-18 Data Source: 2017-18 Student Support Specialist Online Survey (N=10)

2. Caseloads

CIS national guidelines indicate that Student Support Specialists are expected to case manage 10% of the student population in schools with fewer than 1,000 students ("TQS Requirement Target" column). As Table 10 shows, the Actual Total Caseload approached or exceeded the 10% TQS Requirement Target at two sites (bolded). At two sites, the Actual Total Caseload of 34 and 60 in academic year 2016-2017 and 45 and 47 in academic year 2017-2018, were under the projected 10% Target by about 20 students, respectively.

Since the strength of relationships between Student Support Specialists and their case-managed is so critical to the success of the CIS model, it is important to the success of the model to get the case-load right. If Student Support Specialists are serving too many students, they may not be able give each the attention they need. On the other hand, if Student Support Specialists are serving too few students, the cost of the program per student increases and the overall site-level impact might be less. The Student

Support Specialists and CIS leadership indicated that a caseload of around 20-25 was ideal. The caseloads at two of the sites (15 and 16) were lower than desired.

Table 10. Caseloads by Site for AY 2016-17 and AY 2017-18

Site	Total School Enrollment[a]		TQS Requirement Target[b]		Actual Total Caseload[c]		Number of Student Support Specialists		Approximate Caseload per Student Support Specialist	
Academic Year	AY 16-17	AY 17-18	AY 16-17	AY 17-18	AY 16-17	AY 17-18	AY 16-17	AY 17-18	AY 16-17	AY 17-18
School 1	635	737	64	74	34	45	3	3	11	15
School 2[d]	**104**	**108**	**13**	**11**	**13**	**22**	**1**	**1**	**13**	**22**
School 3	**545**	**606**	**55**	**61**	**63**	**70**	**3**	**3**	**21**	**23**
School 4	629	685	63	69	60	47	3	3	20	16
Total	1809	2136	182	215	170	184				

[a] Data Source: Individual school profiles posted on district website
[b] TQS Requirement Target = 10% of Enrollment
[c] Data Source: CIS of Greenville "CIS Caselist Charts"
[d] Middle school enrollment only
Note. Approximate caseload per Student Support Specialist calculated based on the number of students served in each school and the total number of Student Support Specialists assigned to each site.
Note. Site-level N sizes differ from those used in SERVE implementation analyses. Specific inclusion criteria are explained further in Section 4.1.3

3. Students Served

Table 11 shows the demographic characteristics of a total of 170 served in 2016-17[12], slightly less than the 185 projected, particularly due to low numbers of students served at one site. Two of the sites (School 3 and School 4) had approximately equal numbers of students served across grade levels. In the two other sites, the number of students served in 7th grade was greater than those in 6th and 8th. The gender and ethnicity percentages of case-managed students were roughly the same across three sites with three Student Support Specialists (School 1, School 3, School 4). The case-managed students at these three sites were approximately 49% African-American, 24% Hispanic, and 23% White; they were around 58% male.

Table 12 shows demographic information from the CISDM on the analytic sample of 161 case-managed students served in 2017-18. One site (School 1) had approximately equal numbers of students served across grade levels. In two sites (School 3 and School 4), the number of students served in 6th grade was greater than those in 7th and 8th. The gender percentages of case-managed students were roughly the same in School 2 and School 4. At School 1 and School 3, there were higher percentages of male students (69% and 76%) than female students. In two sites (School 2 and School 4), there were more African-American students than White and Hispanic students combined.

[12] One of the CISDM Reports provided by CIS of Greenville (CISDM 2016-17 Student TQS Data Report) included data on a total of 181 students, which included students who may have enrolled but did not finish the year in CIS. For the purposes of this report, all CISDM datasets were matched on student ID number and only included those who completed the year in CIS. Thus, 11 students were excluded from analyses; for analysis purposes, student N=170 (School 1 n=34; School 2 n=13; School 3 n=63; and School 4 n=60).

Table 11. Student Background Information AY 2016-17

Site	Grade Level			Gender		Race/Ethnicity			
	6th	7th	8th	F	M	Black/ Af Am	White	Hispanic	Other
School 1	10 (29%)	14 (41%)	10 (29%)	14 (41%)	20 (59%)	14 (41%)	10 (29%)	8 (24%)	2 (6%)
School 2	1 (8%)	8 (62%)	4 (31%)	8 (62%)	5 (38%)	11 (85%)	0 (0%)	1 (8%)	1 (8%)
School 3	20 (32%)	20 (32%)	23 (37%)	26 (41%)	37 (59%)	30 (48%)	16 (25%)	15 (24%)	2 (3%)
School 4	20 (33%)	19 (32%)	21 (35%)	23 (38%)	37 (62%)	29 (48%)	13 (22%)	17 (28%)	1 (2%)
Total	51 (30%)	61 (36%)	58 (34%)	71 (42%)	99 (58%)	84 (49%)	39 (23%)	41 (24%)	6 (4%)

Data Source: 2016-17 CISDM Database Reports (N=170; School 1 n=34, School 2 n=13; School 3 n=63, School 4 n=60).

Table 12. Student Background Information AY 2017-18

Site	Grade Level			Gender		Race/Ethnicity			
	6th	7th	8th	F	M	Black/ Af Am	White	Hispanic	Other
School 1	15 (36%)	12 (29%)	15 (36%)	13 (31%)	29 (69%)	16 (38%)	19 (45%)	7 (17%)	0 (0%)
School 2	4 (25%)	2 (13%)	10 (63%)	8 (50%)	8 (50%)	14 (88%)	0 (0%)	1 (6%)	1 (6%)
School 3	26 (42%)	21 (34%)	15 (24%)	15 (24%)	47 (76%)	28 (45%)	16 (26%)	16 (26%)	2 (3%)
School 4	16 (39%)	10 (24%)	15 (37%)	20 (49%)	21 (51%)	29 (71%)	3 (7%)	8 (20%)	1 (2%)
Total	61 (38%)	45 (28%)	55 (34%)	56 (35%)	105 (65%)	87 (54%)	38 (24%)	32 (20%)	4 (2%)

Data Source: 2017-18 CISDM Database Reports (N=161; School 1 n=42, School 2 n=16, School 3 n=62, School n=41).

The CIS model distinguishes between Tier II services, which can be group-provided to students with a common need (e.g., homework assistance or character development), and Tier III services, which are intensive and individualized in a one-on-one setting. The CISDM also asks Student Support Specialists to make determinations for each student on whether each is a "Moderate Intensity Case" (most likely receiving Tier II services) or a "High Intensity Case" (most likely receiving both Tier II and Tier III services). Table 13 below shows that, in 2017-18, 38 or 24% of case-managed students were reported in CISDM as receiving High Intensity services, with 121 (76%) of students receiving Moderate Intensity services. These percentages (24% and 76%) were similar to the percentages of High Intensity and Moderate Intensity students in 2016-17 at 29% and 70%, respectively.

In terms of examining fidelity of CIS activities, it is important to consider whether the students being served were those that exhibited needs. As part of the CIS intake process, each student underwent a "Risk Factor Assessment," which includes Student Support Specialist identification of the presence or absence of a set of pre-determined individual and family risk factors related to student performance in school (e.g., aggressive behavior, emotional and/or mental health concerns, lack of parental supervision/discipline).

Table 13. Number of Students Enrolled in High Intensity and Moderate Intensity Services

Site	High Intensity Case Management		Moderate Intensity Case Management	
	AY 16-17	**AY 17-18**	AY 16-17	**AY 17-18**
School 1	7 (21%)	**9 (21%)**	27 (79%)	**33 (79%)**
School 2	5 (38%)	**0 (0%)**	7 (54%)	**16 (100%)**
School 3	30 (48%)	**25 (41%)**	32 (51%)	**36 (59%)**
School 4	7 (12%)	**4 (10%)**	53 (88%)	**36 (90%)**
Total	49 (29%)	**38 (24%)**	119 (70%)	**121 (76%)**

Data Source: 2016-17 CISDM Database Reports (N=170). Table N of 168 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=34, School 2 n=12, School 3 n=62, School 4=60).
2017-18 Data Source: 2017-18 CISDM Database Reports (N=161) Table N total of 159 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=42, School 2 n=16, School 3 n=61, School 4=40).

Table 14 below shows that in 2016-2017, 10% of students were reported as having high risk peer groups. This increased the next year in 2017-2018, where 30% of students were reported as having high risk peer groups. In 2017-2018, over half of case-managed students (58%) were reported as exhibiting emotional/mental health concerns. This increased from just 36% of students exhibiting emotional/mental health concerns in 2016-2017. Additionally in 2017-2018, just under half of case-managed students (48%) showed a lack of effort in school, had poor social skills (45%), and did not participate in any extracurricular activities (43%).

Table 14. Number and Percent of Students by Individual Risk Factor across Sites

Individual Risk Factor	Students	
	AY 16-17	**AY 17-18**
Not living with both natural parents[a]	106 (62%)	---
Emotional/Mental Health Concerns	62 (36%)	93 (58%)
Lack of Effort in School/Low Motivation	64 (38%)	77 (48%)
Poor Social Skills	---	73 (45%)
No Extracurricular Activities	78 (46%)	69 (43%)
Poor academic performance	75 (44%)	---
School misbehavior	62 (36%)	---
Health/Medical Concerns (e.g., ADHD, ADD, obesity)	52 (31%)	62 (39%)
Low Educational Expectations	---	54 (34%)
High Risk Peer Groups (e.g., gangs, delinquent youth, bullies)	17 (10%)	48 (30%)
Aggressive/Violent Behavior	31 (18%)	43 (27%)
Negative Attitude Toward School	---	41 (25%)
Excessive After School Work Hours/Social Activities	---	10 (06%)

2016-2017 Data Source: 2016-17 CISDM Database Reports (N=170)
2017-2018 Data Source: 2017-18 CISDM Database Reports (N=161)
[a]Due to changes in CISDM that occurred during summer 2017, some of the categories of risk factors were not the same each year.

Regarding Family Risk Factors, of the 161 students with CISDM data from 2017-2018, 124 (77%) were reported as having low socioeconomic status. More than half (65%) were reported as having parents/guardians with low levels of education and 61% experienced some sort of family disruption or stress. See Table 15.

Table 15. Number and Percent of Students by Family Risk Factor Across Sites

Individual Risk Factor[a]	Students	
	AY 16-17	**AY 17-18**
Low Socioeconomic Status	120 (71%)	124 (77%)
Low Education Level of Parents/Guardians	84 (50%)	104 (65%)
Family Disruption/Stress	90 (53%)	99 (61%)
Low Educational Expectations	26 (15%)	40 (25%)
Lack of parental supervision/discipline	27 (16%)	---
Sibling/ Family Member Has Dropped Out of School	---	34 (21%)
Lack of Family Conversation About School	---	33 (20%)
Lack of Contact/Engagement with School	37 (22%)	27 (17%)
High Family Mobility/Transiency	---	12 (7%)

2016-2017 Data Source: 2016-17 CISDM Database Reports (N=170)
2017-2018 Data Source: 2017-18 CISDM Database Reports (N=161)
[a]Due to changes in CISDM that occurred during summer 2017, some of the categories of risk factors were not the same each year.

4. Goals Set for Students

As mentioned previously, the case management process requires that a plan be developed for each student with goals established. Table 16 below shows the number/percentage of students by the type of goals set. Overall, 160 of the 161 case-managed students (99%) had the goal to "improve academics." This goal was similar to the previous academic year where 156 of the 170 case-managed students (92%) had the goal of "improving/maintain academics." In academic year 2017-18, improving school behavior was a goal for over half of the case-managed students, compared to 2016-17, when "improving school behavior" was only a goal for about one-third of the case-managed students.

Table 16. Number and Percent of Goals by Type and Site

	School 1		School 2		School 3		School 4	
Goal Type	16-17	**17-18**	16-17	**17-18**	16-17	**17-18**	16-17	**17-18**
Improve Academics (16-17 n=156; 17-18 n=160)	30 (70%)	**42 (40%)**	13 (48%)	**16 (53%)**	53 (50%)	**61 (54%)**	60 (67%)	**41 (56%)**
Improve Attendance (16-17 n=21; 17-18 n=64)	4 (9%)	**30 (28%)**	0 (0%)	**0 (0%)**	9 (9%)	**18 (16%)**	8 (9%)	**16 (22%)**
Improve School Behavior (16-17 n=73; 17-18 n=98)	9 (21%)	**34 (32%)**	7 (26%)	**13 (43%)**	31 (30%)	**35 (31%)**	21 (24%)	**16 (22%)**
Improve Social-Emotional Learning (16-17 n=18; 17-18 n=1)	0 (0%)	**0 (0%)**	6 (22%)	**1 (0%)**	12 (11%)	**0 (0%)**	0 (0%)	**0 (0%)**

2016-17 Data Source: 2016-17 CISDM Database Reports (N=170; School 1 n=34, SCHOOL 2 n=13, School 3 n=63, School 4=60).
2017-18 Data Source: 2017-18 CISDM Database Reports (N=161; School 1 n=42, SCHOOL 2 n=16, School 3 n=62, School 4=41).

C. Implementation Fidelity of Outputs

Implementation RQ10. *What amount and kind of Level II/III services did the targeted students receive? How long have they been in the program?*

1. Length of Time in the Program

Two of the four sites had CIS models in place prior to the OnTrack project; however, prior to the OnTrack funding, there was only one Student Support Specialist serving at each site. With the OnTrack funding, three of four sites were able to implement a one-Student Support Specialist-per-grade-level CIS model. The per-grade-level approach to placing Student Support Specialists at these sites allowed the Student Support Specialist to get to know and interact with teachers and students at a particular grade level. As might be expected, sixth graders have different problems in adapting to a new school environment compared to eighth graders who are getting ready for a move to high school. The per-grade-level model allowed the Student Support Specialists to understand the student needs and the curriculum of each grade level he or she served.

Table 17 below shows the pattern of entry into the CIS case management process by site. Of the 161 case-managed students, 60 (37%) entered in the fall of 2017, thus, experiencing a full year of case-managed services in the 2017-18 academic year. However, 25 (16%) entered in the spring of 2018, thus receiving only half a year of services. The remaining 76 (47%) entered in prior years as shown and thus received multiple years of service.

Table 17. Number and Percent of Students by Semester of Enrollment

Site	Prior to Fall 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Subtotal Prior to 2017-18	Fall 2017	Spring 2018
School 1	0	8	2	3	4	17 (40%)	20 (48%)	5 (12%)
School 2	0	1	2	2	4	9 (56%)	6 (38%)	1 (6%)
School 3	5	3	0	15	4	27 (44%)	22 (35%)	13 (21%)
School 4	0	10	1	7	2	23 (56%)	12 (29%)	6 (15%)
Total	5	22	5	27	14	**76** (47%)	**60** (37%)	**25** (16%)

Data Source: 2017-18 CISDM Database Reports—CISDM Case List Detail (N=161; School 1 n=42, School 2 n=16, School 3 n=62, School 4=41).

Survey responses from students receiving CIS case management services about their length of time in the program (i.e., "meeting with a CIS staff person") are shown in Table 18 and are consistent with the CISDM data in Table 17. About half (46%) of the students completing the survey reported that they had been served by CIS for two years with 35% reported participating in CIS for one year (2017-18 academic year) and 19% reporting starting with CIS mid-year 2017-18. The CIS OnTrack project started in the fall of 2015 at the four sites. Thus, 67 (46%) students completing the survey reported having participated for two years. This may be important for the Impact analysis as longer time in the program may correlate with stronger impacts.

Table 18. Number and Percent of Students by Reported Length of Time in the Program AY 2017-18

How long have you been meeting with CIS staff person?	Students
Just this semester (started after Christmas)	22 (19%)
Both fall and spring semesters	51 (35%)
Last year and this year	67 (46%)

Data Source: Student Survey (N=146)

A second source of data on length of time in the program is that entered by the Student Support Specialists in CISDM. Table 19 shows length of time in the program by grade level using CISDM reports. As can be seen, across the four sites 6th grade had slightly more students in the program (61). Sixth-grade students were more likely to be identified and enter the CIS case management process later in the academic year, as they were new to the site. That is, 33% of 6th graders had one semester or less of time in CIS compared to 4% of 7th graders and 5% of 8th graders. Of the 7th grade students, 15 (33%) were completing their second year in the program in 2017-18 compared to 9 (16%) 8th graders who were completing their second year. However, 51% of 8th grade students had been in case management for more than two years.

Table 19. Number and Percent of Students by Length of Time in the Program and Grade AY 2017-18

Length of Time in the Program	6th Grade	7th Grade	8th Grade
1 semester or less—enrolled Spring 2018 (n=25)	**20 (33%)**	**2 (4%)**	**3 (5%)**
1 year—enrolled Fall 2017 (n=60)	36 (59%)	15 (33%)	9 (16%)
1.5 years—enrolled Spring 2017 (n=14)	1 (2%)	7 (16%)	6 (11%)
2 years—enrolled Fall 2016 (n=27)	**3 (5%)**	**15 (33%)**	**9 (16%)**
More than 2 years—enrolled prior to Fall 2016 (n=35)	1 (2%)	6 (13%)	**28 (51%)**
Total (N=161)	**61**	45	55

Data Source: 2017-18 CISDM Database Reports (N=161) Note. One of the 35 students with more than 2 years of CIS would have received those 2 years of CIS services in elementary school, not in middle school.

2. "Dosage" (Extent of Services) Received

The CIS model is best understood as two components. First, students meet regularly with their assigned Student Support Specialist (at least once per month) to check in (with Student Support Specialists monitoring their progress), given their individualized plan. These meetings are critical for students to develop the relationship with a caring adult at their school. Thus, it is important that these meetings indeed take place. Second, students are offered either Tier II or Tier III services. Tier II is the opportunity to participate in a variety of group activities that address their common needs. Academic assistance can be provided by volunteer tutors or mentors or by Student Support Specialists in group homework assistance sessions.

Other personal development activities can be developed by Student Support Specialists to address a common need. Tier III is for students who may need one-on-one intensive and individualized assistance such as a behavior modification intervention, mental health services, or life skills coaching which can be provided by Student Support Specialists or other agencies.

Table 20 below shows how often students responding to our survey in the spring of 2018 reported meeting with the CIS staff. A total of 77% reported meeting with a CIS Staff person "almost every day" or "about once a week" or "about once or twice a month" as would be expected by CIS protocols (i.e., at

least monthly). However, 34 students (23%) reported meeting with a CIS staff person "just a few times during the school year" which would represent less frequent interactions than expected.

Table 20. Student Reported Frequency of Meetings with Student Support Specialists AY 2017-18

How often did you meet with or talk to a CIS staff person?	Students
Almost every day	47 (32%)
About once a week	42 (29%)
About once or twice a month	23 (16%)
Just a few times during the school year	34 (23%)

Data Source: Student Survey (N=146)

Table 21 shows that 15 of the 34 students who reported irregular meetings with a CIS case manager were those who had started the program mid-year; thus, the reduced frequency of meetings with CIS staff might be expected given the shorter time frame in the program. However, about the same number of students (13 of 34) who indicated infrequent meetings had been in the CIS program for two years.

Table 21. Self-Reported Frequency of Meetings with Student Support Specialists by Length of Time in Case Management

Frequency of Student Support Specialist meetings	Last year and this year	Both fall and spring semesters	Just this semester
Almost every day (n=47)	27 (57%)	18 (38%)	2 (4%)
About once a week (n=42)	18 (43%)	15 (36%)	9 (21%)
About once or twice a month (n=23)	9 (39%)	12 (52%)	2 (9%)
Just a few times during the school year (n=34)	**13 (38%)**	6 (18%)	**15 (44%)**

Data Source: Student Survey (N=146)

As shown in Table 22, Student Support Specialists did report, via CISDM, meeting regularly with students receiving Moderate and High Intensity services. The average number of "check-ins" in 2017-18 was about the same for both High Intensity (5.5) and Moderate Intensity (5.8) cases. The average number of "check-ins" per student, across sites, was 8.0 in 2016-17 and 5.7 in 2017-18. (CIS guidelines require that Student Support Specialists check in with case-managed students at least monthly to ensure ongoing engagement, participation and progress toward established goals.)

Table 22. Average Number of Check-Ins by Site and High versus Moderate Intensity

	High Intensity		Moderate Intensity		Average at Each Site	
Site	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**
School 1	6.7	**5.9**	8.0	**6.9**	7.4	**6.7**
School 2	6.8	**--**	8.0	**5.4**	7.4	**5.4**
School 3	8.4	**5.4**	7.1	**5.2**	7.8	**5.3**
School 4	10.0	**4.8**	9.0	**5.6**	9.5	**5.5**
Average for Each Intensity	8.1	**5.5**	8.0	**5.8**	8.0	**5.7**

2016-17 Data Source: 2016-17 CISDM Database Reports (N=170). Table N of 168 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=34, SCHOOL 2 n=12, School 3 n=62, School 4=60).
2017-18 Data Source: 2017-18 CISDM Database Reports (N=161) Table N total of 159 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=42, SCHOOL 2 n=16, School 3 n=61, School 4=40).

CIS tracks Tier II and Tier III supports provided to case-managed students in accordance with local CIS written data management procedures. At a minimum, this includes: documentation of all Tier II and Tier III supports or resources provided to each case-managed student, including dates, providers, and duration; success in achieving their goals; and achievement of established goals.

In terms of Tier II services students received, the student survey asked about participation in various group activities provided by Student Support Specialists or others. Table 23 shows what was reported by students about their participation in various types of group activities led by Student Support Specialists. The largest number of students (104) reported participating in CIS homework or study sessions and 75 reported participating in conflict resolution or anger management activities. About half the students reported participation in health/stress management sessions.

Table 23. Number of Students Reporting Participation in Tier II Services by Site, AY 2017-18

Possible Tier II Activities	School 1	School 2	School 3	School 4	Total
CIS homework or study sessions	25	12	41	26	104
CIS conflict resolution or anger management activities	15	9	30	21	75
CIS health/stress management sessions (e.g., yoga)	15	10	24	14	63

Data Source: Student Survey (N=146)

The following tables show the overall Number of Supports and Service Hours by site. Service hours were reported by Student Support Specialists showing the hours each student received supports in the following Support Categories: Academic Assistance, Behavioral Intervention/Modification, Case Management, College and Career Preparation, Community Service/Service Learning, Enrichment/Motivation, Family Engagement, Life/Social Skills, Physical Fitness/Health, and Professional Mental Health. Every service or intervention provided by the Student Support Specialists must be documented in one of these ten support areas.

Table 24. Total Number of Supports Provided by Site and by Grade Level

	6th Grade		7th Grade		8th Grade		Total	
Site	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**
School 1	823	**540**	831	**453**	660	**1,362**	2,314	**2,355**
School 2	17	**60**	121	**22**	88	**107**	226	**189**
School 3	694	**419**	526	**353**	430	**198**	1,650	**970**
School 4	1,233	**243**	527	**204**	907	**489**	2,667	**936**
Total for Each Grade	2,767	**1,262**	2,005	**1,032**	2,085	**2,156**	6,857	**4,450**

2016-17 Data Source: 2016-17 CISDM Database Reports (N=170; School 1 n=34, SCHOOL 2 n=13, School 3 n=63, School 4=60).
2017-18 Data Source: 2017-18 CISDM Database Reports (N=161; School 1 n=42, SCHOOL 2 n=16, School 3 n=62, School 4=41).

Table 24 and Table 25 show the data in CISDM on Number of Supports provided to the case-managed students for the 2016-17 year and the 2017-18 year. School 1's CISDM data shows the highest Number of Supports across the four sites (likely reflecting the availability of an after-school program that is considered a CIS intervention support). The number of supports reported by Student Support Specialists at each of the four sites were generally less than the previous year, except for School 1 which reported 41 additional supports in 2017-18 than in 2016-17. For example, Student Support Specialists at School 4

reported 2,667 supports in 2016-17 but only 936 in 2017-18. Overall, Table 25 shows a School-wide decrease from 2016-17 to 2017-18 in average number of supports.

Table 25. Average Number of Supports Provided by Site and by Grade Level

	6th Grade		7th Grade		8th Grade		Avg at Each Site	
Site	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**
School 1	82.3	**36.0**	59.4	**37.8**	66.0	**90.8**	69.2	**56.1**
School 2	17.0	**15.0**	15.1	**11.0**	22.0	**10.7**	18.0	**11.8**
School 3	34.7	**16.1**	26.3	**16.8**	18.7	**13.2**	26.6	**15.6**
School 4	61.7	**15.2**	27.7	**20.4**	43.2	**32.6**	44.2	**22.8**
Average for Grade	48.9	**20.7**	32.1	**22.9**	37.5	**39.2**	39.5	**27.6**

2016-17 Data Source: 2016-17 CISDM Database Reports (N=170; School 1 n=34, SCHOOL 2 n=13, School 3 n=63, School 4=60).
2017-18 Data Source: 2017-18 CISDM Database Reports (N=161; School 1 n=42, SCHOOL 2 n=16, School 3 n=62, School 4=41).

Table 26 shows the Average Number of Supports per student as reported in CISDM by High and Moderate Intensity cases. In 2016-17, in two sites (School 2 and School 3), the pattern was not what would be expected (higher average number of supports for Moderate Intensity cases) but it was posited that the pattern was likely due to differences in how High vs Moderate Intensity labels were applied across Student Support Specialists. In 2017-18, according to the CISDM, Greenville did not offer any High Intensity supports. However, in the three remaining sites, the average number of High Intensity supports was greater than the number of Moderate Intensity supports as would be expected.

Table 26. Average Number of Supports Provided by Site and Intensity

	High Intensity		Moderate Intensity		Average at Each Site	
Site	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**
School 1	76.1	**64.6**	66.0	**53.8**	71.1	**56.1**
School 2	16.4	**--**	19.4	**11.8**	17.9	**11.8**
School 3	25.6	**19.5**	27.2	**13.2**	26.4	**15.6**
School 4	73.6	**25.5**	40.6	**23.1**	57.1	**22.8**
Average Across Sites	47.9	**36.5**	38.3	**25.5**	43.1	**26.6**

2016-17 Data Source: 2016-17 CISDM Database Reports (N=170). Table N of 168 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=34, School 2 n=12, School 3 n=62, School 4=60).
2017-18 Data Source: 2017-18 CISDM Database Reports (N=161) Table N total of 159 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=42, School 2 n=16, School 3 n=61, School 4=40).

Table 27 shows the 2017-18 range, rather than the averages of Number of Supports Provided. The variability in minimum to maximum Number of Supports (e.g., 13 to 137 at one site) likely reflects the various individualized needs of students. (The higher median number of supports at School 1 may reflect the counting of student participation in the after-school program as a CIS intervention support.)

Table 27. Range of Number of Supports Provided by Site and Intensity AY 2017-18

Site	Intensity of Case Management Services	Minimum Number of Supports	Maximum Number of Supports	Median Number of Supports
School 1	High Intensity	14	115	65
	Moderate Intensity	13	137	75
School 2	High Intensity	--	--	--
	Moderate Intensity	6	29	18
School 3	High Intensity	8	36	22
	Moderate Intensity	0	30	15
School 4	High Intensity	15	32	24
	Moderate Intensity	3	44	24

Data Source: 2017-18 CISDM Database Reports (N=161) Table N total of 159 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=42, School 2 n=16, School 3 n=61, School 4=40).

Number of Service Hours

Perhaps the most important indicator of the "dosage" of services students received is the average number of hours of service reported per student. The tables below reflect the total number of service hours by site and grade and the total number of service hours by site and intensity of case management (High vs. Moderate). It is important to note however that the data are dependent on Student Support Specialists inputting all interactions, services, and interventions. These service hours reflect the formal occurrences of services. Table 28 shows that School 1 reported approximately the same number of service hours in 2017-18 than they did in 2016-17. School 2 reported significantly greater service hours in 2017-18; in fact, they reported almost three times more service hours than the previous year. School 3 and School 4 reported fewer service hours; for School 3, it was almost half of what was reported in 2016-17. Table 29 shows that the majority of Service Hours provided were to Moderate Intensity students (2,836) compared to High Intensity students (648).

Table 28. Number of Service Hours Provided by Site and Grade Level

	6th Grade		7th Grade		8th Grade		Total at Each Site	
Site	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**
School 1	263	**238**	321	**197**	276	**371**	859	**806**
School 2	27	**310**	185	**136**	111	**506**	323	**952**
School 3	499	**195**	243	**160**	248	**218**	991	**573**
School 4	484	**395**	326	**213**	572	**549**	1,382	**1,157**
Total for Each Grade	1,274	**1,139**	1,075	**705**	1,206	**1,644**	3,555	**3,488**

2016-17 Data Source: 2016-17 CISDM Database Reports (N=170; School 1 n=34, School 2 n=13, School 3 n=63, School 4=60).
2017-18 Data Source: 2017-18 CISDM Database Reports (N=161; School 1 n=42, School 2 n=16, School 3 n=62, School 4=41).

Table 29. Number of Service Hours Provided by Site and Intensity

Site	High Intensity		Moderate Intensity		Total at Each Site	
	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**
School 1	182	**202**	677	**604**	859	**806**
School 2	123	**--**	181	**952**	304	**952**
School 3	444	**351**	533	**219**	977	**570**
School 4	210	**95**	1,172	**1,060**	1,382	**1,155**
Total for Each Intensity	958	**648**	2,564	**2,836**	3,522	**3,484**

2016-17 Data Source: 2016-17 CISDM Database Reports (N=170). Table N of 168 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=34, School 2 n=12, School 3 n=62, School 4=60).
2017-18 Data Source: 2017-18 CISDM Database Reports (N=161) Table N total of 159 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=42, School 2 n=16, School 3 n=61, School 4=40).

Table 30 shows the average service hours per student by site. Overall, the average number of service hours per case-managed student was 22.6 hours across all four sites in 2016-17 and 21.7 in 2017-18. Thus, over a school year, one might estimate roughly around two to three hours per month in formal occurrences of services that are logged in by Student Support Specialists as received by the case-managed students. This estimate of average "dosage received" by case managed students is similar to that reported in studies conducted by the national CIS office.

Table 30. Average Number of Service Hours Provided by Site and Grade Level

Site	6th Grade		7th Grade		8th Grade		Avg at Each Site	
	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**
School 1	26.3	**15.8**	22.9	**16.4**	27.6	**24.7**	25.6	**19.2**
School 2	26.7	**77.6**	23.1	**67.8**	27.9	**50.6**	25.9	**59.5**
School 3	25.0	**7.5**	12.2	**7.6**	10.8	**14.5**	16.0	**9.2**
School 4	24.2	**24.7**	17.2	**21.3**	27.2	**36.6**	22.9	**28.2**
Avg for Each Grade	25.6	**18.7**	18.9	**15.7**	23.4	**29.9**	**22.6**	**21.7**

2016-17 Data Source: 2016-17 CISDM Database Reports (N=170; School 1 n=34, SCHOOL 2 n=13, School 3 n=63, School 4=60).
2017-18 Data Source: 2017-18 CISDM Database Reports (N=161) Table N total of 159 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=42, SCHOOL 2 n=16, School 3 n=62, School 4=41).

Table 31 shows the average number of service hours by High vs. Moderate Intensity cases. Overall, the average number of service hours reported was higher for Moderate Intensity students than High Intensity students which is the opposite pattern as would be expected.

Table 32 shows the range rather than the average of the service hours. Again, as with the Number of Supports, it shows a variance that likely reflects individual students' needs, but in this case, may also reflect the availability of pull-out time for each site in addition to the scheduled OnTrack time built into the schedule at each site. As to be expected, Schools 3 and 4 have higher maximums as they have OnTrack time built into the school schedule. And even though School 1 has the extra 4-H time (one day per week), they have just over half as many students, therefore it would be expected for them to have fewer service hours.

Table 31. Average Number of Service Hours Provided by Site and Intensity

Site	High Intensity Case Management		Moderate Intensity Case Management		Average Hours at Each Site	
	2016-17	**2017-18**	2016-17	**2017-18**	2016-17	**2017-18**
School 1	26.0	**22.4**	25.1	**18.3**	25.6	**19.2**
School 2	24.5	**--**	25.9	**59.5**	25.2	**59.5**
School 3	14.8	**14.1**	16.7	**6.1**	15.8	**9.2**
School 4	30.0	**23.6**	22.1	**29.5**	26.1	**28.2**
Average Hours for Each Intensity	23.8	**17.0**	22.5	**23.4**	23.1	**21.7**

2016-17 Data Source: 2016-17 CISDM Database Reports (N=170). Table N of 168 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=34, SCHOOL 2 n=12, School 3 n=62, School 4=60).
2017-18 Data Source: 2017-18 CISDM Database Reports (N=161) Table N total of 159 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=42, SCHOOL 2 n=16, School 3 n=61, School 4=40).

Table 32. Range of Service Hours Provided by Site and Intensity

Site	Intensity of Case Management Services	Minimum Number of Service Hours		Maximum Number of Service Hours		Median Number of Service Hours	
		2016-17	2017-18	2016-17	2017-18	2016-17	2017-18
School 1	High Intensity	10.3	4.2	43.9	35.4	24.6	20
	Moderate Intensity	10.9	6.2	36.4	46.7	26.5	27
School 2	High Intensity	19.4	--	31.7	--	24.4	--
	Moderate Intensity	19.0	28.3	27.7	130.3	26.9	79
School 3	High Intensity	3.4	3.1	**69.2**	137.0	11.3	70
	Moderate Intensity	4.0	0.0	42.2	19.2	13.7	10
School 4	High Intensity	10.2	11.5	**73.3**	41.6	24.3	27
	Moderate Intensity	6.4	0.9	39.5	73.6	23.3	37

Data Source: 2016-17 CISDM Database Reports (N=170)
Note. Table total of 168 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management.
Data Source: 2017-18 CISDM Database Reports (N=161) Table N total of 159 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=42, SCHOOL 2 n=16, School 3 n=61, School 4=40).

Both Dosage Indicators (Supports and Service Hours)

Table 33 shows both Average Number of Supports per Student and Average Number of Service Hours per Student in one table. In 2017-18, School 1 reported the highest average Number of Supports by far but comparable average Number of Service Hours to the other sites whereas School 2 had the opposite pattern (the highest average Number of Service Hours by far but the lowest average Number of Supports).

Table 33. Average Number of Supports and Service Hours by Site and Intensity of Services

Site	Intensity of Case Management Services	Average # Supports		Average # of Service Hours	
		2016-17	**2017-18**	2016-17	**2017-18**
School 1	High Intensity	76.1	**64.6**	22.4	**22.4**
	Moderate Intensity	66.0	**53.8**	18.3	**18.3**
	Total	71.1	**56.1**	25.6	**19.2**
School 2	High Intensity	16.4	**--**	24.5	**--**
	Moderate Intensity	19.4	**11.8**	25.9	**59.5**
	Total	17.9	**11.8**	25.2	**59.5**
School 3	High Intensity	25.6	**19.5**	14.8	**14.1**
	Moderate Intensity	27.2	**13.2**	16.7	**6.1**
	Total	26.4	**16.4**	15.8	**10.1**
School 4	High Intensity	73.6	**25.5**	30.0	**23.6**
	Moderate Intensity	40.6	**23.1**	22.1	**29.5**
	Total	57.1	**24.3**	26.1	**26.5**

2016-17 Data Source: 2016-17 CISDM Database Reports (N=170). Table N of 168 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=34, School 2 n=12, School 3 n=62, School 4=60).
2017-18 Data Source: 2017-18 CISDM Database Reports (N=161) Table N total of 159 is attributed to 2 cases where students were not assigned to either High or Moderate Intensity Case Management (School 1 n=42, School 2 n=16, School 3 n=61, School 4=40).

Types of Services

In terms of the types of services offered to CIS students, Table 34 shows the number of times during the school year various supports/services occurred, by service category and site. Overall, in 2017-18, across all sites, the total number of services reported in the service categories shown in was lower than in the previous year. Across both academic years, the three most frequently occurring services at three of the four sites (in no particular order) were "Case Management," "Academic Assistance," and "Behavior Intervention/ Modifications."

Table 34. Number of Times Various Types of Services Were Reported as Provided by Site

Service Category	School 1		School 2		School 3		School 4	
	2016-17	2017-18	2016-17	2017-18	2016-17	2017-18	2016-17	2017-18
Academic Assistance	71	20	11	5	28	20	72	20
Basic Needs	29	2	5	0	13	3	15	2
Behavioral Interventions	35	15	11	6	58	20	73	13
Case Management	194	42	35	17	156	56	162	35
College and Career Preparation	2	3	0	1	4	0	10	6
Community Service	0	4	0	0	1	2	2	6
Enrichment/Motivation	32	10	1	0	21	4	28	14
Family Engagement	0	0	0	0	1	0	2	1
Life/Social Skills	9	7	1	7	19	11	8	10
Physical Health	2	3	0	1	3	2	0	3
Professional Mental Health	N/A	0	N/A	0	N/A	4	N/A	1
Total	374	106	64	37	304	122	372	111

2016-17 Data Source: 2016-17 CISDM Database Reports—Tier II and III Support Summary by Provider
2017-18 Data Source: 2017-18 CISDM Database Reports—Tier II and III Support Summary by Provider

Table 35 shows the average number of supports and the average number of services hours across sites by service category for both years. In terms of average number of supports, in 2017-18, there were over 10 on average per student for the categories of case management, academic assistance, college and career preparation, community service/service learning, enrichment/motivation, and life/social skills. For average number of service hours in 2017-18, the highest average number of service hours were under Community Service/Service Learning (70.4), college and career preparation (29.2), Life/Social Skills (22.4), and Academic Assistances (21.9). Due to the changes in the CISDM system from 2016-17 to 2017-18, some of the differences between years could be attributable to changes in reporting instructions.

Table 35. Average Number of Supports and Service Hours by Service Category Across All Sites

	Average Number of Supports Received		Average Number of Service Hours Received	
Service Category	2016-17	2017-18	2016-17	2017-18
Academic Assistance	5.1	12.4	4.5	21.9
Basic Needs	3.2	7.6	4.6	1.9
Behavioral Interventions	4.9	6.8	5.4	5.7
Case Management	25.1	16.8	9.8	5.9
College and Career Preparation	1.9	12.5	3.7	29.2
Community Service	1.6	11.0	3.0	70.4
Enrichment/Motivation	8.2	13.7	13.1	8.7
Family Engagement	1.2	1.0	1.4	0.5
Life/Social Skills	3.0	12.7	2.6	22.4
Physical Health	2.4	1.2	2.6	0.7
Professional Mental Health	N/A	1.0	N/A	0.3

Note. During 2017-18, there were out-of-school time activities at one CIS site, which may account for the increased number of supports and service hours received.
2016-17 Data Source: 2016-17 CISDM Database Reports—Tier II and III Support Summary by Provider
2017-18 Data Source: 2017-18 CISDM Database Reports—Tier II and III Support Summary by Provider

D. Feedback for Improvement

Focus Area #3: Feedback for Improvement: *What were the perceptions of the CIS School Team, the CIS staff, teachers, and participating students about the value of CIS Activities and how the program could be improved (e.g., relationship between CIS staff/school staff, use of early warning indicators, match of interventions to student needs)?*

An online survey was administered to case-managed CIS students in the spring of 2018. Table 36 shows that most students reported that they were very comfortable going to CIS staff when they needed help (76%) and thought that the support provided by CIS was very helpful (86%). In terms of areas for which they felt CIS helped them, 124 of 146 students (85%) responding to the survey felt CIS helped them "do better in class" and an almost equal number of students felt that it helped them "get better grades" (119 out 146, 82%) and "improve your self-confidence" (81%). Given the importance of behavioral goals, it is also important to note that 111 (76%) felt that it helped them "improve your behavior" and 103 (71%) felt that it helped them "get along better with other students."

Table 36. AY 2017-18 Student Perceptions of CIS Support

Item	Very comfortable	Somewhat comfortable	Not at all comfortable
How comfortable were you going to CIS staff when you needed help?	111 (76%)	32 (22%)	3 (2%)
Item	Very helpful	Somewhat helpful	Not at all helpful
How helpful was the support provided by CIS staff?	125 (86%)	19 (13%)	2 (1%)
Thinking about your participation with CIS this year, did CIS help you...	Yes	Not sure	No
…do better on your homework?	103 (71%)	32 (22%)	11 (8%)
…do better in class?	124 (85%)	20 (14%)	2 (1%)
…get better grades?	119 (82%)	23 (16%)	4 (3%)
…get along better with teachers?	102 (70%)	28 (19%)	16 (11%)
…get along better with other students?	103 (71%)	29 (20%)	14 (10%)
…get along better with your family?	102 (70%)	26 (18%)	18 (12%)
…improve your behavior?	111 (76%)	29 (20%)	6 (4%)
…improve your attendance in school or classes?	94 (64%)	38 (26%)	14 (10%)
…improve your self-confidence?	118 (81%)	21 (14%)	7 (5%)

Data Source: Student Survey N=146

Table 37 shows that, in 2017-18, as in the previous year, students reported, overwhelmingly, that they liked being a part of CIS (91%).

Table 37. Student Perceptions of Communities In Schools

	Students	
Did you like being part of CIS this year?	AY 2016-17	AY 2017-18
Yes	102 (89%)	133 (91%)
Not Sure	10 (9%)	11 (8%)
No	3 (3%)	2 (1%)

Data Sources: 2016-17 Student Survey (N=115) and 2017-18 Student Survey (N=146)

IV. Statistical Analysis of Impacts

A. Unit of Assignment and Analysis

The unit of assignment for this study was the individual student. Students were identified and selected for participation in Communities In Schools by each OnTrack Greenville school's OnTrack Team or by a parent or school referral. Researchers adjusted their analysis on the effects of participating in Communities In Schools to match the unit of assignment by using propensity matching at the student-level. For each student participating in Communities In Schools, up to five "match" students were selected from each comparison group based on several covariates and background conditions. Thus, comparison and treatment groups were comprised of individual matches and the unit of analysis reached the student-level.

B. Analysis Approach

The analysis described here followed a Treatment on Treated (TOT) framework, as participation in the Communities In Schools defines the treatment. It compared those who participated in Communities In Schools to students in the within-school, within-district, and state comparison groups. This study examined whether students who participated in Communities In Schools exhibited improved attendance, behavior, and course performance compared students who did not participate in the program. Differences between the treatment and the within-school comparison group were estimated separately from the treatment and the external comparison group.

C. Formation of Matched Groups

In order for matching techniques to approximate a random experiment, important assumptions have to be met. The first was strongly ignorable treatment assignment. This means that conditional on observed covariates (*X*) the treatment (*W*) was independent of the outcomes (Y_0, Y_1), or $(Y_0, Y_1) \perp W|X$ (Guo & Fraser, 2014, p. 209; Rosenbaum & Rubin, 1983). For this assumption to hold, the selection process had to be derived from covariates used in the model. Previous research indicates that results from matching designs only reflect randomized control trial results when the covariates in the propensity score model accurately predict treatment assignment (Bifulco, 2012; Cook et al., 2008; Fortson et al., 2012). Matching methods work the best when pretreatment outcome measures are used in estimating the propensity score. For this analysis, the propensity score (*P(X)*) was equivalent to:

$$P(X) = \Pr(T_i = 1|\boldsymbol{X}_i),$$

where T_i = 1 if the student, *i,* participates in Communities In Schools and $\boldsymbol{X}_i$ is a vector of covariates that predict participation in Communities In Schools. Evaluators selected the covariates that best predicted treatment assignment and imbalance between treatment and control groups. Given the importance of pretreatment outcome measures, attendance (percentage of days attended), behavior (in school and out of school suspensions), and academic performance (math, ELA, social studies, and science test

scores) from the previous academic year were used.[13] In addition to these factors, the propensity score model included students' race, gender, English-language learner status, disability status, low-income indicator, and grade. Previous research indicates that these variables are related to student attainment and student achievement (e.g., Goldschmidt & Wang, 1999; Laird, Kienzi, DeBell, & Chapman, 2007; Reardon & Robinson, 2007; Reschly & Christenson, 2006; Rumberger & Lim, 2008; Stetser & Stillwell, 2014). Therefore, these factors were included in the propensity model, as they could have been predictive of the likelihood of students being identified by the EWRS, the likelihood of participating in Communities In Schools, and the outcomes of interest.

Researchers estimated a logistic regression using these covariates to produce a predicted probability of receiving treatment for each student separately for the within-school comparison group and the external comparison groups. The model used by evaluators was:

$$\Pr(T_i = 1|X) = \exp(\beta \boldsymbol{X}_i)/(1 + \exp(\beta \boldsymbol{X}_i)),$$

where $\boldsymbol{X}_i$ is a vector of covariates discussed above.

After creating propensity scores, treatment students were matched to comparison students. Like the estimation of the propensity scores, the matching between treatment and within-school comparison students and between treatment and external comparison students occurred independently. Evaluators used nearest neighbor matching, which is a form of greedy matching. Treatment students were matched to the comparison student with the closest absolute propensity score, as long as the distance between the propensity scores fell within a caliper of $.25\sigma_p$, where σ_p is the standard deviation of the propensity scores (Guo & Fraser, 2014, p. 147). This was done to ensure good matches between treatment and comparison students.

Ideally, each Community In Schools treatment student was matched to five comparison students to boost sample size. Matching was done with replacement. However, there were instances in which treatment students could not be matched. First, if a student had missing data for any of the variables included in the first stage regression, the student was excluded from the analysis. Second, Community In Schools students whose propensity scores did not fall within the caliper described above were not included in the analyses presented in this report, as researchers were not able to identify suitable matches.

Another assumption of the matching methods is that there is proper overlap in the propensity scores between the treatment and control group (Rosenbaum & Rubin, 1983; Stuart & Rubin, 2008). In order to ensure that this assumption is met, evaluators performed bivariate tests, such as a *t*-tests or chi-squares, before and after matching. If these tests revealed a significant level of imbalance or a lack of overlap, then evaluators, following Rosenbaum and Rubin (1984, 1985), re-estimated the propensity model using higher-order polynomial terms and interactions between the covariates. When considering the balance of the matches, researchers examined the statistical significance of the bivariate differences in the post-matching covariates between the treatment and control groups, the standardized differences between the two groups, and the variance ratio. The goal was to have no statistically significant differences, standardized mean differences below 0.1, and variance ratios near 1.0 (Steiner & Cook, 2013)

[13] When available, test scores were from both MAP and SC READY exams were used. Collinearity between predictors is generally not a threat when estimating the propensity score (Stuart, 2010).

The pre-matching differences between Communities In Schools students and the comparison students are presented below, followed by data on the effectiveness of the matching procedure.

1. Characteristics of Communities In Schools Students: Pre-Matching

This study examines students who participated in Communities In Schools in academic years 2016-17 and 2017-18. Table 38 and Table 39 below examine the demographic characteristics of the Communities In Schools students who met the inclusion criteria for this study, as well as the overall student population of treatment, district schools, and state schools. These data include all-non Communities In Schools students in the comparison group populations, allowing for a comparison of demographic characteristics before the matching process.

Table 38. Pre-Matching Demographic Characteristics AY 2016-17

	Communities In Schools Participants (n = 156)	Student Population: Treatment Schools (n = 1,756)	Student Population: District Schools (n = 3,300)	Student Population: State Schools (n = 45,013)
Black	51.3%	**29.7%***** (0.45)	**28.8%***** (0.47)	48.8% (0.02)
Hispanic	21.8%	**41.6%***** (0.44)	**16.3%†** (0.14)	**9.6%***** (0.36)
White	23.7%	22.5% (0.03)	**48.2%***** (0.53)	**37.3%**** (0.28)
Other Race	3.2%	6.3% (0.14)	**6.6%†** (0.16)	4.3% (0.05)
Free/Reduced Meals	82.7%	77.1% (0.14)	**54.0%***** (0.65)	**74.9%***** (0.45)
Female	39.7%	**46.8%†** (0.14)	**47.7%†** (0.16)	**48.6%*** (0.19)
Special Education	39.1%	**18.3%***** (0.47)	**13.0%***** (0.62)	**15.1%***** (0.43)
ESL	19.9%	**34.2%***** (0.31)	**11.8%**** (0.22)	**6.6%***** (0.42)
6th grade	32.7%	37.3% (0.10)	35.0% (0.05)	36.8% (0.06)
7th grade	35.9%	33.2% (0.06)	33.6% (0.05)	31.5% (0.06)
8th grade	31.4%	29.6% (0.04)	31.4% (0.00)	31.7% (0.00)

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

*Note: Standardized mean differences are reported in parentheses. Significance tests are in comparison to the Communities In School group.

Table 38 shows the pre-matching demographic characteristics of Communities In Schools students in academic year 2016-17. As shown in Table 38, 51% of CIS students were Black, 22% were Hispanic, 24% were White, and 3% were some other race. CIS students were more likely to be Black than students in both the treatment ($p < 0.001$) and district schools ($p < 0.001$). They were less likely to be Hispanic than students in the treatment schools ($p < 0.001$), but more likely to be Hispanic than students in the district schools ($p < 0.10$) and state schools ($p < 0.001$). In addition, CIS students in academic year 2016-17 were less likely to be White than students in district schools ($p < 0.001$) and state schools ($p < 0.01$). Overall, 40% of CIS students were female. CIS students were less likely to be female than students attending treatment schools ($p < 0.10$), district schools ($p < 0.10$), and state schools ($p < 0.05$). Over 75% of both the CIS students and the treatment school students were low-income students, as measured by free and reduced meals eligibility, while only 54% of students in district schools were low-income ($p < 0.001$). A significant number of CIS students were designated as special education (39%), a higher percentage than at treatment schools ($p < 0.001$), district schools ($p < 0.001$), and state schools ($p < 0.001$). CIS students also were less likely to be English Language Learners than students at treatment schools ($p < 0.001$), but more likely to be English Language Learners than the student population of district schools ($p < 0.01$) and state schools ($p < 0.001$).

Table 39. Pre-Matching Demographic Characteristics AY 2017-18

	Communities In Schools Participants (n = 150)	Student Population: Treatment Schools (n = 1,773)	Student Population: District Schools (n = 3,342)
Black	54.0%	**27.9%*** ** (0.55)	**28.8%*** ** (0.53)
Hispanic	19.3%	**45.8%*** ** (0.59)	16.7% (0.07)
White	23.3%	20.2% (0.08)	**47.2%*** ** (0.52)
Other Race	3.3%	6.1% (0.13)	**7.3%†** (0.18)
Free/Reduced Meals	92.7%	**81.9%*** ** (0.33)	**57.5%*** ** (0.89)
Female	33.3%	**47.7%*** ** (0.30)	**47.5%*** ** (0.29)
Special Education	36.0%	**14.4%*** ** (0.52)	**10.1%*** ** (0.65)
ESL	13.3%	**32.0%*** ** (0.46)	9.9% (0.11)
6th grade	38.4%	34.0% (0.08)	34.0% (0.09)
7th grade	24.5%	**32.2%†** (0.16)	**32.4%*** (0.17)
8th grade	32.1%	31.8% (0.01)	31.7% (0.01)

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

*Note: Standardized mean differences are reported in parentheses. Significance tests are in comparison to the Communities In School group. Significance tests are in comparison to the Communities In School group.

As shown in Table 39, many of these significant differences between CIS students and the student population at treatment and district schools remained present in academic year 2017-18. Researchers used prior year academic outcomes in the matching process and as covariates in regression models; therefore, it is important to examine the pre-matching prior year academic outcomes of treatment students and comparison school populations.

Table 40 presents a selection of the academic year 2015-16 pre-matching outcomes for Communities In Schools students and comparison group populations. Communities In Schools students' prior year behavior and attendance outcomes were significantly different from the overall student population of treatment, district, and state schools. Communities In Schools students were more likely to have had any behavioral referral, any in-school suspension, and any out-of-school suspension ($p < 0.001$) than students attending all three types of comparison schools. Communities In Schools students also had a lower average daily attendance ($p < 0.001$) and were more often chronically absent than the general population of treatment, district, and state schools ($p < 0.001$). There were fewer significant pre-match prior year standardized test scores. CIS students' SC READY ELA and math scores were not significantly different than the general student population at treatment and state schools. CIS students had significantly lower ELA ($p < 0.05$) and math ($p < 0.05$) scores than students attending district schools.

Table 40. Pre-Matching Prior Year Outcomes for 2016-17 CIS Students

	Communities in Schools Participants (n = 156)	Student Population: Treatment Schools (n = 1,756)	Student Population: District Schools (n = 3,300)	Student Population: State Schools (n = 45,013)
Any Behavioral Referral	71.8%	**36.5%***** (0.76)	**27.9%***** (0.98)	**38.3%***** (0.78)
Any ISS	39.7%	**14.7%***** (0.59)	**13.1%***** (0.63)	---
Any OSS	48.1%	**13.8%***** (0.80)	**10.8%***** (0.90)	---
SC READY – ELA	1626	1627 (0.02)	**1642*** (0.19)	1635 (0.11)
SC READY - Math	1630	1630 (0.01)	**1644*** (0.19)	1636 (0.09)
Average Daily Attendance	93.7%	**95.8%***** (0.42)	**96.5%***** (0.58)	**95.6%***** (0.39)
Chronic Absenteeism	18.9%	**8.2%***** (0.32)	**5.2%***** (0.43)	**10.7%***** (0.25)

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

*Note: Standardized mean differences are reported in parentheses. Significance tests are in comparison to the CIS group

The prior year academic outcomes for academic year 2017-18 analyses appear in Table 41. As shown below, there were significant differences in attendance, behavior, and course performance prior year pre-matching outcomes between Communities In Schools students and the school populations of treatment and district schools. For all variables, CIS students had significantly poorer prior year outcomes than students at treatment and district schools. These differences in prior year outcomes were all significant at a p-value of less than 0.001.

Table 41. Pre-Matching Prior Year Outcomes for AY 2017-18 CIS Students

	Communities in Schools Participants (n = 150)	Student Population: Treatment Schools (n = 1,773)	Student Population: District Schools (n = 3,342)
Any Behavioral Referral	68.6%	**33.7%***** (0.75)	**28.5%***** (0.88)
Any ISS	41.5%	**12.1%***** (0.71)	**14.2%***** (0.64)
Any OSS	44.7%	**14.2%***** (0.72)	**11.4%***** (0.80)
SC READY – ELA	1620	1632 (-0.13)	**1640**** (-0.24)
SC READY – Math	1625	1636 (-0.12)	**1644**** (-0.23)
Average Daily Attendance	93.5%	**95.1%***** (0.32)	**95.4%***** (0.36)
Chronic Absenteeism	20.7%	**11.1%***** (0.27)	**9.0%***** (0.33)

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

*Note: Standardized mean differences are reported in parentheses. Significance tests are in comparison to the CIS group.

2. Effectiveness of the Matching Procedure

To assess the impact of Communities In Schools on student attendance, behavior, course performance, and student social-emotional outcomes, researchers created nine matched comparison groups. It was necessary to create nine distinct, matched comparison groups due to (1) the three different comparison school populations (treatment school, district school, and state school), (2) the two different sources of outcome data (administrative data and student survey data), and (3) two years of analysis (2016-17 and 2017-18).

Researchers re-estimated the propensity model until balance was achieved between the treatment and comparison groups. Balance was determined by examining the statistical significance of the bivariate differences, the magnitude of the standardized mean differences, the variance ratios, and the distribution of the propensity scores between the two groups. Below are the results for the 2016-17 match between Communities In Schools students and the within-school treatment school comparison students using administrative data.

Figure 1 demonstrates that the matching process produced two similar groups in terms of standardized differences. For all the 24 variables in the analysis, none had a standardized mean differences larger than 0.1. Figure 2 provides evidence that the two groups are also similar in terms of the variance of the variables. Further, there is substantial overlap between the Communities In Schools students and the treatment school matches in terms of their propensities to participate in Communities In Schools, as is evident in Figure 3. Given these results, researchers are confident that the two groups are similar on these observable characteristics.

Figure 1. AY 2016-17 Treatment School Comparison Matches (Administrative Data): Standardized Differences

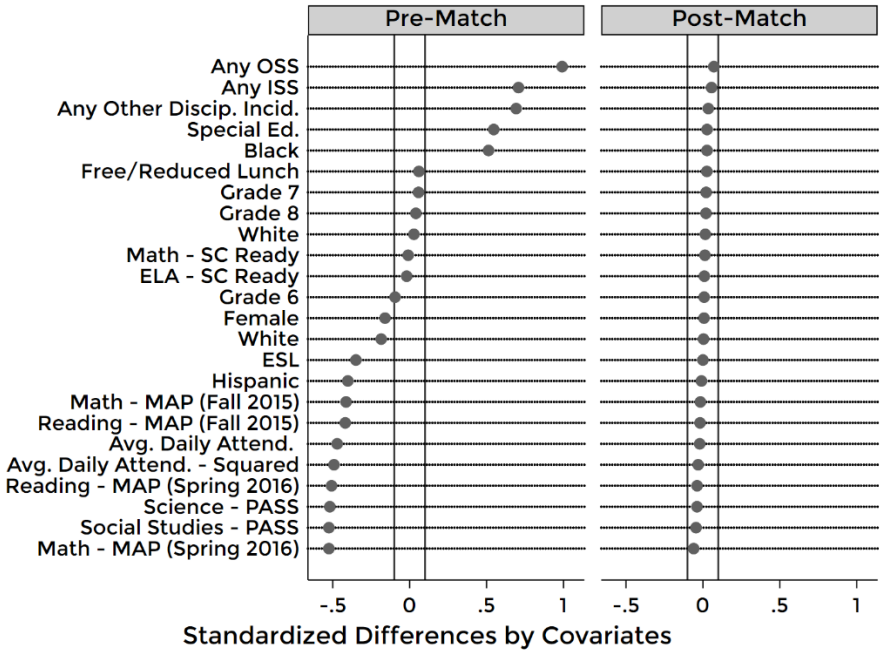


Figure 2. AY 2016-17 Treatment School Comparison Matches (Administrative Data): Variances

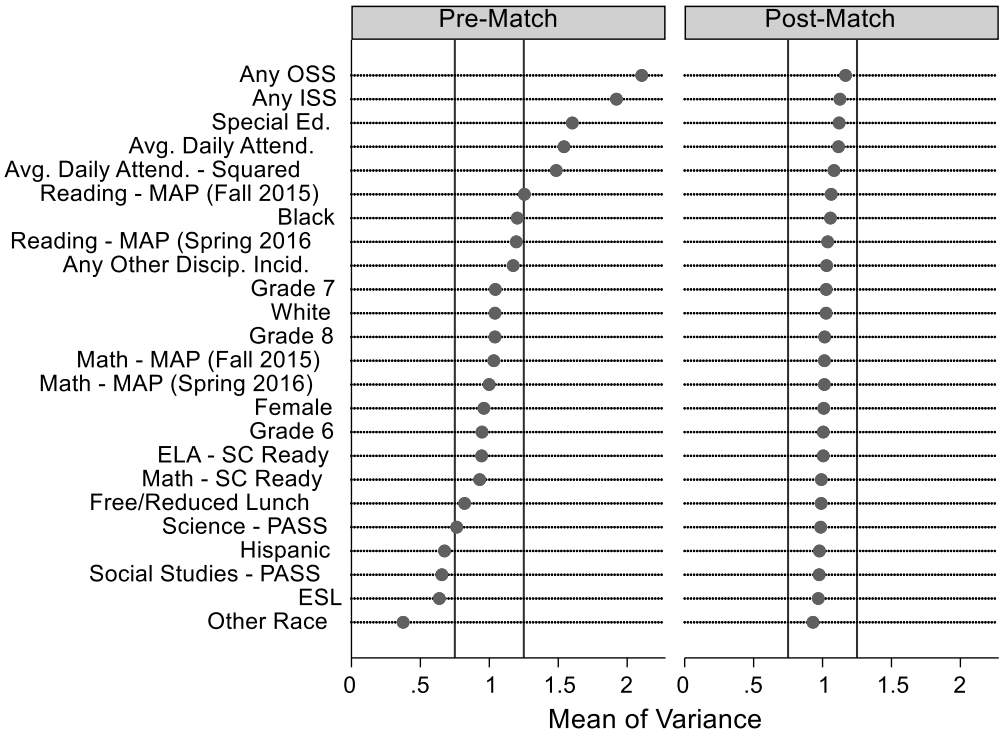
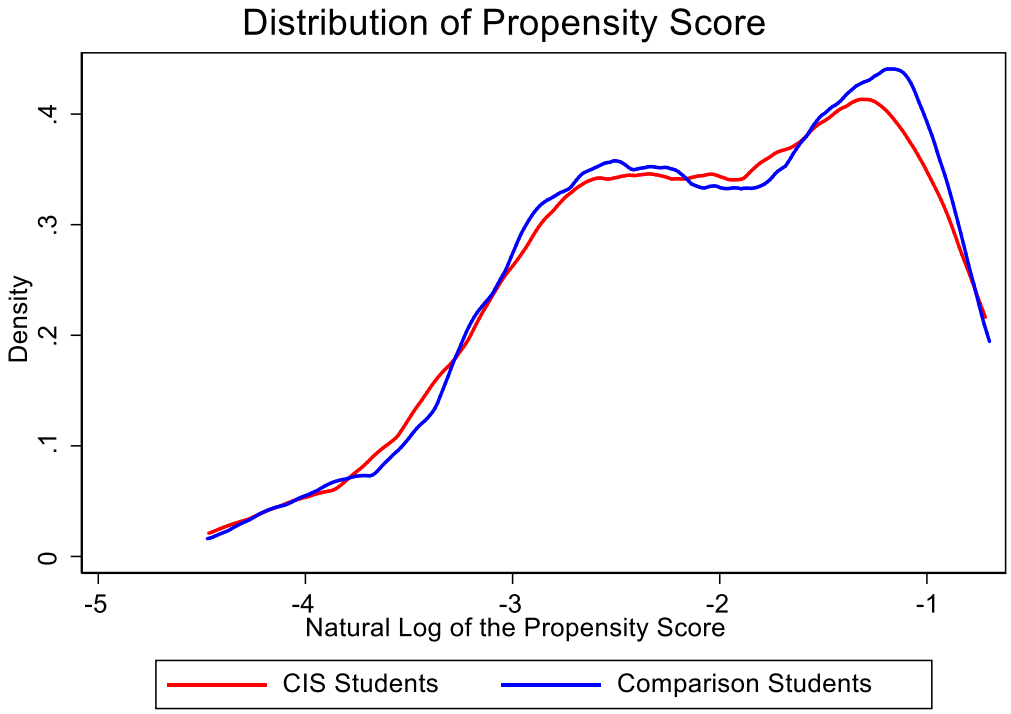


Figure 3. AY 2016-17 Treatment School Comparison Matches (Administrative Data): Overlap



A similar method was used for the eight other matching procedures. In the instances in which ideal matches were not possible, the differences were often marginal. For the results of the other matches, see the Appendix C.

3. Characteristics of Communities In Schools Students: Post-Matching

The following series of tables presents the demographic characteristics of Communities In Schools students and their matched counterparts for each school comparison group (treatment, district, or state) and each data source (administrative or survey).

As noted below in Table 42, no significant differences were present between treatment students and matched comparison students on demographic factors in academic year 2016-17 for the administrative data matches. The lack of significant differences here indicates that the propensity score matching process resulted in balanced samples on these factors. More sophisticated analyses of standardized differences and variance ratios between the treatment and comparison students confirmed that the samples were balanced when examining demographic factors, as well as the baseline attendance, behavior, and achievement outcomes used in the propensity score model. For more information on the effectiveness of the matches for other data sources and academic years, see Appendix C.

Table 42. CIS Participants vs. Student Matches AY 2016-17 (Administrative Data Match)

	CIS Participants (n = 127)	Student Matches: Treatment Schools (n = 635)	CIS Participants (n = 122)	Student Matches: District Schools (n = 610)	CIS Participants (n = 99)	Student Matches: State Schools (n = 495)
Black	52.0%	55.0% (-0.06)	54.1%	54.1% (0.00)	55.6%	55.6% (0.00)
Hispanic	19.7%	17.0% (0.07)	17.2%	19.7% (-0.06)	16.2%	13.3% (0.08)
White	26.0%	25.7% (0.00)	26.2%	23.8% (0.06)	24.2%	27.3% (-0.07)
Other Race	2.4%	2.4% (0.00)	2.5%	2.5% (0.00)	4.0%	3.8% (0.01)
Free/Reduced Meals	94.5%	94.0% (0.02)	94.3%	95.1% (-0.04)	94.9%	94.7% (0.00)
Female	39.4%	35.1% (-0.04)	38.5%	38.0% (0.01)	37.4%	41.0% (-0.07)
Special Ed.	37.8%	35.1% (0.06)	36.9%	37.9% (-0.02)	31.3%	34.5% (-0.07)
ESL	15.7%	14.8% (0.03)	13.9%	15.1% (-0.03)	13.1%	11.5% (0.05)
6th grade	33.1%	31.8% (0.03)	32.8%	33.8% (-0.02)	26.3%	29.5% (-0.07)
7th grade	38.6%	40.8% (-0.04)	39.3%	36.4% (0.06)	40.4%	38.8% (0.03)
8th grade	28.3%	27.4% (0.02)	27.9%	29.8% (-0.04)	33.3%	31.7% (0.03)

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

*Note: Standardized mean differences are reported in parentheses. Significance tests are in comparison to the Communities In Schools group. Frequency weights were used to account for matching with replacement.

Researchers were not able to identify suitable matches for some CIS students due to the parameters of the propensity score matching process. This means that not all CIS students were included in the analyses presented in this report. Table 43 and Table 44 below describe how many CIS students were matched for each comparison group and each set of outcome data. The total number of students listed in the table includes all CIS students who met the inclusion criteria and have full matching data.

Table 43. Number and Percent of CIS Participants Matched (Administrative Data)

	Academic Year 2016-17						Academic Year 2017-18			
	Treatment Schools		District Schools		State Schools		Treatment Schools		District Schools	
Matched	127	81%	122	90%	103	73%	128	88%	136	94%
Not Matched	29	19%	13	10%	39	27%	31	12%	23	6%
Total	135	100%	135	100%	142	100%	145	100%	145	100%

When looking at the Communities In Schools students with complete administrative data in academic year 2016-17, 81% of CIS students were matched to comparison students at treatment schools, 90% were matched to comparison students at district schools, and 73% were matched to comparison students at state schools. Next, when looking at the 145 Communities In Schools students with complete administrative data in academic year 2017-18, 88% of CIS students were matched to comparison students at treatment schools and 94% were matched to comparison students at district schools.

Table 44 presents the number and percentage of treatment students with complete pre- and post-OnTrack Student Survey data who were matched successfully. In academic year 2016-17, 80% of Communities In Schools students were matched to comparison students at treatment schools and 79% were matched to comparison students at district schools. In academic year 2017-18, there were 90 treatment students with survey data; 87% of these students were matched to comparison students attending treatment schools and 90% were matched to comparison students at district schools.

Table 44. Number and Percent of CIS Participants Matched (Survey Data)

	Academic Year 2016-17				Academic Year 2017-18			
	Treatment Schools		District Schools		Treatment Schools		District Schools	
Matched	60	80%	59	79%	78	87%	81	90%
Not Matched	15	20%	16	21%	15	13%	12	10%
Total	75	100%	75	100%	90	100%	90	100%

It is important to note that the estimated effects of the program only pertain to those students included in the analyses. It is possible that participating in Communities In Schools had different effects on those students who were not matched. However, the research team was able to match the majority of Communities In Schools students to lessen this problem. To examine how representative the matched set of Communities In Schools students is, researchers compared the student demographics between the matched Communities In Schools students and those Communities In Schools students who could not be matched. The results for the 2016-17 administrative data match with the treatment school comparison group appears in Table 45 below.

One can see the matched CIS students are generally quite similar to the unmatched CIS students. Eighth grade students were underrepresented in the matched data. Similar analyses were performed for the other matches. Appendix C provides information on the demographic differences between those Communities In Schools students who were matched and those who were not.

Table 45. Which CIS Students Were Matched? Post-Match Demographics, AY 2016-17 Treatment School (Administrative Data Match)

	CIS Not Matched - Mean	CIS Matched - Mean	Difference	S.E. of Diff.
Black	0.59	0.52	0.07	0.12
Hispanic	0.23	0.20	0.03	0.09
White	0.14	0.26	-0.12	0.10
Other Race	0.05	0.02	0.02	0.04
Free/Reduced Meals	0.86	0.94	-0.08	0.06
Female	0.36	0.39	-0.03	0.11
Special Ed.	0.50	0.38	0.12	0.11
ESL	0.25	0.16	0.09	0.09
Grade 6	0.31	0.33	-0.02	0.10
Grade 7	0.24	0.39	-0.14	0.10
Grade 8	0.45	0.28	**0.16**$^{+}$	0.10

Significance determined by chi-square tests.
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

D. Impact Study Results

There are many competing matching procedures. Researchers for this study employed greedy matching. While other approaches, such as optimal matching, have their strengths, greedy matching allowed researchers to perform multivariate analyses on the samples after matching. This feature is one of the reasons why greedy matching is so popular across many disciplines (Guo & Fraser, 2014, p. 148). When propensity scores are used with a regression adjustment, the estimates are "doubly robust," which helps with robustness against misspecification in the propensity score model or the regression model (Imbens & Wooldridge, 2009).

As specified above, researchers ensured that there were no significant differences between the treatment and comparison groups on pre-treatment covariates. For each outcome, the basic model to estimate the impact effects of Communities In Schools was as follows:

$$Y_{t,i} = \beta_0 + \beta_1 T_i + \beta_2 Y_{Baseline,i} + \beta_3 G_i + \beta_4 R_i + \beta_5 F_i + \beta_6 I_i + \beta_7 D_i + \beta_8 E_i + e_i$$

In this equation, $Y_{t,i}$ is the outcome for student *i* at time *t*. β_1 represents the impact of participating in Communities In Schools (T = 1). A statistically significant estimate of β_1 indicates that participating in Communities In Schools is related the outcome of interest. When estimating impact effects using a quasi-experimental design, inclusion of a pretreatment outcome measure decreases selection bias and increases precision (e.g, Bifulco, 2012). β_2 is the impact of the pretreatment, or baseline outcome.[14] For example, the regression model predicting 2017-18 math SC READY test scores will include the 2016-17

[14] Whenever possible, the same measure will be used for both the outcome and the pretreatment control variable. When that is not possible, a pretreatment or baseline measure from the same domain as the outcome variable will be used. No pretreatment measures of the outcome were controlled for the analyses of the survey data.

math SC READY score as a covariate. β_3 represents a vector of grade (7^{th} and 8^{th} with 6^{th} the omitted category) specific effects. R_i represents a set of dummy variables for race (Black, Hispanic, and other with White the omitted category). β_5 represents the difference between female and male students, and I_i is a dummy variable indicating if a student is eligible for free or reduced priced lunch. Dummy indicators for disability status (D_i) and English as a second language status (E_i) were also included in the model.

The student-level random error is denoted as e_i in the above model. One assumption of a traditional OLS model is that the residuals are uncorrelated with the covariates. Since this assumption of homoscedasticity does not necessarily hold, the models were estimated with robust standard errors. Bootstrap methods were used to estimate the standard errors. This approach relies on sampling from the analysis sample and replicating the analysis. This study used 500 replications to produce the standard errors of the CIS coefficients.

The above model was used for interval dependent variables, such as test scores, while a logistic regression was estimated for dichotomous dependent variables, like whether or not a student was chronically absent during a given semester or school year.

The Stata software program was used to perform the matching procedure and outcome analyses (StataCorp, 2017). The above model was used for interval dependent variables, such as test scores, while a logistic regression was estimated for dichotomous dependent variables, like whether or not a student was chronically absent during a given semester or school year.

While the main impact analyses compared Communities In Schools students to matched comparison students, researchers also estimated regressions using the population of comparison students. These unmatched regression results allow one to compare the overall student populations in each comparison group to students who participated in Communities In Schools in academic year 2016-17 or 2017-18. These unmatched analyses provide context when assessing the impact of the matching procedure on the overall conclusions of the study. The results of these unmatched regression analyses are provided in Appendix I.

1. Estimates of Effect Size

Evaluators of education programs should consider the substantive impact of interventions in addition to their statistical significance. For the impact analyses presented below, researchers converted the multivariate regression coefficients into covariate-adjusted, standardized effect sizes (Cohen's d). This was a straightforward process for the OLS regression coefficients (Lipsey & Wilson, 2000). To convert the binary logistic regression results to Cohen's d estimates, researchers first transformed the coefficients to odds ratios. Following Borenstein, Hedges, Higgins, and Rothstein (2009), these odds ratios were then converted into estimates of Cohen's d (p. 47). A benefit of Cohen's d is that it allows for comparisons of substantive impacts across outcomes and studies. However, there is no agreed upon definition of a "meaningful" effect size. Cohen (1988) suggested that an effect size of 0.2 should be considered small, 0.5 moderate, and 0.8 large. However, effect sizes of this magnitude are quite rare in education evaluations. Perhaps, a more appropriate threshold is the What Works Clearinghouse's (2017) statement that an effect size of 0.25 or greater should be considered "substantively important."

2. Confirmatory Impact Analyses

RQ1. *Did students who participated in Communities In Schools have improved attendance when compared to matched comparison students?*

Tables 46 and 47 present the differences in student attendance between students who participated in Communities In Schools and matched comparison students at treatment, district, and state schools. For the analyses examining average daily attendance, positive values in the table indicate that the Communities In Schools students exhibited a more desirable outcome than the matched comparison students, or a higher average daily attendance rate. Two different sets of data are presented in the following tables. The "Matched Regression" columns show the CIS regression coefficients from the post-match multivariate regressions and the bootstrapped standard errors. The regression coefficients from the OLS regressions are directly interpretable. For analyses of dichotomous dependent variables, logistic regression was used, and the "Matched Regression" column presents the log odds and associated bootstrapped standard errors. The "Effect Size" column displays the Cohen's d estimate associated with the CIS regression coefficient. For the analyses examining chronic absenteeism, negative values in the table indicate that the Communities In Schools students exhibited a more desirable outcome than the matched comparison students. Statistically significant differences between the groups are denoted by asterisks in the tables.

As shown in Table 46, there were no significant differences in average daily attendance or chronic absenteeism between CIS students and matched comparison students at treatment schools or district schools in academic year 2016-17. CIS students had lower average daily attendance than matched students at state schools ($p < 0.05$).

Table 46. Confirmatory Impact Results for Student Attendance AY 2016-17

	CIS vs. Comparison Students (Treatment Schools)		CIS vs. Comparison Students (District schools)		CIS vs. Comparison Students (State Schools)	
	Matched Regression (n = 762)	Effect Size	Matched Regression (n = 732)	Effect Size	Matched Regression (n = 618)	Effect Size
Average Daily Attendance	-0.62 (0.59)	-0.09	-0.28 (0.61)	-0.04	**-1.54*** (0.75)	-0.21
Chronically Absent	0.07 (0.26)	0.04	-0.02 (0.25)	-0.01	0.10 (0.26)	0.06

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measures. Frequency weights were used to account for matching with replacement.

In academic year 2017-18, shown in Table 47, Communities In Schools students had poorer attendance than matched comparison students at treatment schools. Communities In Schools students had lower average daily attendance ($p < 0.01$) and were more likely to be chronically absent ($p < 0.01$) than were matched comparison students. There were no significant differences in attendance outcomes between Communities In Schools students and matched comparison students at district schools in academic year 2017-18.

Table 47. Confirmatory Impact Results for Student Attendance AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District schools)	
	Matched Regression (n = 768)	Effect Size	Matched Regression (n = 816)	Effect Size
Average Daily Attendance	**-1.50**** (0.49)	-0.27	-0.31 (0.51)	-0.05
Chronically Absent	**0.92**** (0.32)	0.51	0.36 (0.30)	0.20

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measures. Frequency weights were used to account for matching with replacement.

RQ2. *Did students who participated in Communities In Schools have fewer behavioral incidences when compared to matched comparison students?*

Researchers examined the impact of participating in Communities In Schools on student behavior. Table 48 and Table 49 present the differences in student behavior between CIS students and matched comparison students at treatment, district schools, and state schools. Researchers examined behavior outcomes for two time periods: (1) the entire academic year; and (2) the spring semester of each academic year. Since the majority of CIS students started participating in CIS in the fall semester of each academic year, researchers decided to present only the behavior outcomes of spring semester 2017 and 2018 in this report. Behavior data from spring semester are not true post-program data, as students were still participating in CIS through the end of the academic year. However, data from this time better reflect a period in which one would expect to see an impact of the program as opposed to data from the entire academic year.

As shown in Table 48, results for the student behavior analyses were not in the expected direction for treatment school matches in spring semester 2017. Communities In Schools students were more likely to have had any behavioral referral than matched comparison students ($p < 0.05$) and had 0.77 more total behavioral referrals, on average, than their matched counterparts at treatment schools in spring semester 2017 ($p < 0.01$). Communities In Schools students also were more likely to have had any in-school suspension ($p < 0.05$) and any out-of-school suspension ($p < 0.05$) than matched comparison students at treatment schools. These significant differences between CIS students and comparison students at treatment schools were not in the hypothesized direction.

Table 48 also presents the differences in student behavior between CIS students and matched comparison students at district schools. As shown in Table 48, the significant differences between CIS students and matched comparison students at district schools were in the hypothesized direction in spring 2017. CIS students were less likely to have had any in-school suspension than matched comparison students ($p < 0.10$). Communities In Schools students served 3.06 fewer total hours of in-school suspension, on average, than matched comparison students at district schools ($p < 0.001$). In addition, CIS students had 0.76 fewer total days of out-of-school suspension than matched comparison

students ($p < 0.05$). These significant differences between CIS students and comparison students at district schools were in the hypothesized direction.

Table 48. Confirmatory Impact Results for Student Behavior AY 2016-17

	CIS vs. Comparison Students (Treatment Schools) (Spring 2017)		CIS vs. Comparison Students (District Schools) (Spring 2017)		CIS vs. Comparison Students (State Schools) (AY 2016-17)	
	Matched Regression (n = 762)	Effect Size	Matched Regression (n = 732)	Effect Size	Matched Regression (n = 618)	Effect Size
Any Behavioral Referral	**0.55*** (0.26)	0.31	0.44 (0.28)	0.25	**0.65*** (0.33)	0.36
# Behavioral Referrals	**0.77**** (0.29)	0.29	-0.07 (0.35)	-0.02	**1.07†** (0.55)	0.16
Any ISS	**0.35*** (0.25)	0.19	**-0.45†** (0.26)	-0.25	**0.72**** (0.24)	0.40
# Hours ISS	0.72 (0.58)	0.13	**-3.06***** (0.88)	-0.28	0.35^ (0.27)	0.13
Any OSS	**0.59*** (0.27)	0.32	0.16 (0.27)	0.09	**0.61*** (0.25)	0.34
# Days OSS	0.29 (0.25)	0.13	**-0.76*** (0.36)	-0.18	**0.48*^** (0.23)	0.19

†$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measures. Frequency weights were used to account for matching with replacement.

^ These variables are different in the state dataset: number of ISS and number of OSS

Researchers only had access to aggregate academic year behavior data for state school matched students; therefore, the results presented in Table 48 for state matches are for the entire academic year and not just spring semester. There were several significant differences in behavior between Communities In Schools students and matched students attending state schools. These differences were not in the hypothesized direction. Communities In Schools students were more likely to have had any behavioral referral ($p < 0.05$), any in-school suspension ($p < 0.01$), and any out-of-school suspension ($p < 0.05$) than matched comparison students at state schools. Communities In Schools students also had more total behavioral referrals ($p < 0.10$) and more out-of-school suspensions ($p < 0.05$) than matched students attending state schools.

The results for spring semester 2018 appear in Table 49. Just as in academic year 2016-17, Communities In Schools students had significantly different behavior outcomes than matched students attending treatment schools in spring semester 2018. Communities In Schools students were more likely to have had any behavioral referral ($p < 0.01$), any in-school suspension ($p < 0.01$), and any out-of-school suspension ($p < 0.01$) than matched comparison students at treatment schools in spring semester 2018. Communities In Schools students had, on average, 1.00 more behavioral referrals ($p < 0.001$), 2.01 more hours of in-school suspension ($p < 0.001$), and 0.88 more days of out-of-school suspension than their matched counterparts at treatment schools.

Table 49. Confirmatory Impact Results for Student Behavior AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools) (Spring 2018)		Communities In Schools vs. Comparison Students (District Schools) (Spring 2018)	
	Matched Regression (n = 768)	Effect Size	Matched Regression (n = 816)	Effect Size
Any Behavioral Referral	**0.65**** (0.28)	0.36	**0.49*** (0.24)	0.27
# Behavioral Referrals	**1.00***** (0.28)	0.38	0.09 (0.33)	0.02
Any ISS	**0.80**** (0.28)	0.44	-0.21 (0.25)	-0.12
# Hours ISS	**2.01***** (0.58)	0.46	**-2.58**** (0.83)	-0.22
Any OSS	**0.76**** (0.25)	0.42	**0.66**** (0.23)	0.36
# Days OSS	**0.88**** (0.27)	0.39	0.04 (0.34)	0.01

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measures. Frequency weights were used to account for matching with replacement.

Behavior results for spring semester 2018 were mixed when looking at matched comparison students at district schools. Communities In Schools students had 2.58 fewer hours of in-school suspension than matched comparison students at district schools. However, Communities In Schools students were more likely to have received any behavioral referral ($p < 0.05$) and any out-of-school suspension ($p < 0.01$) than matched comparison students at district schools in spring semester 2018.

RQ3. *Did students who participated in Communities In Schools have improved course performance in math and English/language arts when compared to matched comparison students?*

Researchers examined the impact of participating in Communities In Schools on student course performance. Table 50 and Table 51 present the differences in student course performance between students who participated in Communities In Schools and matched comparison students at treatment, district, and state schools. In the tables below, positive numbers indicate that students who participated in Communities In Schools had higher test scores than matched students, and thus had more desirable results.

As shown in Table 50, there were some significant differences in SC READY and spring MAP assessment scores between CIS students and matched comparison students at treatment, district, and state schools in academic year 2016-17. Communities In Schools students scored higher on the MAP math assessment in spring 2017 than matched comparison students at treatment schools ($p < 0.01$) and district schools ($p < 0.10$). On the other hand, Communities In Schools students had significantly lower scores on the spring 2017 SC READY math assessment than matched comparison students at district schools ($p < 0.10$) and

state schools ($p < 0.05$). Communities In Schools students also had significantly lower scores on the spring 2017 SC READY ELA assessment than matched comparison students at state schools ($p < 0.10$). In academic year 2017-18, there were no significant differences in spring 2018 SC READY ELA or math assessment scores between treatment and matched student at either comparison school. See Table 51.

Table 50. Confirmatory Impact Results for Course Performance AY 2016-17

	CIS vs. Comparison Students (Treatment Schools)		CIS vs. Comparison Students (District Schools)		CIS vs. Comparison Students (State Schools)	
	Matched Regression (n = 732)	Effect Size	Matched Regression (n = 714)	Effect Size	Matched Regression (n = 594)	Effect Size
Spring MAP RIT - Math	**1.81**** (0.69)	0.12	**1.65*** (0.70)	0.10	---	---
Spring MAP RIT - Reading	0.28 (1.03)	0.02	-0.13 (0.96)	-0.01	---	---
SC READY - Math	-1.03 (1.06)	-0.01	**-1.83†** (1.00)	-0.02	**-2.86*** (1.24)	-0.04
SC READY - ELA	0.75 (1.20)	0.01	0.02 (1.28)	0.00	**-2.65†** (1.55)	-0.03

†$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measures. Frequency weights were used to account for matching with replacement.

Note. Data for the MAP assessment were only available at the district level.

Table 51. Confirmatory Impact Results for Student Course Performance AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Matched Regression (n = 744)	Effect Size	Matched Regression (n = 762)	Effect Size
SC READY - Math	-0.04 (0.05)	-0.06	-0.05 (0.05)	-0.07
SC READY - ELA	-0.01 (0.05)	-0.01	-0.01 (0.05)	-0.01

†$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measures. Frequency weights were used to account for matching with replacement.

Note. Greenville County Schools stopped administering the MAP assessment to all middle school students in AY 2017-18.

3. Exploratory Secondary Outcome Analyses

RQ4. *Did students who participated in Communities In Schools have improved relationships with adults when compared to matched comparison students?*

Researchers examined the impact of participating in Communities In Schools on student relationships with adults at schools, as measured by the pre/post OnTrack Greenville Student Survey. For the analyses examining student relationships with adults, positive values in the table indicate that CIS students exhibited a more desirable outcome than the matched comparison students. The results for student relationships with adults appear in Table 52 and Table 53.

In academic year 2016-17, shown in Table 52, students who participated in Communities In Schools reported significantly stronger relationships with teachers when compared to matched comparison students in district schools ($p < 0.05$), though there was no difference in self-reported relationships with caring adults. When compared to matched comparison students at treatment schools, CIS students showed no significant differences in relationships with adults.

Table 52. Exploratory Outcome Results for Relationships with Adults AY 2016-17

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Matched Regression (n = 360)	Effect Size	Matched Regression (n = 354)	Effect Size
Relationships with Teachers	-0.11 (0.11)	-0.14	**0.26*** (0.11)	0.32
Relationships with Caring Adults	-0.06 (0.10)	-0.08	0.11 (0.10)	0.13

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics and grade. Frequency weights were used to account for matching with replacement.

Table 53. Exploratory Outcome Results for Relationships with Adults AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Matched Regression (n = 468)	Effect Size	Matched Regression (n = 486)	Effect Size
Relationships with Teachers	**0.19†** (0.10)	0.24	**0.25**** (0.10)	0.30
Relationships with Caring Adults	**0.18†** (0.11)	0.21	0.10 (0.11)	0.12

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics and grade. Frequency weights were used to account for matching with replacement.

Table 53 presents the differences in relationships with adults between treatment and matched comparison students in academic year 2017-18. Communities In Schools students reported having stronger relationships with teachers ($p < 0.10$) and caring adults ($p < 0.10$) than matched students at treatment schools. Communities In Schools students also reported having stronger relationships with teachers than matched students attending district schools ($p < 0.01$).

RQ6. *Did students who participated in Communities In Schools have an improved educational self-perception when compared to matched comparison students?*

Using student survey responses, researchers assessed the impact of participating in Communities In Schools on student educational self-perception. For these analyses, positive values in the table indicate that CIS students exhibited a more desirable outcome than the matched comparison students. The results for student self-confidence appear in Table 54 and Table 55. In both academic years of the study, there were no significant differences in either measure of educational self-perception between Communities In Schools students and matched comparison students attending treatment and district schools.

Table 54. Exploratory Outcome Results for Educational Self-Perception AY 2016-17

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Matched Regression (n = 360)	Effect Size	Matched Regression (n = 354)	Effect Size
Academic Perseverance	-0.14 (0.10)	-0.21	0.00 (0.10)	0.00
Academic Self-Confidence	-0.03 (0.08)	-0.05	0.11 (0.08)	0.18

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics and grade. Frequency weights were used to account for matching with replacement.

Table 55. Exploratory Outcome Results for Educational Self-Perception AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Matched Regression (n = 468)	Effect Size	Matched Regression (n = 486)	Effect Size
Academic Perseverance	-0.01 (0.09)	-0.01	0.01 (0.09)	0.01
Academic Self-Confidence	0.04 (0.09)	0.06	-0.01 (0.09)	-0.02

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics and grade. Frequency weights were used to account for matching with replacement.

RQ5. *Did students who participated in Communities In Schools have improved school engagement when compared to matched comparison students?*

Researchers assessed the impact of participating in Communities In Schools on student engagement at school. For the analyses examining student engagement at school, positive values in the table indicate that CIS students exhibited a more desirable outcome than the matched comparison students. The results for student engagement at school appear in Table 56 and Table 57. In academic year 2016-17, below in Table 56, Communities In Schools students reported higher levels of school engagement ($p < 0.05$) and school belonging ($p < 0.10$) than matched comparison students at district schools. Student levels of school engagement did not vary significantly between CIS students and matched comparison students at treatment schools in academic year 2016-17. In academic year 2017-18, shown below in Table 57, there were no significant differences in school engagement between Communities In Schools students and matched students at comparison schools.

Table 56. Exploratory Outcome Results for School Engagement AY 2016-17

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Matched Regression (n = 360)	Effect Size	Matched Regression (n = 354)	Effect Size
School Engagement	0.08 (0.10)	0.10	**0.28*** (0.10)	0.36
School Belonging	-0.14 (0.12)	-0.16	**0.22†** (0.12)	0.25

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics and grade. Frequency weights were used to account for matching with replacement.

Table 57. Exploratory Outcome Results for School Engagement AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Matched Regression (n = 468)	Effect Size	Matched Regression (n = 486)	Effect Size
School Engagement	0.12 (0.11)	0.16	0.11 (0.11)	0.13
School Belonging	0.10 (0.11)	0.12	0.03 (0.11)	0.03

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics and grade. Frequency weights were used to account for matching with replacement.

RQ7. *Did students who participated in Communities In Schools have an improved attitude toward learning when compared to matched comparison students?*

Researchers also examined the impact of participating in Communities In Schools on student attitude toward learning. For the analyses examining student attitude toward learning, positive values in the table indicate that CIS students exhibited a more desirable outcome than the matched comparison students. The results for student attitudes toward learning appear in Table 58 and Table 59. There were no significant differences in attitude toward learning between Communities In Schools students and matched comparison students in academic year 2016-17 or 2017-18.

Table 58. Exploratory Outcome Results for Student Attitude toward Learning AY 2016-17

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Matched Regression (n = 360)	Effect Size	Matched Regression (n = 354)	Effect Size
Valuing Education	-0.06 (0.10)	-0.09	0.12 (0.10)	0.17

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics and grade. Frequency weights were used to account for matching with replacement.

Table 59. Exploratory Outcome Results for Student Attitude toward Learning AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Matched Regression (n = 468)	Effect Size	Matched Regression (n = 486)	Effect Size
Valuing Education	-0.04 (0.11)	-0.06	-0.06 (0.11)	-0.09

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficients of the Communities In Schools variable and bootstrap SEs in parentheses from multivariate regressions that also control for student demographics and grade. Frequency weights were used to account for matching with replacement.

4. Adjustment for Multiple Outcomes

This evaluation examined the effects of participating in Communities In Schools on multiple outcomes. However, as the number of comparisons in a study increases, so does the possibility of committing a Type I error. There are many ways to deal with this challenge. As seen above in section II, this evaluation examined outcomes in a number of different domains. Following Schochet (2008), the impacts and outcomes of interest were classified as confirmatory or exploratory. The confirmatory analyses were the focus of this evaluation and adjustments for multiple outcomes were necessary. This evaluation included confirmatory outcomes across three domains: attendance, behavior, and course performance. Within each domain, the Benjamni-Hochberg adjustment was used. Using this approach, the evaluation team conducted separate tests for each outcome. Researchers ordered the p-values from the tests from smallest to largest and compared each to an adjusted p-value that took the number of tests in the domain into account. This method was preferred over the Bonferroni correction because the Bonferroni correction can be overly conservative and can significantly increase the possibility of Type II error, which reduces power (Gelman, Hill, & Yajima, 2012; Schochet, 2008).

The multiple comparison adjustment for the attendance domain is presented below in Table 60. There were 10 total tests (average daily attendance rate and chronic absenteeism for the five matches using the administrative data). Before adjustments for multiple comparison were made, three of the tests indicated statistically significant differences between Communities In Schools students and comparison students. After adjusting for multiple comparisons, two results remained statistically significant.

Table 60. Multiple Comparison Adjustment for the Attendance Domain

Outcome	Year	Comparison Group	Coefficient	Original p-value	Significant at p < 0.10
Average Daily Attendance	2018	Treatment School	-1.4964	0.0022	Yes
Chronic Absences	2018	Treatment School	0.9237	0.0034	Yes
Average Daily Attendance	2017	State	-1.5429	0.0406	No

The multiple comparison adjustment for the course performance domain is presented below in Table 61. There were 14 total tests (MAP Reading, MAP Math, SC READY ELA and SC READY Math for the treatment and district 2016-17 matches, and SC READY ELA and SC READY Math for the 2016-17 state match and the 2017-18 administrative data matches). Before adjustments for multiple comparison were made, 5 of the tests indicated statistically significant differences between Communities In Schools students and comparison students. After adjusting for multiple comparisons, none of the results remained statistically significant.

Table 61. Multiple Comparison Adjustment for the Course Performance Domain

Outcome	Year	Comparison Group	Coefficient	Original p-value	Significant at p < 0.10
Math - SC READY	2017	State	-2.8622	0.0223	No
Math - MAP	2017	Treatment School	1.8135	0.0296	No
Math - MAP	2017	District	1.6484	0.0518	No
Math - SC READY	2017	District	-1.8262	0.0891	No
ELA - SC READY	2017	State	-2.6521	0.0990	No

The multiple comparison adjustment for the behavior domain is presented below in Table 62. There were 30 total tests (any referral, any ISS, any OSS, number of referrals, ISS hours and OSS days for the five matches using the administrative data). Before adjustments for multiple comparison were made, 20 of the tests indicated statistically significant differences between Communities In Schools students and comparison students. After adjusting for multiple comparisons, 17 results remained statistically significant.

Table 62. Multiple Comparison Adjustment for the Behavior Domain

Outcome	Year	Comparison Group	Coefficient	Original psa-value	Significant at p < 0.10
Number of Referrals	2018	Treatment School	0.9997	0.0004	Yes
ISS Total Hours	2017	District	-3.0586	0.0006	Yes
ISS Total Hours	2018	Treatment School	2.0074	0.0006	Yes
OSS Total Days	2018	Treatment School	0.8829	0.0015	Yes
ISS Total Hours	2018	District	-2.5817	0.0020	Yes
Any OSS	2018	Treatment School	0.7582	0.0021	Yes
Any ISS	2018	Treatment School	0.8038	0.0035	Yes
Any OSS	2018	District	0.6600	0.0041	Yes
Any ISS	2017	State	0.7158	0.0068	Yes
Any Referral	2018	Treatment School	0.6508	0.0077	Yes
Number of Referrals	2017	Treatment School	0.7679	0.0086	Yes
Any OSS	2017	Treatment School	0.5895	0.0277	Yes
Any OSS	2017	State	0.6084	0.0293	Yes
Any Referral	2017	Treatment School	0.5523	0.0304	Yes
OSS Total Days	2017	District	-0.7630	0.0331	Yes
Any Referral	2018	District	0.4918	0.0416	Yes
# of OSS	2017	State	0.4801	0.0518	Yes
Number of Referrals	2017	State	1.0721	0.0712	No
Any Referral	2017	District	-0.4518	0.0820	No
Any Referral	2017	State	0.6539	0.0873	No

V. Findings, Lessons Learned, and Next Steps

A. Summary of Implementation Study Findings

The CIS logic model identified five CIS case management elements on which the Student Support Specialists were trained as the structure for engaging with their assigned caseload of students. For each case management element, the majority of Student Support Specialists (6 – 8 out of 10) indicated success. That is, at the end of the 2017-18 year, the 10 Student Support Specialists across the four sites were mostly positive about their implementation of the five elements of case management.

Each of the 10 Student Support Specialists was expected to support a caseload of between 20-25 students. CIS national guidelines suggest that the CIS model should aim to provide case management services to 10% of the student population in schools with fewer than 1,000 students; therefore, the program should have expected to serve 215 students across the four sites in academic year 2017-18 instead of the 185 originally targeted at the beginning of the project. At two sites, the Actual Total Caseload of 45 and 47 were under the projected 10% target by about 20 students.

Of the case-managed students across the four sites in academic year 2017-18, there was a similar distribution across the three middle grades levels, with the highest percentage in sixth grade (38%) and the lowest in seventh grade (28%). There was a higher percentage of males (65%) compared to females (35%). There was also a higher percentage of Black/African American students (54%) receiving case management as compared to similar percentages of White (24%) and Hispanic (20%) students.

As part of the CIS intake process, for each student, each Student Support Specialist completed a "Risk Factor Assessment," which included identification of the presence or absence of a set of pre-determined individual and family risk factors related to student performance in school (e.g., aggressive behavior, emotional and/or mental health concerns, lack of parental supervision/discipline). In academic year 2017-18, over half of case-managed students (58%) were reported as exhibiting "emotional/mental health concerns." Just under half of case-managed students (48%) were indicated to show a "lack of effort in school," and 45% were associated with "poor social skills." Regarding Family Risk Factors, of the 161 students with CISDM data, 124 (77%) were reported as having "low socioeconomic status." More than half (65%) were reported as having "parents/guardians with low levels of education," and 61% experienced some sort of "family disruption or stress." Thus, students were identified with a variety of risk factors that went beyond academic underperformance.

In the CISDM system, students were labeled as "Moderate Intensity" (Tier II) or "High Intensity" (Tier II) by their Student Support Specialist, indicating the level of service they may need. Of the case-managed students in academic year 2017-18, 24% were identified to be "High Intensity" and 76% were "Moderate Intensity."

Student length of time in the program varied. Of the 161 case-managed students in academic year 2017-18, 60 (37%) entered in the fall of 2017, thus, experiencing a full year of case-managed services in the 2017-18 academic year. However, 25 (16%) entered in the spring of 2018, thus receiving only half a year of services. The remaining 76 (47%) entered in prior years and thus received multiple years of service.

Across the four sites, sixth grade had slightly more students in the program (61); however, they were more likely to enter the CIS case management process later in the academic year. That is, 33% of sixth graders had one semester or less of time in CIS compared to 4% of 7th graders and 5% of 8th graders. Of the seventh grade students, 43% were completing their second year or more in the program in academic year 2017-18 compared to 67% of eighth grade students who had been in case management for two years or more. Thus, the impact of CIS was likely to have been greater on case-managed students in the seventh and eighth grade than in the sixth grade. The impact study did not have a large enough sample to conduct separate grade-level analyses.

The CIS model is best understood as two components. First, students meet regularly with their assigned Student Support Specialist (at least once per month) to check-in and allow the Student Support Specialists to monitor student progress in their individualized plan. These meetings are critical for students to develop the relationship with a caring adult at their school. Thus, it is important that these meetings indeed take place. Second, students are offered either Tier II or Tier III services. Tier II is the opportunity to participate in a variety of group activities that address students' common needs. Academic assistance can be provided by volunteer tutors, mentors, or Student Support Specialists in group homework assistance sessions. Tier III is for students who may need one-on-one intensive and individualized assistance which can be provided by Student Support Specialists or other agencies.

On an end-of-year survey, a total of 77% of students reported meeting with a CIS Staff person "almost every day" or "about once a week" or "about once or twice a month" as would be expected by CIS protocols (i.e., at least monthly). However, 34 students (23%) reported meeting with a CIS staff person "just a few times during the school year" which would represent less frequent interactions than expected. Of these 34 students, 15 who reported irregular meetings with a CIS Student Support Specialist were also those who started the program mid-year; thus, the reduced frequency of meetings with CIS staff might be expected given the shorter time in the program. That said, about the same number of students (13 of 34) who indicated infrequent meetings had been in the CIS program for two years. Perhaps their longer time in the program suggested that they were in less need of "check-ins" or were perhaps phasing out of the program.

In academic years 2016-17, in two sites (School 2 and School 3), the patterns in average number of student supports per student were not what would be expected (higher average number of supports for Tier II cases than Tier III cases). It was posited that the pattern was likely due to differences in how "High Intensity" versus "Moderate Intensity" labels were applied across Student Support Specialists. In academic year 2017-18, School 2 did not have serve any Tier III students. In the three other sites, the average number of "High Intensity" supports was greater than the average number of "Moderate Intensity" supports, as would be expected.

In addition to number of supports, Student Support Specialists also track time estimates for each support in CISDM. Overall, the average number of service hours per case-managed student was 22.6 hours across all four sites in academic year 2016-17 and 21.7 in academic year 2017-18. Thus, over a school year, one might estimate that Student Support Specialists provided roughly two to three hours per month in formal occurrences of services to the case-managed students. This estimate of average "dosage received" by case-managed students is similar to that reported in studies conducted by the national CIS office.

In academic year 2017-18, there were on average over ten supports provided per site for the categories of case management, academic assistance, college and career preparation, community service/service

learning, enrichment/motivation, and life/social skills. For average number of service hours in academic year 2017-18, the highest average number of service hours were in community service/service learning (70.4), college and career preparation (29.2), life/social skills (22.4), and academic assistance (21.9). Due to the changes in the CISDM system from academic year 2016-17 to 2017-18, some of the differences between years could be attributable to changes in reporting instructions.

B. Summary of Impact Study Findings

In order to achieve a moderate level of evidence, this study utilized a single-site non-randomized group design with groups formed by propensity score matching. For confirmatory impact research questions, there were three comparison groups. Treatment students were matched to (1) other students in the *treatment schools* who did not participate in the intervention; (2) other students in the *same school district* attending district schools; and (3) other students attending *Title I schools across the state* of South Carolina. The use of these multiple comparison groups improved the overall internal and external validity of the study, as each comparison group presented different threats to validity. Researchers matched students using a propensity score model that included race, gender, grade level, English proficiency, special education status, free and reduced meal eligibility, and baseline outcome variables. Researchers conducted separate matching procedures for each data source, administrative data and survey data. At the conclusion of the matching process, researchers ensured that there were no significant differences between the treatment and comparison groups on pre-treatment covariates.

Confirmatory Impact Results - Attendance

Researchers examined the impact of participating in Communities In Schools on student attendance, rejecting the hypothesis that CIS students would have improved attendance when compared to matched comparison students. In the first year of the study (academic year 2016-17), there were no significant differences in average daily attendance or chronic absenteeism between CIS students and matched comparison students at treatment schools or district schools. When examining matched comparison students attending state schools, however, Communities In Schools students had lower average daily attendance than matched students at state schools ($p < 0.05$, $d = -0.21$).

In academic year 2017-18, the negative results for attendance also were present for the matched comparisons with treatment school students. In the second year of the study, Communities In Schools students had lower average daily attendance ($p < 0.01$, $d = -0.27$) and were more likely to be chronically absent than ($p < 0.01$, $d = 0.51$) than were matched comparison students at treatment schools. There were no significant differences in attendance outcomes between Communities In Schools students and matched comparison students at district schools in academic year 2017-18.

There were ten total tests (average daily attendance rate and chronic absenteeism for the five matches using the administrative data). Before adjustments for multiple comparisons were made, three of the tests indicated statistically significant differences between Communities In Schools students and matched comparison students. After adjusting for multiple comparisons, two results remained statistically significant. These results were not in the hypothesized direction.

Confirmatory Impact Results - Behavior

Researchers examined the impact of participation in Communities In Schools on student behavior. Results varied greatly by academic year, comparison group, and type of behavioral incident. Overall, there were more statistically significant negative results than positive results, leading researchers primarily to reject the hypothesis that Communities In Schools students would have fewer behavioral incidences than matched comparison students. Since most CIS students enrolled in the program in the fall semester, researchers isolated spring behavioral incidences for these analyses, though behavior data from this time period are not true post-program data.

Overall, Communities In Schools students had more behavioral incidences when compared to matched comparison students at treatment and district schools. For example, in academic year 2016-17, Communities In Schools students were more likely to have had any behavioral referral than matched comparison students ($p < 0.05$, $d = 0.31$) and had 0.77 more total behavioral referrals, on average, than their matched counterparts at treatment schools in spring semester 2017 ($p < 0.01$, $d = 0.29$). Communities In Schools students also were more likely to have had any in-school suspension ($p < 0.05$, $d = 0.19$) and any out-of-school suspension ($p < 0.05$, $d = 0.32$) than matched comparison students at treatment schools in spring 2017.

Researchers were not able to isolate spring behavior incident data for state comparison students, so outcome data for this comparison group cover part of the academic year before which students enrolled in Communities In Schools and results should be interpreted with caution. In academic year 2016-17, Communities In School students were more likely to have received any behavioral referral ($p < 0.05$, $d = 0.36$), any in-school suspension ($p < 0.01$, $d = 0.40$), and any out-of-school suspension ($p < 0.05$, $d = 0.34$) than matched comparison students attending state schools.

Despite these negative significant behavior results for comparisons with matched students at treatment and state schools, Communities In Schools students generally had better behavioral outcomes when compared to matched comparison students at district schools. In academic year 2016-17, CIS students were less likely to have had any in-school suspension than matched comparison students ($p < 0.10$, $d = -0.25$). Communities In Schools students served 3.06 fewer total hours of in-school suspension, on average, than matched comparison students at district schools ($p < 0.001$, $d = -0.28$). In addition, CIS students had 0.76 fewer total days of out-of-school suspension than matched comparison students ($p < 0.05$, $d = -0.18$). In academic year 2017-18, CIS students had fewer total hours of in-school suspension than matched comparison students at district schools ($p < 0.01$, $d = -0.22$). However, CIS students also were more likely to have received any behavioral referral ($p < 0.05$, $d = 0.27$) and any out-of-school suspension ($p < 0.01$, $d = 0.36$) than district school matches during the second year of the study.

There were 30 total tests (any referral, any ISS, any OSS, number of referrals, ISS hours and OSS days for each of the five matches using the administrative data). Before adjustments for multiple comparisons were made, 20 of the tests indicated statistically significant differences between Communities In Schools students and comparison students. After adjusting for multiple comparisons, 17 results remained statistically significant. Three of the 17 results were in the hypothesized direction, while the other 14 significant results were not in the hypothesized direction.

Confirmatory Impact Results – Course Performance

Finally, researchers examined the impact of participating in Communities In Schools on student course performance. Researchers partially confirmed the hypothesis that CIS students would have improved course performance when compared to matched comparison students, though results were mixed and varied by assessment and academic year.

There were positive significant results in the first year of analyses, academic year 2016-17, when looking at student scores on the MAP math assessment. Communities In Schools students scored higher on the MAP math assessment in spring 2017 than matched comparison students at treatment schools ($p < 0.05$, $d = 0.12$) and district schools ($p < 0.10$, $d = 0.10$). These were small effects, however. There were no significant differences in MAP assessment ELA scores in academic year 2016-17 and researchers were unable to include the MAP assessment as an outcome measure in the study in academic year 2017-18, as the local school district ended its contract with MAP and began implementing a different assessment of student growth.

Researchers also examined scores on the end-of-year math and ELA state assessment, SC READY. Communities In Schools students had significantly lower scores on the spring 2017 SC READY math assessment than matched comparison students at district schools ($p < 0.10$, $d = -0.02$) and state schools ($p < 0.05$, $d = -0.04$). Communities In Schools students also had significantly lower scores on the spring 2017 SC READY ELA assessment than matched comparison students at state schools ($p < 0.10$, $d = -0.03$). In academic year 2017-18, however, there were no significant differences in spring 2018 SC READY ELA or math assessment scores between treatment and matched student at either comparison school.

There were 14 total tests (MAP Reading, MAP Math, SC READY - ELA and SC READY - Math for the treatment and district 2016-17 matches, and SC READY - ELA and SC READY - Math for the 2016-17 state match and the 2017-18 administrative data matches). Before adjustments for multiple comparisons were made, five of the tests indicated statistically significant differences between Communities In Schools students and comparison students. After adjusting for multiple comparisons, none of the results remained statistically significant.

Exploratory Secondary Outcome Results

The secondary goals of the Communities In Schools program are to help students improve their educational self-perception, feel more engaged at school, and strengthen their relationships with adults at school, at home, and in the community. An analysis of student survey data offered preliminary support showing CIS students were improving in many of these critical secondary outcomes.

Researchers examined the impact of participation in Communities In Schools on students' relationships with adults at school, confirming the hypothesis that CIS students would have improved relationships with adults when compared to matched comparison students. Students who participated in Communities In Schools reported significantly stronger relationships with teachers when compared to matched comparison students in district schools in academic year 2016-17 ($p < 0.01$, $d = 0.32$) and academic year 2017-18 ($p < 0.01$, $d = 0.30$). In academic year 2017-18, Communities In Schools students reported having stronger relationships with teachers ($p < 0.10$, $d = 0.21$) and caring adults ($p < 0.10$, $d = 0.21$) than matched students at treatment schools.

Next, researchers examined the impact of participation in Communities In Schools on students' educational self-perception. Researchers rejected the hypothesis that CIS students would have improved educational self-perception when compared to matched comparison students. In both academic years of the study, there were no significant differences in either survey measure of educational self-perception between Communities In Schools students and matched comparison students attending treatment and district schools.

Researchers examined the effect of participating in Communities In Schools on students' school engagement using data from two student survey measures. Results varied by academic year and comparison group; therefore, researchers partially confirmed the hypothesis that CIS students would have improved school engagement when compared to matched comparison students. In academic year 2016-17, Communities In Schools students reported higher levels of school engagement ($p < 0.05$, $d = 0.32$) and school belonging ($p < 0.10$, $d = 0.25$) than matched comparison students at district schools. Student levels of school engagement did not vary significantly between CIS students and matched comparison students at treatment schools in academic year 2016-17 or academic year 2017-18.

Lastly, researchers examined the impact of participating in Communities In Schools on students' attitude toward learning. Researchers rejected the hypothesis that CIS students would have improved attitude toward learning when compared to matched comparison students. There were no significant differences in survey measures of educational self-perception between CIS students and matched comparison students in either comparison group.

Evidence Level Determination and Discussion of Results

The design of this study targeted a moderate level of evidence and the use of multiple comparison groups helped reduce threats to internal and external validity. After adjusting for multiple comparisons, the negative outcomes for student attendance and behavior outweighed the positive findings for student behavior; therefore, this study was not able to achieve a moderate level of evidence. The positive significant results for secondary outcomes, such as relationships with teachers, relationships with caring adults, and school engagement, allow researchers to confirm a preliminary level of evidence for the model. While researchers did not adjust for multiple comparisons for the secondary outcome analyses, positive significant findings across years of the study and comparison group were consistent with prior evaluations of the model (Parise et al., 2017).

There were several barriers to achieving a moderate level of evidence. First, the impact study of Communities In Schools was designed to cover four academic years. With the loss of Social Innovation Fund continuation funding, researchers executed a contingency plan to conclude the impact study after only two years. These important student impacts in attendance, behavior, and course performance are long-term in nature and it is possible the shorter study timeline did not allow researchers enough of an opportunity to examine the long-term effects of participation in the program. Further, some minor challenges with implementation resulted in the enrollment of students during the second semester of the academic year, a broad treatment definition, and ultimately a slightly lower sample size than expected. With a stricter treatment definition and a larger sample size, it is possible that there would have been fewer negative results of the impact study. This study will continue without support from the Social Innovation Fund. If these barriers are mitigated in the next two years, it is possible that this study ultimately will achieve a moderate level of evidence.

When interpreting the results, it is interesting to note the pre-matching demographic characteristics of treatment students presented in Tables 38 and 39. More so than other interventions participating in OnTrack Greenville, Communities In Schools is serving students whose demographic characteristics and outcome data are significantly different than the overall student populations of the treatment and district schools. While the matching process eliminated these differences, it is still worth noting that Communities In Schools targeted, as intended, students with significant challenges in attendance, behavior, and course performance. Improving these outcomes for treatment students is the intended long-term impact of the program, so it is not surprising that preliminary results of the first year of the impact study did not reveal significant gains, especially in attendance and course performance, a finding consistent with other recent evaluations of the model (Corrin et al., 2015; Parise et al., 2017). Positive significant findings for behavior, relationships with teachers, school engagement, and school belonging are an important first step in establishing evidence for the effectiveness of the model as implemented through OnTrack Greenville.

There are several possible explanations for the negative behavior findings when examining matched students at treatment schools. First, OnTrack Greenville treatment schools simultaneously were implementing other school-wide policies aimed at improving student behavior. Most notably, OnTrack Greenville as a whole is a collective impact partnership that supports school leaders as they systemically examine and adjust informal school policies related to student behavior. At its core, OnTrack Greenville is a school transformation model, where the initiative intentionally aims to strengthen school climate so that schools are more student-centered in policy, practice, and behavior. Capturing Kids' Hearts, a school-wide character development model, is another program that may have influenced student behavior and school climate, thus weakening the strength of the in-school matching process. In addition, administrators at treatment schools have started to participate in Adverse Childhood Experiences (ACEs) training and learning trauma-informed approaches to handling student behavior. These school-wide efforts to improve student behavior and implement trauma-informed approaches to addressing student behavior are confounding factors that may explain the lack of significant effects when comparing CIS students to in-school matched comparison students. These school-wide efforts also increased the likelihood that the positive significant effects of the program identified when examining non-treatment school matches may not be fully attributable to the Communities In Schools program. Additional analyses are needed to control for these school-wide efforts.

Further, the significant negative behavior findings for in-school matches may be related to missing data on student participation in other OnTrack Greenville interventions. Apart from the school-wide models discussed above, OnTrack Greenville includes four other formal implementation partners and several informal partners, some of whom are working to improve the same student outcomes as Communities In Schools. It is possible that some of the in-school matches selected for the present study participated in other OnTrack Greenville support programs that influenced student attendance, behavior, or course performance. Future analyses will include more complete data on student participation in other OnTrack Greenville interventions, allowing researchers to control for participation during the in-school matching process. While researchers will not have access to comparable participation data for students in district schools, none of the OnTrack programs operate in comparison schools and there are few support programs similar to OnTrack available to students at these schools. Therefore, there is less concern that comparison students at district schools would be participating in potentially similar programs.

Missing data in outcome measures also resulted in a smaller sample size than expected for some of the analyses. CIS expected to serve 180 students in Tier II or Tier III services, so the 156 students who met the inclusion criteria for the study in academic year 2016-17 and 150 students in academic year 2017-18

was not far from that goal. Several students had missing administrative, test, and/or complete pre/post-survey data, limiting the pool of potential treatment students for each set of matches. In addition, researchers were not able to identify suitable comparison student matches for several CIS students with complete outcome data. As discussed already, CIS targets and serves the lowest performing students at treatment schools, further limiting the number of suitable matches. In future years of the study, Communities In Schools will continue to monitor CISDM data to ensure that all Student Support Specialists are serving the targeted student caseload. As school populations grow, the 10% caseload target will grow, so researchers expect to be able to include more students in the final two years of the study.

The small sample size also resulted in researchers setting a very broad definition of treatment. Students were included in the treatment group if they were enrolled in Tier II or Tier III support services during academic year 2016-17 or 2017-18. Many students enrolled in the fall semester, but some students did not enroll until the beginning of the spring semester. Further, researchers had access to internal program data tracking the number of support services each student received and the number of contact hours each student had with his or her Student Support Specialist. Researchers and program stakeholders jointly decided to include all students enrolled in Tier II or Tier III services in the impact study instead of setting a cutoff for enrollment date, number of support services received, or number of contact hours. This decision stemmed from potential inconsistencies in CISDM data entry across treatment sites and Student Support Specialists as identified in the implementation study. In future years of the study, researchers will consider using program records to create a more narrow definition of dosage. By examining a smaller set of students who received a higher dose of the CIS program, it is possible that future analyses will yield positive results in all primary impact and secondary outcome areas.

Further, the current administrative data available for the primary outcome measures for attendance and course performance, average daily attendance, chronic absenteeism, and standardized test scores are very broad measures. Researchers received attendance data in a single time interval, the entire academic year, making it impossible to examine attendance outcomes over shorter periods of time, such as academic semesters or quarters. Therefore, researchers were unable to measure potential differences in attendance throughout the academic year based on the structure of the data. Initial conversations with the local school district about the availability and structure of certain variables have indicated some promising areas for modifying data sharing agreements in future years of the study to allow for more nuanced measures of student attendance.

Lastly, researchers will consider other measures for course performance in future years of the study, partially out of necessity. In academic year 2017-18, the local school district discontinued the use of the MAP test, replacing it with a different computerized adaptive test, Mastery Connect, which is administered three times per year. While this change in outcome measurement will prohibit researchers from comparing some test results from year to year, there is more to learn about this new measure for course performance and its utility for the study. Other studies (e.g. Corrin et al., 2016) have opted to include measures of course grades, examining the number of core courses failed, instead of standardized test scores. While researchers only would have access to course grade data for students within the local school district and not state-wide, this is an additional option for refining the impact analysis of course performance moving forward.

In sum, these mixed findings help provide partial support for the Communities In Schools model of tiered student support services, especially for student behavior outcomes and several of the secondary

exploratory outcomes. The positive findings, examined on their own, contribute to a moderate level of evidence for the study. The confirmatory research question results, when examined comprehensively, point to more negative significant results than positive, however. While these are final results for the Social Innovation Fund, this evaluation will continue for two more academic years. During this time, researchers are hopeful to tease apart these findings and provide additional insight into the overall effects of the program model.

Changes to the SEP - Impact Study Design

The primary change to the SEP was the loss of a key outcome measure of course performance: MAP assessment scores in ELA and math. Prior to academic year 2017-18, the local school district administered the MAP assessment in grades 3 through 8 at least two times per year, in the fall and spring. Some schools opted to administer the assessment a third time, in winter. The district opted to end its contract with MAP and began administering Mastery Connect in fall of 2017. At present time, researchers do not have access to Mastery Connect data and remain uncertain if data from this assessment will serve as an acceptable outcome measure in the study. Researchers only were able to examine end-of-year SC READY assessment scores in math and ELA for academic year 2017-18.

Researchers also had to alter the inclusion criteria for state comparison schools. In the SEP, researchers originally proposed to select state schools with a poverty index of 85 or higher and a Hispanic student population of at least 10%. At the time of writing the SEP, South Carolina calculated the poverty index based on the number of students eligible for free or reduced meals. After the introduction of the community provision for free and reduced meals, state officials introduced a new measure of poverty that included students who met any of the criteria: homeless or migrant during the academic year; Medicaid enrollment at any time during a three year period; SNAP enrollment at any time during a three year period; TANF enrollment at any time during a three year period; or foster care enrollment at any time during a three year period. This change in the poverty index affected and, in general, reduced the reported poverty levels of treatment schools and all schools across the state. When researchers searched for state comparison schools using these criteria, only 13 schools appeared as possible comparison schools from which to draw matched comparison students. Of these schools, several were charter schools or schools serving exceptional learners and were not appropriate to serve as comparison schools. As such, researchers relaxed the inclusion criteria for state comparison schools and included all Title I middle schools in the state of South Carolina outside of the local district.

In addition, researchers were not certain if they would be able to administer the OnTrack Greenville Student Survey outside of the treatment schools at the time of writing the SEP. The local district allowed researchers to administer this pre- and post-survey at the four district comparison schools, allowing researchers to analyze student survey outcomes using matched comparison students. This change to the SEP strengthened the study's design for the analysis of secondary research questions.

There were some modifications to the matching procedure. The SEP noted that researchers would trim observations with propensities less than 0.1 and greater than 0.9, if sample size permitted. This was not done to ensure larger sample sizes. In order to increase balance and overlap, researchers used matching with replacement, rather than matching without replacement which was specified in the SEP. This necessitated the use of frequency weights in the matched analyses.

Further changes were made to the impact analysis plan. While the SEP stated that the main analyses would focus on the "treatment-on-the-treated" (ITT) effect, the researchers also suggested an "intent-

to-treat" analysis might also be performed if data were available. The evaluation team did not have access to the EWRS data in a form that would allow the researchers to compare those who were identified to receive CIS services, as opposed to those who actually received those services. Therefore, an ITT analysis was not possible. In addition, there were some challenges in estimating the proper standard errors in the regression analyses post-match. Researchers used a bootstrapping method, rather than clustered standard errors. The bootstrap standard errors were very similar to robust standard errors. Other modifications were implemented to maximize the number of observations to be included in the analyses. The proposed final regression model in the SEP included pre-treatment, or baseline, measures of the outcome as a covariate. The analyses presented here used that approach for the attendance, behavior, and test score analyses. Researchers did not control for a pretreatment measure of the outcome for the survey analyses. Doing so would have required students to have complete "pre" and "post" survey data. Given the response rates for the surveys, this would have severely limited the sample size. Therefore, pretreatment outcome measures were not controlled for in the survey outcome analyses.

In the SEP, researchers stated that they would use one-tailed tests with a significance level of $\alpha \leq .05$ to determine statistical significance. In this evaluation, researchers also considered the possibility that receiving CIS Tier II or Tier III services could decrease student academic performance. Therefore, researchers used a two-tailed, 0.10 alpha level. In terms of identifying a positive CIS effect to support a moderate level of evidence, the two approaches are equivalent.

This evaluation was complicated by the presence of multiple, simultaneous interventions occurring in the OnTrack Greenville schools. In the SEP, researchers suggested that participation in the other student-level interventions could be controlled for in the final regression models. Data on the timing of participation in the various interventions was not detailed enough to ensure that participation in these other programs occurred before receiving CIS services. Given that controlling for post-treatment covariates can bias estimates of causal impacts (Montgomery et al., 2018), researchers did not adjust for participation in the other OnTrack Greenville programs as proposed in the SEP. A full analysis of the effects of participating in different intervention combinations is better suited for the cumulative impact study, rather than this evaluation.

C. Lessons Learned

Project stakeholders learned several valuable lessons about the program and the process of evaluation throughout the course of this study.

Program Model and Implementation Fidelity

OnTrack Greenville was a nascent collective impact initiative at the beginning of Social Innovation Fund grant funding. With the influx of federal grant dollars and a strict grant implementation timeline, OnTrack Greenville partners launched into the pilot year of 2015-16 with great speed and urgency, forging new relationships while establishing new programs and processes at schools. Project partners, especially Communities In Schools leaders, learned very quickly about the challenges of implementing programs with fidelity while simultaneously working hard to build trust and rapport with other partners. Communities In Schools quickly realized the tensions that existed and decided to operate more flexibly during the early stages of the project, working to be what each individual school needed them to be and

compromising on model fidelity. In particular, Student Support Specialists engaged in more school-wide Tier I activities and less case management than the model prescribed. At this stage, however, partners learned that the relationships mattered more than strict model fidelity, as they would serve as a foundation for the coming years of the project.

As implementation progressed, Communities In Schools learned how to leverage those relationships to strike a greater balance between meeting schools' needs and implementing with greater model fidelity in order to meet students' needs through case management. Over time, the flexibility that helped support the work initially led to increased frustration among Student Support Specialists who felt pulled in multiple directions and uncertain about their roles and responsibilities. Student Support Specialists are embedded within the schools and treated as school employees. Without clear understanding at the school level of the CIS tiered model of student supports, Student Support Specialists were unable to separate themselves from the "all hands on deck" environment at schools. Other school employees began to see overlap in roles and wondered if Student Support Specialists were there to duplicate or assume parts of their work. As project leaders were able to move toward greater model fidelity, they learned how essential it was for individual Student Support Specialists to feel confident in their role and areas of expertise, allowing them to carve out their unique niche in the crowded, and sometimes chaotic, school environment. Communication has been and continues to be integral to the success of program implementation and role clarification as Communities In Schools works to strengthen its model fidelity across sites.

As program leaders have reduced the provision of Tier I activities and increased Tier II and III supports for students, they have learned more about the most effective ways to offer meaningful Tier I activities at schools. This also has coincided with increased accountability standards from the CIS National Office around the impact of Tier I activities. Communities In Schools of Greenville learned that coordinating Tier I activities across the partnership instead of providing unique activities at each individual school was more successful and efficient. By having one central CIS staff member serve as the central point of contact for principals for planning Tier I activities, Communities In Schools has been able to align resources and be more thoughtful about the types of Tier I activities that will be most effective in strengthening school culture and supporting school-wide improvements in attendance, behavior, and course performance.

Scaling

Communities In Schools stakeholders also experienced learning around the scaling process. This Social Innovation Fund Sub-Grant allowed Communities In Schools to scale from one Student Support Specialist per school to three per school. Two of the school sites already were home to one Student Support Specialist under the prior model and two sites were new to Communities In Schools. This rapid scaling during the pilot year of implementation certainly led to some growing pains and learning opportunities. Communities In Schools, using feedback from partners and the implementation study, realized the need for a refined organizational chart with the addition of staff at schools. First, Communities In Schools designated a Lead Student Support Specialist at each school tasked with being the point-person for communication with school administration. This change allowed for more consistent communication with administrators across all treatment schools. Communities In Schools also created a new position, the Director of Field Management, to whom all Student Support Specialists directly reported.

At the present time, OnTrack Greenville leaders are working on a scaling plan that may include funding for Communities In Schools to serve additional elementary and high schools in the current White Horse Community feeder pattern and/or serve additional middle schools throughout the district. As planning and scaling efforts continue, Communities In Schools has learned to utilize more of a need-focused approach to scale the number of Student Support Specialists placed at each school. By allowing itself more flexibility, Communities In Schools intends to match the number and skills of Student Support Specialists with the unique needs of students at each school. While it is possible that some schools will have a need for grade-level Student Support Specialists, Communities In Schools learned that a data-informed approach to placing Student Support Specialists at schools can ensure that the right staff members ultimately support the right students. Program leaders recommend starting with just one or two Student Support Specialists per school when scaling, and then closely monitoring data to adjust the staffing structure as needed.

Evaluation Process

There were several lessons learned related to the evaluation itself. First, there were lessons learned about the importance of data-sharing agreements and school-community partnerships. OnTrack Greenville is a collective impact initiative that created a culture of trust and learning with Sub-Grantee and school partners. Among the six formal guiding values of the partnership, two values helped foster a strong culture that supported the evaluation: (1) operating as an innovative learning community and (2) having a results-oriented mindset. Partners' commitment to these shared values and the ongoing efforts of United Way of Greenville County serving as the collective impact backbone helped strengthen relationships between researchers, district stakeholders, and partners. For that reason, partners over time grew more comfortable with evaluation and embraced learning opportunities rather than fearing potentially negative or unexpected findings. This helped ensure that implementation and impact study findings and recommendations translated into programmatic changes more quickly.

Researchers also learned valuable lessons around fostering the early stages of a research-practice partnership with the school district. Greenville County Schools is the 45th largest school district in the nation and receives numerous requests from researchers to serve a research site in studies. In order to protect students' time in the classroom from research activities, GCS must be very selective about the research activities it permits at its schools through formal Research and Data Sharing Agreements. Due to the district's deep commitment to the partnership values and intended outcomes of OnTrack Greenville, the district and researchers were able to engage in thoughtful conversations around the study design and data collection activities, successfully establishing and maintaining a complex multi-party Research and Data Sharing Agreement with the Riley Institute and five distinct implementation study research teams.

Lastly, the student survey administration process used in this study required a great level of detail and resulted in a high response rate among students. The initial challenge was identifying a way to link survey data with the administrative data used in the study that also maximized participation in the study. Having students put any identifiable information on their survey, such as their name or student ID number, would have required active parental consent. In order to use passive parental consent, researchers created unique student IDs for the survey that were linked to student PowerSchool numbers, allowing students to access their electronic survey easily and researchers to connect the survey to attendance, behavior, and course performance data through the embedded PowerSchool number linked to their unique student ID for the survey. This entailed creating more than 5,000 student

ID note cards two times per year and delivering and collecting classroom-specific survey packets to eight schools just for the OnTrack Greenville Student Survey.

There were many strengths to this study. The use of the multiple comparison groups improved the overall internal and external validity of the study, as each comparison group presented different threats to validity. The majority of positive significant findings were detected with the matched students attending district comparison schools. One strength is that these schools shared the same district and community context. Moreover, students in this comparison group were likely to have participated in the Communities In Schools program if it had been available to them at their school. These schools did not share the same school or neighborhood contexts, though, presenting a threat to internal validity.

In addition, a thorough implementation study strengthened the implementation of the program and allowed researchers to confirm a sufficient degree of model fidelity. The lessons learned through the implementation study were valuable to project stakeholders and helped shine a light on program strengths and possible areas of improvement.

However, there were several limitations to the study. First, researchers were not able to identify a subset of state Title I middle schools with student population demographics similar to the treatment schools. The Sub-Grantee Evaluation Plan called for including only state comparison schools with a poverty index of 85% or higher and Hispanic students representing 10% of the student body. Only 13 schools met these inclusion criteria to be considered as state comparison schools—many were charter schools or special designation schools serving students with disabilities and were substantially different from the treatment schools. Researchers opted to loosen the inclusion criteria and include all Title I middle schools in South Carolina in the state school comparison group.

Another limitation of the study is that researchers did not have the ability to assess if comparison students at district and state schools had received similar program services, such as other integrated student support services. Researchers were able to confirm through the state Communities In Schools network that no that no other Title I middle schools included in the state comparison group were CIS school sites. While it is possible that a number of schools in the state comparison group offered programs similar to Communities In Schools, the number of matched students who attended these schools likely was very small and the inclusion of these students as matches would not have significantly influenced the results of the study.

In addition, the treatment schools simultaneously were implementing formal and informal school-wide initiatives to improve student attendance, behavior, and course performance. These school-wide efforts were confounding factors that may explain the lack of significant effects when comparing Communities In Schools students to in-school matched comparison students. These school-wide efforts also increased the likelihood that the positive significant effects of the program identified when examining district school matches may not be fully attributable to the Communities In Schools program.

Further, the absence of positive significant findings for in-school matches may be related to missing data on student participation in other OnTrack Greenville interventions. Apart from the school-wide models discussed above, OnTrack Greenville includes four other formal implementation partners and several informal partners, some of whom are working to improve the same student outcomes as the Communities In Schools program. It is possible that some of the in-school matches selected for the present study participated in other OnTrack Greenville support programs that influenced student behavior. This study originally intended to control for participation in other OnTrack Greenville support

programs to address this limitation; therefore, this represents a deviation from the Sub-Grantee Evaluation Plan. In addition, researchers were unable to examine student outcomes as they related to the original cause of referral to CIS. For example, if a student was referred to a CIS for a behavior intervention, the Student Support Specialist may not have directly addressed academics with that student.

D. Study Limitations

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E. Next Steps

The implementation and impact studies of Communities In Schools revealed several next steps for project stakeholders and comparable programs to consider in the future.

Improve stakeholders' clarity of the program model's guidelines for building student caseloads. Findings revealed variation in the enrollment dates and subsequent dosage of services. While Communities In Schools will work with students who are referred at any point throughout the academic year, students who begin receiving Tier II or Tier III services at the beginning of the academic year are more likely to benefit academically and socially from the prolonged exposure to the intervention. Some school stakeholders continued to view Communities In Schools as a shorter-term intervention from which students quickly rolled on and off of caseloads. Routinely refreshing partners on the core components of the program model, including best practices for building caseloads, may help improve the overall efficiency of building caseloads at the beginning of the academic year so that more students benefit from services for the entire academic year.

Similarly, provide more information to school faculty at the beginning of the academic year on what kinds of students are the best fit for Communities In Schools and the types of support services students receive in the program. The communication and trust fostered by OnTrack Greenville's collective impact framework ensured that district leaders and principals have a clear understanding of the Communities In Schools program model, but that knowledge and communication did not fully permeate at all levels of the partnership, sometimes leaving front-line staff and teachers with lower levels of awareness. Further, with a high faculty turnover rate at treatment schools, it is important to provide all educators information about the core features of the model every academic year, especially among educators who will participate frequently in OnTrack Teams, a major source of student referrals to Communities In Schools. By supporting educator knowledge of the program model and target student population, it will be more likely that the right students receive referrals early in the academic year. This intentional sharing of information, coupled with strong communication between CIS and school staff, will help resolve tensions with teachers around referrals and services when they emerge.

Routinely convene Student Support Specialists to provide ongoing training on CISDM terminology and data entry best practices. In summer 2017, Communities In Schools launched a CISDM software upgrade, changing the data entry work flow substantially. Communities In Schools of Greenville provided ongoing support to Student Support Specialists in academic year 2017-18 to help them adjust to these changes in data entry. While interviews with Student Support Specialists suggested that staff members had adapted well to the change in data entry and appreciated the training provided by the program, a review of CISDM data highlights several opportunities for continued refinement of data definitions and data entry practices. For example, it would be worthwhile to have structured discussions across the ten Student Support Specialists on what goes into the 25 service hours per student (on average) reported in CISDM to see if terminology and services are being thought of in similar ways. With greater consistency and precision in data entry, CISDM data will serve as a powerful tool as program leaders engage in data-drive decision-making with internal staff and external partners.

Engage in a mid-year assessment of Student Support Specialists' caseloads at each site. At two school sites, Student Support Specialists had lower than expected average caseloads and served less than the recommended 10% of the school population in Tier II and Tier III services. A more intentional mid-year assessment will help program leaders identify any school sites or Student Support Specialists who are

above or below target caseloads. This assessment will help stakeholders have a better understanding of what is and is not working at each site in terms of reaching maximum caseload capacity and help ensure that Student Support Specialists are reaching the right students and right number of students.

Communities In Schools should provide further clarification to Student Support Specialists around how to categorize students as "High Intensity" versus "Moderate Intensity." Implementation study results found a lack of consistency in the proportion of students identified as receiving Tier II and Tier III services at teach school site, with one school site have no Tier III students in academic year 2017-18. As noted by project stakeholders, most students referred to Communities In Schools have High Intensity needs, but the challenge remains which students are the best fit for High Intensity supports. One possible approach might be to look at a random sample of case-managed students from each site and have the Student Support Specialists decide, together as a group, how to assign students as moderate or High Intensity to ensure the categorization process is consistent across sites. Similarly, leadership might consider holding a group meeting of OnTrack Team facilitators to discuss use of "Moderate Intensity" and "High Intensity" labels to guide the intervention referral process.

In addition to clarifying the assignment of students to tiers of intervention, Communities In Schools should revisit how Student Support Specialists work with students to set personalized goals and how to determine that students have met goals. The implementation study revealed some inconsistencies across sites in the types of goals set and the number of unmet goals at the end of the academic year. In terms of goal type, researchers noted a possible overlap in the application of the "school behavior" goal type and the "social-emotional" goal type, given the overlap in student behaviors to which these goals may be assigned. In terms of goal achievement, one site had a greater number of unmet goals as compared to the others sites. It may be useful to review a sample of students at each site with an academic goal and whether the interventions provided align with the observed academic need.

Communities In Schools leaders should continue to examine the program logic model and theory of change, especially the long-term academic impacts of the program. The results of this study also continue to spark dialogue among project stakeholders around the long-term impacts included in the Communities In Schools logic model and the feasibility of affecting student attendance, behavior, and course performance for case-managed students. These CIS students often are the students with the greatest and most complex needs at their schools. In the present study, Communities In Schools students had significantly poorer pre-treatment outcomes in attendance, behavior, and course performance than the general student population of treatment and comparison schools. The general lack of positive significant results for these academic outcomes is consistent with prior evaluations of the model, including a recent study also funded by the Social Innovation Fund (Parise et al., 2017). While more research is needed to explore long-term effects of participation in Communities In Schools, local stakeholders should continue to engage in conversations around the non-academic outcomes of the model in order to set reasonable expectations with school district and OnTrack Greenville leaders.

With a greater focus on the non-academic impacts of Communities In Schools, program leaders should select or adapt proven socio-emotional development program materials for Tier II services. Student Support Specialists reported investing time and resources into planning and implementing these social-emotional small-group services and one-on-one interventions with students. By creating a centralized toolbox with evidence-based materials that are shared easily across schools and over time, Student Support Specialists will be able to devote more time to working directly with students instead and less time planning group and individualized interventions.

Future research should more closely examine the best practices of Student Support Specialists for fostering strong relationships with students. Building rapport with students is a soft skill that can be developed, for certain, but program staff continue to wonder how to teach and train new and current Student Support Specialists in the best practices for building deep and meaningful relationships with case-managed students. The positive significant results for Communities In School students' relationships with teachers and caring adults at school add support for the model's impact on student relationships with adults. Knowing more about the characteristics of these strong relationships will help make the relational part of the Student Support Specialist job description a trainable skill rather than an innate trait.

Researchers should examine the impact of long-term participation in Communities In Schools at different levels of dosage. The present study examines a broad treatment definition as just one year of participation in CIS. In subsequent years of the study and with a sufficient sample of students, researchers will examine the impact of participation in Communities In Schools at different levels, potentially comparing student outcomes for Tier II versus Tier III services. Further, some students re-enroll in CIS every academic year, so this continued exposure to the treatment is a factor to consider in subsequent analyses.

Researchers and stakeholders also need to continue discussing and documenting the implementation of school-wide policy changes at OnTrack Greenville treatment schools. As OnTrack Greenville schools continue to refine policies affecting attendance, behavior, and course performance, an ongoing discussion and documentation of these changes will allow stakeholders and researchers to understand better and potentially tease out the impact of individual implementation partners and the impact of broader change at a systems level.

Appendix A. Study Logistics Updates

A. Institutional Review Board

There were no issues securing Institutional Review Board approval for this study. Furman University's Institutional Review Board approved and oversaw all research activities affiliated with the impact study. Furman University's IRB reviewed this research under its Expedited review process. The original application was submitted to Furman's IRB in July 2016 and approved in August 2016. Modification requests were submitted for IRB review on an ongoing basis and continuation requests were submitted annually. The school district and school personnel informed parents and guardians of the interventions and services available to their students and secured permission to provide services when necessary. Evaluators followed all parental consent and child assent protocol, as dictated by Furman University IRB guidelines and Greenville County Schools' district research protocol. These protocols detailed precisely how researchers must protect data electronically and in hard copy, and detailed informed consent procedures for both parents (parental consent) and students (child assent).

The Implementation Evaluation was governed by the University of North Carolina at Greensboro's (UNCG) IRB. The IRB determined that the Implementation Evaluation did not constitute human subjects research as defined under federal regulations [45 CFR 46.102 (d or f)] and did not require IRB approval. However, the research team will followed all parental consent and child assent protocols established by UNCG, which specified precisely how researchers must protect data electronically and in hard copy, and detailed informed consent procedures for both parents (parental consent) and students (child assent).

B. Project Timeline

There were very few modifications to the evaluation timeline for data collection, analysis, and reporting. The most notable change is that data from the South Carolina Department of Education for academic year 2017-18 were not made available in November as originally planned. At present time, researchers still have not received these data; therefore, researchers were not able to conduct statistical analyses for the state comparison group for academic year 2017-18 for inclusion in this report.

Researchers intended to administer the OnTrack Greenville Student pre-survey in September of each academic year. For several reasons, pre-survey administration occurred in October instead. First, in academic year 2016-17, schools were administering the MAP assessment in September and standardized testing took precedent over data collection. In addition, researchers required the entire month of September to manage the parental consent process and prepare survey administration materials. Subsequently, researchers established a two-week survey administration window for schools in early October. In academic year 2016-17, schools were closed unexpectedly in early October due to Hurricane Michael, which delayed survey administration at some school sites. One comparison school experienced additional challenges with having adequate electronic devices for survey administration and did not complete survey administration until early November 2016.

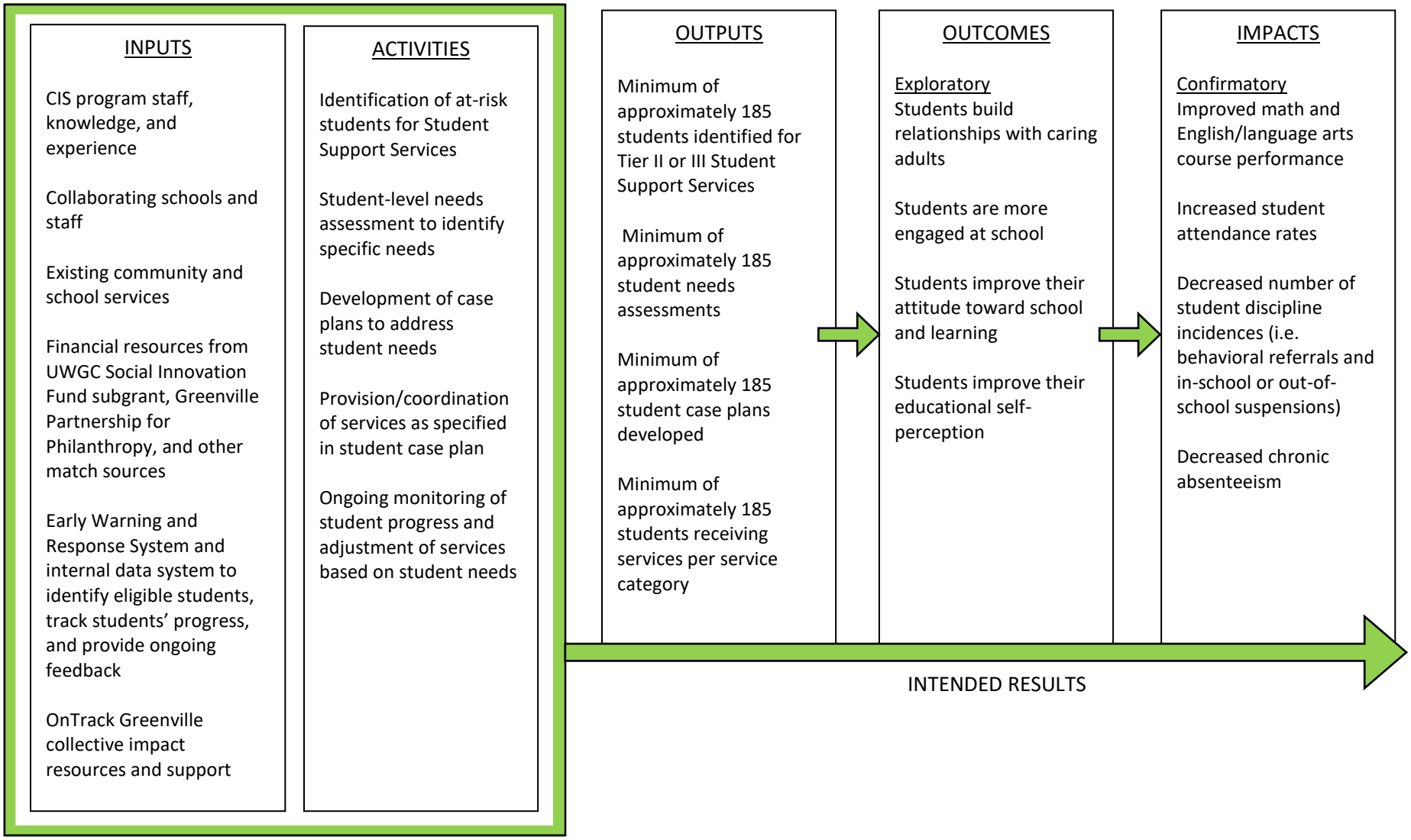
C. Project Personnel

There were no major changes to the evaluation or Communities In Schools project team. The Principal Investigators and lead project staff remained constant for all years of the study. There was some turnover among Student Support Specialists at project schools, but this was not unexpected and did not affect any aspects of study logistics.

D. Project Budget

Apart from the unavailability of Social Innovation Fund continuation grant monies for Year 4 and Year 5 of the project, there were no issues with or changes to the budget for this evaluation. OnTrack Greenville stakeholders have secured non-federal funding to continue the implementation and evaluation of OnTrack Greenville through academic year 2019-20.

Appendix B. Program Logic Model



Appendix C. Additional Matching Results

Appendix C provides further information on the matching process, organized by match. Each section provides: 1) additional data on the number of students matched via a participant flow chart, (2) the demographic differences between the CIS students who were matched and those who were not, (3) the overlap in propensities between the CIS and comparison students, and (4) further evidence of balance is provided in the form of post-match standardized mean differences and variance ratios of the variables used in the matching process.

Participation Flow Chart: The CIS and comparison sample sizes are presented for each match. Given that each match was done independently, the number of students in each match varies, so a separate flow chart for each match is necessary. One will note that the sample sizes for the matches using survey data are much smaller than those using the administrative data. This is because researchers limited potential matches to those who responded to the student survey.

Demographic Differences between Matched and Unmatched CIS Students: As is evident in the participant flow charts, not all CIS students were matched. This has important implications for the generalizability for the results presented in this evaluation. The estimated effects of CIS participation are limited to those who are included in the analysis. It is possible that the effect of receiving CIS services is different for those who could not be matched. To get a better sense of the matching results, researchers compared the demographic characteristics of those CIS students who were matched to those who were not. This allows one to examine how similar the CIS sample is to the CIS population on these factors.

Overlap: One goal of the matching process is for there to be substantial overlap in the propensity scores of the CIS students and the comparison group. To get a sense of this overlap, kernel densities were estimated for the CIS and comparison samples after the matching process. Frequency weights were used to account for matching with replacement. Further, the natural log of the propensity score was used in the figures, since it is not truncated at zero and one. Substantial overlap between the distributions of the CIS and comparison groups is evidence of good balance.

Evidence of Balance: When considering the balance of the matches, researchers considered the standardized differences between the two groups and the variance ratios. The goal was to have standardized mean differences below 0.1 and variance ratios near 1 (Steiner & Cook, 2013). If researchers found that the initial matching process created imbalanced samples, they re-estimated the propensity model using higher-order terms and interactions between the covariates (Rosenbaum & Rubin, 1984, 1985). This iterative process lead to different combinations of variables being included in different matching procedures. Following Steiner and Cook (2013), the figures below demonstrate the improvement from the pre-match to the post-match balance in terms of standardized differences and variance ratios. The figures highlight that the matching process produced two very similar samples based on these factors. In two instances (2017-18 treatment administrative match and 2017-18 district school survey match), researchers were unable to get the variance ratios for all the included covariates between 0.75 and 1.25. However, in these cases the variance ratios were only marginally beyond the thresholds (1.252, 1.257, and 1.270).

A. AY 2016-17 District Administrative Match

Table 63. CIS Participant Flow Chart at District Schools AY 2016-17 (Administrative Data)

Study Time-point	Total number students	Number students included	Number students not included	Notes
Treatment Students				
1. Program Roster	170	---	---	
2. Had Roster Data	170	156	14	
3. Met Treatment Inclusion Criteria	156	156	0	Received Tier II or Tier III Services
4. Had Full Matching Data	156	135	21	
5. Matched	135	122	13	
6. Included in Analysis	122	122	0	
Comparison Students				
1. School Roster	5,267			
2. Met Treatment Inclusion Criteria	5,267	3,348	1,919	District School
3. Had Full Matching Data	3,348	2,876	472	
4. Matched	2,876	398	2,478	Unique students (note: matching was done with replacement)
5. Included in Analysis	398	398	0	

Table 64. Which CIS Students Were Matched? Post-Match Demographics, AY 2016-17 District Schools (Administrative Data)

	CIS Not Matched - Mean	CIS Matched - Mean	Difference	S.E. of Diff.
Black	0.62	0.54	0.07	0.15
Hispanic	0.31	0.17	0.14	0.11
White	0.08	0.26	-0.19	0.13
Other Race	0.00	0.02	-0.02	0.04
Free/Reduced Meals	1.00	0.94	0.06	0.06
Female	0.31	0.39	-0.08	0.14
Special Ed.	0.85	0.37	**0.48*****	0.14
ESL	0.23	0.14	0.09	0.10
CIS Participant (2015-16)	0.54	0.45	0.09	0.15
Grade 6	0.46	0.33	0.13	0.14
Grade 7	0.15	0.39	**-0.24**$^{+}$	0.14
Grade 8	0.38	0.28	0.11	0.13

Significance determined by chi-square tests. + 0.10 * 0.05 ** 0.01 *** 0.001

Figure 4. AY 2016-17 District School Comparison Matches (Administrative Data): Overlap

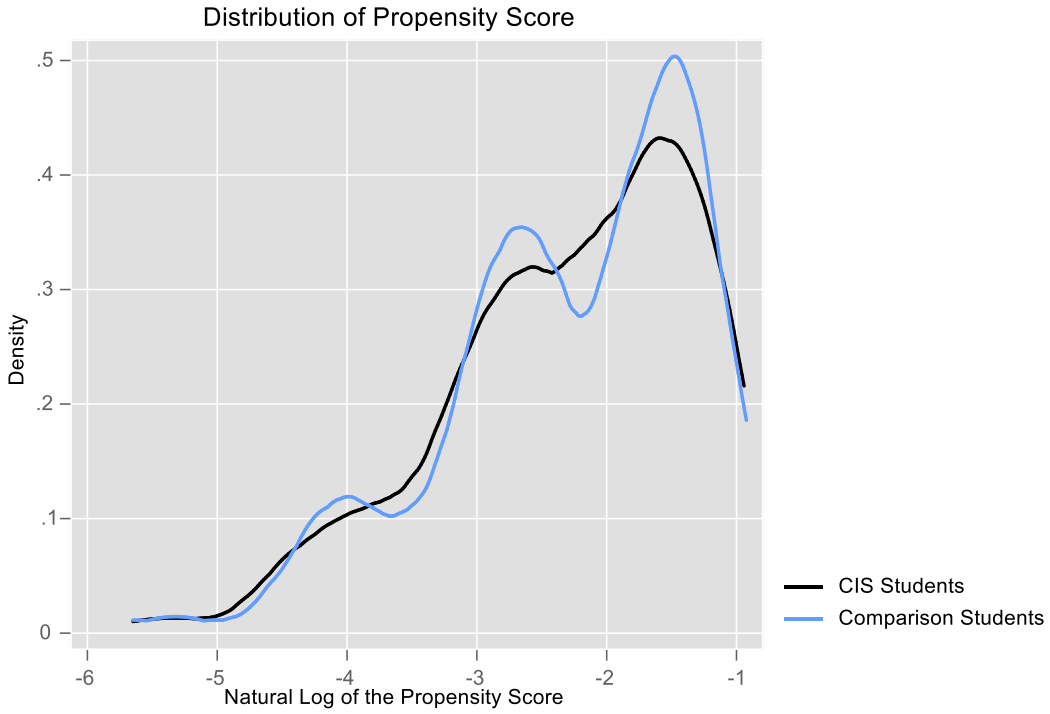
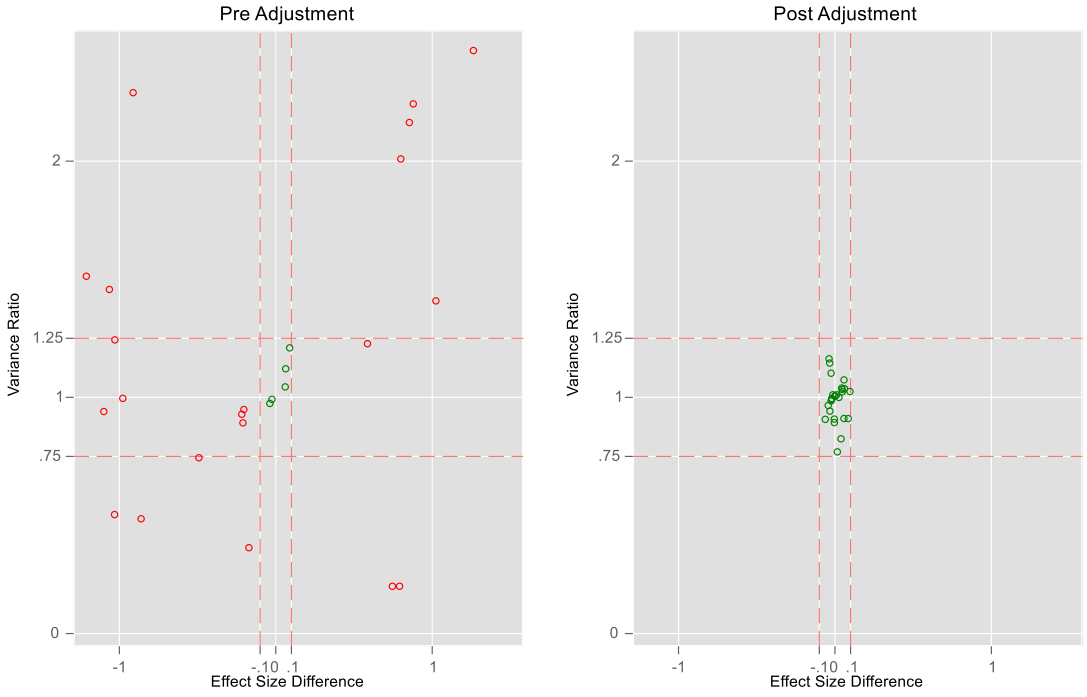


Figure 5. AY 2016-17 District School Comparison Matches (Administrative Data): Standardized Differences and Variance Ratios



B. AY 2016-17 State Administrative Match

Table 65. CIS Participant Flow Chart at State Schools AY 2016-17 (Administrative Data)

Study Time-point	Total number students	Number students included	Number students not included	Notes
Treatment Students				
1. Program Roster	170	---	---	
2. Had Roster Data	170	151	19	
3. Met Treatment Inclusion Criteria	151	151	0	Received Tier II or Tier III Services
4. Had Full Matching Data	151	142	9	
5. Matched	142	103	39	
6. Included in Analysis	103	103	0	
Comparison Students				
1. School Roster	797,359	---	---	
2. Met Treatment Inclusion Criteria	797,359	45,013	752,346	Title I School, Grades 6-8, Not in GCS district
3. Had Full Matching Data	45,013	41,029	3,984	
4. Matched	41,029	471	40,588	Unique students (note: matching was done with replacement)
5. Included in Analysis	471	471	0	

Table 66. Which CIS Students Were Matched? Post-Match Demographics, AY 2016-17 District Schools (Administrative Data)

	CIS Not Matched - Mean	CIS Matched - Mean	Difference	S.E. of Diff.
Black	0.41	0.56	**-0.15**$^{+}$	0.09
Hispanic	0.31	0.16	**0.14***	0.07
White	0.27	0.24	0.02	0.08
Other Race	0.02	0.04	-0.02	0.03
Free/Reduced Meals	0.88	0.95	-0.07	0.05
Female	0.41	0.37	0.03	0.09
Special Ed.	0.31	0.31	-0.01	0.08
ESL	0.27	0.13	**0.13***	0.07
Grade 6	0.48	0.26	**0.22****	0.08
Grade 7	0.23	0.40	**-0.17***	0.08
Grade 8	0.29	0.33	-0.04	0.08

Significance determined by chi-square tests. + 0.10 * 0.05 ** 0.01 *** 0.001

Figure 6. AY 2016-17 State School Comparison Matches (Administrative Data): Overlap

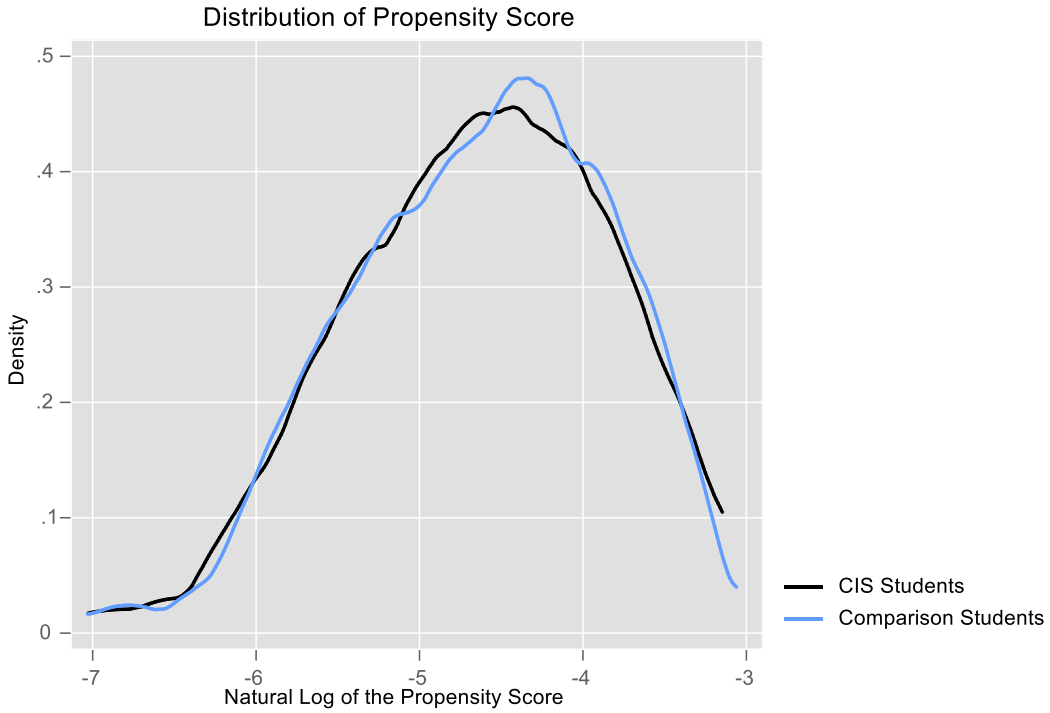
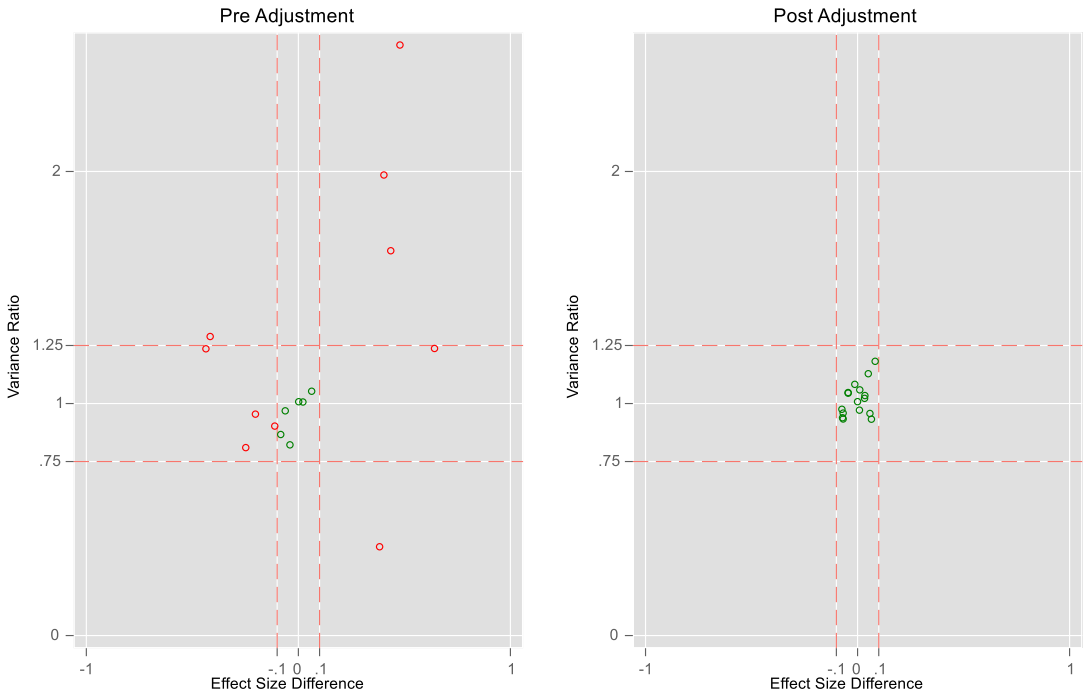


Figure 7. AY 2016-17 State School Comparison Matches (Administrative Data): Standardized Differences and Variance Ratios



C. AY 2016-17 Treatment School Survey Match

Table 67. CIS Participant Flow Chart at Treatment Schools AY 2016-17 (Survey Data)

Study Time-point	Total number students	Number students included	Number students not included	Notes
Treatment Students				
1. Program Roster	170	---	---	
2. Had School Roster Data	170	156	14	
3. Met Treatment Inclusion Criteria	156	156	0	Received Tier II or Tier III Services
4. Had Full Matching Data	156	135	21	
5. Had Survey Outcomes	135	75	60	Spring 2017 survey outcomes
6. Matched	75	60	15	
7. Included in Analysis	60	60	0	
Comparison Students				
1. School Roster	5,267	---	---	
2. Met Treatment Inclusion Criteria	5,267	1,763	3,966	Treatment School, Didn't receive CIS services
3. Had Full Matching Data	1,763	1,449	314	
4. Had Survey Outcomes	1,449	946	503	Spring 2017 survey outcomes
5. Matched	946	217	729	Unique students (note: matching was done with replacement)
6. Included in Analysis	217	217	0	

Table 68. Which CIS Students Were Matched? Post-Match Demographics, AY 2016-17 Treatment Schools (Survey Data)

	CIS Not Matched - Mean	CIS Matched - Mean	Difference	S.E. of Diff.
Black	0.80	0.48	**0.32***	0.14
Hispanic	0.00	0.25	**-0.25***	0.11
White	0.20	0.27	-0.07	0.13
Other Race	0.00	0.00	0.00	0.00
Free/Reduced Meals	1.00	0.93	0.07	0.07
Female	0.27	0.45	-0.18	0.14
Special Ed.	0.93	0.30	**0.63*****	0.12
ESL	0.00	0.18	**-0.18**+**	0.10
CIS Participant (2015-16)	0.53	0.45	0.08	0.15
Grade 6	0.47	0.42	0.05	0.14
Grade 7	0.27	0.38	-0.12	0.14
Grade 8	0.27	0.20	0.07	0.12

Significance determined by chi-square tests. + 0.10 * 0.05 ** 0.01 *** 0.001

Figure 8. AY 2016-17 Treatment School Comparison Matches (Survey Data): Overlap

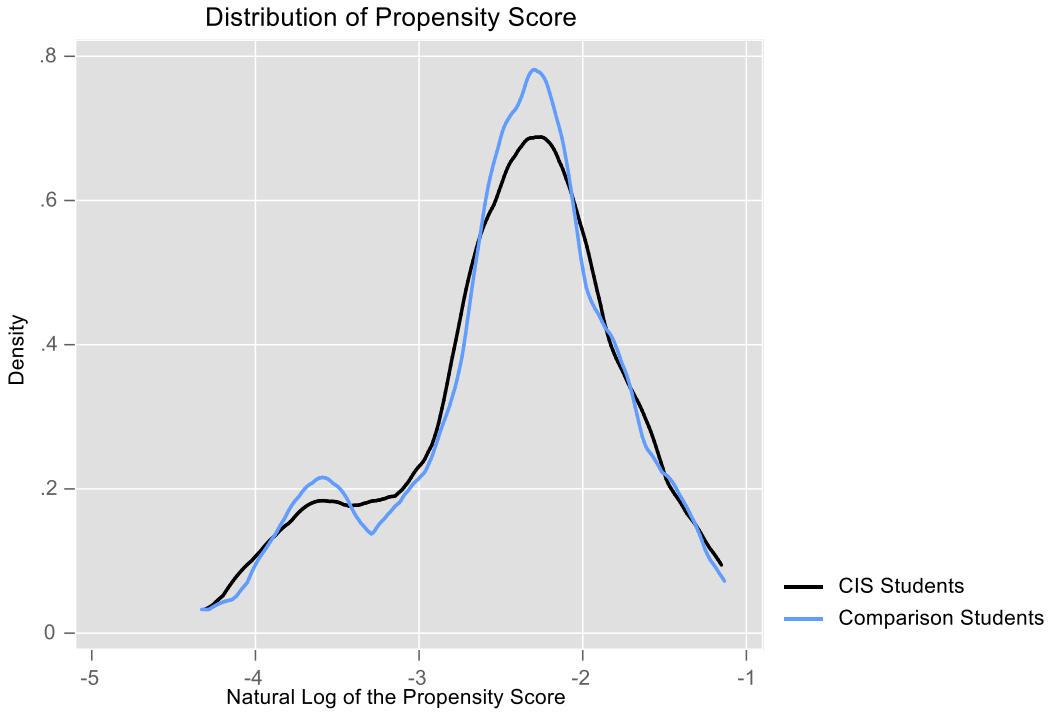
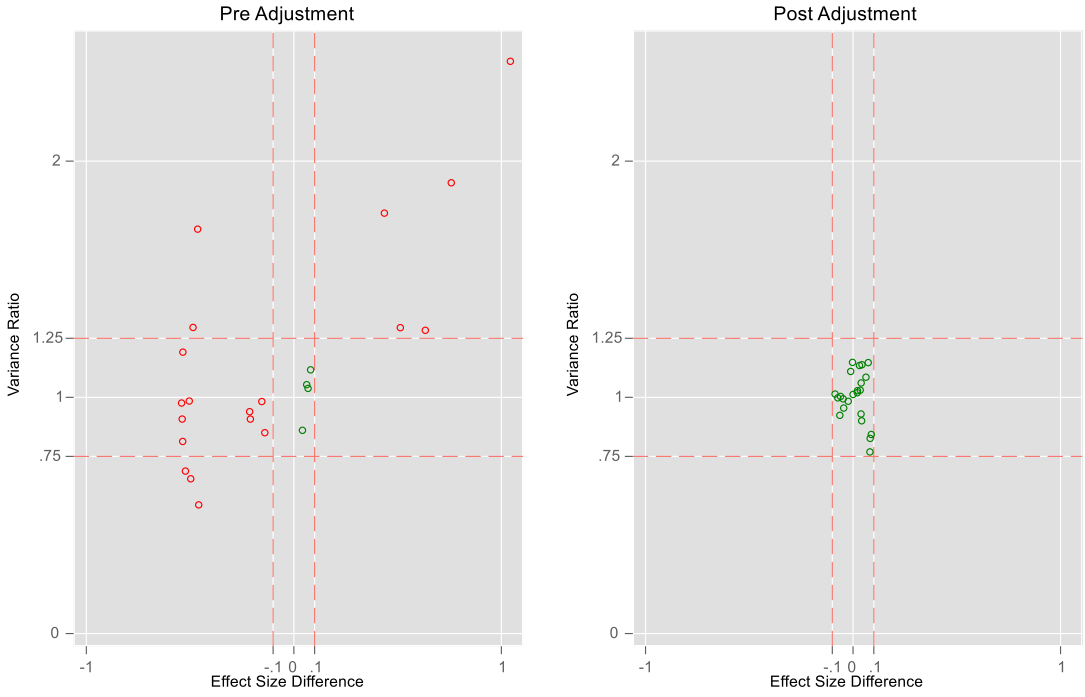


Figure 9. AY 2016-17 Treatment School Comparison Matches (Survey Data): Standardized Differences and Variance Ratios



D. AY 2016-17 District Survey Match

Table 69. CIS Participant Flow Chart at District Schools AY 2016-17 (Survey Data)

Study Time-point	Total number students	Number students included	Number students not included	Notes
Treatment Students				
1. Program Roster	170	---	---	
2. Had School Roster Data	170	156	14	
3. Met Treatment Inclusion Criteria	156	156	0	Received Tier II or Tier III Services
4. Had Full Matching Data	156	135	21	
5. Had Survey Outcomes	135	75	60	Spring 2017 survey outcomes
6. Matched	75	59	16	
7. Included in Analysis	59	59	0	
Comparison Students				
1. School Roster	5,267	---	---	
2. Met Treatment Inclusion Criteria	5,267	3,348	1,919	District School
3. Had Full Matching Data	3,348	2,876	472	
4. Had Survey Outcomes	2,876	2,341	535	Spring 2017 survey outcomes
5. Matched	2,341	242	2,099	Unique students (note: matching was done with replacement)
6. Included in Analysis	242	242	0	

Table 70. Which CIS Students Were Matched? Post-Match Demographics, AY 2016-17 District Schools (Survey Data)

	CIS Not Matched - Mean	CIS Matched - Mean	Difference	S.E. of Diff.
Black	0.63	0.53	0.10	0.14
Hispanic	0.13	0.22	-0.10	0.11
White	0.25	0.25	-0.00	0.12
Other Race	0.00	0.00	0.00	0.00
Free/Reduced Meals	1.00	0.93	0.07	0.06
Female	0.25	0.46	-0.21	0.14
Special Ed.	0.88	0.31	**0.57*****	0.12
ESL	0.13	0.15	-0.03	0.10
CIS Participant (15-16)	0.50	0.46	0.04	0.14
Grade 6	0.56	0.39	0.17	0.14
Grade 7	0.25	0.39	-0.14	0.14
Grade 8	0.19	0.22	-0.03	0.12

Significance determined by chi-square tests. + 0.10 * 0.05 ** 0.01 *** 0.001

Figure 10. AY 2016-17 District School Comparison Matches (Survey Data): Overlap

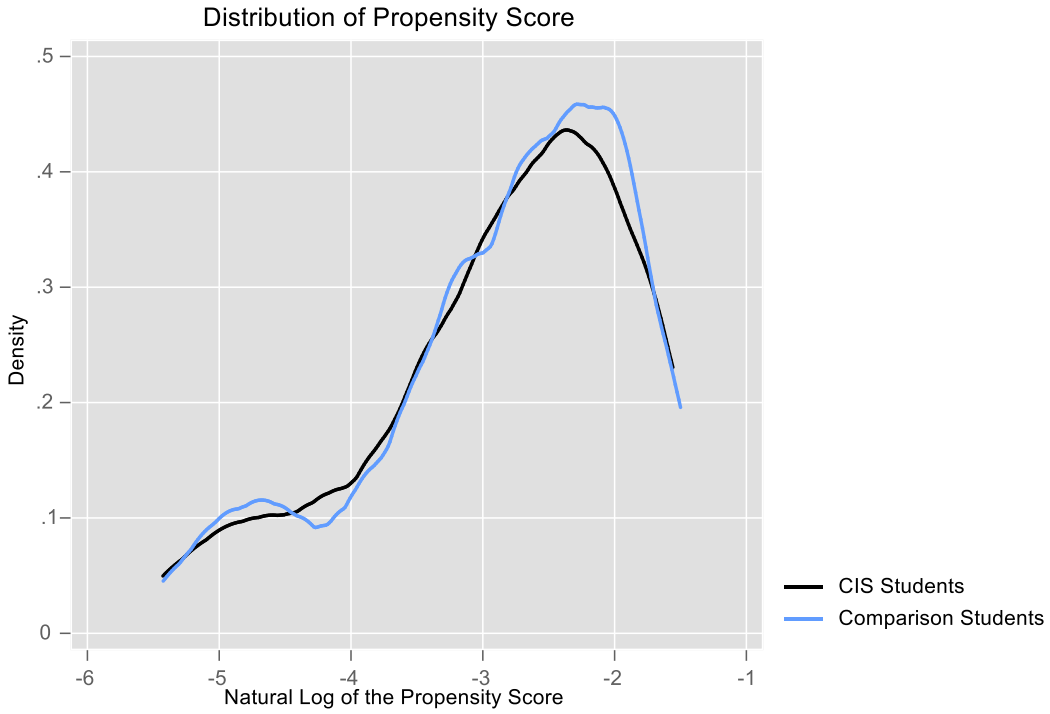
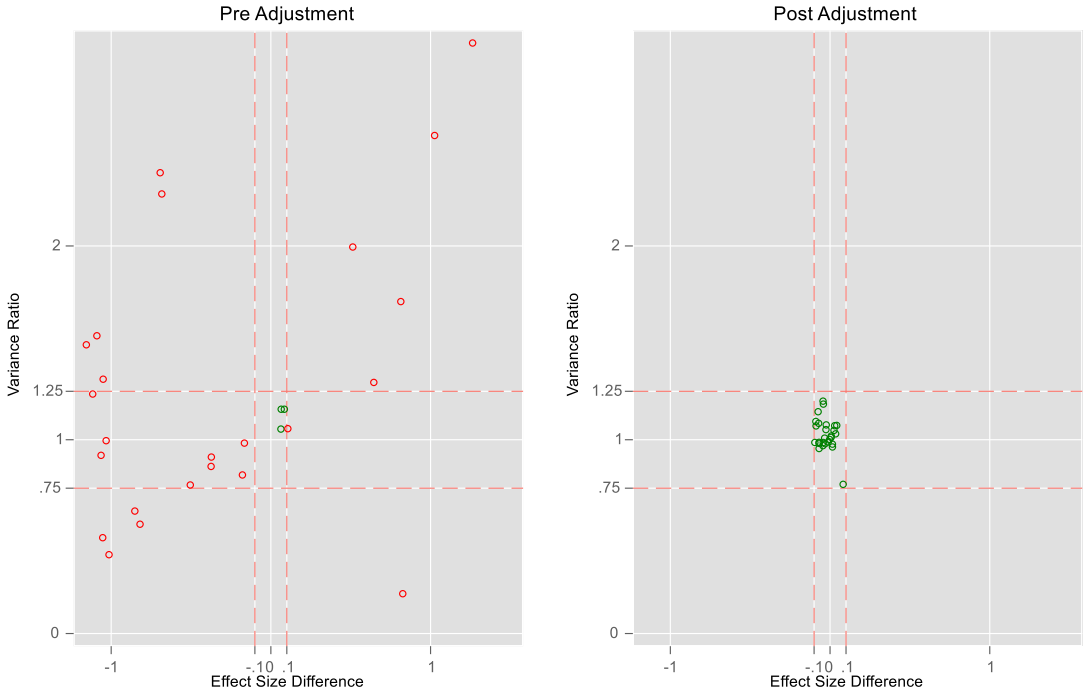


Figure 11. AY 2016-17 District School Comparison Matches (Survey Data): Standardized Differences and Variance Ratios



E. AY 2017-18 Treatment School Administrative Match

Table 71 CIS Participant Flow Chart at Treatment Schools AY 2017-18 (Administrative Data)

Study Time-point	Total number students	Number students included	Number students not included	Notes
Treatment Students				
1. Program Roster	184	---	---	
2. Had School Roster Data	184	164	20	
3. Met Treatment Inclusion Criteria	164	159	5	Received Tier II or Tier III Services
4. Had Full Matching Data	159	145	14	
5. Matched	145	128	17	
6. Included in Analysis	128	128	0	
Comparison Students				
1. School Roster	5,424			
2. Met Treatment Inclusion Criteria	5,424	1,839	3,585	Treatment School, Didn't receive CIS services in 2016-17 or 2017-18
3. Had Full Matching Data	1,839	1,659	180	
4. Matched	1,659	435	1,224	Unique students (note: matching was done with replacement)
5. Included in Analysis	435	435	0	

Table 72. Which CIS Students Were Matched? Post-Match Demographics, AY 2017-18 Treatment Schools (Administrative Data)

	CIS Not Matched - Mean	CIS Matched - Mean	Difference	S.E. of Diff.
Black	0.73	0.51	**0.22**$^{+}$	0.11
Hispanic	0.05	0.22	**-0.17**$^{+}$	0.09
White	0.05	0.27	**-0.22***	0.10
Other Race	0.18	0.01	**0.17*****	0.04
Free/Reduced Meals	0.86	0.94	-0.07	0.06
Female	0.14	0.37	**-0.23***	0.11
Special Ed.	0.59	0.32	**0.27***	0.11
ESL	0.09	0.14	-0.05	0.08
Grade 6	0.26	0.41	-0.16	0.10
Grade 7	0.16	0.27	-0.10	0.09
Grade 8	0.32	0.32	0.00	0.09

Significance determined by chi-square tests. + 0.10 * 0.05 ** 0.01 *** 0.001

Figure 12. AY 2017-18 Treatment School Comparison Matches (Administrative Data): Overlap

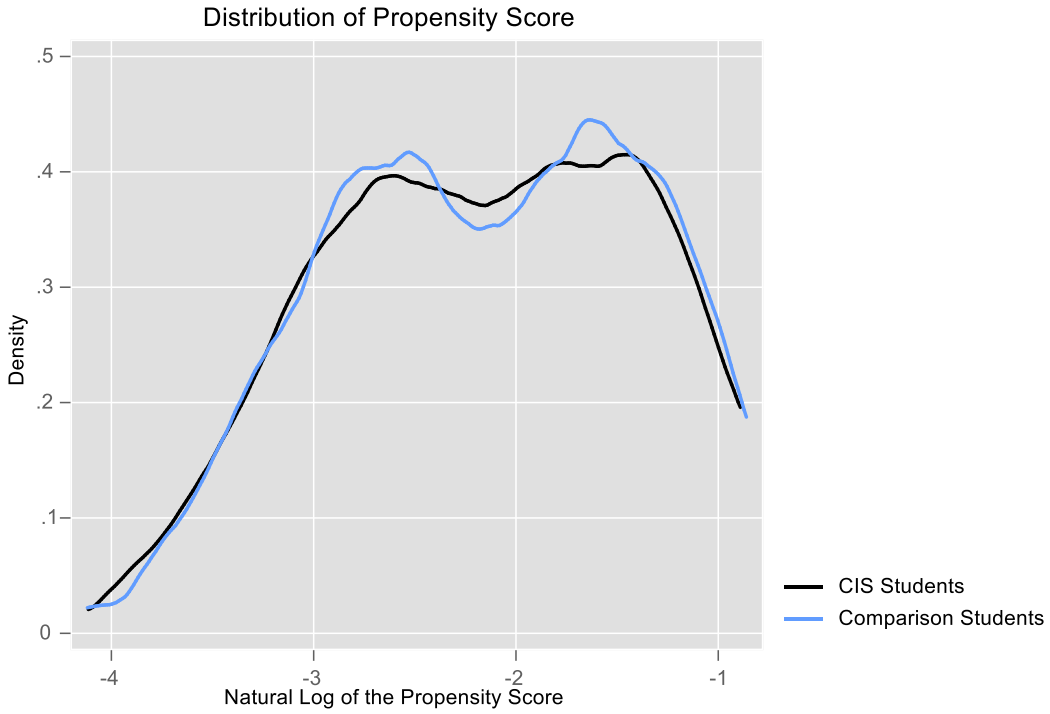
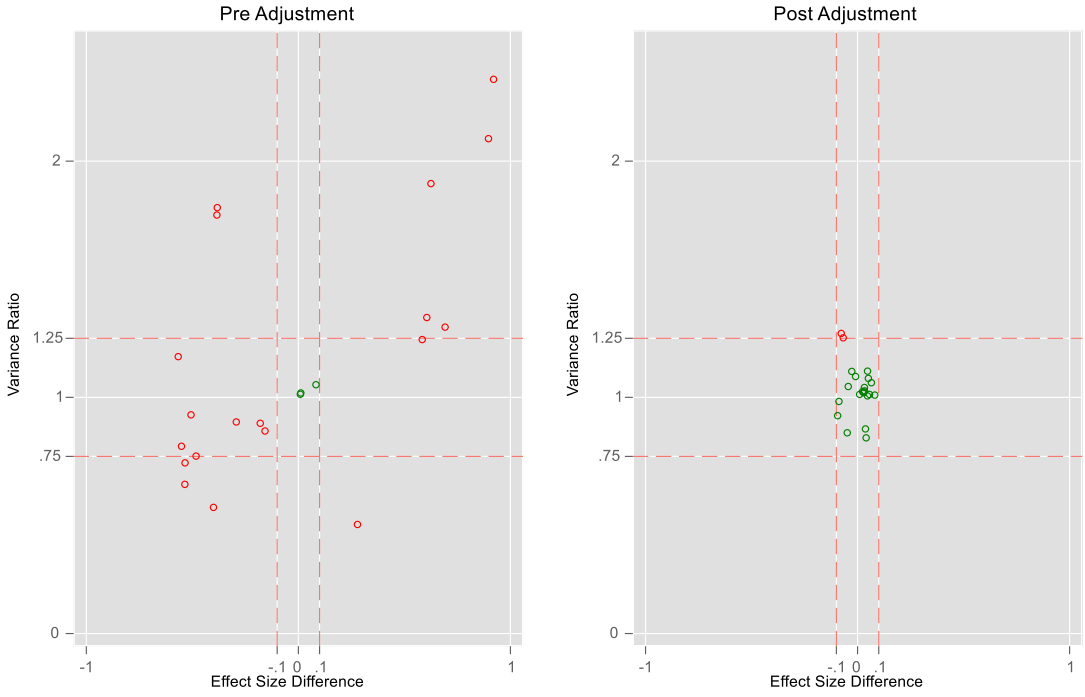


Figure 13. AY 2017-18 Treatment School Comparison Matches (Administrative Data): Standardized Differences and Variance Ratios



F. AY 2017-18 District Administrative Match

Table 73. CIS Participant Flow Chart at District Schools AY 2017-18 (Administrative Data)

Study Time-point	Total number students	Number students included	Number students not included	Notes
Treatment Students				
1. Program Roster	184			
2. Had School Roster Data	184	164	20	
3. Met Treatment Inclusion Criteria	164	159	5	Received Tier II or Tier III Services
4. Had Full Matching Data	159	145	14	
5. Matched	145	136	9	
6. Included in Analysis	136	136	0	
Comparison Students				
1. School Roster	5,424			
2. Met Treatment Inclusion Criteria	5,424	3,514	1,910	District School
3. Had Full Matching Data	3,514	3,253	261	
4. Matched	3,253	482	2,711	Unique students (note: matching was done with replacement)
5. Included in Analysis	482	482	0	

Table 74. Which CIS Students Were Matched? Post-Match Demographics, AY 2017-18 District Schools (Administrative Data)

	CIS Not Matched - Mean	CIS Matched - Mean	Difference	S.E. of Diff.
Black	0.43	0.55	-0.12	0.14
Hispanic	0.29	0.18	0.10	0.11
White	0.00	0.26	**-0.26***	0.12
Other Race	0.29	0.01	**0.28*****	0.05
Free/Reduced Meals	0.79	0.94	**-0.16***	0.07
Female	0.14	0.35	-0.21	0.13
Special Ed.	0.64	0.33	**0.31***	0.13
ESL	0.29	0.12	**0.17+**	0.10
Grade 6	0.26	0.40	-0.14	0.11
Grade 7	0.13	0.26	-0.13	0.10
Grade 8	0.26	0.33	-0.07	0.11

Significance determined by chi-square tests. + 0.10 * 0.05 ** 0.01 *** 0.001

Figure 14. AY 2017-18 District School Comparison Matches (Administrative Data): Overlap

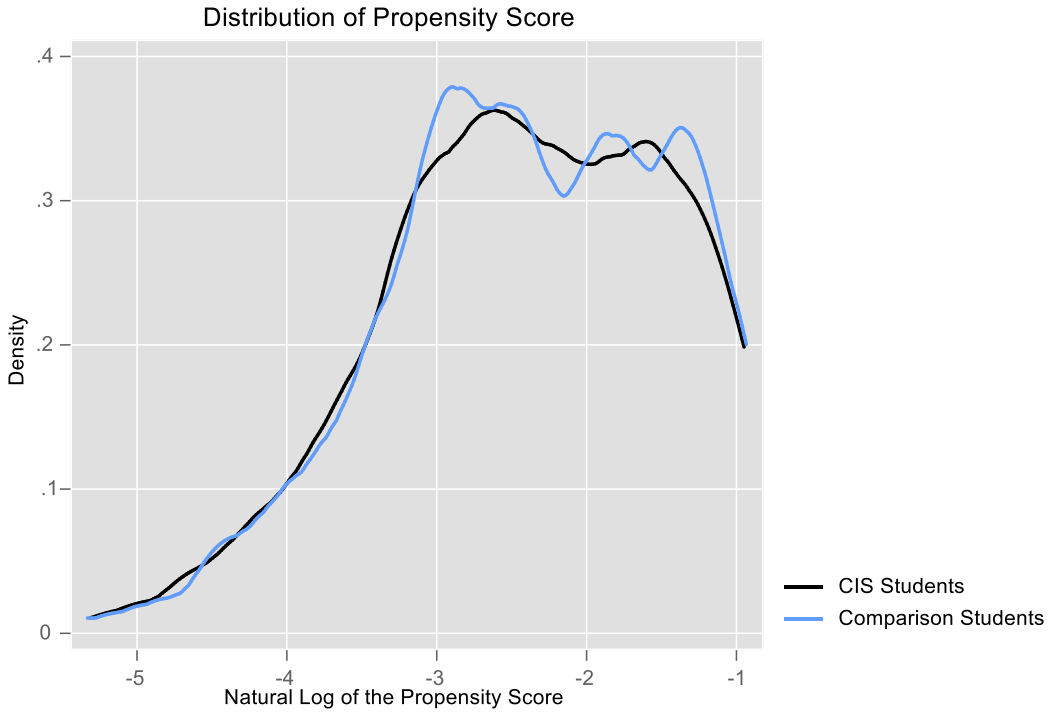
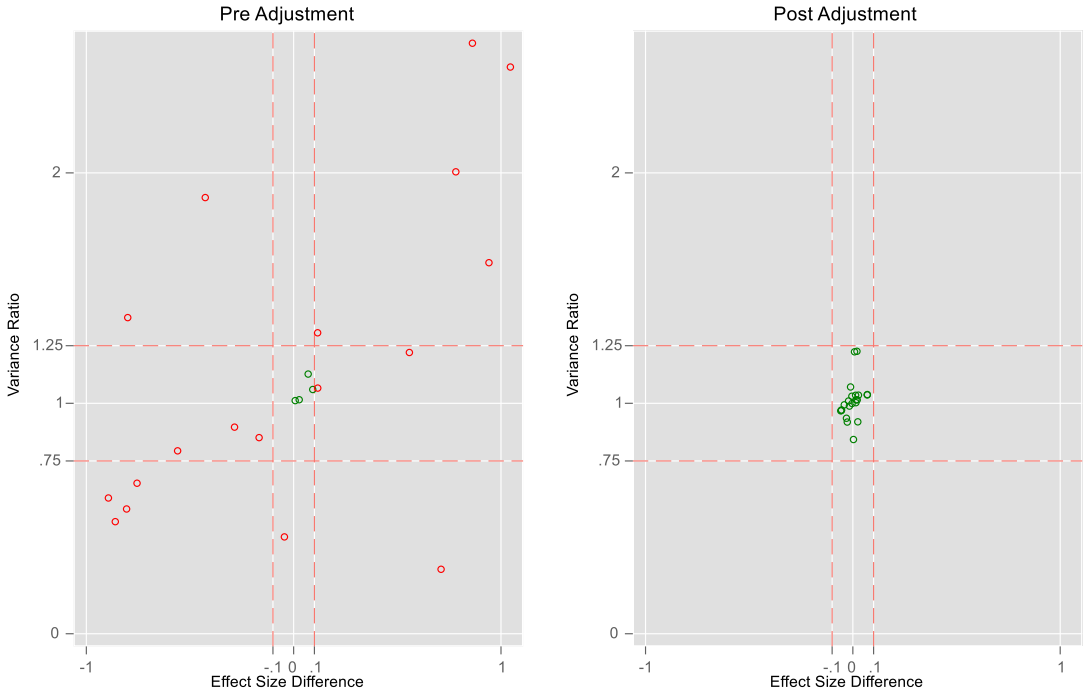


Figure 15. AY 2017-18 District School Comparison Matches (Administrative Data): Standardized Differences and Variance Ratios



G. AY 2017-18 Treatment School Survey Match

Table 75. CIS Participant Flow Chart at Treatment Schools AY 2017-18 (Survey Data)

Study Time-point	Total number students	Number students included	Number students not included	Notes
Treatment Students				
1. Program Roster	184	---	---	
2. Had School Roster Data	184	164	20	
3. Met Treatment Inclusion Criteria	164	159	5	Received Tier II or Tier III Services
4. Had Full Matching Data	159	145	14	
5. Had Survey Outcomes	145	90	55	Spring 2018 survey outcomes
6. Matched	90	78	12	
7. Included in Analysis	78	78	0	
Comparison Students				
1. School Roster	5,424	---	---	
2. Met Treatment Inclusion Criteria	5,424	1,839	3,585	Treatment School, Didn't receive CIS services in 2016-17 or 2017-18
3. Had Full Matching Data	1,839	1,659	180	
4. Had Survey Outcomes	1,659	1,172	487	Spring 2018 survey outcomes
5. Matched	1,172	286	886	Unique students (note: matching was done with replacement)
6. Included in Analysis	286	286	0	

Table 76. Which CIS Students Were Matched? Post-Match Demographics, AY 2017-18 Treatment Schools (Survey Data)

	CIS Not Matched - Mean	CIS Matched - Mean	Difference	S.E. of Diff.
Black	0.80	0.46	**0.34***	0.14
Hispanic	0.07	0.24	-0.18	0.12
White	0.00	0.28	**-0.28***	0.12
Other Race	0.13	0.01	**0.12***	0.05
Free/Reduced Meals	0.93	0.91	0.02	0.08
Female	0.20	0.42	-0.22	0.14
Special Ed.	0.60	0.26	**0.34****	0.13
ESL	0.13	0.14	-0.01	0.10
Grade 6	0.33	0.44	-0.10	0.14
Grade 7	0.20	0.27	-0.07	0.12
Grade 8	0.47	0.29	0.17	0.13

Significance determined by chi-square tests. + 0.10 * 0.05 ** 0.01 *** 0.001

Figure 16. AY 2017-18 Treatment School Comparison Matches (Survey Data): Overlap

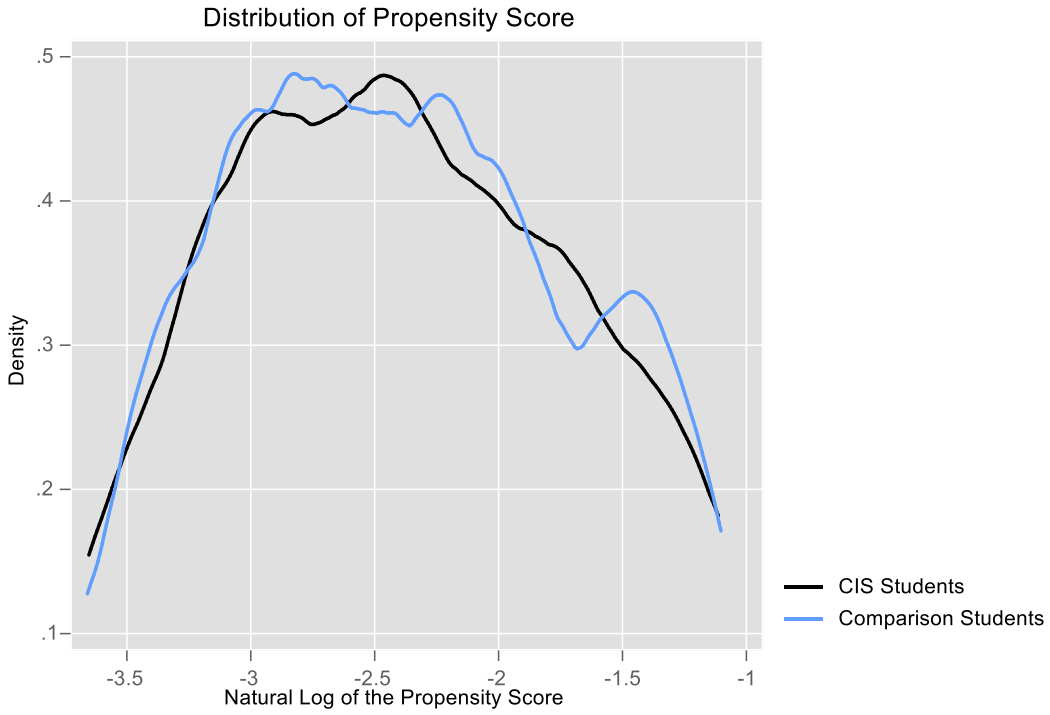
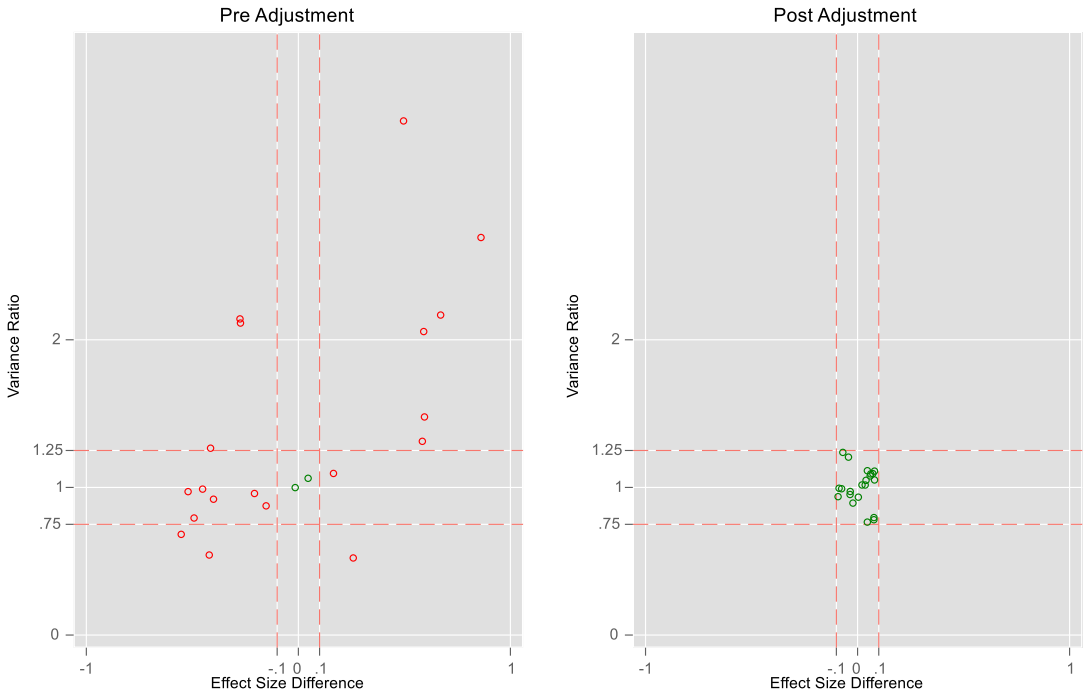


Figure 17. AY 2017-18 Treatment School Comparison Matches (Survey Data): Standardized Differences and Variance Ratios



H. AY 2017-18 District Survey Match

Table 77. CIS Participant Flow Chart at District Schools AY 2017-18 (Survey Data)

Study Time-point	Total number students	Number students included	Number students not included	Notes
Treatment Students				
1. Program Roster	184			
2. Had School Roster Data	184	164	20	
3. Met Treatment Inclusion Criteria	164	159	5	Received Tier II or Tier III Services
4. Had Full Matching Data	159	145	14	
5. Had Survey Outcomes	145	90	55	Spring 2018 survey outcomes
6. Matched	90	81	9	
7. Included in Analysis	81	81	0	
Comparison Students				
1. School Roster	5,424			
2. Met Treatment Inclusion Criteria	5,424	3,514	1,910	District School
3. Had Full Matching Data	3,514	3,253	261	
4. Had Survey Outcomes	3,253	2,392	861	Spring 2018 survey outcomes
5. Matched	2,392	322	2,070	Unique students (note: matching was done with replacement)
6. Included in Analysis	322	322	0	

Table 78. Which CIS Students Were Matched? Post-Match Demographics, , AY 2017-18 District Schools (Survey Data)

	CIS Not Matched - Mean	CIS Matched - Mean	Difference	S.E. of Diff.
Black	0.67	0.49	0.17	0.16
Hispanic	0.17	0.22	-0.06	0.13
White	0.00	0.27	**-0.27***	0.13
Other Race	0.17	0.01	**0.15****	0.05
Free/Reduced Meals	0.92	0.91	0.00	0.09
Female	0.25	0.41	-0.16	0.15
Special Ed.	0.58	0.27	**0.31***	0.14
ESL	0.25	0.12	0.13	0.11
Grade 6	0.25	0.44	-0.19	0.15
Grade 7	0.33	0.25	0.09	0.14
Grade 8	0.42	0.31	0.11	0.15

Significance determined by chi-square tests. † 0.10 * 0.05 ** 0.01 *** 0.001

Figure 18. AY 2017-18 District School Comparison Matches (Survey Data): Overlap

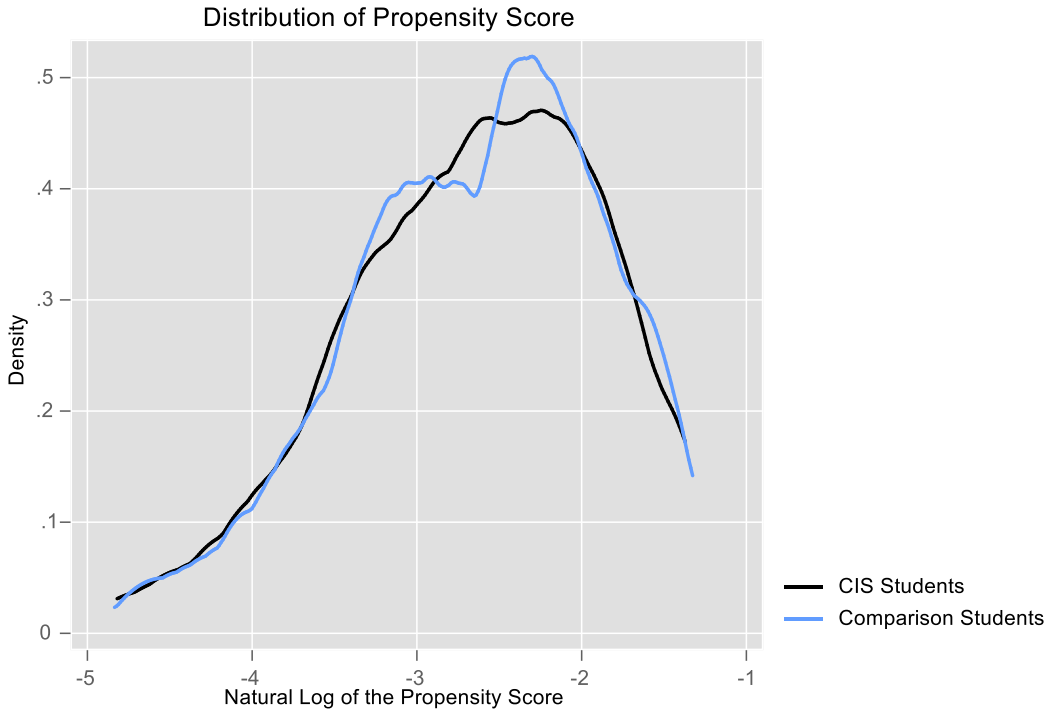
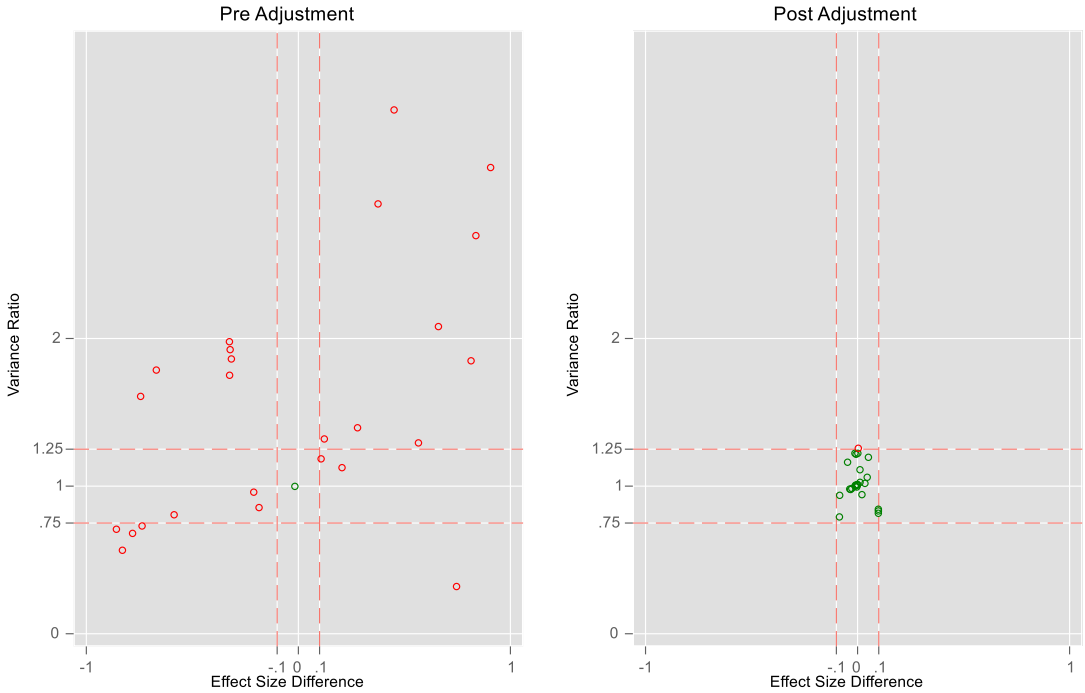


Figure 19. AY 2017-18 District School Comparison Matches (Survey Data): Standardized Differences and Variance Ratios



G. Additional Post-Matching Demographics

Table 79. CIS Participants vs. Student Matches AY 2017-18 (Administrative Data Match)

	Communities In Schools Participants (n = 128)	Student Matches: Treatment Schools (n = 640)	Communities In Schools Participants (n = 136)	Student Matches: District Schools (n = 680)
Black	50.8%	48.4% (0.05)	55.2%	56.2% (-0.02)
Hispanic	21.9%	19.8% (0.05)	18.4%	18.5% (-0.00)
White/Other Race	27.4%	31.7% (-0.09)	26.4%	25.3% (0.03)
Free/Reduced Meals	93.7%	94.4% (-0.03)	94.1%	93.5% (0.02)
Female	36.7%	35.3% (0.03)	35.3%	34.6% (0.02)
Special Ed.	32.0%	30.9% (0.02)	33.1%	35.9% (-0.06)
ESL	14.1%	12.5% (0.05)	11.8%	12.8% (-0.03)
6th grade	41.4%	45.8% (-0.09)	40.4%	37.1% (0.07)
7th grade	26.6%	25.2% (0.03)	26.5%	27.2% (-0.02)
8th grade	32.0%	29.1% (0.07)	33.2%	35.7% (-0.06)

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

*Note: Standardized mean differences are reported in parentheses. Significance tests are in comparison to the Communities In Schools group. Frequency weights were used to account for matching with replacement.

Table 80. CIS Participants vs. Comparison Student Matches AY 2016-17 (Survey Data Match)

	Communities In Schools Participants (n = 60)	Student Matches: Treatment Schools (n = 300)	Communities In Schools Participants (n = 59)	Student Matches: District Schools (n = 295)
Black	48.3%	52.7% (-0.09)	52.5%	52.5% (0.00)
Hispanic	25.0%	23.3% (0.04)	22.0%	21.0% (0.02)
White	26.7%	24.0% (0.06)	25.4%	26.8% (-0.03)
Other Race	0.0%	0.0%	0.0%	0.0%
Free/Reduced Meals	93.3%	91.0% (0.08)	93.2%	90.8% (0.08)
Female	45.0%	48.0% (-0.06)	45.8%	47.5% (-0.03)
Special Ed.	30.0%	30.0% (0.00)	30.5%	30.2% (0.01)
ESL	18.3%	15.7% (0.07)	15.3%	14.2% (0.03)
6th grade	41.7%	40.7% (0.02)	39.0%	37.3% (0.03)
7th grade	38.3%	36.7% (0.03)	39.0%	42.4% (-0.07)
8th grade	20.0%	22.7% (-0.06)	22.0%	20.3% (0.04)

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

*Note: Standardized mean differences are reported in parentheses. Significance tests are in comparison to the Communities In Schools group. Frequency weights were used to account for matching with replacement.

Table 81. CIS Participants vs. Comparison Student Matches AY 2017-18 (Survey Data Match)

	Communities In Schools Participants (n = 78)	Student Matches: Treatment Schools (n = 390)	Communities In Schools Participants (n = 81)	Student Matches: Non-Treatment Schools (n = 405)
Black	46.2%	44.4% (0.04)	49.4%	49.4% (0.00)
Hispanic	24.4%	21.8% (0.06)	22.2%	21.7% (0.01)
White/Other Race	29.5%	33.8% (-0.09)	28.4%	28.9% (-0.01)
Free/Reduced Meals	91.0%	92.8% (-0.07)	91.4%	92.6% (-0.05)
Female	42.3%	41.3% (0.02)	40.7%	41.0% (-0.01)
Special Ed.	25.6%	27.2% (-0.03)	27.2%	25.2% (-0.08)
ESL	14.1%	12.6% (0.05)	12.4%	12.4% (0.00)
6th grade	43.6%	47.9% (-0.09)	44.4%	42.7% (0.03)
7th grade	26.9%	24.4% (0.06)	24.7%	24.7% (0.00)
8th grade	29.5%	27.7% (0.04)	30.9%	32.6% (-0.04)

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

*Note: Standardized mean differences are reported in parentheses. Significance tests are in comparison to the Communities In Schools group. Frequency weights were used to account for matching with replacement.

Appendix D. OnTrack Greenville Student Survey

Please enter your survey ID number: _____

Click NEXT to continue.

You may complete the survey in English or Spanish. Please select which language you prefer. Usted puede hacer la encuesta en inglés o español. Por favor marque el idioma que prefiere.

a) English / inglés
b) Spanish / español

I am Dr. Tracy Waters from Furman University. I am conducting a study to learn about the OnTrack Greenville initiative in your school district. We are asking you to take part in the study because you are learning in a school that offers this program.

For this research, we will ask you to take a short survey. We don't think that you will encounter any problems if you participate in this survey. You can feel good about helping out with this important study. Please answer all of the questions as best you can, even if they don't seem like they apply to you.

You will not put your name anywhere on this survey. We will keep all of your answers private and will not show them to your teachers or your parents. Your answers will be stored on a password protected computer file. Only people from Furman University working on this study will see the answers students provide. When we share the results of the survey, we will never share your name or the name of your school.

You should know that:

- You do not have to be in this study if you do not want to. You won't get into any trouble with your teachers, your school, or Furman University if you say no.
- You can stop being in the study at any time.
- You can ask any questions you have, now or later. If you think of a question later, you or your parents can contact me at 864-294-3803.
- Your parents/guardians have been provided information about this study and have been given the opportunity to decline your participation.

Click NEXT to continue.

Are you willing to take this survey? By choosing "Yes," below, you acknowledge that you:

- Understand what you will be doing for this study,
- Have had all your questions answered,
- Have talked to your parent(s)/legal guardian about any questions you have about the study and,
- Agree to take part in this study.

If you choose "No," the survey will end.

a. Yes
b. No

What grade are you in?

a. 6th
b. 7th
c. 8th

[Pre-Survey] We are going to ask you about the kinds of things you did during your SUMMER BREAK, June to August 2017. Please select the answer that best reflects how often you did each of the activities listed below during the summer this year.

Responses: (1) Never; (2) Not very often (1 or 2 times); (3) Sometimes (about one a week); (4) Pretty often (a couple of times a week or more); or (5) Very often

How often…

…did you go to the library?
…did you write something like an email, letter, poem, or story?
…did you play math games or solve math problems?
…did you read a book?

[Pre-Survey] How often you did each of the activities listed below during your summer break this year?

Responses: (1) Never; (2) Not very often (1 or 2 times); (3) Sometimes (about one a week); (4) Pretty often (a couple of times a week or more); or (5) Very often

How often…

…did you play on your phone, watch TV, or play video games?
…did you do activities at a community center, YMCA, church or day camp, or Boys and Girls club?
…did you play outside?

The following statements describe your experiences at your school.

How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

When I study, I set goals for myself.
I keep doing schoolwork even if it is hard.
If I can't do something the first time, I keep trying until I can.

How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

I keep doing schoolwork even if I am bored.
When something is hard for me to do, I usually give up.
I keep doing schoolwork even if I don't like it.

How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

It is easy for me to get good grades in school.
I generally understand the material in my classes just as well as other students.
I am a good student.

How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

My homework is usually pretty easy for me.
I will be able to go as far in school as I want to go.
I can learn new things if I try.

How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

Doing well at school is important to me.
The things I am learning in school will be useful outside of school.
I think it is important to go to college.
I need to do well in school to accomplish my goals.

How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

I like school.
I participate a lot in class.
I like learning new things in school.
I feel like I matter at my school.

The following statements describe teachers at your school.

How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

Overall, students at my school get along well with teachers.
My teachers meet with me to talk about schoolwork and give me extra help if I need it.
My teachers really listen to what I have to say.

How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

Teachers at this school set a positive example for students with their actions.
My teachers notice when I am doing a good job and let me know about it.
Overall, teachers at my school try to be fair.

The following statements describe adults at your school. How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

There is at least one adult at my school who…

…really cares about me.
…tells me when I do a good job.
…notices when I am not there.

How true are the following statements?
Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

There is at least one adult at my school who…

…always wants me to do my best.
…listens to me when I have something to say.
…believes that I will be a success.

The following statements describe your experiences at your school. How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

My education will be valuable in getting the job I want.
I would be upset if I got a low grade in one of my subjects.
What I learn in school is useful for the job I want to have as an adult.

How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

It is important to me to get good grades.
Being a good student is important to me.
School is useful in helping me make good decisions in my life.

How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

I feel close to people at this school.
I am happy to be at this school.
I feel like I am a part of this school.

How true are the following statements?

Responses: (1) Not true; (2) Somewhat true; (3) Mostly true; (4) True

I feel teachers at this school treat me fairly.
I feel safe in my school.

How far *would you LIKE to go* in school with your education?

a. Some high school
b. Finish high school
c. Finish two-year/technical school
d. Finish four-year college
e. Finish graduate school or professional school
f. I don't know

How far *do you think you will actually go* in school with your education?

a. Some high school
b. Finish high school
c. Finish technical school
d. Finish college
e. Finish graduate school or professional school
f. I don't know

Physical Health refers to your diet and exercise, how often you are sick or healthy, and how your body feels.

In general, how would you describe your physical health?

(a) Excellent (b) Good (c) Fair (d) Poor

Mental Health refers to how you think and feel emotionally on a daily basis.

In general, how would you describe your emotional or mental health?

(a) Excellent (b) Good (c) Fair (d) Poor

Where do you usually go when you need to see a doctor or nurse?

a. My doctor's office
b. Emergency room
c. School health room
d. Somewhere else
e. I don't know

I am…

(a) Male (b) Female (c) Prefer not to say

I would describe myself as… (Choose all that apply)

(a) Black or African American
(b) White
(c) Spanish/Hispanic/Latino
(d) Asian or Pacific Islander
(e) American Indian or Alaska Native
(f) Other: _____
(g) Prefer not to say

--- END OF SURVEY ---

[If language = Spanish]

Yo soy la Dra. Tracy Waters de la Universidad de Furman. Yo estoy haciendo un estudio para aprender sobre el programa de OnTrack Greenville en tu distrito escolar. Te invitamos a participar en este estudio porque tú estás asistiendo a una escuela que ofrece este programa.

Para este estudio, vamos a pedir que tomes una breve encuesta. No pensamos que tendrás ningún problema si tomas esta encuesta. Tú puedes sentirse bien por ayudarnos con este estudio importante. Por favor conteste todas las preguntas lo mejor que puedas, incluso si las preguntas no te aplican.

No vamos a pedir que pongas tu nombre en ninguna parte de la encuesta. Vamos a mantener tus respuestas privadas y no vamos a compartirlas con tus maestros/as ni con tus padres. Tus respuestas serán guardadas en un archivo de computadora protegido con contraseña. Solamente personas de Furman University que trabajan en este estudio van a ver las respuestas que estudiantes proveen. Cuando compartimos los resultados de la encuesta, nunca vamos a compartir tu nombre ni el nombre de tu escuela.

Tú debes saber que:

- No tienes que participar en este estudio si no quieres. Tú no te vas a meter en problemas con tus maestros/as, tu escuela, ni la Universidad de Furman si dices “No.”
- Puedes retirar del estudio en cualquier momento.
- Puedes preguntar cualquier pregunta que tienes, ahora o después. Si piensas en una pregunta después, tú o tus padres/tutores pueden llamarme al 864-294-3803.
- Tus padres/tutores han recibido información sobre este estudio y ellos han tenido la oportunidad de declinar tu participación.

Oprima PRÓXIMO para continuar.

¿Estás dispuesto/a a tomar esta encuesta?? A escoger “Sí” debajo, tú reconoces que:

- Entiendes lo que vas a hacer en este estudio,
- Se han contestado todas tus preguntas,
- Has hablado con tus padres/tutores sobre las preguntas que tienes relacionadas con el estudio y
- Aceptas participar en este estudio.

Si escoges “No,” la encuesta va a acabar.

a. Sí
b. No

¿En qué grado estás?

a. 6º (sexto)
b. 7º (séptimo)
c. 8º (octavo)

Vamos a preguntarte sobre los tipos de cosas que hiciste durante LAS VACACIONES DE VERANO, junio a agosto 2017. Por favor marque la respuesta que mejor reflexione la frecuencia con que hiciste las siguientes actividades durante el verano de este año.

Respuestas: (a) Nunca; (b) No muy en seguido (1 o 2 veces); (c) A veces (como una vez a la semana); (d) Más o menos frecuente (un par de veces cada semana o más); (e) Muy frecuente (todos los días)

¿Con tanta frecuencia….?

…fuiste a la biblioteca?
…escribiste algo como un email, una carta, un poema o un cuento?
…jugaste juegos matemáticos o solucionar problemas matemáticas?
…leíste un libro?

¿Con tanta frecuencia hiciste cada una de las siguientes actividades durante las vacaciones de verano de este año.

Respuestas: (a) Nunca; (b) No muy en seguido (1 o 2 veces); (c) A veces (como una vez a la semana); (d) Más o menos frecuente (un par de veces cada semana o más) ; (e) Muy frecuente (todos los días)

¿Con tanta frecuencia….?

…jugaste en tu teléfono, viste televisión, o jugaste juegos videos?
…hiciste actividades en un centro comunitario, YMCA, iglesia o campo, o Club de Niños y Niñas?
…jugaste afuera?

Las siguientes frases describen tus experiencias en tu escuela.

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

¿Qué tan verdad son las siguientes frases?

Cuando estudio, yo me fijo metas para mí.
Yo sigo haciendo mi trabajo escolar incluso si es difícil.
Si no puedo hacer algo la primera vez, sigo intentando hasta que pueda.

¿Qué tan verdad son las siguientes frases

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Sigo haciendo mi trabajo escolar incluso si estoy aburrido/a.
Cuando algo es difícil para mí, normalmente me rindo.
Sigo hacienda mi trabajo escolar incluso si no me gusta.

¿Qué tan verdad son las siguientes frases?

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Es fácil para mí sacar buenas notas en la escuela.
Generalmente entiendo el material en mis clases tan bien como otros estudiantes.
Soy buen/a estudiante.

¿Qué tan verdad son las siguientes frases?

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Mis tareas en general son fáciles para mí.
Puedo llegar tan lejos en la escuela como quiero llegar.
Puedo aprender cosas nuevas si intento.

¿Qué tan verdad son las siguientes frases?
Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Hacer bien en la escuela es importante para mí.
Las cosas que estoy aprendiendo en la escuela serán útiles para mí afuera de escuela.
Pienso que es importante ir a la universidad.
Tengo que hacer bien en la escuela para alcanzar mis metas.

¿Qué tan verdad son las siguientes frases?

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Me gusta la escuela.
Participo mucho en clase.
Me gusta aprender cosas nuevas en escuela.
Siento que valgo en mi escuela.

Las siguientes frases describen a los/las maestros/as en tu escuela.

¿Qué tan verdad son las siguientes frases?

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

En general, estudiantes en mi escuela se llevan bien con maestros/as.
Mis maestros/as se reúnen conmigo para hablar de mi trabajo escolar y darme más ayuda si la necesito.
Mis maestros/as realmente escuchan lo que tengo que decir.

¿Qué tan verdad son las siguientes frases?

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Maestros/as en esta escuela muestran un ejemplo positivo para estudiantes con sus acciones.
Mis maestros/as notan cuando estoy haciendo un buen trabajo y me dejan saber.
En general, maestros/as en mi escuela intentan ser justos/as.

Las siguientes frases describen a adultos en tu escuela. ¿Qué tan verdad son las siguientes frases?

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Hay por lo menos un adulto en mi escuela quien…

…realmente se preocupa de mí.
…me dice cuando hago un buen trabajo.
…nota cuando no estoy presente.

¿Qué tan verdad son las siguientes frases?

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Hay por lo menos un adulto en mi escuela quien…

…siempre quiere que yo haga mi mejor.
…escucha cuando tengo algo que decir.
…cree que voy a ser un éxito.

Las siguientes frases describen tus experiencias en tu escuela. ¿Qué tan verdad son las siguientes frases?

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Mi educación será valiosa en obtener el trabajo que quiero.
Me pondría bravo/a si sacara una nota baja en una de mis materias.
Lo que aprendo en la escuela es útil para el trabajo que quiero tener de adulto.

¿Qué tan verdad son las siguientes frases?

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Es importante para mí sacar buenas notas.
Ser buen/a estudiante es importante para mí.
La escuela es útil en ayudarme a hacer buenas decisiones en mi vida.

¿Qué tan verdad son las siguientes frases

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Siento cerco/a de las personas en esta escuela.
Estoy feliz estar en esta escuela.
Siento que soy parte de esta escuela.

¿Qué tan verdad son las siguientes frases?

Respuestas: (a) No verdad; (b) Un poco verdad; (c) En la mayor parte verdad; (d) Verdad

Me siento que maestros/as en esta escuela me tratan justamente.
Me siento seguro/a en mi escuela.

¿Qué tan lejos *te GUSTARIA llegar* en la escuela con tu educación?

a. Hacer una parte de la preparatorio
b. Terminar toda la preparatorio
c. Terminar la universidad de 2 años / escuela técnica
d. Terminar la universidad de 4 años / licenciatura
e. Terminar la maestría, una especialización o un doctorado
f. Yo no sé

¿Qué tan lejos *crees que actualmente vas a llegar* en la escuela con tu educación?

a. Hacer una parte de la preparatorio
b. Terminar toda la preparatorio
c. Terminar la universidad de 2 años / escuela técnica
d. Terminar la universidad de 4 años / licenciatura
e. Terminar la maestría, una especialización o un doctorado
f. Yo no sé

La salud física refiere a tu dieta y ejercicio, la frecuencia con que estás enfermo/a o saludable y como se siente tu cuerpo.

¿En general, como describes tu salud física?

(a) Excelente (b) Buena (c) Regular (d) Mala

La salud mental refiere a como piensas y te sientes emocionalmente diariamente.

¿En general, como describes tu salud emocional o mental?

(a) Excelente (b) Buena (c) Regular (d) Mala

¿Normalmente a dónde vas cuando necesitas una consulta con un/a médico/a o enfermera?

a. La oficina de mi médico/a
b. La sala de emergencias
c. La sala de salud escolar
d. Otro lado: _____
e. Yo no sé

Yo soy…

a. Varón
b. Hembra
c. Prefiero no decir

Me describo como… (Escoge todos que te describen)

a. Negro/a o Afroamericano/a
b. Caucásico/a
c. Hispano/a o Latino/a
d. Asiático/a o Isleño/a del Pacífico
e. Indio/a Americano/a o Nativo/a de Alaska
f. Otro/a: _____
g. Prefiero no decir

--- END OF SURVEY ---

Appendix E. Student Support Specialist Survey

Your school name:

- ○ School 1
- ○ School 2
- ○ School 3
- ○ School 4

A. Caseload

1. What is your current caseload for students receiving Tier II and/or Tier III services?
   - ○ Under 10
   - ○ 11-20
   - ○ 21-30
   - ○ Over 30

2. Overall, during the 2017-18 school year, was your caseload...
   - ○ Too low
   - ○ About right
   - ○ Too high

3. At your assigned grade level, in a typical month, please rank order the top three categories (1st, 2nd, 3rd) in terms of the kinds of support you provide your case- managed students. For each of the three categories you select from the dropdown lists, please share an example of a commonly used Tier II activity and Tier III activity.

	Top 3 Categories of Support	Example of Tier II Activities	Example of Tier III Activities
1st	[dropdown list of possible categories]*		
2nd	[dropdown list of possible categories]		
3rd	[dropdown list of possible categories]		

*Dropdown list:

- Academic Assistance
- Behavioral Intervention/Modification
- Case Management
- College and Career Preparation
- Community Service/Service Learning
- Enrichment/Motivation
- Family Engagement
- Life/Social Skills
- Physical Fitness/Health
- Professional Mental Health

B. Preparation and Ongoing Support on CIS Model

4. This year, have you received the preparation, training, and ongoing support you needed from CIS to be effective in the role of Student Support Specialist?
   - ○ Yes, very much so
   - ○ Yes, for the most part
   - ○ Not sure yet
   - ○ No

   [Display logic: if above answer is Yes for the most part, Not sure yet, or No]

   Please explain your needs for additional support

5. Do you have any difficulties, questions, or concerns about data entry and/or use of the CIS Data Management 2.0 system?
   - ○ Yes, major
   - ○ Yes, minor
   - ○ Not sure yet
   - ○ Not concerns at all

   [Display logic: if above answer is Yes, major or Yes, minor]

   Please explain any challenges you face with data entry/use of the CISDM 2.0.

C. School Context

6. To what extent did the EWRS Team work as intended in your school in terms of identifying students and getting them the supports they need?
   - ○ Worked as fully intended
   - ○ Worked somewhat as intended
   - ○ Did not work at all as intended

7. Please describe how, if at all, EWRS Team efforts could be improved in terms of identifying students and getting them the supports they need?

8. This year, how frequently did the EWRS Team in your school monitor case-managed students' progress?
   - ○ More than once per grading period
   - ○ Only at the end of a grading period
   - ○ Once per semester
   - ○ Other _____

D. Case Management Implementation

On a scale of 1 to 4, please choose the number that best describes where you think you are with each case management element. After making your selection, please provide a brief explanation for your choice.

9. Case Management Element 1: Identification of At-Risk Students for Student Support Services—Please rate, on a scale of 1-4, how well the CIS staff at your school have implemented the processes for identification of at-risk students for Student Support Services this year?
   - ○ 1 = We have major unresolved implementation challenges to work out
   - ○ 2 = We have minor unresolved implementation challenges to work out
   - ○ 3 = We need minor adjustments but they will be easy to make
   - ○ 4 = We have been successful this year with no changes needed

   [Display logic: if above answer is 1, 2, or 3]

   Please explain (e.g., what challenges have you faced/what adjustments were made or will be made).

10. Case Management Element 2: Student Needs Assessment to Identify Specific Needs—Please rate, on a scale of 1-4, how well you have implemented the processes for student needs assessment to identify specific needs this year.
    - ○ 1 = I have major unresolved implementation challenges to work out
    - ○ 2 = I have minor unresolved implementation challenges to work out
    - ○ 3 = I need minor adjustments but they will be easy to make
    - ○ 4 = I have been successful this year with no changes needed

    [Display logic: if above answer is 1, 2, or 3]

    Please explain (e.g., what challenges have you faced/what adjustments were made or will be made).

11. Case Management Element 3: Development of Student Support Plans to Address Student Needs—Please rate, on a scale of 1-4, how well you have implemented the development of Student Support Plans to address student needs this year?
    - ○ 1 = I have major unresolved implementation challenges to work out
    - ○ 2 = I have minor unresolved implementation challenges to work out
    - ○ 3 = I need minor adjustments but they will be easy to make
    - ○ 4 = I have been successful this year with no changes needed

    [Display logic: if above answer is 1, 2, or 3]

    Please explain (e.g., what challenges have you faced/what adjustments were made or will be made).

12. Case Management Element 4: Provision/Coordination of Services as Specified in Student Support Plan—Please rate, on a scale of 1-4, how well you have implemented the provision/coordination of services as specified in the student support plan this year?
    - ○ 1 = I have major unresolved implementation challenges to work out
    - ○ 2 = I have minor unresolved implementation challenges to work out
    - ○ 3 = I need minor adjustments but they will be easy to make
    - ○ 4 = I have been successful this year with no changes needed

    [Display logic: if above answer is 1, 2, or 3]

    Please explain (e.g., what challenges have you faced/what adjustments were made or will be made).

13. Case Management Element 5: Ongoing Monitoring of Student Progress and Adjustment of Services Based on Student Needs—Please rate, on a scale of 1-4, how well you have implemented the ongoing monitoring of student progress and adjustment of services based on student needs this year?
    - ○ 1 = I have major unresolved implementation challenges to work out
    - ○ 2 = I have minor unresolved implementation challenges to work out
    - ○ 3 = I need minor adjustments but they will be easy to make
    - ○ 4 = I have been successful this year with no changes needed

    [Display logic: if above answer is 1, 2, or 3]

    Please explain (e.g., what challenges have you faced/what adjustments were made or will be made).

14. Across all your case-managed students receiving Tier II and/or III services this year, please rate, on a scale of 1-4, how often you think you were able to align the services provided to the needs and goals you initially identified for each student.
    - ○ 1 = Seldom
    - ○ 2 = On Occasion
    - ○ 3 = Almost Always
    - ○ 4 = Always

E. Concluding Questions

In looking back over your time with the project:

15. What has been the most successful aspect of your work with case-managed students?

16. What has been the least successful aspect of your work with case-managed students

17. What recommendations, if any, would you like to offer about moving the CIS model into other schools?

You have now reached the end of this survey. Once you click the SUMBIT button below, you will see the words: "We thank you for your time spent taking this survey. Your response has been recorded." and you will know that your survey responses have been received. Thank you!

Appendix F. Communities In Schools Student Survey

This survey is to help the Communities In Schools (CIS) program get a better idea of how the CIS staff at your school helped you this school year (2017-18). Your individual answers in this survey won't be shown to anyone so please be honest in your responses.

What school do you go to?
School 1
School 2
School 3
School 4

What grade level are you in?
6th
7th
8th
9th

Are you...
Female
Male
Prefer not to answer

What language do you speak at home?
English
Spanish
Other

Display This Question:
If What language do you speak at home? Spanish Is Selected

Would you prefer to continue with the survey in Spanish?
Yes
No

Have you been at this school since the beginning of the 2017-18 school year?
Yes
No

How often did you have days when you liked school this year?
Every day I liked school
Most days I liked school
About half the time I liked school
A few days here and there I liked school
I never liked school

How long have you been meeting with a CIS staff person?
Just this semester (started after Christmas)
Both fall and spring semesters
Last year and this year

Display This Question:
If What school do you go to? = School 1

Which one CIS staff person did you talk to or work with the most at School 1 this year?
Student Support Specialist 1
Student Support Specialist 2
Student Support Specialist 3
Other _____

Display This Question:
If What school do you go to? = School 3

Which one CIS staff person did you talk to or work with the most at School 3 this year?
Student Support Specialist 1
Student Support Specialist 2
Student Support Specialist 3
Other _____

Display This Question:
If What school do you go to? = School 4

Which one CIS staff person did you talk to or work with the most at School 4 this year?
Student Support Specialist 1
Student Support Specialist 2
Student Support Specialist 3
Other _____

How often did you meet with or talk to a CIS staff person?
Just a few times during the school year
About once or twice a month
About once a week
Almost every day

When you met by yourself with your CIS staff person, did he or she help you...

	Yes	No
(a) set academic goals for yourself?	○	○
(b) set personal goals for yourself?	○	○
(c) set behavioral goals for yourself?	○	○
(d) with your classes (such as helping with homework, how to study for tests, or understanding assigned reading)?	○	○
(e) with getting along better with your teachers?	○	○
(f) with getting along better with other students?	○	○
(g) with any family issues that may have been bothering you?	○	○

What grades did you get on your last report card?
All As and Bs
Mostly Bs and Cs
Mostly Cs and Ds

Did you get Fs this year on any of your report cards?
Yes
No

Display This Question:
If Did you get Fs this year on any of your report cards? = Yes

About how many Fs did you get this year?
1
2
3 or more

Below is a list of group activities that may have been offered by CIS at your school. Did you participate in any of the following group activities? Check "Yes" if you did and "No" if you did not.

	Yes	No
(a) CIS homework or study sessions	○	○
(b) CIS conflict resolution or anger management activities	○	○
(c) CIS health or stress management sessions (e.g., yoga)	○	○
(d) Club activities such as dance	○	○
(e) Afterschool sessions	○	○
(f) Extended Day at Greenville Early College	○	○

How comfortable were you going to CIS staff when you needed help?
Very comfortable
Somewhat comfortable
Not at all comfortable

Display This Question:
If How comfortable were you going to CIS staff when you needed help? Somewhat comfortable or Not at all comfortable Is Selected

Is there something CIS could do to make you more comfortable asking for help when needed?

_____
_____
_____

How helpful was the support provided by CIS staff?
Very helpful
Somewhat helpful
Not at all helpful

Display This Question:
If helpful was the support provided by CIS staff? Somewhat helpful or Not at all helpful Is Selected

Is there something CIS could do to be more helpful?

_____
_____
_____

Thinking about your participation with CIS this year, has it helped you in any of the following ways? Did CIS help you...

	Yes	Not Sure	No
(a) do better on your homework?	○	○	○
(b) do better in class?	○	○	○
(c) get better grades?	○	○	○
(d) get along better with teachers?	○	○	○
(e) get along better with other students?	○	○	○
(f) get along better with your family?	○	○	○
(g) improve your behavior?	○	○	○
(h) improve your attendance in school or classes?	○	○	○
(i) improve your self-confidence?	○	○	○

Below are questions about personal issues or challenges some students may have experienced this school year that kept them from being able to do their best on school work.

Were their times that you had needs (food, clothing, personal care, school supplies) that your family could not provide?
Yes
Not Sure
No

Display This Question:
If Were their times that you had needs (food, clothing, personal care, school supplies) that your fa... = Yes

Did CIS help you with this?
Yes
Not Sure
No

Did you have family demands or problems that kept you from attending school or doing your homework?
Yes
Not Sure
No

Display This Question:
If Did you have family demands or problems that kept you from attending school or doing your homework? = Yes

Did CIS help you with this?
Yes
Not Sure
No

Did you have conflicts with any adults in the school that were difficult for you to handle?
Yes
Not Sure
No

Display This Question:
If Did you have conflicts with any adults in the school that were difficult for you to handle? = Yes

Did CIS help you with this?
Yes
Not Sure
No

Did you have some classes that were too confusing or difficult for you?
Yes
Not Sure
No

Display This Question:
If Did you have some classes that were too confusing or difficult for you? = Yes

Did CIS help you with this?
Yes
Not Sure
No

Did you have trouble getting along with other students at school?
Yes
Not Sure
No

Display This Question:
If Did you have trouble getting along with other students at school? = Yes

Did CIS help you with this?
Yes
Not Sure
No

In this final set of questions, you have the chance to provide a little more feedback to CIS in your own words. All thoughts and suggestions are welcome!

Did you like being part of CIS this year?
Yes
Not Sure
No

Please explain why you liked or didn't like being part of CIS.
_____
_____

Was there anything CIS did for you this year that was particularly helpful or that you really enjoyed?
_____
_____

Is there anything else you can think of that CIS could do to help you do better in school?
_____
_____

Any other last comments about what CIS could do more of in your school?
_____
_____

***Y**ou have now reached the end of the survey. Once you click the SUBMIT button below, you will see the words: "We thank you for your time spend taking this survey. Your response has been recorded" and you will know that your survey responses have been received.*

Thank you!

Appendix G. OnTrack Educator Survey

INTRODUCTORY SCREEN

Welcome, and thank you for participating in the Educator Survey administered as a part of the evaluation of OnTrack Greenville.

Please know that results of this survey are confidential, and no findings will be reported that identify you or your school. The informed consent form on the next screen provides additional information on confidentiality and reporting of results.

Your survey link is unique to you; no one else will be able to use your link. If you need to stop while completing the survey: finish the page you are on, click the Next button, and then close your browser window. You can resume the survey at any point by clicking the link in your email invitation. Your answers will be saved.

To thank you for completing this survey, you will receive five free movie rentals from Redbox. At the end of this survey, you will be redirected to a separate page where you will enter your name and email address. A member of the research team will send the movie rental codes to the email address you provide. Your personal information will not be connected to your survey responses in any way, maintaining your confidentiality at all times.

If you have questions at any point during the survey, contact Tracy Waters at tracy.waters@furman.edu or (864) 294-3803.

Click the Next button to view the informed consent and begin the survey.

Please select your choice from the options below. To view and/or print the informed consent form, click **here**.

By choosing "Agree" you acknowledge that you understand the general purposes of your involvement in the study described, have decided that you will participate, and understand that you can withdraw at any time.

If you select "Disagree" the survey will end.

a. Agree
b. Disagree → END OF SURVEY

Q1. What is the name of your school? [If you work at multiple schools, check all that apply.]
a. School 1
b. School 2
c. School 3
d. School 4
e. Other School: _____

Q2. What is your current role in the school(s)? [Check all that apply]
a. Teacher
b. Administrator
c. Title I Staff
d. Guidance, Social Work, Mental Health, or other Case Management Staff
e. Other Professional Staff: _____

Q3. What is your highest level of education?

a. High School diploma or equivalency
b. Associate's degree
c. Bachelor's degree
d. Master's degree
e. Master's degree + 30
f. Doctoral degree

Q4. IF Q2=Teacher, Which of the following grades do you teach? [Check all that apply.]

a. 6th grade
b. 7th grade
c. 8th grade

Q5. IF Q2=Teacher, Which of the following courses do you teach? [Check all that apply]

a. Math
b. ELA
c. Social Studies
d. Science
e. Special Education
f. Related arts courses
g. Other: _____

Q6. How many years have you been employed at your school, including this school year?

a. This is my first year
b. 2 – 4 years
c. 5 – 7 years
d. 8 – 10 years
e. 11 or more years

Q7. How many years have you worked in the field of K-12 education, in total, including this year?

a. This is my first year
b. 2 – 4 years
c. 5 – 7 years
d. 8 – 10 years
e. 11 or more years

Q8. Overall, how much do you agree or disagree with the following statements?

Responses: (1) Completely Agree, (2) Somewhat Agree, (3) Somewhat Disagree, and (4) Completely Disagree.

a. Educators in this school are able to get through to the most difficult students.
b. Educators here are confident that they will be able to motivate their students.
c. If it seems like a child doesn't want to learn, educators here give up.
d. Educators here have the skills needed to produce meaningful student learning.

Q9. Overall, how much do you agree or disagree with the following statements?

Responses: (1) Completely Agree, (2) Somewhat Agree, (3) Somewhat Disagree, and (4) Completely Disagree.

a. Educators in this school believe that every student can learn.
b. Students in this school come to school ready to learn.
c. Students in this school just aren't motivated to learn.

Q10. Overall, how much do you agree or disagree with the following statements?

Responses: (1) Completely Agree, (2) Somewhat Agree, (3) Somewhat Disagree, and (4) Completely Disagree.

a. Educators in this school do not have the skills to deal with student disciplinary problems.
b. The opportunities in this community help ensure that students will learn.
c. Learning is more difficult at this school because students are worried about their safety.
d. Drug and alcohol abuse in this community make it difficult for students here.

Q11. Overall, how much do you agree or disagree with the following statements?

Responses: (1) Completely Agree, (2) Somewhat Agree, (3) Somewhat Disagree, and (4) Completely Disagree.

a. Educators at this school routinely analyze information together (such as student work and data) to inform practices.
b. Educators at this school routinely develop strategies for improvement based on data they have analyzed.
c. Educators at this school have effective practices for working together.
d. My school's schedule allows adequate time for educator collaboration.

Q12. Do you participate in an OnTrack Team (a.k.a. EWRS Team) at your school?
a. Yes
b. No

Q13. How familiar are you with OnTrack Greenville and the following OnTrack interventions available at your school?

Responses: (1) Very familiar, (2) Familiar, (3) Somewhat familiar, and (4) Not at all familiar

a. OnTrack Greenville
b. Public Education Partners (PEP) Literacy Coaches
c. School-Based Health Center (GHS)
d. Communities In Schools (CIS)
e. BELL Summer Program
f. Teen Leadership course

<u>ONTRACK TEAMS (Questions 14 – 21) [DISPLAY THIS SECTION IF Q12 = Yes]</u>

Q14. How often did you participate in OnTrack Team (EWRS Team) meetings at your school this year?

a. Every week
b. About two times per month
c. About once per month
d. About every other month
e. Only once or twice this year

Q15. The following statements describe how OnTrack Teams hope to make decisions when matching students to appropriate interventions. How much do you agree or disagree with the following statements?

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, and 5) Completely Agree.

When matching students to appropriate interventions…
a) …discussions of students focus on strengths and solutions.
b) …decisions are made collaboratively with OnTrack Team members.
c) …decisions are made collaboratively with students.
d) …decisions are made collaboratively with families.

Q16. The statements below reflect how OnTrack Greenville hopes team members interact with each other. Overall, how much do you agree or disagree that team members are achieving these behaviors?

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, and 5) Completely Agree.

OnTrack Team members at my school are…
a. …sharing information and communicating effectively.
b. …following through on assigned tasks.
c. …reporting back to the team on progress and/or barriers.
d. …working together to discover different approaches to the EWRS process.
e. …adapting solutions to improve student success.

Q17. How much do you agree or disagree with the following statements?

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, and 5) Completely Agree.

a. The right types of interventions exist at my school to meet student needs.
b. The right types of interventions exist in my community to meet student needs.
c. Most students who have needs are matched to an intervention(s).
d. When identified as in need of assistance, students generally are matched with the right intervention(s).
e. When identified students are matched with an intervention(s), the intervention(s) seems to meet the students' needs.

Q18. [IF Q17a=1, 2, or 3]: What additional types of interventions are needed to help meet student needs? [open-ended essay-size test box]

Q19. [IF Q17b=1, 2, or 3]: What are the reasons that some students who have needs are not matched to an intervention(s)? [Check all that apply.]
a. The intervention(s) cannot serve enough students.
b. The right type of intervention(s) is not available at my school or in my community.
c. Caregivers do not provide consent for students to participate in the intervention(s).
d. Other, please specify: _____ [ESSAY-SIZE TEXT BOX].

Q20. The following partners serve students identified as needing assistance by the OnTrack Teams. How often does your OnTrack Team match identified students to these OnTrack interventions?

Responses: 1) Rarely, 2) Once in a while, 3) Sometimes, 4) Often, and 5) All the time.

a. Communities In Schools (CIS)
b. School-Based Health Center (GHS)

Q21. What feedback or suggestions, if any, do you have about how the OnTrack Team in your school can be improved? [Essay-sized text-box.]

COMMUNITIES IN SCHOOLS (Questions 22 – 26) [DISPLAY SECTION IF Q13c=1, 2, or 3]

Q22. Have you referred students to services provided by Communities In Schools (CIS)?
a. Yes
b. No

Q23. Thinking about your school, indicate how much do you agree or disagree with the following statements.

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

CIS has helped participating students…
a. …improve their attendance.
b. …improve their behavior
c. …improve course performance in Math.
d. …improve course performance in English/language arts.

Q24. Thinking about your school, indicate how much do you agree or disagree with the following statements.

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

CIS has helped participating students…
a. …improve their attitude toward learning and school.
b. …become more engaged in learning.
c. …build relationships with caring adults.
d. …improve their educational self-perception.

Q25. Please indicate the extent to which you agree or disagree with the following statements.

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

a. CIS is well-integrated with other interventions and services for students at my school.
b. CIS Student Support Specialists in my school have developed good relationships with the students they serve.
c. This year, CIS Student Support Specialists have contributed to an improvement in our school climate.

Q26. What feedback or suggestions, if any, do you have about how the CIS program in your school can be improved? [Essay-sized text box].

SCHOOL-BASED HEALTH CENTERS: IMPACT QUESTIONS (Questions 27 – 29) [DISPLAY IF Q13b=1, 2 or 3.]

Q27. Have you referred students to the School-Based Health Center staff?
a. Yes
b. No

Q28. Please indicate the extent to which you agree or disagree with the following statements:

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

a. The School-Based Health Center in this school is well-integrated with other interventions and services for students.
b. The School-Based Health Center staff in this school have developed good relationships with the students they serve.
c. This year, School-Based Health Center staff have contributed to an improvement in our school climate.

Q29. What feedback or suggestions, if any, do you have about how the School-Based Health Center in your school can be improved? [Essay-sized text box]

TEEN LEADERSHIP COURSE (Questions 30 – 31). [DISPLAY SECTION IF Q13e= 1, 2, or 3]

Q30. Please indicate the extent to which you agree or disagree with the following statements:

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

a. The Teen Leadership course in my school is well-integrated with other interventions and services for students.
b. The Teen Leadership teachers in my school have developed good relationships with the students they serve.
c. This year, Teen Leadership teachers have contributed to an improvement in our school climate.

Q31. What feedback or suggestions, if any, do you have about how the Teen Leadership course in your school can be improved? [Essay-sized text box]

PUBLIC EDUCATION PARTNERS (PEP) LITERACY COACHES (Questions 32 – 33) DISPLAY SECTION IF Q13a=1, 2, or 3

Q32. Please indicate the extent to which you agree or disagree with the following statements:

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

a. PEP Literacy Coaching in this school is well-integrated with other professional development/coaching opportunities.
b. The PEP Literacy Coaches in this school have developed good relationships with the teachers they coach.
c. This year, PEP Literacy Coaches have contributed to an improvement in our school climate.

Q33. What feedback or suggestions, if any, do you have about how PEP Literacy Coaching in your school can be improved? [Essay-sized text box]

BELL SUMMER PROGRAM (Questions 34 – 35) [DISPLAY SECTION IF Q13d=1, 2, or 3]

Q34. Please indicate the extent to which you agree or disagree with the following statements:

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

a. The BELL Summer Program in this school is well-integrated with other interventions and services for students.
b. The BELL Summer Program staff in this school have developed good relationships with the students they serve.
c. This year, the BELL Summer Program staff have contributed to an improvement in our school climate.

Q35. What feedback or suggestions, if any, do you have about how the BELL Summer Program at your school can be improved? [Essay-sized text box]

PUBLIC EDUCATION PARTNERS DISPLAY SECTION IF [Q1=A, C, OR D] AND [Q2=TEACHER] AND [Q5=MATH OR ELA]

Q36. Did you work with a PEP Literacy Coach or PEP Mathematics Coach during this academic school year?
a.Yes
b. No

[Display Questions 37 – 45 IF Q36=Yes]

Q37. How often did you work with a PEP Coach this year?
a.Once a semester
b. Once a quarter
c. Monthly
d. Weekly
e. Other: _____

Q38. How many total days was the PEP Coach in your classroom during the year?
a.15 or more days
b. 11 – 15 days
c. 6 – 10 days
d. 1 – 5 days
e. 0 days

Q39. Who typically initiated the collaboration between you and a PEP Coach?
a.PEP Coach
b. You
c. Teaching Colleague
d. Administrator
e. Other: _____

Q40. What student learning outcomes did you and the coach attempt to improve upon? [Essay-sized text box]

Q41. What teaching practices/strategies were focused on during your collaboration? [Essay-sized text box]

Q42. Which of the following coaching activities occurred during your collaboration(s) with the PEP Coach? [Check all that apply]
a.Sharing of resources
b. Meeting to plan curriculum and/or instruction
c. In-class modeling of instruction
d. Observation of your teaching/students
e. Collection of student formative assessment data
f. Debriefing of instruction with student data
g.Other: _____

Q43. Which of the following coaching activities did you find most valuable during your collaboration(s) with the PEP Coach? [Check all that apply]
a.Sharing of resources
b. Meeting to plan curriculum and/or instruction
c. In-class modeling of instruction
d. Observation of your teaching/students
e. Collection of student formative assessment data
f. Debriefing of instruction with student data
g.Other: _____

Q44. How likely are you to recommend literacy coaching to a teaching colleague?
a.Very likely
b. Likely
c. Somewhat likely
d. Not at all likely

Q45. Please indicate the extent to which you agree or disagree with the following statements.

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, and 5) Completely Agree.

a. More teachers at my school should participate in literacy coaching.
b. I regularly incorporate teaching practices I learned through coaching into my instruction.
c. My students have benefited from my participation in literacy coaching.
d. I feel confident incorporating teaching practices I learned through coaching into my instruction.
e. Literacy coaching has enhanced my instruction.
f. My students are more engaged in class when I use teaching practices I learned through literacy coaching.

SCHOOL-BASED HEALTH CENTERS: IMPLEMENTATION QUESTIONS (Questions 46 – 58)

The following questions are to get a sense of your level of awareness about the School-Based Health Center services and processes. Please answer each question to the best of your ability.

Q46. On what days are the School-Based Health Center staff available at your school (Check all that apply)?
   a. Monday
   b. Tuesday
   c. Wednesday
   d. Thursday
   e. Friday
   f. It varies by week or month
   g. School-Based Health Center staff are not available at my school, only Telemedicine
   h. I don't know

Q47. On a weekly basis, what is the best way to let school personnel know when School-Based Health Center staff are on site? [Essay-sized text box]

Q48. On a weekly basis, what is the best way to let students and parents know when School-Based Health Center staff are on site? [Essay-sized text box]

Q49. The following is a list of ways students could be referred to the School-Based Health Center health care provider. Of these, which referral processes are available at your school?

Responses: 1) Yes, available at my school, 2) No, not available at my school, and 3) Unsure if available at my school

a. A parent may make a request for their child to be seen by my school's School-Based Health Center health care provider.
b. The school nurse can refer someone to the School-Based Health Center health care provider.
c. A teacher, staff member, or administrator may refer a student to the School-Based Health Center health care provider.
d. A student may be referred to the School-Based Health Center health care provider through the OnTrack Teams (Early Warning and Response System).
e. A student may refer another student to the School-Based Health Center health care provider.

Q50. The following is a list of health and/or health-related services. Please indicate if the service is available at your school.

Responses: 1) Yes, available at my school, 2) No, not available at my school, and 3) Unsure if available at my school

a. Sports Physicals
b. Care for acute illness (such as cough/cold, allergies, headache, or stomach-ache)
c. Immunization management
d. Chronic illness management (such as asthma, high blood pressure, etc.)
e. ADHD evaluations with physicians
f. Referrals for specialty care (such as an endocrinologist or gastroenterologist)

[Page Break]

g. Referral to primary care practice for a "medical home"
h. Assistance with Medicaid eligibility application
i. Assistance with accessing health-related community resources
j. Diagnosis and treatment of illnesses with over-the-counter medicine available at school
k. Treatment of illnesses with over-the-counter medicine sent from home in original bottle with parent permission
l. Diagnosis and treatment of illnesses with a prescription medicine

[Page Break]

m. Decision-making around sending a child back to class, home, or to hospital, based on clinical judgment
n. Basic first aid
o. Wound care (e.g. removing stitches or redressing a bandage)
p. Administration of prescription medicine that is sent to school with doctor's note and in original bottle

Q51. [DISPLAY ONLY THOSE OPTIONS SELECTED IN Q50]. Below are some of the health and/or health-related services that you said are available at your school. Please check the appropriate box(es) for who at your school provides that service. If services are provided by both the School Nurse and the School-Based Health Center health care provider, please check both columns.

Responses: 1) School Nurse, 2) School-Based Health Center health care provider, 3) Unsure

a. Sports Physicals
b. Care for acute illness (such as cough/cold, allergies, headache, or stomach ache)
c. Chronic illness management (such as asthma, high blood pressure, etc.)

[Page Break]

d. Assistance with accessing health-related community resources
e. Diagnosis and treatment of illnesses with over-the-counter medicine available at school
f. Treatment of illnesses with over-the-counter medicine sent from home in original bottle with parent permission

[Page Break]

g. Decision making around sending a child back to class, home, or to hospital based on clinical judgment
h. Wound care (e.g. removing stitches, redressing a bandage)

Q52. Have you interacted with the School-Based Health Center staff at your school this school year?
a.Yes
b. No
c. Don't know

Q53. What are the names of the School-Based Health Center staff at your school? [Open response]

Q54. Have you referred a student to the School-Based Health Center this school year?
a.Yes
b. No
c. Don't know

Q55. What additional services, if any, would you like to see provided by the School-Based Health Center staff at your school? [Essay-sized text box]

Q56. Are there barriers to students accessing the School-Based Health Center staff?
a.Yes
b. No
c. I don't know

Q57. DISPLAY IF Q56=YES. What are the barriers to students accessing the School-Based Health Center staff? [Essay-sized text box]

Q58. DISPLAY IF Q56=YES. Do you have any recommendations on how to remove potential barriers and encourage more students to use the School-Based Health Center services that are available? [Essay-sized text box]

<u>End of Survey Questions</u>

Q59. Use the space below to comment on any aspects of OnTrack Greenville that we have not covered or to provide any general impressions that would be helpful for us to know. [Essay-sized text box]

Q60. What is your gender?
a. Female
b. Male
c. Prefer not to say

Q61. What is your race/ethnicity? [Select all that apply.]
a. Black
b. Asian American
c. White
d. Hispanic American
e. Native American
f. Prefer not to say [MAKE MUTUALLY EXCLUSIVE]
g. Other (please specify): _____

Appendix H. Principal/Assistant Principal Interview Protocol

Interviewee Name: _____

School Name: _____

Date of Interview: _____ **Start Time**: _____ **End Time**: _____

Interviewer's Name: _____

Introductions >>>>>>>>>>>>>

As you may remember, we interviewed principals at the four OnTrack project schools several times during the grant to hear your perceptions of CIS. As we mentioned then, our purpose in interviewing principals is to inform the implementation of CIS at the four schools (we are not looking at not impact—Riley Institute is doing the impact study on CIS). We have also interviewed the Student Support Specialists and the EWRS Team Facilitator at your school.

Please feel free to be open and candid in your responses to our questions, as the intent is to improve the program. We will summarize the interviews/feedback/recommendations and discuss findings with CIS of Greenville leadership (and Riley Institute) but will not report comments associated with names of individuals. With your permission, we would like to record this interview so that we can transcribe the conversation and summarize it more accurately. The tape recording will be destroyed upon transcription and the transcript will not be shared outside of SERVE project staff.

Any questions before we begin?

Just to identify the recording, I'll start it and record the school name. Here we go.
Interviewer: My name is _____. It is _____(date). This is an interview with the principal/vice principal at _____ (name of school).

CIS Implementation and Impact

1. What, if anything, went really well with the implementation of CIS at your school this year?

2. Flipside, what, if anything, didn't go very well this year in the implementation of CIS?

3. Do you feel like the Student Support Specialists in your school identified and worked with the right students (ones that benefitted from case management) this year? That is, were the right students selected for case management? Were there about the right number of rollovers versus new students served?

4. During the fall we heard that some schools had to consolidate their CIS space; on the other hand, we also heard that most schools had an On Track period that allowed for the Student Support Specialists to work with their case-managed students. Can you talk to us about the

logistics of CIS in your school this year (space and time for Student Support Specialists to meet with students)?

5. How did the CIS provision of Tier I services go this year at your school?

6. During the fall we heard that at some schools Student Support Specialists worked mostly on behavioral needs (socioemotional development, anger management, etc.) versus academic needs. To what extent was that true in your school? Please elaborate. Does CIS/Student Support Specialists offer the right level of support for case-managed students' academic needs in your school? If not, what additional supports for academic needs could be addressed by Student Support Specialists (e.g., study skills, homework help, reading more?)?

7. What kinds of impacts do you think CIS had on case-managed students this year (receiving Tier II or III services)? Why? Can you give some examples of the types of students in which CIS really seemed to make a difference in attendance, attitude toward school or approach towards schoolwork?

CIS/School Fit

8. Will you be continuing with 3 Student Support Specialists next year? Why or why not?

9. Have you perceived any tension among teachers/school staff? If so, how are these tensions resolved?

10. After three years of implementation, what lessons have you learned in implementing CIS that other schools might need to know when they start with CIS?

11. If you were in charge of CIS, how would you select schools (based on what criteria) that might be the best fit/context for successful implementation of their model? That is, what are the characteristics of a school that might be a good fit for implementing the CIS model?

12. Is there anything else you'd like to tell us?

***Thank you so much for your participation*.**

Appendix I. Unmatched Regressions

Appendix I presents the coefficients, standard errors, and effect sizes for the CIS treatment variable from the unmatched regressions. Ordinary least square and logistic regressions were estimated using all observations for which complete data were available. The tables below are equivalent to the tables in Section V.D; however, these regressions include the full sample, rather than just the matched students. In the unmatched regressions, researchers controlled for race, gender, grade level, English proficiency, special education status, free and reduced meal eligibility, and baseline outcome variables when available. The covariate-adjusted CIS regression coefficient and the robust standard errors are presented in the tables. The coefficients were converted into Cohen's d, a measure of effect size. By comparing the unmatched results to the matched comparisons, one can see how the matching process changed the results.

Researchers compared student attendance outcomes between students receiving treatment services from CIS and students attending treatment, district, and state schools in the 2016-17 academic year. As shown in Table 82, CIS students had significantly lower average daily attendance rates ($p < 0.001$) and significantly higher rates of chronic absenteeism ($p < 0.001$) than students attending treatment, district, and state comparison schools in the 2016-17 academic year.

Table 82. Confirmatory Impact Unmatched Regression Results for Student Attendance AY 2016-17

	CIS vs. Comparison Students (Treatment Schools)		CIS vs. Comparison Students (District schools)		CIS vs. Comparison Students (State Schools)	
	Unmatched Regression (n = 1,913)	Effect Size	Unmatched Regression (n = 3,493)	Effect Size	Unmatched Regression (n = 45,164)	Effect Size
Average Daily Attendance	**-3.24***** (0.72)	-0.54	**-3.51***** (0.72)	-0.69	**-3.76***** (0.73)	-0.62
Chronically Absent	**0.96***** (0.19)	0.53	**1.14***** (0.18)	0.63	**1.02***** (0.17)	0.56

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measure.

Researchers compared student attendance outcomes between students receiving treatment services from CIS and students attending treatment, district, and state schools in the 2017-18 academic year. As shown in Table 83, CIS students had significantly lower average daily attendance rates ($p < 0.001$) and significantly higher rates of chronic absenteeism ($p < 0.001$) than students attending treatment and district comparison schools in the 2017-18 academic year.

Table 83. Confirmatory Impact Unmatched Regression Results for Student Attendance AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)	Communities In Schools vs. Comparison Students (District schools)

	Unmatched Regression (n = 1952)	Effect Size	Unmatched Regression (n = 3597)	Effect Size
Average Daily Attendance	**-3.48*** (0.56)	-0.72	**-3.26*** (0.56)	-0.66
Chronically Absent	**1.42*** (0.19)	0.78	**1.29*** (0.19)	0.71

†$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measure.

Researchers compared student behavioral outcomes between students receiving treatment services from CIS and students attending treatment, district, and state comparison schools during the 2016-17 academic year. As shown in Table 84, CIS students were significantly more likely to receive at least one behavioral referral, at least one hour of ISS, and at least one day of OSS ($p < 0.001$) and they received more behavioral referrals, hours of ISS, and days of OSS ($p < 0.001$) when compared to students attending treatment, district, and state schools during the 2016-17 academic year.

Table 84. Confirmatory Impact Unmatched Regression Results for Student Behavior AY 2016-17

	CIS vs. Comparison Students (Treatment Schools) (AY 2016-17)		CIS vs. Comparison Students (District Schools) (AY 2016-17)		CIS vs. Comparison Students (State Schools) (AY 2016-17)	
	Unmatched Regression (n = 1919)	Effect Size	Unmatched Regression (n = 3504)	Effect Size	Unmatched Regression (n = 45164)	Effect Size
Any Behavioral Referral	**1.38*** (0.19)	0.76	**1.68*** (0.19)	0.92	**1.41*** (0.19)	0.78
# Behavioral Referrals	**4.23*** (0.52)	1.15	**4.39*** (0.52)	1.23	**3.17*** (0.43)	0.77
Any ISS	**1.37*** (0.17)	0.76	**1.20*** (0.17)	0.66	**1.35*** (0.16)	0.74
# Hours ISS	**4.73*** (0.91)	0.59	**3.08*** (0.91)	0.28	**1.03*** (0.19)	0.65
Any OSS	**1.41*** (0.17)	0.78	**1.57*** (0.17)	0.87	**1.43*** (0.16)	0.79
# Days OSS	**2.14*** (0.36)	0.79	**1.99*** (0.36)	0.60	**1.05*** (0.17)	0.76

†$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measure.

^ These variables are different in the state dataset: number of ISS and number of OSS

Researchers compared student behavioral outcomes between students receiving treatment services from CIS and students attending treatment and district schools during the 2017-18 academic year. As

shown in Table 85, CIS students were significantly more likely to receive at least one behavioral referral, at least one hour of ISS, and at least one day of OSS ($p < 0.001$) and they received more behavioral referrals, hours of ISS, and days of OSS ($p < 0.001$) when compared to students attending treatment and district schools during the 2017-18 academic year.

Table 85. Confirmatory Impact Unmatched Regression Results for Student Behavior AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools) (Spring 2018)		Communities In Schools vs. Comparison Students (District Schools) (Spring 2018)	
	Unmatched Regression (n = 1998)	Effect Size	Unmatched Regression (n = 3673)	Effect Size
Any Behavioral Referral	**1.31*** (0.19)	0.72	**1.59*** (0.19)	0.88
# Behavioral Referrals	**4.41*** (0.56)	1.22	**4.44*** (0.56)	1.15
Any ISS	**1.60*** (0.17)	0.88	**1.20*** (0.16)	0.66
# Hours ISS	**6.18*** (0.90)	1.03	**3.24*** (0.92)	0.26
Any OSS	**1.69*** (0.17)	0.93	**1.91*** (0.17)	1.05
# Days OSS	**3.23*** (0.43)	1.18	**3.07*** (0.43)	0.90

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measure.

Researchers compared course performance outcomes between students receiving treatment services from CIS and students attending treatment, district, and state comparison schools during the 2016-17 academic year. As shown in Table 86, CIS students received significantly lower average scores on the MAP Math ($p < 0.001$) and MAP Reading ($p < 0.001$) assessments when compared to students attending treatment and district schools during the 2016-17 academic year. Additionally, CIS students received significantly lower scores on the SC Ready Math ($p < 0.05$) and SC Ready ELA ($p < 0.05$) assessments when compared to students attending district schools during the 2016-17 academic year. However, when compared to students attending treatment schools and states schools, CIS students did not receive significantly different scores on the SC Ready Math or ELA assessments during the 2016-17 academic year.

Table 86. Confirmatory Impact Unmatched Regression Results for Course Performance AY 2016-17

	CIS vs. Comparison Students (Treatment Schools)		CIS vs. Comparison Students (District Schools)		CIS vs. Comparison Students (State Schools)	
	Unmatched Regression (n = 1774)	Effect Size	Unmatched Regression (n = 3353)	Effect Size	Unmatched Regression (n = 42480)	Effect Size

Spring MAP RIT - Math	**-7.51*** ** (1.43)	-0.45	**-16.9*** ** (1.40)	-1.03	---	---
Spring MAP RIT - Reading	**-8.48*** ** (1.68)	-0.49	**-16.8*** ** (1.65)	-1.05	---	---
SC READY - Math	-1.81 (6.75)	-0.02	**-16.8*** (6.61)	-0.21	-8.99 (6.65)	-0.11
SC READY - ELA	-2.05 (7.19)	-0.02	**-16.5*** (7.05)	-0.20	-10.3 (7.10)	-0.12

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measure.
Note. Data for the MAP assessment were only available at the district level.

Researchers compared course performance outcomes between students receiving treatment services from CIS and students attending treatment and district comparison schools during the 2017-18 academic year. As shown in Table 87, CIS students received significantly lower average scores on the SC Ready Math ($p < 0.001$) and SC Ready ELA ($p < 0.001$) assessments when compared to students attending treatment and district schools during the 2017-18 academic year.

Table 87: Confirmatory Impact Unmatched Regression Results for Course Performance AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Unmatched Regression (n = 1840)	Effect Size	Unmatched Regression (n = 3439)	Effect Size
SC READY - Math	**-0.45*** ** (0.06)	-0.56	**-0.88*** ** (0.06)	-0.85
SC READY - ELA	**-0.48*** ** (0.07)	-0.55	**-0.92*** ** (0.07)	-0.91

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics, grade, and pretreatment outcome measure.
Note. Greenville County Schools stopped administering the MAP assessment to all middle school students in AY 2017-18.

Researchers compared outcomes measuring students' relationships with adults in their schools between students receiving treatment services from CIS and students attending treatment and district comparison schools during the 2016-17 academic year. As shown in Table 88, there were no significant differences in relationships with teachers or caring adults between CIS students and students attending treatment schools during the 2016-17 academic year. However, when compared to students attending district schools, CIS students reported significantly stronger relationships with teachers ($p < 0.01$).

Table 88. Exploratory Outcome Unmatched Regression Results for Relationships with Adults AY 2016-17

	Communities In Schools vs. Comparison Students	Communities In Schools vs. Comparison Students

	(Treatment Schools)		(District Schools)	
	Unmatched Regression (n = 1150)	Effect Size	Unmatched Regression (n = 2712)	Effect Size
Relationships with Teachers	0.00 (0.09)	0.00	**0.25**** (0.08)	0.32
Relationships with Caring Adults	-0.01 (0.09)	-0.01	0.04 (0.08)	0.05

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics and grade.

Researchers compared outcomes measuring students' relationships with adults in their schools between students receiving treatment services from CIS and students attending treatment and district comparison schools during the 2017-18 academic year. As shown in Table 89, CIS students reported significantly stronger relationships with teachers ($p < 0.05$) than students attending treatment schools during the 2017-18 academic year. Additionally, when compared to students attending district schools, CIS students reported significantly stronger relationships with teachers ($p < 0.001$).

Table 89. Exploratory Outcome Unmatched Regression Results for Relationships with Adults AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Unmatched Regression (n = 1346)	Effect Size	Unmatched Regression (n = 2591)	Effect Size
Relationships with Teachers	**0.20*** (0.09)	0.25	**0.29***** (0.08)	0.36
Relationships with Caring Adults	0.10 (0.09)	0.12	0.06 (0.08)	0.07

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics and grade.

Researchers compared student self-confidence outcomes between students receiving treatment services from CIS and students attending treatment and district schools during the 2016-17 academic year. As shown in Table 90, CIS students reported significantly lower levels of academic perseverance ($p < 0.10$) than students attending treatment schools in the 2016-17 academic year. When compared to students attending district schools, CIS students reported lower levels of academic perseverance ($p < 0.05$) and higher levels of academic self-confidence ($p < 0.01$) during the 2016-17 academic year.

Table 90. Exploratory Outcome Unmatched Regression Results for Educational Self-Perception AY 2016-17

	Communities In Schools vs. Comparison Students	Communities In Schools vs. Comparison Students

	(Treatment Schools)		(District Schools)	
	Unmatched Regression (n = 1150)	Effect Size	Unmatched Regression (n = 2712)	Effect Size
Academic Perseverance	**-0.14†** (0.08)	-0.22	**-0.19*** (0.08)	-0.29
Academic Self-Confidence	-0.04 (0.07)	-0.06	**0.18**** (0.07)	0.30

†$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics and grade.

Researchers compared student self-confidence outcomes between students receiving treatment services from CIS and students attending treatment and district schools during the 2017-18 academic year. As shown in Table 91, there were no significant differences in self-confidence outcomes between CIS students and students attending treatment schools in the 2017-18 academic year. However, when compared to students attending district schools, CIS students reported lower levels of academic perseverance ($p < 0.05$) and academic self-confidence ($p < 0.05$) during the 2017-18 academic year.

Table 91. Exploratory Outcome Unmatched Regression Results for Educational Self-Perception AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Unmatched Regression (n = 1346)	Effect Size	Unmatched Regression (n = 2591)	Effect Size
Academic Perseverance	-0.07 (0.07)	-0.11	**-0.16*** (0.07)	-0.24
Academic Self-Confidence	0.01 (0.07)	0.02	**-0.18*** (0.07)	-0.28

†$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics and grade.

Researchers compared school engagement outcomes between students receiving treatment services from CIS and students attending treatment and district schools during the 2016-17 academic year. As shown in Table 92, CIS students reported significantly higher levels of school engagement ($p < 0.05$) than students attending treatment schools in the 2016-17 academic year. Additionally, when compared to students attending district schools, CIS students reported higher levels of school engagement ($p < 0.01$) during the 2016-17 academic year.

Table 92. Exploratory Outcome Unmatched Regression Results for School Engagement AY 2016-17

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Unmatched Regression (n = 1150)	Effect Size	Unmatched Regression (n = 2712)	Effect Size
School Engagement	**0.19*** (0.08)	0.25	**0.24**** (0.08)	0.31
School Belonging	-0.01 (0.10)	-0.01	0.07 (0.10)	0.08

†$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics and grade.

Researchers compared school engagement outcomes between students receiving treatment services from CIS and students attending treatment and district schools during the 2017-18 academic year. As shown in Table 93, CIS students reported significantly higher levels of school engagement ($p < 0.10$) than students attending treatment schools in the 2017-18 academic year. However, there were no significant differences on school engagement outcomes between CIS students and students attending district schools during the 2017-18 academic year.

Table 93. Exploratory Outcome Unmatched Regression Results for School Engagement AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Unmatched Regression (n = 1346)	Effect Size	Unmatched Regression (n = 2591)	Effect Size
School Engagement	**0.16†** (0.09)	0.21	0.11 (0.09)	0.14
School Belonging	0.08 (0.10)	0.09	0.07 (0.09)	0.08

†$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics and grade.

Researchers compared outcomes measuring student attitude toward learning between students receiving treatment services from CIS and students attending treatment and district schools during the 2016-17 academic year. As shown in Table 94, there were no significant differences in students' self-reported value of education between Cis students and students attending treatment and district schools during the 2016-17 academic year.

Table 94. Exploratory Outcome Unmatched Regression Results for Student Attitude toward Learning AY 2016-17

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Unmatched Regression (n = 1150)	Effect Size	Unmatched Regression (n = 2712)	Effect Size
Valuing Education	-0.02 (0.08)	-0.03	-0.01 (0.08)	-0.02

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics and grade.

Researchers compared outcomes measuring student attitude toward learning between students receiving treatment services from CIS and students attending treatment and district schools during the 2017-18 academic year. As shown in Table 95, there were no significant differences in students' self-reported value of education between Cis students and students attending treatment and district schools during the 2017-18 academic year.

Table 95. Exploratory Outcome Unmatched Regression Results for Student Attitude toward Learning AY 2017-18

	Communities In Schools vs. Comparison Students (Treatment Schools)		Communities In Schools vs. Comparison Students (District Schools)	
	Unmatched Regression (n = 1346)	Effect Size	Unmatched Regression (n = 2591)	Effect Size
Valuing Education	-0.04 (0.09)	-0.06	-0.11 (0.08)	-0.16

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Table presents the regression coefficient of the Communities In Schools variable and robust SE in parentheses from multivariate regressions that also control for student demographics and grade.

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