



# Transforming the American High School Experience:

NAF's Cohort Graduation Rates from  
2011–2015

May 22, 2017

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## Executive Summary

For more than 30 years, NAF has been working to transform the American high school experience by joining the corporate and education worlds to help ensure that students graduate high school and are prepared for college and careers. NAF’s education design incorporates an academy-development framework, alongside rigorous career-themed curricula and instruction, an advisory board of business and community leaders, and a continuum of work-based learning. Serving 96,741 students in 675 academies in 2016–2017, NAF works with educators, business, and industry partners to ensure successful implementation and delivery of the NAF model through professional development and continuous improvement toward greater student impact.

Since 2010, NAF has annually collected student- and academy-level data from a subset of school districts across its network in an effort to continuously improve its program. Tracking student performance through their high school experience allows NAF to examine impact across nationally measured outcomes and build on the existing evidence base. This report focuses on a cohort of NAF students tracked from Grade 9 through graduation from 10 districts in the NAF network: Porterville Unified School District, California; Pasadena Unified School District, California; Hartford Public Schools; Connecticut; Broward County Public Schools, Florida; Miami-Dade Public Schools, Florida; Charlotte-Mecklenburg Schools, North Carolina; New York City Department of Education, New York; Rochester City School District, New York; Dallas Independent School District, Texas; and Waco Independent School District, Texas. The study includes the analysis of data from a total of 613,002 students in 2011–2012, with 171,489 being freshmen, of which 7,406 were enrolled in a NAF academy

Specifically, this report—prepared by ICF, the external evaluator—seeks to examine the effect of the NAF design on high school student graduation rates. ICF used a longitudinal quasi-experimental design to track a group of NAF students alongside an equivalent comparison group of non-NAF students from Grade 9 to Grade 12. Overall comparisons between NAF and non-NAF, as well as subgroup comparisons based on students’ initial (Grade 9) on-track/at-risk status<sup>1</sup> were conducted to examine whether NAF services had greater impact on certain subgroups. Outcomes were also examined for full participation students who were retained in NAF at Grade 12 and those with partial participation (e.g., withdraw NAF before Grade 12). Specifically, the study examined the following research questions:

What is the graduation rate of NAF students compared to similar peers? How do NAF’s effects differ for at-risk students?

To what extent does the graduation rate vary with degree of participation in the NAF program (full vs partial participation)?

To what extent does the graduation rate vary with academy characteristics like theme, program length, and membership level)?

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<sup>1</sup> A student who fails to meet any of the four performance indicator benchmarks (e.g., GPA, credits earned, English course, and math course) is considered at-risk for not graduating from high school. Conversely, a student who meets all four indicators is considered on-track. See Appendix A for more details.

Key findings from these analyses are provided as follows:

## KEY FINDINGS

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### Overall NAF Students

**+3%**  
Points

Students enrolled in a NAF academy in Grade 9 are **3 percentage points more likely to graduate than their non-NAF counterparts**. The longitudinal study findings showed a 79.2% graduation rate for NAF students versus a 76.3% rate for non-NAF students in the comparison group.

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### At-risk NAF Students

**+5%**  
Points

Students enrolled in a NAF program in Grade 9 and were identified as at-risk of not graduating are **5 percentage points more likely to graduate from high school than their non-NAF counterparts**. The longitudinal study findings showed a 59.8% graduation rate for NAF students who were identified at-risk of not graduating by end of Grade 9 versus a 55.1% rate for non-NAF peers.

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### NAF Students with Full Program Participation

**+6%**  
Points

NAF students who completed the NAF program of study (fully participated in a NAF program until senior year) are **6 percentage points more likely graduate from high school than their non-NAF counterparts**. 87.2% of NAF students completing a full program graduated, compared to 81.2% of the non-NAF students. The results also imply that NAF services provide a greater impact for students completing all NAF requirements in comparison to students exiting the program without meeting all requirements. The graduation rate for NAF students for the full length of the program was more than 20 percentage points higher than those who exited the program without meeting all requirements (66.2%).

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### At-risk NAF Students with Full Program Participation

**+10%**  
Points

Students who were identified as at-risk AND participated in a high-quality NAF academy program through their senior year (full participation) are **10 percentage points more likely to graduate than their non-NAF counterparts**. At-risk NAF students who remained in the program through Grade 12 graduated at a higher rate (72.7%) than did their non-NAF peers (62.5%)

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In 2016–2017, there are 28,253 Grade 9 and 25,658 Grade 10 students participating in NAF. Assuming they complete all NAF requirements during participation (full participation), this would equate to 3,235 (6 percentage points) more NAF students graduating high school on time across the network than there

would be otherwise. High school graduation is the gateway to the continued growth and development of our youth and our communities. The potential long term impact of students not graduating spreads beyond the lives of those students and their families. For example, according to the report “By the numbers: Dropping out of High School” (Breslow, 2012), a youth who drops out of high school can expect to earn \$10,386 less annually than a high school graduate, and \$36,424 less annually than a college graduate. In addition, the report showed that a youth who does not graduate from high school could cost taxpayers an average of \$292,000 over a lifetime. Based on values from the report, NAF calculated the following numbers to demonstrate the potential long-term impact of 3,235 students **not** graduating from high school.

## IMPLICATIONS



According to the U.S. Census Bureau, there were approximately 3,965,000 Grade 9 students nationally in October 2015. If districts improve the graduation rate of these Grade 9 students across the country in the same manner as NAF has accomplished with students who fully participate in a NAF academy, they could increase the graduate rate by six percentage points, which is nearly a quarter of a million more students (237,900) graduating at the end of their senior year.

Overall, these findings suggest that NAF academies in the 10 school districts in this study have been successful in improving the graduation rate of their students compared to their peers. In particular, NAF academies have been successful in targeting and supporting at-risk student populations and providing a pathway for students to be successful. The results also imply that NAF services provide a greater impact for students remaining in the program through graduation in comparison to students exiting the program prior to graduation. Retaining students in the program could be an effective way to increase the likelihood of graduation. The 10 districts in this study illuminate the effect of NAF participation on high school graduation.

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## Introduction

NAF is a national network of education, business, and community leaders working together to ensure high school students are college-, career-, and future-ready. NAF’s educational design ignites students’ passion for learning and gives businesses the opportunity to shape America’s future workforce by transforming the learning environment to include science, technology, engineering, and mathematics (STEM)-infused industry-specific curricula and work-based learning experiences culminating with internships. Since 1982, NAF has partnered with high schools—especially in high-need communities—to enhance school systems at a low cost by implementing NAF academies—rigorous, career-themed learning communities in traditional high schools. While the NAF design is effective for all students and communities when implemented with fidelity, districts and communities with large populations of at-risk/high-need students are targeted for partnerships due to the potential for greater impact and benefit to the students. This is exemplified by the fact that NAF enrollment consists of 69% free-and-reduced lunch students compared to 48% nationally, and 65% minority students (Black and Hispanic) compared to 44% nationally.

To evaluate the effectiveness and impacts of the NAF program, NAF partnered with ICF to conduct a study with longitudinal quasi-experimental design (QED) to track academic performance and graduation of a cohort of NAF students and their comparable non-NAF peers over the course of their high school experience. The study included data from 10 school districts in six states located coast-to-coast, from large urban school districts to small rural schools. In addition to examining the overall program effectiveness, this study also evaluated the relationship between student outcomes and NAF academy characteristics (e.g., membership level, program length, and academy themes) to understand the program features that were related to the largest impacts.

### Participating Districts

- ✓ Porterville, CA
- ✓ Pasadena, CA
- ✓ Hartford, CT
- ✓ Broward, FL
- ✓ Miami-Dade, FL
- ✓ Charlotte-Mecklenburg, NC
- ✓ New York City, NY
- ✓ Rochester, NY
- ✓ Dallas, TX
- ✓ Waco, TX

## Background

During the 2016–2017 school year, 96,741 students attended 675 NAF academies across 36 states, including Washington, D.C. and the U.S. Virgin Islands. In 2016, NAF academies reported 96% of seniors graduated, with 92% of graduates planning to go to college.

Most NAF academies across the country are organized around five career themes, as follows:

- The **Academy of Finance** connects high school students with the world of financial services and personal finance, offering a curriculum that covers banking and credit; financial planning; and global finance, securities, insurance, accounting, and economics.
- The **Academy of Information Technology** prepares students for career opportunities in programming, database administration, web design and administration, digital networks, and other areas in the expanding digital workplace.

- The **Academy of Engineering** answers an acute need for engineers in this country by educating high school students in the principles of engineering and providing content in the fields of electronics, biotechnology, aerospace, civil engineering, and architecture.
- The **Academy of Health Sciences** addresses the critical achievement gap in STEM fields and develops a pipeline of students prepared to pursue health-related degrees and professions in biotechnology, genetics, nursing, therapeutics, and diagnostics.
- The **Academy of Hospitality & Tourism** helps students chart career paths in one of the world's largest industries, from hotel and event management to sports and entertainment, and includes the study of geography, economics, and world cultures.

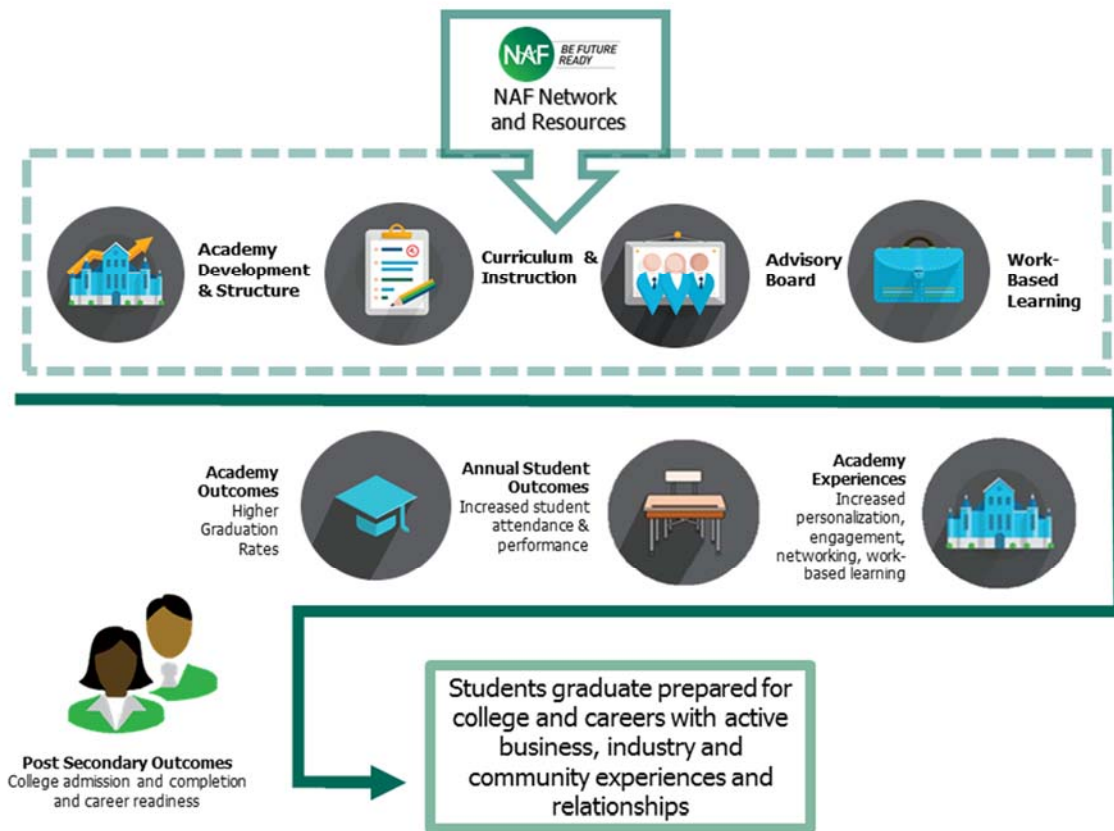
The NAF Career Academy model is built around four key elements of practice: 1) academy development and structure, 2) rigorous career-themed curriculum and instruction, 3) an advisory board of business and community leaders, and 4) a continuum of work-based learning. These elements serve as the foundation of the NAF logic model (see Exhibit 1 for NAF's approach).

NAF academies are structured as small, focused learning communities that fit within and enhance high school systems. NAF academies encourage open enrollment, provide a personalized learning environment that groups NAF students together, and stress continuous improvement through professional development and data collection and review. Moreover, NAF academies employ a recruitment strategy that specifically targets students at-risk of not graduating high school in four years, and includes a particular focus on addressing racial, ethnic or gender gaps. Academy programs include a rigorous career-themed curriculum that is integrated with core academic content and prepares students to be college-, career-, and future-ready. Instructional practices foster cross-curriculum collaboration to encourage students to make connections across subject areas and work-based experiences. Lastly, formal instructional supports (i.e., district-driven tutoring, mentoring, skills workshops, and credit recovery) exist to help students succeed in academy and core courses.

NAF's advisory board provides a bridge between schools and local business and community leaders. Advisory board members collaborate with educators to inform curricula and help organize work-based learning activities. Advisory boards give students the opportunity to build relationships with mentors early and learn from successful adults in their fields. NAF has established a target that advisory boards be composed of at least 80% or more members from business, government, or non-profits.



## Exhibit 1. NAF Approach



Work-based learning brings the classroom to the workplace and the workplace to the classroom. This instructional strategy provides students with a well-rounded skill set that goes beyond academics and includes the soft skills needed to succeed in college and the working world. NAF's approach to work-based learning is centered on a continuum of work-based learning experiences beginning with career awareness, progressing to career exploration, and culminating in career preparation activities, including internships. Representatives from the business community speak to classes, host college and career skills workshops, and take part in mock interviews. Students have the opportunity to tour worksites and network with and shadow business professionals. Work-based learning culminates in an internship that allows students to apply their classroom skills and learn more about what it takes to succeed in the workplace.

Together, these four elements are supported through NAF Career Academy resources such as professional development, a continuous improvement cycle, and the NAFTrack certification system. Professional development includes online tools and resources targeted to strengthen key aspects of the model, remote and onsite technical assistance, academy development programs, and professional development events. NAF's continuous improvement cycle is centered on NAF's annual academy assessment that lets academies review their progress against NAF's standards and a systemic on-the-ground evaluation process to validate the quality of the academy program of study. It is the first step in creating an action plan that will help academies implement the academy design with high fidelity and

also determine the academy's membership level (i.e., under review, member, certified, and model). NAFTrack certification is achieved through an online system designed to assess the college and career readiness of students through end-of-course exams, culminating projects, and internship assessments. Upon successful completion of NAFTrack certification, students are eligible for NAFTrack certified hiring, through which several of America's top companies have pledged to provide special consideration to graduates who have earned the certification.

Schools that fully implement the NAF model with high quality are then successful in establishing an academy experience that promotes personalization of learning, increased engagement by the employer community, and increased student exposure to work-based experiences. The development of a strong academy experience leads to benefits in annually assessed student outcomes (e.g., student academic performance toward high school graduation, career curriculum assessments, and internship assessments), which compound each year to result in long-term benefits (e.g., certifications, graduation, college and career readiness) and positive postsecondary outcomes (e.g., college admission and completion). Lastly, it is the combination of the NAF academy experience, annual high school outcomes, and long-term high school outcomes that result in NAF's primary impact of students graduating high school prepared for college and careers with active and ongoing community engagement experiences.

## Existing Evidence of NAF Programs' Effectiveness

Several studies have noted the role of career academies in positively effecting academic outcomes, including completing high school (Hayward & Tallmadge, 1985; Maxwell & Rubin 2000; Warner et al., 2015; Castellano, Richardson, Sundell, & Stone, 2016), particularly for students at-risk of dropping out of school (Kemple & Snipes, 2000).

In a previous external evaluation of NAF, Fernandez and Sun (2015) examined the effect of the NAF program on student performance indicators of attendance, grade point average (GPA), credit accumulation, English/math course performance, and graduation. Analysis of four-year student cohort data found that NAF students significantly outperformed non-NAF students in reaching on-track status on a few academic benchmark indicators. Moreover, NAF students were significantly more likely to graduate on time than similar non-NAF students by 1.7 percentage points. Findings were strongest for males, Hispanics, English language learners (ELL), and economically disadvantaged students identified by the end of Grade 9 as at-risk of not graduating. While limited to three school districts, findings from the 2015 evaluation showed that NAF academies in Broward County Public Schools, Florida; Miami-Dade Public Schools, Florida; and Porterville Unified School District, California were successful in targeting and supporting at-risk student populations and providing a pathway for students to be successful.

The current NAF longitudinal study builds on previous studies by expanding the sample to include 10 school districts. In addition, the study design is more rigorous by matching a NAF student to two non-NAF students to decrease the attrition of the sample, which reduced the possible bias to some extent (see Appendix A for methodological details). Moreover, the current study examines the relationship between outcomes and student participation (i.e., retention in the academy program from Grade 9 to Grade 12) as well as academy characteristics, which provides more evidence and explanation of NAF's effects.

## Evaluation Methodology

To understand the effectiveness of NAF services, ICF utilized a quasi-experimental design (QED) to track performance of a cohort of students from the end of Grade 9 to Grade 12 along with those from a matched comparison group. Each NAF freshman in 2011–2012 was matched by propensity score matching (PSM) to two non-NAF students in the same school district based on observable characteristics, including student demographics (i.e., gender, ethnicity, ELL status, special education status, and free/reduced lunch status) and Grade 9 high school academic data (i.e., GPA, credit accumulation, and overall at-risk status).

The 10 school districts included in the study had a combined high school population of 613,002 students. A total of 171,489 of these were freshman, of which 7,406 were enrolled in a NAF academy. This represents approximately half ( $n=15,075$ ) of the Grade 9 students enrolled in a NAF academy for the 2011–2012 school year. These school districts were dominated by heavily populated urban school districts, resulting in a larger proportion of minority students (84% versus 65% NAF overall). The proportion of free- and reduced lunch students was similar to the NAF population (72% versus 69%).

As a result of matching, 7,367 NAF freshman were matched to 14,679 non-NAF peers with similar demographics and Grade 9 academic performance.<sup>2</sup> PSM resulted in a balanced sample of treatment and comparison groups, which to some extent reduced confounding when estimating the treatment effects on an outcome (see Appendix A for additional details).

With an equivalent comparison group, NAF effects were examined by addressing the following research questions:

1. What is the graduation rate of NAF students compared to similar peers? How, if at all, do NAF's effects differ for at-risk versus on-track Grade 9 students?<sup>3</sup>
2. To what extent does the graduation rate vary with the degree of participation in the NAF program (full versus partial participation)? How, if at all, do NAF's effects differ by participation length for at-risk versus on-track Grade 9 students?
3. To what extent does the graduation rate vary with academy characteristics (e.g., themes, program length, and membership level)? How, if at all, do NAF's effects differ by academy characteristics for at-risk versus on-track Grade 9 students?

One notable limitation of this study is that due to lack of baseline data before the intervention of NAF (Grade 8), students had to be matched on performance at the end of Grade 9, when the treatment students had already received one year of NAF services. As such, the comparisons between the NAF and non-NAF groups only describe the impact of NAF from the beginning of Grade 10 and do not reflect the overall impact of NAF from the beginning of a four-year academy experience. Additional details regarding the evaluation methodology and limitations of the study are found in Appendix A.

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<sup>2</sup> Some NAF students were only matched to one non-NAF student due to sample limitation.

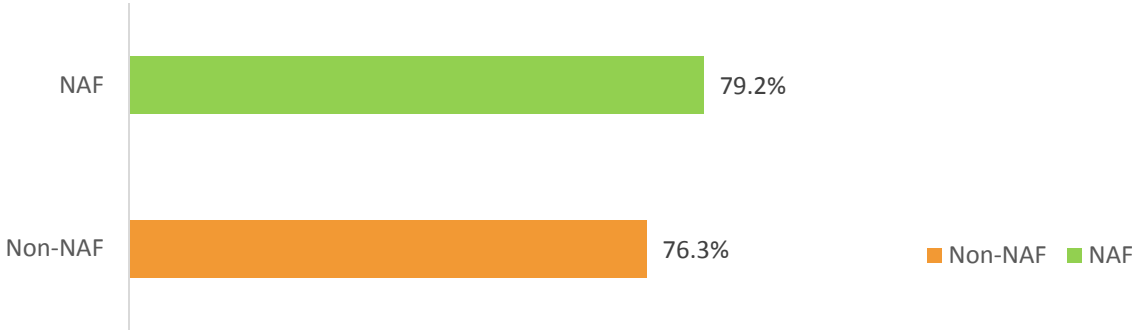
<sup>3</sup> A student who fails to meet any of the four performance indicator benchmarks (e.g., GPA, credits earned, English course, and math course) is considered at-risk for not graduating from high school. Conversely, a student who meets all four indicators is considered on-track. See Appendix A for more details.

# Cohort Graduation Rates

## Overall Results

Results from NAF’s study of graduation rates show that NAF students were significantly more likely to graduate on time than matched non-NAF students within their school districts. Specifically, as shown in Exhibit 2, 79.2% of NAF students graduated on time in comparison to 76.3% of non-NAF students. It is important to note that this result was driven primarily by heavily populated school districts in Miami-Dade, Florida; New York, New York; and Dallas, Texas. NAF students from these school districts were 4 to 8 percentage points more likely to graduate on time in comparison to non-NAF students.

Exhibit 2. NAF and Non-NAF Students’ Graduation Rate. ^



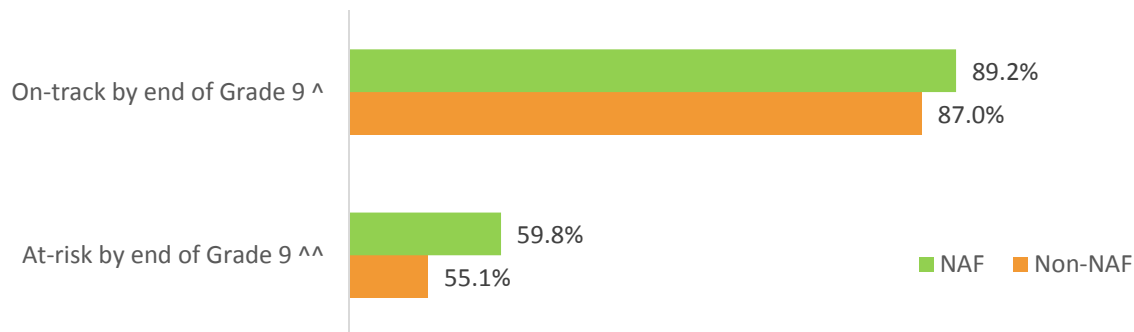
^ The difference is statistically significant between the two groups ( $\chi^2 (1, N = 18,975) = 20.59, p < .001$ ).

Another important finding is that for males, Hispanics, English Language Learners, and economically disadvantaged students (as measured by qualification for the free-and-reduced lunch program), the NAF group was 3.3 to 7.9 percentage points more likely to graduate on time relative to the non-NAF group (see Exhibit B7 in Appendix B). Deeper analysis shows:

- Male NAF students were 3.3 percentage points more likely to graduate on time than male non-NAF students.
- Hispanic NAF students were 4.2 percentage points more likely to graduate on time than Hispanic non-NAF students.
- ELL NAF students were 7.9 percentage points more likely to graduate on time than ELL non-NAF students.
- Free-and-reduced lunch NAF students were 4.6 percentage points more likely to graduate on time than free-and-reduced lunch non-NAF students.

Moreover, NAF students were significantly more likely than non-NAF students to have graduated on time if they were identified as at-risk of not graduating high school at the end of Grade 9 (see Exhibit 3 and Exhibit B4, Exhibit B5, and Exhibit B6). **Specifically, NAF students at-risk of not graduating at the end of Grade 9 were approximately 5 percentage points more likely to graduate high school on time** than non-NAF students who were at-risk of not graduating at the end of Grade 9. This suggests that NAF may be most effective by providing supports to those students at-risk of not graduating.

### Exhibit 3. NAF and Non-NAF Students' Graduation Rate by Students On-track or At-risk for Graduation by the End of Grade 9



^ The difference is statistically significant between the NAF and non-NAF groups ( $X^2(1, N = 12,682) = 13.64, p < .001$ ).

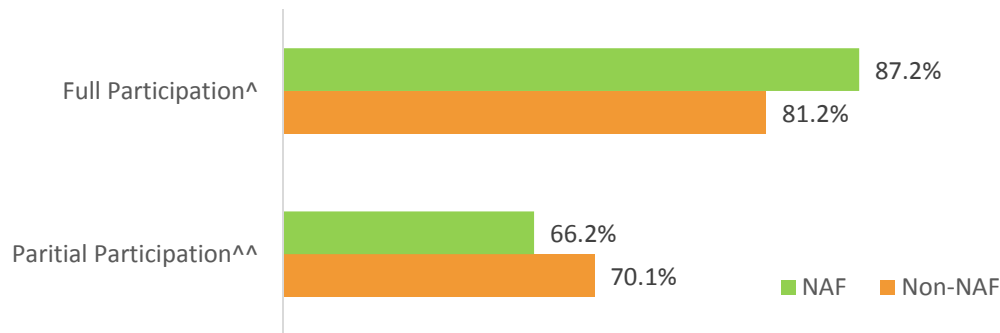
^^ The difference is statistically significant between the NAF and non-NAF groups ( $X^2(1, N = 6,061) = 11.90, p = .001$ ).

### Results by NAF Program Participation (Full vs. Partial Participation)

Full participation is intended to include all students that attended a NAF academy for the full length of the academy experience (typically four years). Districts tend to identify academy students by their enrollment in academy theme courses, and some students complete their theme courses prior to their senior year. For this reason, students who attended the academy steadily from Grade 9 through Grade 11 were assumed to have full participation. Graduation rates of NAF students with full participation were compared to their matched, non-NAF peers, as well as NAF students with partial participation. Approximately 54% of the overall NAF sample had full participation.

When comparing to the matched, non-NAF peers, the NAF full participation students were 6 percentage points more likely to graduate on time (87.2% in comparison to 81.2%, comparatively), while the partial-participating students were about 3.9 percentage points less likely to graduate on time than their matched peers (66.2% in comparison to 70.1%) (see Exhibit 4). This suggests that enrolling in a NAF program and remaining through a student's high school career has a positive impact on the probability of graduating, while starting in a NAF program while not remaining has a negative impact on the probability of graduating. If we assume that all of the 28,253 Grade 9 NAF participants in 2016–2017 remained in the program through their senior year, there would be 1,695 more students graduating on time than would have otherwise.

#### Exhibit 4. NAF and Non-NAF Students' Graduation Rate by Program Participation Through Grade 12

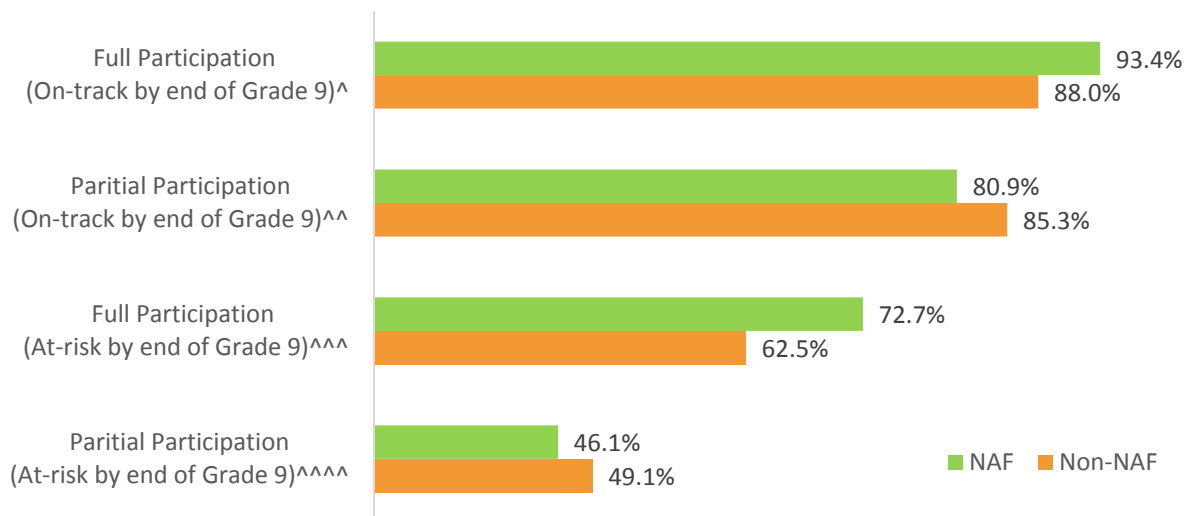


<sup>^</sup> The difference is statistically significant between the NAF and non-NAF groups ( $X^2(1, N = 11,016) = 67.72, p < .001$ ).

<sup>^^</sup> The difference is statistically significant between the NAF and non-NAF groups ( $X^2(1, N = 7,959) = 12.167, p < .001$ ).

The results were found to be stronger for at-risk students. As demonstrated in Exhibit 5, at-risk NAF students who remained in the program graduated at 10.2 percentage points higher (72.7% vs 62.5%) than did their non-NAF peers, while at-risk NAF students who left the program without meeting all requirements graduated at 3 percentage points lower (46.1% vs 49.1%) than did their non-NAF peers. NAF at-risk students who left the program were over 26 points (46.1% vs 72.7%) less likely to graduate than their peers who persisted in the program. Again, this suggests that, for at-risk students, enrolling in a NAF program and persisting has a positive impact on the probability of graduating while enrolling and not persisting has a negative impact on the probability of graduating. Overall, the results imply that retaining students in the program could be an effective way to increase graduation likelihood. Remaining in the program for the full length of high school experience is especially critical for at-risk students.

#### Exhibit 5. NAF and Non-NAF Students' Graduation Rate by Program Participation



<sup>^</sup> The difference is statistically significant between the NAF and non-NAF groups ( $X^2(1, N = 8,045) = 58.74, p < .001$ ).

<sup>^^</sup> The difference is statistically significant between the NAF and non-NAF groups ( $X^2(1, N = 4,637) = 14.13, p < .001$ ).

<sup>^^^</sup> The difference is statistically significant between the NAF and non-NAF groups ( $X^2(1, N = 2,852) = 30.72, p < .001$ ).

<sup>^^^</sup> The difference is **not** statistically significant between the NAF and non-NAF groups ( $X^2(1, N = 3,209) = 2.50, p = .114$ ).

# Results by Academic Characteristics

Graduation rates were also analyzed according to characteristics of the different NAF Career Academies in order to understand the effects of the NAF Career Academy model. There were 117 NAF academies included in the sample (see Exhibit D1 in Appendix D for details on academy level data; note that nine academies did not provide information and so were excluded in the analysis). Specifically, student outcomes were analyzed according to academy themes (i.e., finance, information technology, engineering, health science, and hospitality and tourism), membership level (i.e., under review, member, certified, and model), and program length (i.e., whether the academy serves two, three, or four grade levels).

## Outcomes by Academy Themes

Among the 117 academies included in the analysis, the majority of the academies had a finance theme (36), followed by hospitality and tourism (27) and information technology (27). There were just five academies that had the health sciences theme. Similarly, most of the NAF students in the sample participated in the Information Technology Academy (1,996 students), followed closely by the Finance Academy (1,992 students). The Health Sciences Academy was the academy with the fewest number of NAF students from the sample (271 students). Exhibit D1 provides additional data on academy themes.

Overall, NAF students were between 2.0 and 4.7 percentage points more likely to graduate on time than their matched, non-NAF peers for each of the five academy themes (see Exhibit 6 and Exhibit D2, Exhibit D3, Exhibit D4, Exhibit D5, and Exhibit D6). In addition, graduation rates for NAF students varied according to NAF academy themes. In particular, the finance and health sciences academy themes had the highest graduation rates (85.4% and 83.5%, respectively), whereas hospitality and tourism had the lowest graduation rate of any of the academy themes (72.7%).

**Exhibit 6. NAF and Non-NAF Students’ Graduation Rate by Career Academy Theme**

NAF Themes	NAF Outperforming Non-NAF by:
Engineering	2.0% NAF: 80.0%; Non-NAF: 78.0%
Finance	2.1%* NAF: 85.4%; Non-NAF: 83.3%
Health Sciences	2.7% NAF: 83.5%; Non-NAF: 80.8%
Hospitality & Tourism	2.6% NAF: 72.7%; Non-NAF: 70.1%
Information Technology	4.7%** NAF: 77.7%; Non-NAF: 73.0%

\*p<.05; \*\*p<.01

Exhibit 7 demonstrates the differences in graduation rates by at-risk and on-track NAF students and their matched, non-NAF counterparts for each of the five academies. For students identified as at-risk at the end of Grade 9, NAF students outperformed their matched, non-NAF peers between 0.6 and 8.6





percentage points, depending on the academy theme. The information technology academy theme had the largest difference between NAF and matched, non-NAF students (60.8% and 52.2%, respectively). In contrast, the hospitality and tourism academy theme had the smallest difference between NAF and matched, non-NAF students (49.2% and 48.6%, respectively).

For students identified as on-track at the end of Grade 9, NAF students outperformed their matched, non-NAF peers between 0.5 and 5.6 percentage points, respectively. The health sciences academy theme had the largest difference between NAF and matched, non-NAF students (95.2% and 89.6%, respectively), whereas the finance academy theme had the smallest difference between NAF and matched, non-NAF students (91.4% and 90.9%, respectively).

Overall, these findings show that some academy themes appear to correspond with higher graduation rates for at-risk students in comparison to their matched, non-NAF peers, while other academy themes appear to correspond with higher graduation rates for on-track students in comparison to their matched, non-NAF peers. In other words, there is no consistency between at-risk and on-track NAF students in terms of which academies correspond with the greatest differences in graduation rates between NAF students and matched, non-NAF students.

#### Exhibit 7. At-risk and On-track NAF and Non-NAF Students' Graduation Rate by Career Academy Theme

NAF Themes	NAF Outperforming Non-NAF by:	
	On-track by end of Grade 9	At-risk by end of Grade 9
<b>Engineering</b>	<b>2.0%</b> NAF: 88.6%; Non-NAF: 86.6%	<b>3.4%</b> NAF: 62.6%; Non-NAF: 59.2%
<b>Finance</b>	<b>0.5%</b> NAF: 91.4%; Non-NAF: 90.9%	<b>4.7%</b> NAF: 67.1%; Non-NAF: 62.4%
<b>Health Sciences</b>	<b>5.6%</b> NAF: 95.2%; Non-NAF: 89.6%	<b>4.8%</b> NAF: 72.2%; Non-NAF: 67.4%
<b>Hospitality &amp; Tourism</b>	<b>3.7%*</b> NAF: 85.4%; Non-NAF: 81.7%	<b>0.6%</b> NAF: 49.2%; Non-NAF: 48.6%
<b>Information Technology</b>	<b>3.1%*</b> NAF: 89.2%; Non-NAF: 86.1%	<b>8.6%**</b> NAF: 60.8%; Non-NAF: 52.2%

\*p<.05; \*\*p<.01

#### Outcomes by Membership Level

NAF academies are categorized into four academy membership or implementation levels (i.e., under review, member, certified, and model) based on academy assessment scores received on NAF's annual academy assessment. Academy assessments are completed annually by a school-based review team that meets to review responses and collect evidence to support responses. Among the 116 academies with membership level information, 61 or 52.5% had reached model status. Twenty-three or 19.8% academies had reached certified status and 19 or 16.4% were considered member. Since there were just two NAF academies from the sample that were under review, these results were not included in the



report to protect privacy. Academies with certified and model membership levels meet the NAF academy standards. These two levels were combined into one category in the analysis.

Exhibit 8 presents the percentage of NAF and non-NAF students' graduation rates for certified and model and member-level implementers. Across membership ratings, 2.0 to 3.1 percentage points more NAF students graduated on time than comparable non-NAF students (see Exhibit D7, Exhibit D8, and Exhibit D9 for additional data on outcomes by membership level).

### Exhibit 8. Graduation Rate by Membership Level

NAF Membership Level	NAF Outperforming Non-NAF by:
<b>Certified &amp; Model</b>	<b>3.1%**</b> NAF: 80.2%; Non-NAF: 77.1%
<b>Member</b>	<b>2.0%</b> NAF: 79.7%; Non-NAF: 77.7%

\*\*p<.01

As illustrated in Exhibit 9, for member academies, on-track NAF students were 2.4 percentage points more likely to graduate on time, and at-risk NAF students were 4.6 percentage points more likely to graduate on time in comparison to their respective matched, non-NAF peers. In addition, for certified and model academies, on-track NAF students were 2.3 percentage points more likely to graduate on time and at-risk NAF students were 5.0 percentage points more likely to graduate on time in comparison to their respective matched, non-NAF peers. Overall, at-risk NAF students in certified and model NAF academies (i.e., academies with the highest scores on the NAF annual academy assessment) benefited most from the NAF program in terms of on-time graduate rates when compared to their non-NAF peers.

### Exhibit 9. At-risk and On-track NAF and Non-NAF Students' Graduation rate by Membership Level

NAF Membership Level	NAF Outperforming Non-NAF by:	
	On-track by End of Grade 9	At-risk by End of Grade 9
<b>Certified &amp; Model</b>	<b>2.3%</b> NAF: 89.2%; Non-NAF: 86.9%	<b>5.0%*</b> NAF: 59.2%; Non-NAF: 54.2%
<b>Member</b>	<b>2.4%</b> NAF: 91.2%; Non-NAF: 88.8%	<b>4.6%</b> NAF: 69.7%; Non-NAF: 65.1%

\*p<.05

### Outcomes by Program Length

NAF academies included in the sample ranged in length from two to four years. Most NAF academies were four-year programs (104); however, 12 academies were three-year programs and one academy was a two-year program. To protect privacy, results of the two-year program are not presented in this report.

Exhibit 10 presents the percentage of NAF and non-NAF students' graduation rate by defined length of each academy (i.e., three years and four years). While the graduation rates of NAF students in three-year programs (Grades 10–12) was similar to their matched, non-NAF peers (78.9% in comparison to

78.7%, respectively), the graduation rate of NAF students in four-year programs was much more notable in comparison to their matched, non-NAF peers (80.1% in comparison to 76.8%, respectively). This finding suggests that four-year academies were associated with greater impact in terms of graduation rate in comparison to three-year academies. It is important to note that while four-year academies spanned from Grade 9 to Grade 12, analyses only examined three years of impact (Grades 10–12), the same as for the three-year academies. The different findings between program lengths actually indicate greater impacts might have happened in Grade 9 than later grades.

#### Exhibit 10. NAF and Non-NAF Students’ Graduation Rate by Program Length

NAF Program Length	NAF Outperforming Non-NAF by:
4-year (Grade 9-12)	<b>3.3%**</b> NAF: 80.1%; Non-NAF: 76.8%
3-year (Grade 10-12)	<b>0.2%</b> NAF: 78.9%; Non-NAF: 78.7%

\*\*p<.01

Exhibit 11 presents the graduation rate of at-risk and on-track NAF students and their matched, non-NAF peers by defined length of each academy. At-risk NAF students enrolled in three-year programs graduated at a similar rate than their matched, non-NAF peers (60.2% compared to 59.6%, respectively). In contrast, at-risk NAF students enrolled in four-year programs graduated at a higher rate than their matched, non-NAF peers (61.3% compared to 55.8%, respectively).

Program length did not appear to be as strongly associated with graduation rate differences between NAF and non-NAF students for on-track students as much as with at-risk students. That said, on-track NAF students in four-year programs had greater graduation rate differences than their matched, non-NAF peers (89.2% compared to 86.7%, respectively) in comparison to on-track NAF students in three-year programs (93.2% compared to 93.8%, respectively) or two-year programs (81.0% compared to 79.9%).

#### Exhibit 11. At-risk and On-track NAF and Non-NAF students’ Graduation Rate by Program Length

NAF Program Length	NAF Outperforming Non-NAF by:	
	On-track by End of Grade 9	At-risk by End of Grade 9
4-year (Grade 9-12)	<b>2.5%**</b> NAF: 89.2%; Non-NAF: 86.7%	<b>5.5%**</b> NAF: 61.3%; Non-NAF: 55.8%
3-year (Grade 10-12)	<b>-0.6%</b> NAF: 93.2%; Non-NAF: 93.8%	<b>0.6%</b> NAF: 60.2%; Non-NAF: 59.6%

\*\*p<.01

This finding indicates that at-risk and on-track NAF students in four-year programs graduated at much higher rates than their matched, non-NAF peers, in comparison to NAF students from three-year programs, who graduated at approximately the same rate as their non-NAF peers. Again, the impact of the longer NAF program length was greater with at-risk students.

## Conclusion

The analyses of the differences in graduation rates between NAF students and their matched non-NAF counterparts revealed that, overall, the NAF program is effective in improving graduation. Students enrolled in a NAF academy in Grade 9 were 3 percentage points more likely to graduate than their matched non-NAF counterparts (79.2% vs 76.3%). The program's impact on graduation rate is influenced by students' persistence. Students who fully participated until their senior year were 6 percentage points (87.2% vs 81.2%) more likely to graduate from high school on time than their matched non-NAF counterparts. Applying this difference to the 28,253 grade 9 NAF students in 2016-17, this would equate to 1,695 more students graduating high school in four years (2019-20) than would for non-NAF students. On the other hand, students who began in a NAF program but did not remain to complete the program, were 4 percentage points (66.2% vs 70.1%) less likely to graduate than their peers who did not begin in a NAF program. Comparing NAF students who fully participated in the program and those who exited early, the difference in the graduation rates was more than 21 percentage points (87.2% vs 66.2%).

The impact of the NAF program and the influence of program persistence on graduation rates are even stronger for at-risk students. Overall, at-risk NAF students demonstrated a 5-percentage-point difference (59.8% vs 55.1%) in the probability of graduating than their non-NAF counterparts. At-risk students who participated in the NAF academy program through their senior year (full participation) were 10 percentage points (72.7% vs 62.5%) more likely to graduate than their non-NAF counterparts. At-risk NAF students who started, but did not complete the program graduated at a rate three percentage points (46.1% vs 49.1%) lower than peers who did not start in a NAF program.

Analyses of graduation rates by academic characteristics revealed that graduation rates for NAF students in comparison to their non-NAF peers varied according to different program characteristics, including membership level, and program type. NAF students in certified or model academies were 3 percentage points more likely to graduate on time than non-NAF students, while NAF students in member academies were 2 percentage points more likely to graduate than non-NAF students. Analysis of graduation rates by program length showed that NAF students in four-year NAF programs were 3 percentage points more likely to graduate on time than non-NAF students, while students in shorter programs were 0.2 percentage points more likely to graduate than non-NAF students.

As described elsewhere in this report, among the 10 participating school districts, Miami-Dade County Public Schools and the New York City Department of Education contain a much larger student population than the other school districts and, as a result, made up the majority of the analysis sample. As such, the results were driven mostly by students from these two large urban districts.

Matching students at the end of Grade 9 means that the comparisons between the NAF and non-NAF groups only describe the impact of NAF from the beginning of Grade 10. The study found that students with full participation have a higher graduation rate, and students who attended a four-year academy have a higher graduation rate than those who attended an academy for a shorter period. These findings, along with the fact that this analysis is based on only the last three years of academy experience, suggests that this study significantly underestimates the full impact of a four-year NAF academy experience.

The implications for NAF is that, overall, the design has a positive impact on students and an even greater impact on at-risk students. Further, the study demonstrates that student persistence until their senior year is vital for the success of the program. Supporting these results is the fact that certified or model academies have a greater impact than member academies (adherence to the model is important) and that four year academies have a greater impact than do three year academies (length of exposure to the model matters).

These results will provide guideposts for NAF's work with schools, districts and partners moving forward by increasing the quality of existing academies, expanding the reach of the NAF model, and emphasizing the importance of student persistence. NAF will be examining the data from this study to gain a deeper understanding of the dynamics of the greater impact on at-risk students and the factors affecting students leaving the program early. NAF will also seek to mine the data gathered by this study to determine the characteristics of students who enter but do not graduate from a NAF academy with the goal of developing approaches that will increase the graduation rate from NAF academies even further.

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# Appendix A: Methodology

## A1. Overview of Data and Performance Indicators

### Data

The data used in analyses reported herein were drawn from student-level data and academy assessments collected annually by NAF through a secondary party. **Student-level** data files were provided annually by participating districts for the 2011–2012, 2012–2013, 2013–2014, and 2014–2015 academic years. Files included information on all students within the district, with a flag to identify NAF students. This device enabled the comparison of NAF and non-NAF student characteristics and outcomes.<sup>4</sup> Student-level data were separated into two main submissions:

- **Student data:** Includes gender, race, ethnicity, learning disability, free-and-reduced lunch status,<sup>5</sup> ELL status, graduation cohort, attendance, GPA, credit completion, and graduation status.
- **Course data:** Final grade and credits earned in English and mathematics courses.

**Academy-level** data described program characteristics and annual academy assessment scores. Since 2010, NAF academies have responded to an annual assessment that measures implementation to the NAF model. The academy assessment is structured around the four elements of the NAF model, each of which is composed of a series of standards and strategic actions that reflect everyday practice. Academy-level data were separated into two main submissions:

- **Academy Data:** Listing of all NAF academies including identification codes, school names, contact information, region, academy theme, years of operation, and current operating status.
- **Academy Assessments:** Assessment scores provided for each of the four NAF key elements, along with identified standards within each component, and an overall score, as well as academy categorization into four academy membership levels based on their overall score: under review, member, certified, and model. Academy assessments are completed annually by a school-based review team that meets to review responses and collect evidence to support responses.

### Performance Indicators

NAF categorizes student status regarding high school graduation as either on-track or at-risk on the basis of five performance indicators: 1) attendance, 2) GPA, 3) cumulative credit completion, 4) English course performance, and 5) math course performance. For each indicator, NAF has defined a specific benchmark that designates whether students are on-track or at-risk on that indicator (see Exhibit A1). A student who fails to meet any of the five performance indicator benchmarks is considered at-risk for not graduating from high school. Conversely, a student who meets all five indicators is considered on-track.

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<sup>4</sup> Non-NAF students were defined as any student within the district not enrolled in one of NAF's five career academies.

<sup>5</sup> Porterville Unified School District did not provide free-and-reduced lunch status as part of its data submissions.

## Exhibit A1. NAF Student Performance Indicators and Benchmarks

Academic Performance Indicator	Benchmark
Attendance	Minimum of 80% (Due to inconsistency of attendance definitions across districts and lack of variation in the attendance data, attendance was not included as a performance indicator in this report.)
GPA	Minimum of 2.0
Cumulative Credits	Minimum of: 6 credits by the end of Grade 9 12 credits by the end of Grade 10 18 credits by the end of Grade 11 24 credits by the end of Grade 12
English Courses	Zero course failures
Math Courses	Zero course failures
Overall	Failure to meet any one of the five benchmarks above

## A2. Definition of Graduation Rate

The definition of graduation rate used in this study is the number in study (NAF students and the matched non-NAF students) graduating in their senior year in the same district, divided by the number in the cohort at the beginning of the study (end of Grade 9). Excluded from this ratio were students who had a transfer flag indicating that they transferred to another school outside the district. Because the comparative group (non-NAF students) was developed by PSM based on Grade 9 performance information, this graduation rate is essentially a three-year graduation rate (Grade 10 to Grade 12). The same definition is used consistently throughout the study, so the difference in graduation rates between the various groups presented in this study are directly interpretable. These rates, however, cannot be compared to the national graduation rate reported by the National Center for Educational Statistics (NCES) or the senior-year graduation rate reported in various NAF reports.

The national graduation rate, reported by the NCES, is the adjusted cohort graduation rate (ACGR), which “uses detailed student-level data to determine the percentage of students who graduate within four years of starting Grade 9 for the first time.” This is a three-year graduation rate including all students; is not district specific; and is statistically adjusted to overcome the problem of missing data (i.e., a student who starts in one district and graduates in another district is included).

The graduation rate reported in some NAF reports is the proportion of NAF seniors who graduate at the end of their senior year. This is a one-year graduation rate. This rate cannot be compared to the three-year graduation rate

### A3. Overview of Methodology and Analysis

To understand the effectiveness of NAF services, a quasi-experimental design was utilized to **track performance of a cohort of students from Grade 9 to Grade 12** along with those from a matched comparison group. NAF freshman in 2011-2012 were matched to non-NAF students within their school district and then student performance outcomes were tracked until their anticipated graduation year (i.e., 2014–15). To establish an equivalent comparison group, student-level propensity score matching (PSM) was utilized to match the NAF students with non-NAF students based on their demographics (i.e., gender, ethnicity, English Language Learner status (ELL), special education status, and free/reduced lunch status) and Grade 9 outcomes data (i.e., GPA, credit accumulation, and overall at-risk status). (See Section A3 for detailed propensity score methodology.)

After the comparison group was established, research questions were firstly addressed by basic descriptive statistics and also examined by significance tests, like chi-square tests. Specifically, percentages of on-track and at-risk student for each benchmark indicator (i.e., GPA, credit accumulation, English course, and Math course) were calculated and compared between NAF and non-NAF students. In addition to the benchmark indicators, graduation rate is one of the most important measurement for program effectiveness. Overall comparisons between NAF and non-NAF, as well as subgroup comparisons based on students' initial (Grade 9) on-track/at-risk status were conducted to examine whether NAF services had greater impact on certain subgroups. Outcomes were also examined for full participation students who were retained in NAF at Grade 12 and those with partial participation (e.g., withdraw NAF before Grade 12).

To understand whether NAF academy features and characteristics have different impacts on student outcomes, subgroup analysis was conducted to compare outcomes between NAF students in an academy with certain characteristics and their matched non-NAF peers. Specifically, outcome differences between NAF and non-NAF were compared by NAF membership level (under review, member, certified, and model), program length (two-year, three-year, and four-year), and academy themes (Finance; Hospitality & Tourism; Information Technology; Engineering; and Health Sciences).

### A4. Propensity Score Matching

This section presents a detailed description of the propensity score matching (PSM) methodology for selecting the sample used in this study.

The propensity score is the probability of treatment assignment conditional on observed characteristics. The propensity score allows one to design and analyze an observational (nonrandomized) study so that it mimics some of the particular characteristics of a randomized controlled trial. In particular, the propensity score is a balancing score: the distribution of covariates will be similar between treated and untreated subjects.

In this study, NAF students were matched with non-NAF students in the same school district without replacement. To avoid attrition issues, instead of one-to-one matching, participants were matched one-to-two so that pairs of treated and untreated subjects with similar propensity scores were formed. The matching was conducted without replacement, meaning that once the non-NAF student was matched to



a NAF student, he/she was no longer available in the pool and could not be matched to another NAF student. The matching process also used a combination of exact and nearest neighbor PSM at the student level within each school district to decrease the distance, or difference, between NAF and non-NAF students. There is broad support in the literature for these matching procedures (Rosenbaum & Rubin, 1985; Smith, 1997; Stuart, 2010). For example, Stuart (2010) described performing an exact match on key covariates such as race or gender followed by using propensity scores to further guide the match (Stuart, 2010, p. 6). Likewise, Rosenbaum and Rubin (1985) described their approach that provided for an exact match on gender and then propensity scores to determine the closest match or nearest neighbor.

Due to lack of baseline data before the intervention of NAF, student-level matching was based on the demographic variables and student performance at the end of Grade 9, when the treatment students had already received one year of services. One NAF student was matched to one non-NAF student with the same demographics (gender, race/ethnicity, free-and-reduced lunch status, ELL status), and overall at-risk status. Each pair of matched NAF and non-NAF students also had similar GPAs and credits earned at the end of Grade 9.

Exhibit A2 shows the detail of the matching methodology and variables. Students were matched within districts, and then pooled together to form the final analysis sample.

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#### Exhibit A2. Propensity Score Matching Variables and Methodology

Matching Methodology	Variables Included
Exact	School District
	Gender
	Race/Ethnicity
	Free/Reduced Lunch <sup>a</sup>
	English Learner
	Learning Disability <sup>b</sup>
	Overall At-risk Indicator
Nearest Neighbor	GPA
	Credits Earned

<sup>a</sup>. Free/Reduced Lunch data from Charlotte-Mecklenburg, Porterville (CA), and Rochester City School District (NY) was not included due to missing or invalid data.

<sup>b</sup>. Learning Disability data from Dallas ISD (TX), Waco ISD (TX), Miami-Dade (FL), Pasadena Unified (CA), and Porterville (CA) was not included due to missing or invalid data.

The 10 school districts included in the study had a combined high school population of 613,002 students. A total of 171,489 of these were freshman, of which 7,406 were enrolled in a NAF academy. This represents approximately 45% of the Grade 9 students enrolled in a NAF academy for the 2011–2012 school year. Exhibit A3 shows the sample sizes and the average standardized difference between NAF and non-NAF students before and after matching. Before matching, the sample pool included 7,406 NAF students and 164,083 non-NAF students who enrolled in Grade 9 during the 2011-12 academic

year. The large sample size of the non-NAF students provides a sufficient pool from which to identify an equivalent comparison group, which is critical in estimating the causal impacts of NAF. After matching, approximately 99.8 percent of NAF students were matched to non-NAF students with similar demographics and performance at the end of the Grade 9, resulting in a total analysis sample of 22,046 students. The majority of NAF students were able to find two matches, but some of NAF students were only matched to one non-NAF peer due to lack of similar students in the pool.

**Exhibit A3. Sample Balance Before and After Propensity Score Matching**

Sample Size	Before Matching		After Matching	
	NAF	Non-NAF	NAF	Non-NAF
<b>Total</b>	7,406	164,089	7,367	14,679
Porterville	367	1,232	355	697
Pasadena	79	1,198	76	146
Hartford	248	1,340	237	456
Broward	672	18,945	671	1,341
Miami-Dade	2,812	25,583	2,807	5,610
Charlotte-Mecklenburg	585	10,576	585	1,170
Rochester	198	1,896	197	386
Dallas	540	9,384	536	1,071
Waco	119	785	118	234
NYC	1,786	93,150	1,785	3,568
<b>Standardized mean difference for propensity score</b>	0.173		0.000	

Before matching, the average standardized differences between the propensity scores for the two groups was 0.173. After matching, the average standardized differences decreased to 0, which implies no difference between the two groups based on the observed variables. These findings show that the PSM was successful in controlling for observed differences between NAF and non-NAF students, thereby making the two groups more comparable.

## A5. Limitations of the Study

There are several limitations that present challenges to interpreting findings. While the non-NAF comparison school groups provided the best possible comparison groups given the context of NAF, it is only possible to say that NAF service was associated with outcomes, not that NAF service caused any outcomes. One notable limitation is that due to lack of baseline data before the intervention of NAF

(Grade 8), students had to be matched on performance at the end of Grade 9, when the treatment students had already received one year of NAF services. As such, the comparisons between the NAF and non-NAF groups only describe the impact of NAF from the beginning of Grade 10 and do not reflect the overall impact of NAF from the beginning of a four-year academy experience.

In addition, models presented in this report control for factors that are collected and measurable, but not for other confounding factors that are less easily measured and can also contribute to change (e.g., student motivation). Among the 10 participating school districts, Miami-Dade County Public Schools and the New York City Department of Education contain a much larger student population than the other school districts and, as a result, made up the majority of the analysis sample. As such, the results were driven mostly by students from these large population urban districts.

## Appendix B: Student Demographics and Outcomes

Appendix B presents the demographics and academic outcomes for the NAF and non-NAF students in the analysis sample.

### Demographics

**Exhibit B1. Comparison of the Demographics of NAF Students in the Study, NAF Students Overall, and All Students Nationwide**

	Study	NAF Overall (2016)	National (2016)
<b>Gender</b>			
Female	41.8%	45%	
Male	58.2%	53%	
<b>Race/Ethnicity</b>			
Asian	3.7%	7%	6%
Black	32.9%	27%	15%
Hispanic	51.3%	38%	29%
Native American	0.2%	1%	1%
Hawaiian/Pacific Islander	0.1%	1%	1%
White	11.2%	21%	46%
Two or more	0.5%	3%	4%
Missing	0.1%	0.1%	0.1%
<b>Special Population</b>			
English Language Learner	11.0%	18%	9%
Eligible for Free-and-Reduced Lunch	71.9%	69%	48%
Learning Disability	12.9%	12.8%	12.9%

**Exhibit B2. Demographics of NAF and Non-NAF Grade 9 Students (Results of Propensity Score Matching)**

	NAF	Non-NAF	P value <sup>a</sup>
<b>n</b>	7,367	14,679	
<b>Gender</b>			
Female	41.8%	41.9%	0.946
Male	58.2%	58.1%	
<b>Race/Ethnicity</b>			
Asian	3.7%	3.7%	1.000
Black	32.9%	33.0%	
Hispanic	51.3%	51.4%	
Native American	0.2%	0.2%	
Hawaiian/Pacific Islander	0.1%	0.1%	
White	11.2%	11.2%	
Two or more	0.5%	0.5%	
Missing	0.1%	0.1%	
<b>Special Population</b>			
English Language Learner	11.0%	11.1%	0.898
Eligible for Free-and-Reduced Lunch	71.9%	71.9%	0.970
Learning Disability	12.9%	12.8%	0.825

<sup>a</sup> Differences were tested by Chi-Square Tests. \* p<.05; \*\*p<0.01

## Academic Outcomes

Exhibit B3. Descriptive Student Outcomes – All Students

Outcome Benchmark Indicator	Grade		NAF		Non-NAF		Diff.	P value <sup>a</sup>
			Count	%	Count	%		
<b>GPA</b>	Gr9	At-risk	1,886	27.4%	3,759	27.4%	0.0%	0.968
		On-track	4,987	72.6%	9,953	72.6%	0.0%	
	Gr10	At-risk	2,097	30.2%	4,195	31.1%	-0.9%	0.189
		On-track	4,846	69.8%	9,294	68.9%	0.9%	
	Gr11	At-risk	1,460	24.3%	2,997	25.2%	-0.9%	0.173
		On-track	4,559	75.7%	8,901	74.8%	0.9%	
Gr12	At-risk	1,036	17.4%	2,234	19.3%	-1.9%	0.002**	
	On-track	4,924	82.6%	9,335	80.7%	1.9%		
<b>Credits Earned</b>	Gr9	At-risk	868	12.0%	1,726	12.0%	0.0%	0.956
		On-track	6,347	88.0%	12,652	88.0%	0.0%	
	Gr10	At-risk	1,316	19.9%	2,861	22.4%	-2.5%	0.000**
		On-track	5,286	80.1%	9,916	77.6%	2.5%	
	Gr11	At-risk	943	15.0%	1,827	15.2%	-0.2%	0.743
		On-track	5,324	85.0%	10,169	84.8%	0.2%	
Gr12	At-risk	870	14.5%	2,172	18.7%	-4.2%	0.000**	
	On-track	5,119	85.5%	9,449	81.3%	4.2%		
<b>English Course</b>	Gr9	At-risk	1,122	16.2%	2,268	16.7%	-0.5%	0.330
		On-track	5,804	83.8%	11,285	83.3%	0.5%	
	Gr10	At-risk	1,655	24.8%	3,263	25.6%	-0.8%	0.197
		On-track	5,021	75.2%	9,464	74.4%	0.8%	
	Gr11	At-risk	821	13.6%	1,530	13.6%	0.0%	0.936
		On-track	5,219	86.4%	9,690	86.4%	0.0%	
Gr12	At-risk	447	9.0%	868	9.1%	-0.2%	0.759	
	On-track	4,535	91.0%	8,643	90.9%	0.2%		
<b>Math Course</b>	Gr9	At-risk	1,450	21.1%	3,015	22.6%	-1.4%	0.022*
		On-track	5,406	78.9%	10,350	77.4%	1.4%	
	Gr10	At-risk	1,769	26.5%	3,670	28.9%	-2.4%	0.000**
		On-track	4,904	73.5%	9,009	71.1%	2.4%	
	Gr11	At-risk	1,021	17.1%	1,982	17.7%	-0.6%	0.322
		On-track	4,936	82.9%	9,188	82.3%	0.6%	
Gr12	At-risk	621	13.0%	1,094	12.2%	0.8%	0.205	
	On-track	4,158	87.0%	7,842	87.8%	-0.8%		
<b>Overall</b>	Gr9	At-risk	2,625	36.2%	5,315	36.8%	0.2%	0.375
		On-track	4,630	63.8%	9,129	63.2%	-0.2%	
	Gr10	At-risk	3,195	45.9%	6,522	48.1%	-0.6%	0.002**
		On-track	3,768	54.1%	7,025	51.9%	0.6%	
	Gr11	At-risk	2,372	37.8%	4,518	37.6%	-2.3%	0.785
		On-track	3,909	62.2%	7,511	62.4%	2.3%	
Gr12	At-risk	1,615	26.9%	3,483	29.9%	-3.0%	0.000**	
	On-track	4,386	73.1%	8,159	70.1%	3.0%		
<b>Graduation</b>	Not graduate		1,338	20.8%	2,971	23.7%	-2.9%	0.000**
	Graduate		5,100	79.2%	9,566	76.3%	2.9%	

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p <.01.

**Exhibit B4. Comparisons between NAF and Non-NAF - Students At-risk by End of Grade 9**

Outcome Benchmark Indicator	Grade		NAF		Non-NAF		Diff.	P value <sup>a</sup>
			Count	%	Count	%		
<b>GPA</b>	Gr9	At-risk	1,886	79.1%	3,759	77.6%	1.5%	0.153
		On-track	498	20.9%	1,083	22.4%	-1.5%	
	Gr10	At-risk	1,748	73.4%	3,495	74.5%	-1.1%	0.336
		On-track	632	26.6%	1,196	25.5%	1.1%	
	Gr11	At-risk	1,121	58.8%	2,348	62.2%	-3.4%	0.013*
		On-track	784	41.2%	1,424	37.8%	3.4%	
Gr12	At-risk	820	46.2%	1,793	51.3%	-5.1%	0.001**	
	On-track	953	53.8%	1,701	48.7%	5.1%		
<b>Credits Earned</b>	Gr9	At-risk	868	33.3%	1,726	32.6%	0.7%	0.549
		On-track	1,737	66.7%	3,561	67.4%	-0.7%	
	Gr10	At-risk	1,021	45.5%	2,141	48.2%	-2.7%	0.040*
		On-track	1,221	54.5%	2,301	51.8%	2.7%	
	Gr11	At-risk	550	27.6%	1,084	28.5%	-0.8%	0.499
		On-track	1,442	72.4%	2,726	71.5%	0.8%	
Gr12	At-risk	634	35.4%	1,526	43.3%	-7.9%	0.000**	
	On-track	1,155	64.6%	1,998	56.7%	7.9%		
<b>English Course</b>	Gr9	At-risk	1,122	45.6%	2,268	45.9%	-0.3%	0.795
		On-track	1,340	54.4%	2,674	54.1%	0.3%	
	Gr10	At-risk	910	41.8%	1,896	44.2%	-2.5%	0.059
		On-track	1,269	58.2%	2,391	55.8%	2.5%	
	Gr11	At-risk	539	29.1%	1,058	30.8%	-1.7%	0.189
		On-track	1,314	70.9%	2,374	69.2%	1.7%	
Gr12	At-risk	288	20.1%	577	21.3%	-1.1%	0.396	
	On-track	1,143	79.9%	2,138	78.7%	1.1%		
<b>Math Course</b>	Gr9	At-risk	1,450	59.5%	3,015	62.2%	-2.7%	0.028*
		On-track	986	40.5%	1,834	37.8%	2.7%	
	Gr10	At-risk	957	44.0%	2,108	49.5%	-5.5%	0.000**
		On-track	1,217	56.0%	2,148	50.5%	5.5%	
	Gr11	At-risk	606	33.4%	1,278	37.6%	-4.2%	0.003**
		On-track	1,207	66.6%	2,123	62.4%	4.2%	
Gr12	At-risk	353	25.4%	641	24.7%	0.6%	0.652	
	On-track	1,039	74.6%	1,953	75.3%	-0.6%		
<b>Overall</b>	Gr9	At-risk	2,625	100.0%	5,315	100.0%	0.0%	-
		On-track	-	0.0%	-	0.0%	0.0%	
	Gr10	At-risk	1,971	82.6%	3,995	84.7%	-2.1%	0.021*
		On-track	416	17.4%	722	15.3%	2.1%	
	Gr11	At-risk	1,388	69.5%	2,746	71.8%	-2.3%	0.061
		On-track	609	30.5%	1,076	28.2%	2.3%	
Gr12	At-risk	1,040	57.9%	2,228	63.1%	-5.2%	0.000**	
	On-track	756	42.1%	1,303	36.9%	5.2%		
<b>Graduation</b>	Not graduate		822	40.2%	1,802	44.9%	-4.6%	0.000**
	Graduate		1,222	59.8%	2,215	55.1%	4.6%	

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p < .05, \*\* p < .01.

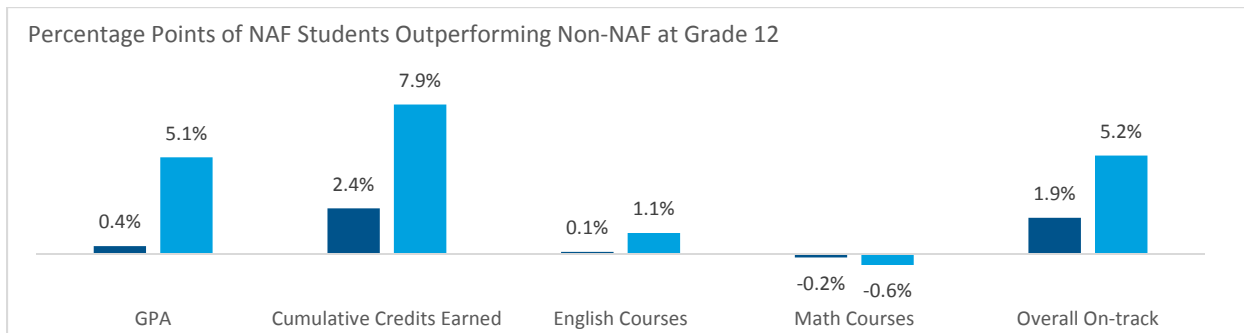
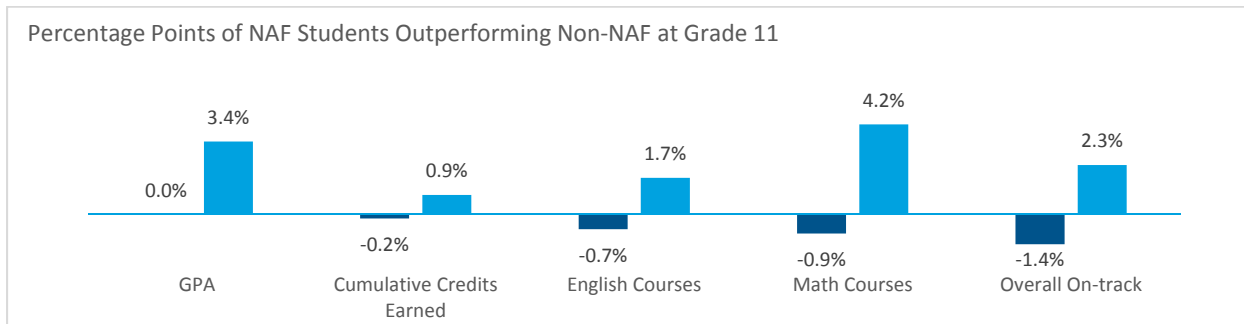
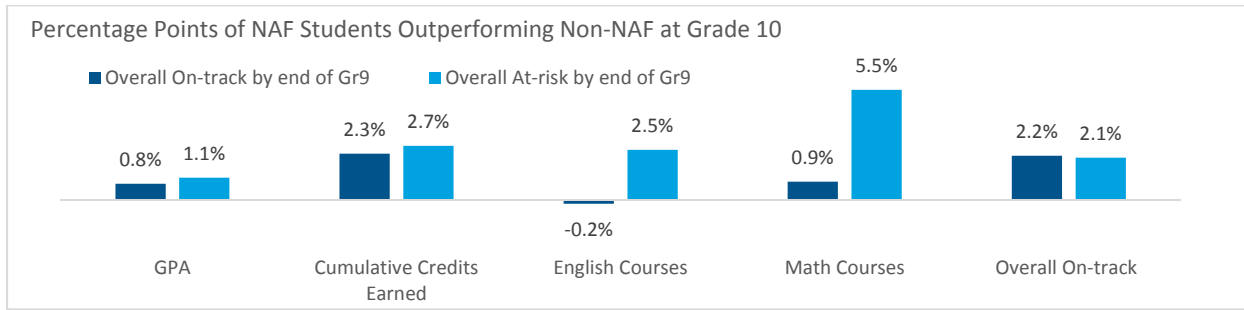
**Exhibit B5. Comparisons Between NAF and Non-NAF - Students On-track by End of Grade 9**

Outcome Benchmark Indicator	Grade		NAF		Non-NAF		Diff.	P value <sup>a</sup>
			Count	%	Count	%		
<b>GPA</b>	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
		On-track	4,489	100.0%	8,870	100.0%	0.0%	
	Gr10	At-risk	274	6.1%	597	6.9%	-0.8%	0.087
		On-track	4,195	93.9%	8,034	93.1%	0.8%	
	Gr11	At-risk	285	7.0%	559	7.0%	0.0%	0.934
		On-track	3,758	93.0%	7,417	93.0%	0.0%	
Gr12	At-risk	178	4.3%	373	4.7%	-0.4%	0.340	
	On-track	3,953	95.7%	7,579	95.3%	0.4%		
<b>Credits Earned</b>	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
		On-track	4,610	100.0%	9,091	100.0%	0.0%	
	Gr10	At-risk	245	5.7%	656	8.0%	-2.3%	0.000**
		On-track	4,026	94.3%	7,519	92.0%	2.3%	
	Gr11	At-risk	352	8.4%	662	8.2%	0.1%	0.801
		On-track	3,852	91.6%	7,371	91.8%	-0.1%	
Gr12	At-risk	207	5.0%	586	7.4%	-2.4%	0.000**	
	On-track	3,935	95.0%	7,383	92.6%	2.4%		
<b>English Course</b>	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
		On-track	4,464	100.0%	8,611	100.0%	0.0%	
	Gr10	At-risk	694	15.7%	1,289	15.6%	0.2%	0.798
		On-track	3,716	84.3%	6,993	84.4%	-0.2%	
	Gr11	At-risk	249	6.0%	412	5.4%	0.7%	0.140
		On-track	3,871	94.0%	7,236	94.6%	-0.7%	
Gr12	At-risk	132	3.8%	262	3.9%	-0.1%	0.737	
	On-track	3,365	96.2%	6,439	96.1%	0.1%		
<b>Math Course</b>	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
		On-track	4,420	100.0%	8,516	100.0%	0.0%	
	Gr10	At-risk	745	16.9%	1,469	17.8%	-0.9%	0.209
		On-track	3,668	83.1%	6,797	82.2%	0.9%	
	Gr11	At-risk	370	9.1%	627	8.2%	0.9%	0.112
		On-track	3,707	90.9%	7,005	91.8%	-0.9%	
Gr12	At-risk	233	7.0%	423	6.7%	0.2%	0.665	
	On-track	3,104	93.0%	5,845	93.3%	-0.2%		
<b>Overall</b>	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
		On-track	4,630	100.0%	9,129	100.0%	0.0%	
	Gr10	At-risk	1,144	25.5%	2,399	27.7%	-2.2%	0.007**
		On-track	3,338	74.5%	6,256	72.3%	2.2%	
	Gr11	At-risk	921	21.9%	1,654	20.5%	1.3%	0.089
		On-track	3,291	78.1%	6,395	79.5%	-1.3%	
Gr12	At-risk	527	12.7%	1,166	14.6%	-1.9%	0.004**	
	On-track	3,619	87.3%	6,817	85.4%	1.9%		
<b>Graduation</b>	Not graduate	465	10.8%	1,088	13.0%	-2.3%	0.000**	
	Graduate	3,860	89.2%	7,269	87.0%	2.3%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p < .05, \*\* p < .01.



**Exhibit B6. Comparisons Between NAF and Non-NAF Students by Grade 9 On-track/At-risk Status**



## Exhibit B7. Graduation Rate by Student Demographics

		NAF		Non-NAF		Difference	Sig.
		n	Graduation %	n	Graduation %	% pt.	P
<b>Gender</b>							
	Female	2702	80.3%	5291	78.0%	2.3%	0.015**
	Male	3736	78.4%	7246	75.1%	3.3%	0.000**
<b>Race/Ethnicity</b>							
	Black	2105	75.2%	4036	73.5%	1.7%	0.151
	Hispanic	3284	78.9%	6476	74.7%	4.2%	0.000**
	White	744	90.7%	1421	88.3%	2.4%	0.087
	Other	305	82.6%	604	83.8%	-1.2%	0.660
<b>Special Population</b>							
<b>English Language Learner</b>							
	Yes	657	67.9%	1276	60.0%	7.9%	0.001**
	No	5713	80.6%	11130	78.2%	2.4%	0.000**
<b>Eligible for Free-and-Reduced Lunch <sup>a</sup></b>							
	Yes	3881	75.0%	7572	70.4%	4.6%	0.000**
	No	1551	85.4%	2995	83.2%	2.2%	0.053
<b>Learning Disability <sup>b</sup></b>							
	Yes	437	64.5%	861	62.5%	2.0%	0.470
	No	3285	81.1%	6401	78.7%	2.4%	0.006**

<sup>a</sup> Free-and-reduced lunch data from Charlotte-Mecklenburg, Porterville (CA), and Rochester City School District (NY) were not included due to missing or invalid data.

<sup>b</sup> Learning disability data from Dallas ISD (TX), Waco (TX), Miami-Dade (FL), Pasadena Unified (CA), and Porterville (CA) were not included due to missing or invalid data.

## Appendix C: Student Participation and Outcomes

Exhibit C1. Comparisons Between NAF Students with Full Participation and Their Non-NAF Peers

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>	
		Count	%	Count	%			
GPA	Gr9	At-risk	710	18.9%	1,411	18.9%	0.1%	0.939
		On-track	3,042	81.1%	6,069	81.1%	-0.1%	
	Gr10	At-risk	826	21.3%	1,796	24.3%	-3.0%	0.000**
		On-track	3,043	78.7%	5,595	75.7%	3.0%	
	Gr11	At-risk	702	19.0%	1,403	20.8%	-1.9%	0.024*
		On-track	3,002	81.0%	5,340	79.2%	1.9%	
	Gr12	At-risk	646	16.4%	1,052	16.0%	0.4%	0.572
		On-track	3,295	83.6%	5,534	84.0%	-0.4%	
Credits Earned	Gr9	At-risk	269	6.8%	535	6.8%	0.0%	0.986
		On-track	3,665	93.2%	7,299	93.2%	0.0%	
	Gr10	At-risk	344	9.4%	1,084	15.7%	-6.3%	0.000**
		On-track	3,300	90.6%	5,801	84.3%	6.3%	
	Gr11	At-risk	413	10.5%	879	12.9%	-2.4%	0.000**
		On-track	3,514	89.5%	5,925	87.1%	2.4%	
	Gr12	At-risk	417	10.5%	938	14.2%	-3.6%	0.000**
		On-track	3,541	89.5%	5,675	85.8%	3.6%	
English Course	Gr9	At-risk	350	9.2%	832	11.2%	-2.0%	0.001**
		On-track	3,473	90.8%	6,616	88.8%	2.0%	
	Gr10	At-risk	746	19.5%	1,596	22.6%	-3.2%	0.000**
		On-track	3,089	80.5%	5,458	77.4%	3.2%	
	Gr11	At-risk	412	10.6%	739	11.5%	-0.9%	0.183
		On-track	3,461	89.4%	5,692	88.5%	0.9%	
	Gr12	At-risk	274	8.3%	430	7.9%	0.4%	0.541
		On-track	3,022	91.7%	4,982	92.1%	-0.4%	
Math Course	Gr9	At-risk	499	13.2%	1,214	16.6%	-3.4%	0.000**
		On-track	3,281	86.8%	6,117	83.4%	3.4%	
	Gr10	At-risk	835	21.7%	1,793	25.5%	-3.7%	0.000**
		On-track	3,007	78.3%	5,249	74.5%	3.7%	
	Gr11	At-risk	581	15.1%	1,009	15.8%	-0.7%	0.379
		On-track	3,259	84.9%	5,385	84.2%	0.7%	
	Gr12	At-risk	434	13.6%	569	11.1%	2.5%	0.001**
		On-track	2,756	86.4%	4,558	88.9%	-2.5%	
Overall	Gr9	At-risk	1,055	26.7%	2,257	28.7%	-2.0%	0.023*
		On-track	2,897	73.3%	5,610	71.3%	2.0%	
	Gr10	At-risk	1,428	36.9%	3,129	42.2%	-5.3%	0.000**
		On-track	2,445	63.1%	4,293	57.8%	5.3%	
	Gr11	At-risk	1,248	31.8%	2,278	33.4%	-1.6%	0.086
		On-track	2,682	68.2%	4,549	66.6%	1.6%	
	Gr12	At-risk	989	24.9%	1,693	25.6%	-0.6%	0.482
		On-track	2,977	75.1%	4,933	74.4%	0.6%	
Graduation	Not graduate	509	12.8%	1,325	18.8%	-6.1%	0.000**	
	Graduate	3,477	87.2%	5,705	81.2%	6.1%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

**Exhibit C2. Comparisons Between NAF Students with Partial Participation and Their Non-NAF Peers**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>	
		Count	%	Count	%			
GPA	Gr9	At-risk	1,176	37.7%	2,348	37.7%	0.0%	0.997
		On-track	1,945	62.3%	3,884	62.3%	0.0%	
	Gr10	At-risk	1,271	41.3%	2,399	39.3%	2.0%	0.064
		On-track	1,803	58.7%	3,699	60.7%	-2.0%	
	Gr11	At-risk	758	32.7%	1,594	30.9%	1.8%	0.117
		On-track	1,557	67.3%	3,561	69.1%	-1.8%	
	Gr12	At-risk	390	19.3%	1,182	23.7%	-4.4%	0.000**
		On-track	1,629	80.7%	3,801	76.3%	4.4%	
Credits Earned	Gr9	At-risk	599	18.3%	1,191	18.2%	0.1%	0.945
		On-track	2,682	81.7%	5,353	81.8%	-0.1%	
	Gr10	At-risk	972	32.9%	1,777	30.2%	2.7%	0.010**
		On-track	1,986	67.1%	4,115	69.8%	-2.7%	
	Gr11	At-risk	530	22.6%	948	18.3%	4.4%	0.000**
		On-track	1,810	77.4%	4,244	81.7%	-4.4%	
	Gr12	At-risk	453	22.3%	1,234	24.6%	-2.3%	0.037**
		On-track	1,578	77.7%	3,774	75.4%	2.3%	
English Course	Gr9	At-risk	772	24.9%	1,436	23.5%	1.4%	0.149
		On-track	2,331	75.1%	4,669	76.5%	-1.4%	
	Gr10	At-risk	909	32.0%	1,667	29.4%	2.6%	0.13*
		On-track	1,932	68.0%	4,006	70.6%	-2.6%	
	Gr11	At-risk	409	18.9%	791	16.5%	2.4%	0.016*
		On-track	1,758	81.1%	3,998	83.5%	-2.4%	
	Gr12	At-risk	173	10.3%	438	10.7%	-0.4%	0.633
		On-track	1,513	89.7%	3,661	89.3%	0.4%	
Math Course	Gr9	At-risk	951	30.9%	1,801	29.8%	1.1%	0.293
		On-track	2,125	69.1%	4,233	70.2%	-1.1%	
	Gr10	At-risk	934	33.0%	1,877	33.3%	-0.3%	0.778
		On-track	1,897	67.0%	3,760	66.7%	0.3%	
	Gr11	At-risk	440	20.8%	973	20.4%	0.4%	0.696
		On-track	1,677	79.2%	3,803	79.6%	-0.4%	
	Gr12	At-risk	187	11.8%	525	13.8%	-2.0%	0.046*
		On-track	1,402	88.2%	3,284	86.2%	2.0%	
Overall	Gr9	At-risk	1,570	47.5%	3,058	46.5%	1.0%	0.330
		On-track	1,733	52.5%	3,519	53.5%	-1.0%	
	Gr10	At-risk	1,767	57.2%	3,393	55.4%	1.8%	0.102
		On-track	1,323	42.8%	2,732	44.6%	-1.8%	
	Gr11	At-risk	1,124	47.8%	2,240	43.1%	4.7%	0.000**
		On-track	1,227	52.2%	2,962	56.9%	-4.7%	
	Gr12	At-risk	626	30.8%	1,790	35.7%	-4.9%	0.000**
		On-track	1,409	69.2%	3,226	64.3%	4.9%	
Graduation	Not graduate	829	33.8%	1,646	29.9%	3.9%	0.000**	
	Graduate	1,623	66.2%	3,861	70.1%	-3.9%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

**Exhibit C3. Comparisons Between NAF Students with Full Participation and Their Non-NAF Peers (At-risk by End of Grade 9)**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>	
		Count	%	Count	%			
GPA	Gr9	At-risk	710	74.1%	1,411	69.2%	4.9%	0.006**
		On-track	248	25.9%	628	30.8%	-4.9%	
	Gr10	At-risk	652	65.3%	1,401	69.3%	-4.0%	0.026*
		On-track	347	34.7%	621	30.7%	4.0%	
	Gr11	At-risk	504	53.3%	1,022	59.4%	-6.1%	0.002**
		On-track	442	46.7%	699	40.6%	6.1%	
Gr12	At-risk	485	47.0%	784	48.9%	-1.9%	0.342	
	On-track	546	53.0%	818	51.1%	1.9%		
Credits Earned	Gr9	At-risk	269	25.7%	535	23.8%	1.8%	0.250
		On-track	779	74.3%	1,711	76.2%	-1.8%	
	Gr10	At-risk	251	27.4%	716	38.7%	-11.3%	0.000**
		On-track	665	72.6%	1,134	61.3%	11.3%	
	Gr11	At-risk	202	19.8%	450	25.8%	-6.0%	0.000**
		On-track	820	80.2%	1,296	74.2%	6.0%	
Gr12	At-risk	287	27.6%	599	37.0%	-9.4%	0.000**	
	On-track	753	72.4%	1,020	63.0%	9.4%		
English Course	Gr9	At-risk	350	35.2%	832	39.6%	-4.4%	0.019*
		On-track	645	64.8%	1,271	60.4%	4.4%	
	Gr10	At-risk	318	32.4%	770	41.0%	-8.5%	0.000**
		On-track	662	67.6%	1,109	59.0%	8.5%	
	Gr11	At-risk	243	24.3%	445	27.7%	-3.5%	0.050
		On-track	759	75.7%	1,160	72.3%	3.5%	
Gr12	At-risk	162	18.8%	264	20.3%	-1.5%	0.384	
	On-track	699	81.2%	1,034	79.7%	1.5%		
Math Course	Gr9	At-risk	499	50.7%	1,214	59.1%	-8.4%	0.000**
		On-track	485	49.3%	840	40.9%	8.4%	
	Gr10	At-risk	356	36.3%	865	46.2%	-9.9%	0.000**
		On-track	626	63.7%	1,008	53.8%	9.9%	
	Gr11	At-risk	309	31.2%	563	35.7%	-4.5%	0.019**
		On-track	682	68.8%	1,014	64.3%	4.5%	
Gr12	At-risk	222	26.0%	284	22.7%	3.3%	0.083	
	On-track	632	74.0%	967	77.3%	-3.3%		
Overall	Gr9	At-risk	1,055	100.0%	2,257	100.0%	0.0%	-
		On-track	-	0.0%	-	0.0%	0.0%	
	Gr10	At-risk	764	76.5%	1,656	81.4%	-4.9%	0.001**
		On-track	235	23.5%	378	18.6%	4.9%	
	Gr11	At-risk	649	63.4%	1,202	68.6%	-5.2%	0.005**
		On-track	375	36.6%	551	31.4%	5.2%	
Gr12	At-risk	593	56.8%	967	59.6%	-2.8%	0.155	
	On-track	451	43.2%	656	40.4%	2.8%		
Graduation	Not graduate	287	27.3%	675	37.5%	-10.2%	0.000**	
	Graduate	764	72.7%	1,126	62.5%	10.2%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

**Exhibit C4. Comparisons Between NAF Students with Full Participation and Their Non-NAF Peers (On-track by End of Grade 9)**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>	
		Count	%	Count	%			
GPA	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
		On-track	2,794	100.0%	5,441	100.0%	0.0%	
	Gr10	At-risk	143	5.1%	342	6.5%	-1.4%	0.011*
		On-track	2,684	94.9%	4,950	93.5%	1.4%	
	Gr11	At-risk	167	6.2%	335	6.8%	-0.6%	0.299
		On-track	2,548	93.8%	4,617	93.2%	0.6%	
Gr12	At-risk	130	4.5%	230	4.7%	-0.1%	0.779	
	On-track	2,737	95.5%	4,692	95.3%	0.1%		
Credits Earned	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
		On-track	2,886	100.0%	5,588	100.0%	0.0%	
	Gr10	At-risk	83	3.1%	339	6.8%	-3.7%	0.000**
		On-track	2,603	96.9%	4,620	93.2%	3.7%	
	Gr11	At-risk	193	6.7%	393	7.9%	-1.1%	0.065
		On-track	2,669	93.3%	4,593	92.1%	1.1%	
Gr12	At-risk	112	3.9%	312	6.3%	-2.4%	0.000**	
	On-track	2,763	96.1%	4,620	93.7%	2.4%		
English Course	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
		On-track	2,828	100.0%	5,345	100.0%	0.0%	
	Gr10	At-risk	413	14.7%	785	15.4%	-0.7%	0.396
		On-track	2,399	85.3%	4,312	84.6%	0.7%	
	Gr11	At-risk	152	5.4%	261	5.5%	-0.1%	0.831
		On-track	2,677	94.6%	4,495	94.5%	0.1%	
Gr12	At-risk	91	3.8%	151	3.7%	0.1%	0.861	
	On-track	2,303	96.2%	3,913	96.3%	-0.1%		
Math Course	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
		On-track	2,796	100.0%	5,277	100.0%	0.0%	
	Gr10	At-risk	450	16.0%	878	17.2%	-1.3%	0.146
		On-track	2,368	84.0%	4,213	82.8%	1.3%	
	Gr11	At-risk	245	8.7%	406	8.5%	0.2%	0.789
		On-track	2,562	91.3%	4,343	91.5%	-0.2%	
Gr12	At-risk	184	8.0%	267	7.0%	1.1%	0.125	
	On-track	2,113	92.0%	3,572	93.0%	-1.1%		
Overall	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
		On-track	2,897	100.0%	5,610	100.0%	0.0%	
	Gr10	At-risk	630	22.3%	1,407	26.5%	-4.3%	0.000**
		On-track	2,201	77.7%	3,899	73.5%	4.3%	
	Gr11	At-risk	562	19.6%	1,019	20.4%	-0.8%	0.422
		On-track	2,301	80.4%	3,980	79.6%	0.8%	
Gr12	At-risk	360	12.5%	680	13.8%	-1.3%	0.114	
	On-track	2,519	87.5%	4,261	86.2%	1.3%		
Graduation	Not graduate	191	6.6%	616	12.0%	-5.3%	0.000**	
	Graduate	2,701	93.4%	4,537	88.0%	5.3%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

**Exhibit C5. Comparisons Between NAF Students with Partial Participation and Their Non-NAF Peers  
(At-risk by End of Grade 9)**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>	
		Count	%	Count	%			
GPA	Gr9	At-risk	1,176	82.5%	2,348	83.8%	-1.3%	0.284
		On-track	250	17.5%	455	16.2%	1.3%	
	Gr10	At-risk	1,096	79.4%	2,094	78.5%	0.9%	0.504
		On-track	285	20.6%	575	21.5%	-0.9%	
	Gr11	At-risk	617	64.3%	1,326	64.7%	-0.3%	0.867
		On-track	342	35.7%	725	35.3%	0.3%	
Gr12	At-risk	335	45.1%	1,009	53.3%	-8.2%	0.000**	
	On-track	407	54.9%	883	46.7%	8.2%		
Credits Earned	Gr9	At-risk	599	38.5%	1,191	39.2%	-0.7%	0.648
		On-track	958	61.5%	1,850	60.8%	0.7%	
	Gr10	At-risk	770	58.1%	1,425	55.0%	3.1%	0.065
		On-track	556	41.9%	1,167	45.0%	-3.1%	
	Gr11	At-risk	348	35.9%	634	30.7%	5.2%	0.005**
		On-track	622	64.1%	1,430	69.3%	-5.2%	
Gr12	At-risk	347	46.3%	927	48.7%	-2.3%	0.279	
	On-track	402	53.7%	978	51.3%	2.3%		
English Course	Gr9	At-risk	772	52.6%	1,436	50.6%	2.0%	0.204
		On-track	695	47.4%	1,403	49.4%	-2.0%	
	Gr10	At-risk	592	49.4%	1,126	46.8%	2.6%	0.139
		On-track	607	50.6%	1,282	53.2%	-2.6%	
	Gr11	At-risk	296	34.8%	613	33.6%	1.2%	0.531
		On-track	555	65.2%	1,214	66.4%	-1.2%	
Gr12	At-risk	126	22.1%	313	22.1%	0.0%	0.994	
	On-track	444	77.9%	1,104	77.9%	0.0%		
Math Course	Gr9	At-risk	951	65.5%	1,801	64.4%	1.1%	0.493
		On-track	501	34.5%	994	35.6%	-1.1%	
	Gr10	At-risk	601	50.4%	1,243	52.2%	-1.7%	0.326
		On-track	591	49.6%	1,140	47.8%	1.7%	
	Gr11	At-risk	297	36.1%	715	39.2%	-3.1%	0.133
		On-track	525	63.9%	1,109	60.8%	3.1%	
Gr12	At-risk	131	24.3%	357	26.6%	-2.2%	0.318	
	On-track	407	75.7%	986	73.4%	2.2%		
Overall	Gr9	At-risk	1,570	100.0%	3,058	100.0%	0.0%	-
		On-track	-	0.0%	-	0.0%	0.0%	
	Gr10	At-risk	1,207	87.0%	2,339	87.2%	-0.2%	0.843
		On-track	181	13.0%	344	12.8%	0.2%	
	Gr11	At-risk	739	76.0%	1,544	74.6%	1.3%	0.431
		On-track	234	24.0%	525	25.4%	-1.3%	
Gr12	At-risk	447	59.4%	1,261	66.1%	-6.6%	0.001**	
	On-track	305	40.6%	647	33.9%	6.6%		
Graduation	Not graduate	535	53.9%	1,127	50.9%	3.0%	0.114	
	Graduate	458	46.1%	1,089	49.1%	-3.0%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p < .05, \*\* p < .01.

**Exhibit C6. Comparisons Between NAF Students with Partial Participation and Their Non-NAF Peers (On-track by End of Grade 9)**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>		
		Count	%	Count	%				
GPA	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-	
		On-track	1,695	100.0%	3,429	100.0%	0.0%	-	
	Gr10	At-risk	131	8.0%	255	7.6%	0.3%	0.672	
		On-track	1,511	92.0%	3,084	92.4%	-0.3%	-	
	Gr11	At-risk	118	8.9%	224	7.4%	1.5%	0.095	
		On-track	1,210	91.1%	2,800	92.6%	-1.5%	-	
	Gr12	At-risk	48	3.8%	143	4.7%	-0.9%	0.182	
		On-track	1,216	96.2%	2,887	95.3%	0.9%	-	
	Credits Earned	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
			On-track	1,724	100.0%	3,503	100.0%	0.0%	-
		Gr10	At-risk	162	10.2%	317	9.9%	0.4%	0.692
			On-track	1,423	89.8%	2,899	90.1%	-0.4%	-
Gr11		At-risk	159	11.8%	269	8.8%	3.0%	0.002**	
		On-track	1,183	88.2%	2,778	91.2%	-3.0%	-	
Gr12		At-risk	95	7.5%	274	9.0%	-1.5%	0.104	
		On-track	1,172	92.5%	2,763	91.0%	1.5%	-	
English Course		Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
			On-track	1,636	100.0%	3,266	100.0%	0.0%	-
		Gr10	At-risk	281	17.6%	504	15.8%	1.8%	0.121
			On-track	1,317	82.4%	2,681	84.2%	-1.8%	-
	Gr11	At-risk	97	7.5%	151	5.2%	2.3%	0.004**	
		On-track	1,194	92.5%	2,741	94.8%	-2.3%	-	
	Gr12	At-risk	41	3.7%	111	4.2%	-0.5%	0.487	
		On-track	1,062	96.3%	2,526	95.8%	0.5%	-	
	Math Course	Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
			On-track	1,624	100.0%	3,239	100.0%	0.0%	-
		Gr10	At-risk	295	18.5%	591	18.6%	-0.1%	0.921
			On-track	1,300	81.5%	2,584	81.4%	0.1%	-
Gr11		At-risk	125	9.8%	221	7.7%	2.2%	0.019*	
		On-track	1,145	90.2%	2,662	92.3%	-2.2%	-	
Gr12		At-risk	49	4.7%	156	6.4%	-1.7%	0.050	
		On-track	991	95.3%	2,273	93.6%	1.7%	-	
Overall		Gr9	At-risk	-	0.0%	-	0.0%	0.0%	-
			On-track	1,733	100.0%	3,519	100.0%	0.0%	-
		Gr10	At-risk	514	31.1%	992	29.6%	1.5%	0.273
			On-track	1,137	68.9%	2,357	70.4%	-1.5%	-
	Gr11	At-risk	359	26.6%	635	20.8%	5.8%	0.000**	
		On-track	990	73.4%	2,415	79.2%	-5.8%	-	
	Gr12	At-risk	167	13.2%	486	16.0%	-2.8%	0.020*	
		On-track	1,100	86.8%	2,556	84.0%	2.8%	-	
	Graduation	Not graduate	274	19.1%	472	14.7%	4.4%	0.000**	
		Graduate	1,159	80.9%	2,732	85.3%	-4.4%	-	

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.



## Appendix D: Academy Characteristics and Student Outcomes

Exhibit D1. NAF Academies by Theme, Program Length, and Membership Level

	# of Academies ( <i>n</i> =117 <sup>a</sup> )	# of NAF Students	% of At-risk Student by End of Gr9
<b>NAF Academy Theme</b>			
Finance	36	1992	28.1%
Hospitality & Tourism	27	1465	39.9%
Information Technology	27	1996	40.9%
Engineering	22	1437	33.9%
Health Sciences	5	271	38.6%
<b>NAF Membership Level</b>			
Under Review	_b	_b	_b
Member	19	1183	42.0%
Certified	34	1541	37.3%
Model	61	4089	32.5%
<b>Program Type</b>			
2 years (Grades 11-12)	_b	_b	_b
3 years (Grades 10-12)	12	574	49.0%
4 years (Grades 9-12)	104	6437	34.3%

<sup>a</sup> Nine academies have no information

<sup>b</sup> This information is masked due to small *n* (<5) to protect privacy of the academies.

**Exhibit D2. Comparisons Between NAF Students in Academy of Engineering and Their Non-NAF Peers**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>	
		Count	%	Count	%			
GPA	Gr9	At-risk	327	24.6%	646	24.4%	0.2%	0.910
		On-track	1,003	75.4%	1,999	75.6%	-0.2%	
	Gr10	At-risk	424	31.3%	817	30.8%	0.5%	0.731
		On-track	929	68.7%	1,835	69.2%	-0.5%	
	Gr11	At-risk	290	26.9%	608	26.0%	0.9%	0.566
		On-track	788	73.1%	1,733	74.0%	-0.9%	
Gr12	At-risk	252	22.0%	484	22.0%	0.0%	0.938	
	On-track	893	78.0%	1,712	78.0%	0.0%		
Credits Earned	Gr9	At-risk	125	8.9%	249	8.9%	0.0%	0.976
		On-track	1,281	91.1%	2,543	91.1%	0.0%	
	Gr10	At-risk	180	15.3%	376	16.8%	-1.5%	0.246
		On-track	999	84.7%	1,861	83.2%	1.5%	
	Gr11	At-risk	133	11.0%	280	11.7%	-0.8%	0.485
		On-track	1,081	89.0%	2,105	88.3%	0.8%	
Gr12	At-risk	119	10.3%	318	14.4%	-4.1%	0.001*	
	On-track	1,037	89.7%	1,896	85.6%	4.1%		
English Course	Gr9	At-risk	208	15.6%	385	14.9%	0.7%	0.550
		On-track	1,127	84.4%	2,206	85.1%	-0.7%	
	Gr10	At-risk	201	15.2%	431	16.8%	-1.6%	0.211
		On-track	1,118	84.8%	2,134	83.2%	1.6%	
	Gr11	At-risk	212	17.8%	322	14.2%	3.6%	0.005**
		On-track	979	82.2%	1,947	85.8%	-3.6%	
Gr12	At-risk	81	8.8%	174	9.7%	-0.9%	0.448	
	On-track	843	91.2%	1,627	90.3%	0.9%		
Math Course	Gr9	At-risk	236	17.7%	466	18.0%	-0.4%	0.771
		On-track	1,100	82.3%	2,117	82.0%	0.4%	
	Gr10	At-risk	223	17.0%	484	19.0%	-1.9%	0.140
		On-track	1,088	83.0%	2,070	81.0%	1.9%	
	Gr11	At-risk	220	18.8%	376	16.6%	2.2%	0.111
		On-track	952	81.2%	1,889	83.4%	-2.2%	
Gr12	At-risk	120	13.5%	214	12.5%	1.0%	0.476	
	On-track	772	86.5%	1,502	87.5%	-1.0%		
Overall	Gr9	At-risk	478	33.9%	950	34.0%	0.0%	0.986
		On-track	931	66.1%	1,848	66.0%	0.0%	
	Gr10	At-risk	500	36.8%	986	36.8%	-0.1%	0.960
		On-track	860	63.2%	1,690	63.2%	0.1%	
	Gr11	At-risk	435	35.6%	809	33.6%	2.0%	0.240
		On-track	787	64.4%	1,596	66.4%	-2.0%	
Gr12	At-risk	327	28.1%	672	30.2%	-2.1%	0.198	
	On-track	836	71.9%	1,550	69.8%	2.1%		
Graduation	Not graduate	254	20.0%	541	22.0%	-1.9%	0.174	
	Graduate	1,014	80.0%	1,923	78.0%	1.9%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

**Exhibit D3. Comparisons Between NAF Students in Academy of Finance and Their Non-NAF Peers**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>		
		Count	%	Count	%				
GPA	Gr9	At-risk	391	20.5%	781	20.5%	0.0%	0.997	
		On-track	1,518	79.5%	3,033	79.5%	0.0%		
	Gr10	At-risk	425	22.3%	869	23.9%	-1.6%	0.193	
		On-track	1,481	77.7%	2,774	76.1%	1.6%		
	Gr11	At-risk	323	18.4%	620	18.8%	-0.4%	0.732	
		On-track	1,433	81.6%	2,680	81.2%	0.4%		
	Gr12	At-risk	218	12.6%	465	14.0%	-1.3%	0.187	
		On-track	1,509	87.4%	2,866	86.0%	1.3%		
	Credits Earned	Gr9	At-risk	184	9.3%	366	9.2%	0.0%	0.966
			On-track	1,798	90.7%	3,591	90.8%	0.0%	
Gr10		At-risk	251	13.8%	568	16.1%	-2.3%	0.030*	
		On-track	1,567	86.2%	2,968	83.9%	2.3%		
Gr11		At-risk	226	12.8%	436	13.1%	-0.3%	0.757	
		On-track	1,535	87.2%	2,882	86.9%	0.3%		
Gr12		At-risk	205	11.8%	513	15.4%	-3.5%	0.001*	
		On-track	1,529	88.2%	2,828	84.6%	3.5%		
English Course		Gr9	At-risk	239	12.4%	487	12.8%	-0.4%	0.670
			On-track	1,685	87.6%	3,312	87.2%	0.4%	
	Gr10	At-risk	675	36.4%	1,233	35.7%	0.6%	0.639	
		On-track	1,180	63.6%	2,217	64.3%	-0.6%		
	Gr11	At-risk	187	10.9%	347	11.1%	-0.2%	0.848	
		On-track	1,521	89.1%	2,771	88.9%	0.2%		
	Gr12	At-risk	100	6.6%	197	7.2%	-0.6%	0.480	
		On-track	1,411	93.4%	2,541	92.8%	0.6%		
	Math Course	Gr9	At-risk	272	14.5%	711	19.3%	-4.8%	0.000*
			On-track	1,598	85.5%	2,966	80.7%	4.8%	
Gr10		At-risk	676	36.4%	1,290	37.5%	-1.1%	0.418	
		On-track	1,182	63.6%	2,149	62.5%	1.1%		
Gr11		At-risk	238	14.1%	476	15.3%	-1.2%	0.253	
		On-track	1,449	85.9%	2,627	84.7%	1.2%		
Gr12		At-risk	151	10.6%	286	10.9%	-0.3%	0.768	
		On-track	1,271	89.4%	2,333	89.1%	0.3%		
Overall		Gr9	At-risk	558	28.1%	1,191	30.1%	-2.0%	0.113
			On-track	1,429	71.9%	2,770	69.9%	2.0%	
	Gr10	At-risk	976	51.2%	1,936	53.1%	-1.9%	0.178	
		On-track	932	48.8%	1,713	46.9%	1.9%		
	Gr11	At-risk	572	32.5%	1,095	33.0%	-0.5%	0.707	
		On-track	1,189	67.5%	2,223	67.0%	0.5%		
	Gr12	At-risk	394	22.7%	807	24.1%	-1.4%	0.253	
		On-track	1,341	77.3%	2,535	75.9%	1.4%		
	Graduation	Not graduate	266	14.6%	586	16.7%	-2.1%	0.046*	
		Graduate	1,552	85.4%	2,913	83.3%	2.1%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

**Exhibit D4. Comparisons Between NAF Students in Academy of Health Sciences and Their Non-NAF Peers**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>		
		Count	%	Count	%				
GPA	Gr9	At-risk	59	24.3%	116	24.0%	0.3%	0.938	
		On-track	184	75.7%	367	76.0%	-0.3%		
	Gr10	At-risk	79	30.2%	141	27.6%	2.5%	0.465	
		On-track	183	69.8%	369	72.4%	-2.5%		
	Gr11	At-risk	56	23.2%	104	22.6%	0.7%	0.839	
		On-track	185	76.8%	357	77.4%	-0.7%		
	Gr12	At-risk	35	15.6%	64	14.7%	0.8%	0.783	
		On-track	190	84.4%	370	85.3%	-0.8%		
	Credits Earned	Gr9	At-risk	49	20.5%	98	20.6%	-0.1%	0.968
			On-track	190	79.5%	377	79.4%	0.1%	
		Gr10	At-risk	46	18.2%	100	20.1%	-1.9%	0.526
			On-track	207	81.8%	397	79.9%	1.9%	
Gr11		At-risk	28	11.6%	73	15.7%	-4.1%	0.139	
		On-track	213	88.4%	391	84.3%	4.1%		
Gr12		At-risk	25	11.1%	55	12.5%	-1.5%	0.582	
		On-track	201	88.9%	384	87.5%	1.5%		
English Course		Gr9	At-risk	31	13.8%	53	12.4%	1.4%	0.606
			On-track	193	86.2%	374	87.6%	-1.4%	
		Gr10	At-risk	43	16.6%	97	20.0%	-3.4%	0.264
			On-track	216	83.4%	389	80.0%	3.4%	
	Gr11	At-risk	38	15.9%	66	15.0%	0.9%	0.747	
		On-track	201	84.1%	375	85.0%	-0.9%		
	Gr12	At-risk	19	14.1%	20	8.4%	5.7%	0.083	
		On-track	116	85.9%	219	91.6%	-5.7%		
	Math Course	Gr9	At-risk	49	21.9%	94	22.0%	-0.1%	0.980
			On-track	175	78.1%	334	78.0%	0.1%	
		Gr10	At-risk	67	25.9%	135	28.0%	-2.1%	0.544
			On-track	192	74.1%	348	72.0%	2.1%	
Gr11		At-risk	52	22.0%	93	21.5%	0.6%	0.868	
		On-track	184	78.0%	340	78.5%	-0.6%		
Gr12		At-risk	29	24.6%	35	15.5%	9.1%	0.040*	
		On-track	89	75.4%	191	84.5%	-9.1%		
Overall		Gr9	At-risk	98	38.6%	189	37.7%	0.9%	0.818
			On-track	156	61.4%	312	62.3%	-0.9%	
		Gr10	At-risk	104	39.7%	217	42.5%	-2.8%	0.459
			On-track	158	60.3%	294	57.5%	2.8%	
	Gr11	At-risk	83	34.4%	177	38.1%	-3.6%	0.344	
		On-track	158	65.6%	288	61.9%	3.6%		
	Gr12	At-risk	43	19.0%	99	22.6%	-3.5%	0.293	
		On-track	183	81.0%	340	77.4%	3.5%		
	Graduation	Not graduate	38	16.5%	88	19.2%	-2.7%	0.396	
		Graduate	192	83.5%	371	80.8%	2.7%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p < .05, \*\* p < .01.

**Exhibit D5. Comparisons Between NAF Students in Academy of Hospitality and Tourism and Their Non-NAF Peers**

Outcome Benchmark Indicator	Grade		NAF		Non-NAF		Diff.	P value <sup>a</sup>	
			Count	%	Count	%			
GPA	Gr9	At-risk	437	31.9%	874	32.0%	0.0%	0.994	
		On-track	931	68.1%	1,861	68.0%	0.0%		
	Gr10	At-risk	490	35.8%	871	33.1%	2.7%	0.087	
		On-track	879	64.2%	1,761	66.9%	-2.7%		
	Gr11	At-risk	355	29.7%	611	26.6%	3.0%	0.057	
		On-track	842	70.3%	1,684	73.4%	-3.0%		
	Gr12	At-risk	237	21.2%	441	20.4%	0.8%	0.605	
		On-track	880	78.8%	1,716	79.6%	-0.8%		
	Credits Earned	Gr9	At-risk	209	14.3%	417	14.3%	0.0%	0.997
			On-track	1,248	85.7%	2,491	85.7%	0.0%	
		Gr10	At-risk	353	26.0%	722	27.5%	-1.6%	0.284
			On-track	1,007	74.0%	1,899	72.5%	1.6%	
Gr11		At-risk	229	19.1%	375	16.3%	2.8%	0.038*	
		On-track	972	80.9%	1,928	83.7%	-2.8%		
Gr12		At-risk	235	21.0%	503	23.3%	-2.3%	0.137	
		On-track	885	79.0%	1,659	76.7%	2.3%		
English Course		Gr9	At-risk	284	20.2%	543	19.6%	0.7%	0.613
			On-track	1,120	79.8%	2,232	80.4%	-0.7%	
		Gr10	At-risk	248	19.5%	470	19.0%	0.4%	0.743
			On-track	1,027	80.5%	2,003	81.0%	-0.4%	
	Gr11	At-risk	142	12.6%	278	12.9%	-0.4%	0.775	
		On-track	989	87.4%	1,876	87.1%	0.4%		
	Gr12	At-risk	86	8.8%	185	9.7%	-0.9%	0.412	
		On-track	896	91.2%	1,723	90.3%	0.9%		
	Math Course	Gr9	At-risk	347	24.8%	703	25.5%	-0.8%	0.595
			On-track	1,053	75.2%	2,049	74.5%	0.8%	
		Gr10	At-risk	284	22.1%	611	24.8%	-2.7%	0.068
			On-track	999	77.9%	1,851	75.2%	2.7%	
Gr11		At-risk	177	16.0%	377	17.7%	-1.7%	0.214	
		On-track	932	84.0%	1,754	82.3%	1.7%		
Gr12		At-risk	92	9.9%	214	12.2%	-2.4%	0.067	
		On-track	841	90.1%	1,537	87.8%	2.4%		
Overall		Gr9	At-risk	582	39.9%	1,173	40.3%	-0.4%	0.790
			On-track	876	60.1%	1,735	59.7%	0.4%	
		Gr10	At-risk	627	45.6%	1,241	46.8%	-1.2%	0.477
			On-track	748	54.4%	1,412	53.2%	1.2%	
	Gr11	At-risk	507	42.0%	878	38.0%	4.1%	0.019*	
		On-track	699	58.0%	1,435	62.0%	-4.1%		
	Gr12	At-risk	350	31.2%	732	33.7%	-2.5%	0.147	
		On-track	773	68.8%	1,442	66.3%	2.5%		
	Graduation	Not graduate	336	27.3%	717	29.9%	-2.6%	0.102	
		Graduate	896	72.7%	1,683	70.1%	2.6%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

**Exhibit D6. Comparisons Between NAF Students in Academy of Information Technology and Their Non-NAF Peers**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>		
		Count	%	Count	%				
GPA	Gr9	At-risk	595	32.3%	1,188	32.3%	0.0%	0.975	
		On-track	1,249	67.7%	2,489	67.7%	0.0%		
	Gr10	At-risk	582	31.2%	1,313	35.7%	-4.5%	0.001**	
		On-track	1,282	68.8%	2,365	64.3%	4.5%		
	Gr11	At-risk	368	23.1%	912	28.6%	-5.6%	0.000**	
		On-track	1,228	76.9%	2,275	71.4%	5.6%		
	Gr12	At-risk	247	15.3%	669	21.1%	-5.8%	0.000**	
		On-track	1,363	84.7%	2,497	78.9%	5.8%		
	Credits Earned	Gr9	At-risk	273	14.1%	541	14.0%	0.1%	0.938
			On-track	1,668	85.9%	3,326	86.0%	-0.1%	
		Gr10	At-risk	433	24.0%	989	28.2%	-4.1%	0.001**
			On-track	1,370	76.0%	2,523	71.8%	4.1%	
Gr11		At-risk	289	17.0%	583	18.2%	-1.1%	0.324	
		On-track	1,409	83.0%	2,629	81.8%	1.1%		
Gr12		At-risk	239	14.8%	687	21.6%	-6.8%	0.000**	
		On-track	1,377	85.2%	2,493	78.4%	6.8%		
English Course		Gr9	At-risk	309	16.5%	690	19.1%	-2.6%	0.020*
			On-track	1,562	83.5%	2,927	80.9%	2.6%	
		Gr10	At-risk	423	23.6%	925	27.1%	-3.5%	0.006**
			On-track	1,369	76.4%	2,488	72.9%	3.5%	
	Gr11	At-risk	213	13.1%	440	14.9%	-1.8%	0.089	
		On-track	1,418	86.9%	2,514	85.1%	1.8%		
	Gr12	At-risk	141	10.7%	247	9.5%	1.1%	0.018	
		On-track	1,181	89.3%	2,341	90.5%	-1.1%		
	Math Course	Gr9	At-risk	474	25.6%	920	25.7%	-0.2%	0.893
			On-track	1,381	74.4%	2,657	74.3%	0.2%	
		Gr10	At-risk	452	25.3%	1,022	30.1%	-4.7%	0.000*
			On-track	1,332	74.7%	2,376	69.9%	4.7%	
Gr11		At-risk	288	17.8%	565	19.1%	-1.3%	0.297	
		On-track	1,326	82.2%	2,393	80.9%	1.3%		
Gr12		At-risk	204	15.4%	294	12.2%	3.3%	0.005**	
		On-track	1,118	84.6%	2,124	87.8%	-3.3%		
Overall		Gr9	At-risk	798	40.9%	1,604	41.2%	-0.4%	0.778
			On-track	1,155	59.1%	2,285	58.8%	0.4%	
		Gr10	At-risk	873	46.7%	1,916	52.0%	-5.3%	0.000**
			On-track	995	53.3%	1,767	48.0%	5.3%	
	Gr11	At-risk	693	40.8%	1,391	43.3%	-2.5%	0.094	
		On-track	1,005	59.2%	1,822	56.7%	2.5%		
	Gr12	At-risk	438	27.1%	1,034	32.5%	-5.4%	0.000**	
		On-track	1,178	72.9%	2,146	67.5%	5.4%		
	Graduation	Not graduate	385	22.3%	915	27.0%	-4.7%	0.000*	
		Graduate	1,342	77.7%	2,470	73.0%	4.7%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

**Exhibit D7. Comparisons Between NAF Students in Member Academies and Their Non-NAF Peers**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>		
		Count	%	Count	%				
GPA	Gr9	At-risk	354	32.8%	705	32.8%	0.0%	0.985	
		On-track	725	67.2%	1,446	67.2%	0.0%		
	Gr10	At-risk	377	33.2%	832	37.8%	-4.7%	0.008**	
		On-track	760	66.8%	1,367	62.2%	4.7%		
	Gr11	At-risk	223	27.4%	610	32.5%	-5.1%	0.008**	
		On-track	591	72.6%	1,265	67.5%	5.1%		
	Gr12	At-risk	205	21.4%	488	26.5%	-5.1%	0.003**	
		On-track	753	78.6%	1,353	73.5%	5.1%		
	Credits Earned	Gr9	At-risk	135	12.6%	269	12.6%	0.0%	0.933
			On-track	939	87.4%	1,873	87.4%	0.0%	
Gr10		At-risk	165	16.5%	373	20.4%	-3.9%	0.011*	
		On-track	836	83.5%	1,453	79.6%	3.9%		
Gr11		At-risk	204	19.5%	382	19.9%	-0.3%	0.837	
		On-track	840	80.5%	1,542	80.1%	0.3%		
Gr12		At-risk	115	11.9%	407	21.9%	-9.9%	0.000**	
		On-track	850	88.1%	1,455	78.1%	9.9%		
English Course		Gr9	At-risk	137	13.8%	297	15.6%	-1.8%	0.203
			On-track	855	86.2%	1,608	84.4%	1.8%	
	Gr10	At-risk	341	30.4%	666	32.0%	-1.6%	0.356	
		On-track	779	69.6%	1,413	68.0%	1.6%		
	Gr11	At-risk	151	14.8%	345	19.0%	-4.2%	0.005**	
		On-track	867	85.2%	1,470	81.0%	4.2%		
	Gr12	At-risk	96	11.7%	190	12.3%	-0.6%	0.669	
		On-track	727	88.3%	1,359	87.7%	0.6%		
	Math Course	Gr9	At-risk	191	19.5%	410	22.1%	-2.7%	0.100
			On-track	790	80.5%	1,443	77.9%	2.7%	
Gr10		At-risk	398	35.7%	767	37.0%	-1.3%	0.483	
		On-track	716	64.3%	1,307	63.0%	1.3%		
Gr11		At-risk	209	20.7%	437	24.4%	-3.7%	0.024*	
		On-track	802	79.3%	1,353	75.6%	3.7%		
Gr12		At-risk	147	17.7%	216	15.3%	2.4%	0.142	
		On-track	683	82.3%	1,192	84.7%	-2.4%		
Overall		Gr9	At-risk	462	42.0%	935	42.7%	-0.7%	0.720
			On-track	638	58.0%	1,257	57.3%	0.7%	
	Gr10	At-risk	588	51.6%	1,241	56.3%	-4.6%	0.011*	
		On-track	551	48.4%	965	43.7%	4.6%		
	Gr11	At-risk	418	40.0%	896	46.5%	-6.4%	0.001**	
		On-track	626	60.0%	1,032	53.5%	6.4%		
	Gr12	At-risk	296	30.7%	705	37.9%	-7.2%	0.000**	
		On-track	669	69.3%	1,157	62.1%	7.2%		
	Graduation	Not graduate	210	20.3%	447	22.3%	-2.0%	0.198	
		Graduate	825	79.7%	1,556	77.7%	2.0%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

**Exhibit D8. Comparisons Between NAF Students in Certified Academies and Their Non-NAF Peers**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>		
		Count	%	Count	%				
GPA	Gr9	At-risk	470	31.3%	933	31.2%	0.1%	0.935	
		On-track	1,032	68.7%	2,060	68.8%	-0.1%		
	Gr10	At-risk	499	34.4%	906	32.3%	2.1%	0.160	
		On-track	951	65.6%	1,901	67.7%	-2.1%		
	Gr11	At-risk	363	28.6%	609	25.4%	3.3%	0.033*	
		On-track	905	71.4%	1,793	74.6%	-3.3%		
	Gr12	At-risk	241	19.9%	468	20.4%	-0.6%	0.686	
		On-track	972	80.1%	1,821	79.6%	0.6%		
	Credits Earned	Gr9	At-risk	136	8.9%	272	8.9%	0.0%	0.971
			On-track	1,396	91.1%	2,781	91.1%	0.0%	
Gr10		At-risk	234	16.8%	451	16.8%	0.0%	0.996	
		On-track	1,158	83.2%	2,231	83.2%	0.0%		
Gr11		At-risk	176	13.8%	337	13.9%	-0.1%	0.905	
		On-track	1,101	86.2%	2,083	86.1%	0.1%		
Gr12		At-risk	202	16.6%	464	20.2%	-3.6%	0.009*	
		On-track	1,018	83.4%	1,836	79.8%	3.6%		
English Course		Gr9	At-risk	260	17.1%	547	18.2%	-1.1%	0.362
			On-track	1,258	82.9%	2,454	81.8%	1.1%	
	Gr10	At-risk	450	31.9%	827	30.8%	1.1%	0.483	
		On-track	961	68.1%	1,856	69.2%	-1.1%		
	Gr11	At-risk	200	16.1%	351	15.3%	0.8%	0.534	
		On-track	1,042	83.9%	1,942	84.7%	-0.8%		
	Gr12	At-risk	89	8.8%	173	9.5%	-0.7%	0.545	
		On-track	917	91.2%	1,641	90.5%	0.7%		
	Math Course	Gr9	At-risk	311	20.9%	639	21.7%	-0.8%	0.538
			On-track	1,177	79.1%	2,305	78.3%	0.8%	
Gr10		At-risk	445	31.6%	850	31.8%	-0.2%	0.881	
		On-track	963	68.4%	1,820	68.2%	0.2%		
Gr11		At-risk	243	20.0%	434	19.0%	1.0%	0.491	
		On-track	975	80.0%	1,852	81.0%	-1.0%		
Gr12		At-risk	123	12.4%	263	15.2%	-2.7%	0.048*	
		On-track	867	87.6%	1,471	84.8%	2.7%		
Overall		Gr9	At-risk	573	37.3%	1,162	38.0%	-0.7%	0.630
			On-track	964	62.7%	1,895	62.0%	0.7%	
	Gr10	At-risk	749	51.3%	1,408	49.8%	1.6%	0.331	
		On-track	710	48.7%	1,421	50.2%	-1.6%		
	Gr11	At-risk	518	40.3%	895	36.7%	3.6%	0.031*	
		On-track	767	59.7%	1,544	63.3%	-3.6%		
	Gr12	At-risk	355	28.9%	729	31.5%	-2.6%	0.107	
		On-track	873	71.1%	1,583	68.5%	2.6%		
	Graduation	Not graduate	300	22.4%	680	26.4%	-3.9%	0.007*	
		Graduate	1,038	77.6%	1,900	73.6%	3.9%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p < .05, \*\* p < .01.



**Exhibit D9. Comparisons Between NAF Students in Model Academies and Their Non-NAF Peers**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>		
		Count	%	Count	%				
GPA	Gr9	At-risk	891	23.2%	1,779	23.2%	0.0%	0.991	
		On-track	2,945	76.8%	5,877	76.8%	0.0%		
	Gr10	At-risk	980	25.4%	2,038	27.1%	-1.7%	0.050	
		On-track	2,884	74.6%	5,490	72.9%	1.7%		
	Gr11	At-risk	694	19.7%	1,441	21.3%	-1.6%	0.062	
		On-track	2,823	80.3%	5,322	78.7%	1.6%		
	Gr12	At-risk	469	13.8%	1,022	15.4%	-1.6%	0.033*	
		On-track	2,931	86.2%	5,618	84.6%	1.6%		
	Credits Earned	Gr9	At-risk	494	12.1%	980	12.1%	0.1%	0.930
			On-track	3,581	87.9%	7,141	87.9%	-0.1%	
Gr10		At-risk	739	19.9%	1,715	23.5%	-3.6%	0.000**	
		On-track	2,978	80.1%	5,596	76.5%	3.6%		
Gr11		At-risk	465	13.2%	933	13.7%	-0.5%	0.441	
		On-track	3,060	86.8%	5,858	86.3%	0.5%		
Gr12		At-risk	440	12.9%	1,040	15.6%	-2.7%	0.000**	
		On-track	2,973	87.1%	5,618	84.4%	2.7%		
English Course		Gr9	At-risk	581	14.9%	1,146	15.0%	-0.1%	0.835
			On-track	3,330	85.1%	6,493	85.0%	0.1%	
	Gr10	At-risk	717	19.4%	1,528	21.5%	-2.2%	0.009**	
		On-track	2,980	80.6%	5,564	78.5%	2.2%		
	Gr11	At-risk	391	11.5%	663	10.5%	1.0%	0.117	
		On-track	3,009	88.5%	5,673	89.5%	-1.0%		
	Gr12	At-risk	212	7.4%	403	7.4%	0.1%	0.875	
		On-track	2,634	92.6%	5,077	92.6%	-0.1%		
	Math Course	Gr9	At-risk	777	20.0%	1,635	21.6%	-1.6%	0.049*
			On-track	3,100	80.0%	5,924	78.4%	1.6%	
Gr10		At-risk	788	21.3%	1,751	24.8%	-3.5%	0.000**	
		On-track	2,913	78.7%	5,305	75.2%	3.5%		
Gr11		At-risk	464	13.8%	896	14.2%	-0.3%	0.657	
		On-track	2,891	86.2%	5,432	85.8%	0.3%		
Gr12		At-risk	290	10.9%	505	9.7%	1.2%	0.107	
		On-track	2,369	89.1%	4,676	90.3%	-1.2%		
Overall		Gr9	At-risk	1,326	32.5%	2,683	33.0%	-0.5%	0.563
			On-track	2,754	67.5%	5,442	67.0%	0.5%	
	Gr10	At-risk	1,567	40.5%	3,328	44.1%	-3.6%	0.000**	
		On-track	2,305	59.5%	4,225	55.9%	3.6%		
	Gr11	At-risk	1,214	34.4%	2,318	34.1%	0.3%	0.758	
		On-track	2,316	65.6%	4,482	65.9%	-0.3%		
	Gr12	At-risk	799	23.4%	1,685	25.3%	-1.9%	0.038*	
		On-track	2,617	76.6%	4,982	74.7%	1.9%		
	Graduation	Not graduate	682	18.9%	1,526	21.7%	-2.8%	0.001**	
		Graduate	2,936	81.1%	5,516	78.3%	2.8%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

**Exhibit D10. Comparisons Between NAF Students in Four-Year Academies and Their Non-NAF Peers**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>	
		Count	%	Count	%			
GPA	Gr9	At-risk	1,527	25.4%	3,041	25.4%	0.0%	0.958
		On-track	4,474	74.6%	8,927	74.6%	0.0%	
	Gr10	At-risk	1,674	27.6%	3,405	29.0%	-1.3%	0.059
		On-track	4,389	72.4%	8,353	71.0%	1.3%	
	Gr11	At-risk	1,178	21.9%	2,398	22.9%	-1.1%	0.129
		On-track	4,212	78.1%	8,065	77.1%	1.1%	
Gr12	At-risk	796	15.0%	1,754	17.1%	-2.1%	0.001**	
	On-track	4,513	85.0%	8,495	82.9%	2.1%		
Credits Earned	Gr9	At-risk	804	12.7%	1,599	12.7%	0.0%	0.969
		On-track	5,512	87.3%	10,982	87.3%	0.0%	
	Gr10	At-risk	1,151	19.5%	2,550	22.4%	-2.9%	0.000**
		On-track	4,754	80.5%	8,834	77.6%	2.9%	
	Gr11	At-risk	787	14.2%	1,545	14.7%	-0.5%	0.424
		On-track	4,746	85.8%	8,971	85.3%	0.5%	
Gr12	At-risk	700	13.1%	1,791	17.4%	-4.3%	0.000**	
	On-track	4,626	86.9%	8,491	82.6%	4.3%		
English Course	Gr9	At-risk	882	14.5%	1,805	15.2%	-0.7%	0.244
		On-track	5,185	85.5%	10,075	84.8%	0.7%	
	Gr10	At-risk	1,424	24.4%	2,851	25.6%	-1.3%	0.071
		On-track	4,419	75.6%	8,270	74.4%	1.3%	
	Gr11	At-risk	662	12.4%	1,217	12.3%	0.1%	0.923
		On-track	4,689	87.6%	8,663	87.7%	-0.1%	
Gr12	At-risk	349	7.9%	664	8.0%	0.0%	0.965	
	On-track	4,044	92.1%	7,671	92.0%	0.0%		
Math Course	Gr9	At-risk	1,156	19.3%	2,496	21.3%	-2.1%	0.001**
		On-track	4,837	80.7%	9,200	78.7%	2.1%	
	Gr10	At-risk	1,534	26.3%	3,191	28.8%	-2.6%	0.000**
		On-track	4,306	73.7%	7,879	71.2%	2.6%	
	Gr11	At-risk	855	16.2%	1,626	16.5%	-0.4%	0.562
		On-track	4,431	83.8%	8,204	83.5%	0.4%	
Gr12	At-risk	495	11.7%	879	11.1%	0.5%	0.378	
	On-track	3,745	88.3%	7,010	88.9%	-0.5%		
Overall	Gr9	At-risk	2,177	34.3%	4,426	35.0%	-0.7%	0.321
		On-track	4,169	65.7%	8,208	65.0%	0.7%	
	Gr10	At-risk	2,731	44.9%	5,623	47.6%	-2.7%	0.001**
		On-track	3,350	55.1%	6,186	52.4%	2.7%	
	Gr11	At-risk	2,006	36.2%	3,798	36.0%	0.2%	0.837
		On-track	3,540	63.8%	6,750	64.0%	-0.2%	
Gr12	At-risk	1,297	24.3%	2,855	27.7%	-3.4%	0.000*	
	On-track	4,040	75.7%	7,448	72.3%	3.4%		
Graduation	Not graduate	1,133	19.9%	2,556	23.2%	-3.3%	0.000*	
	Graduate	4,550	80.1%	8,463	76.8%	3.3%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

**Exhibit D11. Comparisons Between NAF Students in Three-Year Academies and Their Non-NAF Peers**

Outcome Benchmark Indicator	Grade	NAF		Non-NAF		Diff.	P value <sup>a</sup>		
		Count	%	Count	%				
GPA	Gr9	At-risk	230	41.8%	460	41.8%	0.0%	1.000	
		On-track	320	58.2%	640	58.2%	0.0%		
	Gr10	At-risk	256	46.5%	497	45.8%	0.7%	0.789	
		On-track	294	53.5%	587	54.2%	-0.7%		
	Gr11	At-risk	160	43.6%	376	42.0%	1.6%	0.594	
		On-track	207	56.4%	520	58.0%	-1.6%		
	Gr12	At-risk	148	35.8%	300	36.4%	-0.5%	0.855	
		On-track	265	64.2%	525	63.6%	0.5%		
	Credits Earned	Gr9	At-risk	31	5.5%	62	5.5%	0.0%	1.000
			On-track	532	94.5%	1,064	94.5%	0.0%	
Gr10		At-risk	83	22.6%	156	21.0%	1.6%	0.537	
		On-track	284	77.4%	587	79.0%	-1.6%		
Gr11		At-risk	96	20.4%	159	17.0%	3.4%	0.115	
		On-track	375	79.6%	779	83.0%	-3.4%		
Gr12		At-risk	87	20.5%	201	23.9%	-3.4%	0.179	
		On-track	337	79.5%	641	76.1%	3.4%		
English Course		Gr9	At-risk	146	26.6%	274	26.3%	0.4%	0.873
			On-track	402	73.4%	769	73.7%	-0.4%	
	Gr10	At-risk	121	23.0%	243	23.9%	-0.9%	0.681	
		On-track	405	77.0%	772	76.1%	0.9%		
	Gr11	At-risk	98	22.0%	185	21.6%	0.4%	0.865	
		On-track	347	78.0%	671	78.4%	-0.4%		
	Gr12	At-risk	53	13.3%	123	16.1%	-2.8%	0.206	
		On-track	345	86.7%	640	83.9%	2.8%		
	Math Course	Gr9	At-risk	179	32.8%	313	30.2%	2.6%	0.282
			On-track	367	67.2%	725	69.8%	-2.6%	
Gr10		At-risk	131	25.0%	265	26.2%	-1.2%	0.614	
		On-track	393	75.0%	747	73.8%	1.2%		
Gr11		At-risk	86	20.0%	194	22.6%	-2.6%	0.289	
		On-track	344	80.0%	665	77.4%	2.6%		
Gr12		At-risk	77	21.2%	127	18.5%	2.7%	0.288	
		On-track	286	78.8%	560	81.5%	-2.7%		
Overall		Gr9	At-risk	279	49.0%	549	48.5%	0.5%	0.848
			On-track	290	51.0%	582	51.5%	-0.5%	
	Gr10	At-risk	271	49.2%	544	50.0%	-0.9%	0.741	
		On-track	280	50.8%	543	50.0%	0.9%		
	Gr11	At-risk	223	47.3%	452	48.2%	-0.8%	0.765	
		On-track	248	52.7%	486	51.8%	0.8%		
	Gr12	At-risk	199	46.9%	377	44.8%	2.2%	0.466	
		On-track	225	53.1%	465	55.2%	-2.2%		
	Graduation	Not graduate	100	21.3%	197	21.1%	0.3%	0.913	
		Graduate	369	78.7%	738	78.9%	-0.3%		

<sup>a</sup> Differences were tested by Chi-Square Tests. Statistical significance levels are indicated as follows: \* p <.05, \*\* p < .01.

## Appendix E: List of NAF Academies Included in This Study

School District	Academy Name
Porterville, CA	Granite Hills High School AOIT
Porterville, CA	Harmony Magnet Academy AOE
Porterville, CA	Monache High School Multimedia and Technology Academy
Porterville, CA	Porterville High School Academy of Medical Careers AOHS
Porterville, CA	Porterville High School AOF
Pasadena, CA	Engineering & Environmental Science Academy
Hartford, CT	Academy of Engineering and Green Technology
Hartford, CT	Culinary Arts Academy AOHT
Hartford, CT	Hartford Public High School NAF Academy of Nursing and Health Sciences
Hartford, CT	High School, Inc. AOF
Hartford, CT	Pathways Academy of Technology & Design AOIT
Broward, FL	Blanche Ely High School AOIT
Broward, FL	Boyd Anderson High School AOF
Broward, FL	Charles W. Flanagan High School AOF
Broward, FL	Coral Glades High School AOF
Broward, FL	Cypress Bay High School AOF
Broward, FL	Deerfield Beach High School AOF
Broward, FL	Dillard High School AOF
Broward, FL	J.P. Taravella High School AOF
Broward, FL	Marjory Stoneman Douglas High School AOF
Broward, FL	Northeast High School AOF (Broward)
Broward, FL	Northeast High School AOIT (Broward)
Broward, FL	Piper High School AOF
Broward, FL	Plantation High School AOF
Broward, FL	Plantation High School AOHT
Broward, FL	South Broward High School AOHT
Broward, FL	Western High School AOF
Miami-Dade, FL	Alonzo and Tracy Mourning Senior High School AOHT
Miami-Dade, FL	Alonzo and Tracy Mourning Senior High School AOIT
Miami-Dade, FL	American Senior High School AOHT
Miami-Dade, FL	American Senior High School AOIT
Miami-Dade, FL	Barbara Goleman Senior High School AOF
Miami-Dade, FL	Barbara Goleman Senior High School AOHT
Miami-Dade, FL	Barbara Goleman Senior High School AOIT
Miami-Dade, FL	Booker T. Washington Senior High AOE
Miami-Dade, FL	Booker T. Washington Senior High AOF

School District	Academy Name
Miami-Dade, FL	Booker T. Washington Senior High AOHT
Miami-Dade, FL	Booker T. Washington Senior High AOIT
Miami-Dade, FL	Coral Gables Senior High School AOF
Miami-Dade, FL	Coral Reef High School AOF
Miami-Dade, FL	G. Holmes Braddock AOIT
Miami-Dade, FL	Hialeah Gardens Senior High School AOE
Miami-Dade, FL	Hialeah Gardens Senior High School AOF
Miami-Dade, FL	Hialeah Gardens Senior High School AOHT
Miami-Dade, FL	Hialeah Gardens Senior High School AOIT
Miami-Dade, FL	Homestead Senior High School AOHT
Miami-Dade, FL	John A. Ferguson Senior High AOHT
Miami-Dade, FL	Mater Academy East Charter High School
Miami-Dade, FL	Miami Beach Senior High School AOHT
Miami-Dade, FL	Miami Beach Senior High School AOIT
Miami-Dade, FL	Miami Central Senior High School AOIT
Miami-Dade, FL	Miami Edison Senior High School AOF
Miami-Dade, FL	Miami Jackson Senior High School AOF
Miami-Dade, FL	Miami Jackson Senior High School AOIT
Miami-Dade, FL	Miami Lakes Educational Center AOHS
Miami-Dade, FL	Miami Norland Senior High School AOHT
Miami-Dade, FL	Miami Norland Senior High School AOIT
Miami-Dade, FL	Miami Northwestern Senior High School AOHT
Miami-Dade, FL	Miami Springs Senior High School AOHT
Miami-Dade, FL	Miami Sunset Senior High School Academy of Information & Media Technology
Miami-Dade, FL	Miami Sunset Senior High School AOE
Miami-Dade, FL	Miami Sunset Senior High School AOF
Miami-Dade, FL	Miami Sunset Senior High School AOHT
Miami-Dade, FL	North Miami Beach Senior High School AOF
Miami-Dade, FL	North Miami Beach Senior High School AOIT
Miami-Dade, FL	North Miami Senior High School AOE
Miami-Dade, FL	North Miami Senior High School AOF
Miami-Dade, FL	Robert Morgan Educational Center AOHT
Miami-Dade, FL	South Dade Senior High School AOF
Miami-Dade, FL	South Dade Senior High School AOIT
Miami-Dade, FL	Southwest Miami Senior High School AOF
Miami-Dade, FL	William H. Turner Technical High School AOF
Charlotte-Mecklenburg, NC	East Mecklenburg High School AOE

School District	Academy Name
Charlotte-Mecklenburg, NC	Hopewell High School AOE
Charlotte-Mecklenburg, NC	Hopewell High School AOHT
Charlotte-Mecklenburg, NC	Mallard Creek High School AOE
Charlotte-Mecklenburg, NC	Olympic, Biotechnology, Health and Public Administration AOHS
Charlotte-Mecklenburg, NC	Olympic, School of Executive Leadership & Entrepreneurial Development AOF
Charlotte-Mecklenburg, NC	Phillip O. Berry Academy of Technology AOE
Charlotte-Mecklenburg, NC	Phillip O. Berry Academy of Technology AOIT
Charlotte-Mecklenburg, NC	Zebulon B. Vance High School AOE
Rochester, NY	Rochester STEM Academy AOE
Rochester, NY	Rochester STEM Academy AOHS
Rochester, NY	Rochester STEM Academy AOIT
Dallas, TX	H. Grady Spruce High School AOE
Dallas, TX	Justin F. Kimball High School AOE
Dallas, TX	Justin F. Kimball High School AOHT
Dallas, TX	Skyline High School & Career Development Center AOHT
Dallas, TX	Thomas Jefferson High School AOF
Dallas, TX	Thomas Jefferson High School AOHT
Dallas, TX	W.T. White High School AOE
Dallas, TX	Woodrow Wilson High School AOE
Waco, TX	A.J. Moore Academy AOE
Waco, TX	A.J. Moore Academy AOF
Waco, TX	A.J. Moore Academy AOHT
Waco, TX	A.J. Moore Academy AOIT
New York City, NY	Academy for Language and Technology AOIT
New York City, NY	Academy of Finance and Enterprise AOF
New York City, NY	Academy of Hospitality and Tourism High School AOHT
New York City, NY	Bronx Engineering and Technology Academy AOE
New York City, NY	Bronx Engineering and Technology Academy AOIT
New York City, NY	Bronx School of Law and Finance AOF
New York City, NY	City Polytechnic High School of Engineering, Architecture, and Technology (AOE)
New York City, NY	Construction Trades, Engineering and Architecture
New York City, NY	Grover Cleveland High School AOIT
New York City, NY	High School for Enterprise Bus and Tech AOHT
New York City, NY	High School of Economics and Finance AOF
New York City, NY	High School of Hospitality Management AOHT
New York City, NY	Jacqueline Kennedy Onassis High School AOHT
New York City, NY	James Madison High School AOF

School District	Academy Name
New York City, NY	James Madison High School AOIT
New York City, NY	Manhattan Bridges High School AOE
New York City, NY	Manhattan Bridges High School AOIT
New York City, NY	New Utrecht High School AOHT
New York City, NY	Port Richmond High School AOHT
New York City, NY	Susan E. Wagner High School AOF
New York City, NY	The Academy of Innovative Technology High School AOIT