

# Multi-State Mentoring Research

The Center for Neighborhood Enterprise's Violence Free Zone (VFZ) Initiative



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BAYLOR INSTITUTE FOR  
**Studies of Religion**

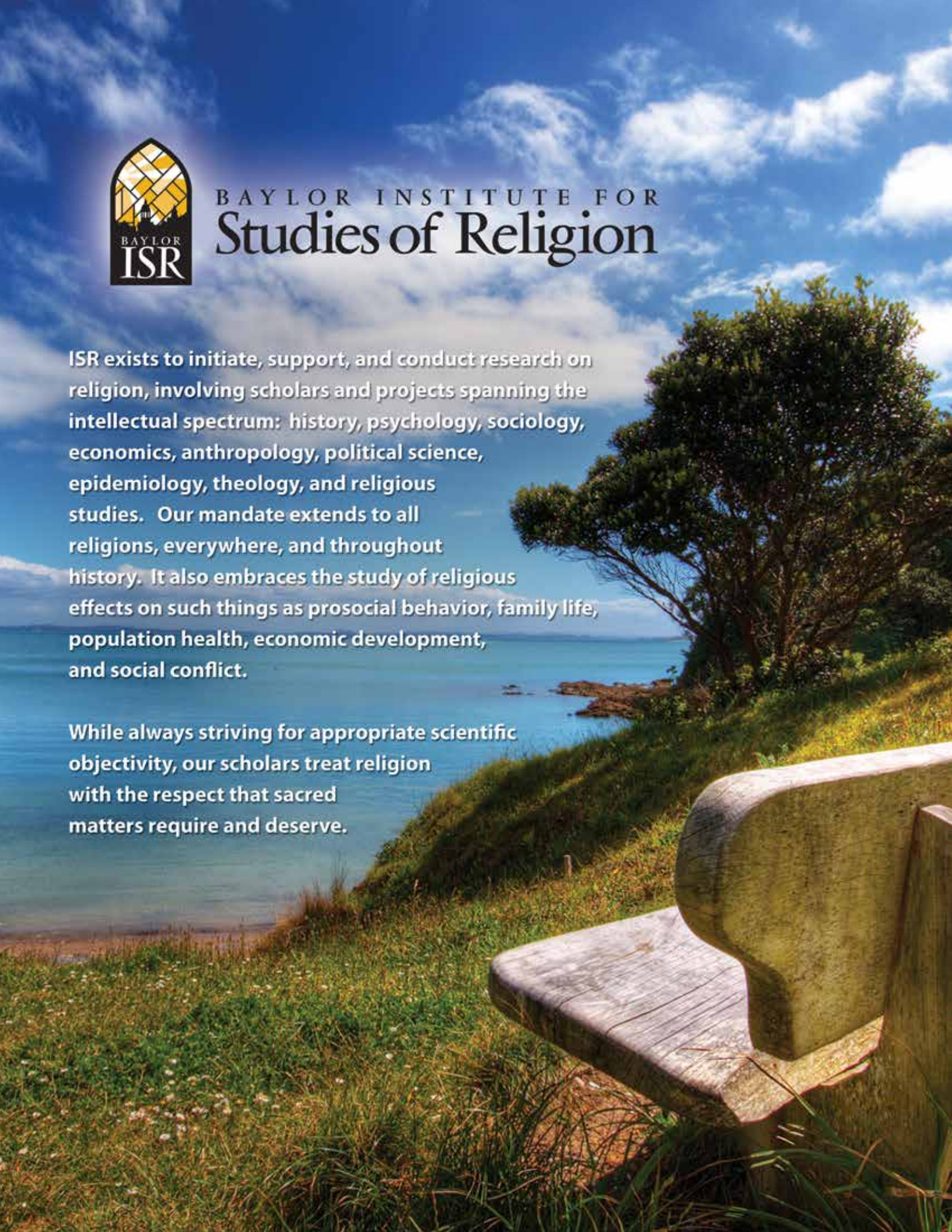




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## ISR SPECIAL REPORT

### **MULTI-STATE MENTORING RESEARCH** THE CENTER FOR NEIGHBORHOOD ENTERPRISE'S VIOLENCE FREE ZONE (VFZ) INITIATIVE

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**MULTI-STATE MENTORING RESEARCH**  
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**VIOLENCE FREE ZONE (VFZ) INITIATIVE**

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## ACKNOWLEDGEMENTS:

We would like to acknowledge Terence M. Mathis for the assistance offered to us through the staff at the Center for Neighborhood Enterprise, Kristen Kappelman and Blake Ward from the Milwaukee Public Schools Research Office, Mojishola Mason from Running Rebels, Claudia Horn and Matt Stucky from Results Technology Solutions, and Alfreda Alvarez Wubbenhorst and Sumner Wubbenhorst from Social Capital Valuations, LLC.

## ABSTRACT:

The Violence-Free Zone (VFZ) youth mentoring program is designed to address behaviors that result in truancies, suspensions, violent and nonviolent incidents, involvement in drugs and gangs, and poor academic performance in public middle and high schools. Originally targeting the highest-risk students, the VFZ program has expanded throughout most of the schools within the Milwaukee, WI Public School system (MPS) and two high schools in the Richmond, VA public school (RPS) system.

The goal of the three-year Multi-State Mentoring Initiative Research Project was to conduct a variety of program and return on investment (ROI) analyses to assess the effectiveness of the VFZ program in providing mentoring services to high-risk, underserved youth. The research project team hopes to provide VFZ, MPS and RPS with insight as to the various impacts of the VFZ program on the target populations as well as on the schools' climate, in general.

## EXECUTIVE SUMMARY

The Center for Neighborhood Enterprise (CNE) coordinates the Violence-Free Zone (VFZ) initiative through local nonprofit community based organizations (CBOs) in several U.S. cities. VFZ employs and trains staff from these local CBOs to function as school-based mentors, called “youth advisors,” who model and encourage positive behaviors among high-risk youth. These youth advisors are chosen for their ability to relate to young people, and often come from circumstances similar to those of the students they mentor. The youth advisors monitor, counsel, and mediate on behalf of students within the VFZ program as well as assist with school-wide monitoring (i.e., walking the hallways, being there when students come to school, etc.) and perform informal mentoring activities for the entire school population, in coordination with school authorities.

Local public school administrators from across the nation have praised the initiative’s work. The Department of Justice’s National Gang

Center endorses the VFZ initiative as a promising program structure.<sup>1</sup> A research team led by scholars at Baylor University’s Program on Prosocial Behavior also found the VFZ initiative positively influenced several behavioral factors known to be associated with high-risk youth. The Baylor research team was included as the third-party evaluator on a three-year grant from the Office of Juvenile Justice and Delinquency Prevention (OJJDP) to expand and enhance the VFZ initiative in Milwaukee, Richmond (VA)<sup>2</sup> and Baltimore.<sup>3</sup> This report synthesizes the activities and findings from the past three years.

The Baylor team’s research efforts over these three years are captured in four separate evaluations of VFZ program outcomes and projected impacts, as described in the following three tables. The following Table 1 provides a summary description of the city of the VFZ program, the specific school or schools evaluated, and the type of analytic approach used in the evaluation.

Table 2 provides a timeline for each of the studies. Table 3 provides a summary of the findings associated with each evaluation.

**TABLE 1: SUMMARY OF VFZ EVALUATION EFFORTS (2010-2014)**

STUDY #	PROGRAM EVALUATED	SPECIFIC SCHOOLS	TYPE OF EVALUATION	TIME PERIOD OF ANALYSIS
1	Milwaukee	School for Career and Technical Education (SCTE) <sup>4</sup>	Pre/Post comparison of VFZ students in SCTE.  Pre/Post comparison of overall school climate changes.	Academic Years (AYs)  2007-2010  AYs 2005-2010
2	Milwaukee	SCTE	Return On Investment (ROI) analysis	AYs 2007-2010
3	Richmond	Armstrong High School  George Wythe High School	Multi-year trend analysis of overall school incidents, GPA, and suspensions/suspension days	AYs 2009-2012
4	Milwaukee	8 high schools  3 middle schools <sup>5</sup>	Pre/Post comparison of VFZ students in all VFZ schools <sup>6</sup>	AY 2013-14

<sup>1</sup> OJJDP. (2012). Strategic Planning Tool: Violence-Free Zones. Office of Juvenile Justice and Delinquency Prevention (OJJDP), U.S. Department of Justice. Retrieved August 1, 2012 from <http://www.nationalgangcenter.gov/SPT/Programs/130>

<sup>2</sup> The Richmond VFZ program was terminated at the end of academic year 2012 and is no longer in operation.

<sup>3</sup> The research team was not able to obtain information from the Baltimore VFZ to include in this evaluation.

<sup>4</sup> Formerly known as the Custer High School.

<sup>5</sup> One school, Bay View, had both a middle school and a high school.

<sup>6</sup> One Milwaukee VFZ school, Groppi, was excluded from the analysis due to lack of data.



**TABLE 2: TIMELINE FOR VFZ STUDIES**

STUDY (#)	CITY	ACADEMIC YEARS						
		2007	2008	2009	2010	2011	2012	2013
SCTE (1)	Milwaukee							
SCTE (2) (ROI)	Milwaukee							
George Wythe / Armstrong High Schools (3)	Richmond							
All VFZ Schools (4)	Milwaukee							

**TABLE 3-A: PRE-POST EVALUATION OF VFZ MENTEES (MILWAUKEE – 1 SCHOOL PILOT)**

EVALUATION MEASURE	PRE-VFZ	POST-VFZ	% IMPROVEMENT
Average number of behavioral incidents per student per month	1.20	.667	44% reduction
Average number of suspension days per student per month	.600	.124	79% reduction
Average number of truancy incidents per student per month	.13	.10	23% reduction
Average GPA per student	1.62	1.77	9.3% increase in GPA
High School Graduation Rate (3 year average)	SCTE 74%	VFZ 92%	24% higher high school graduation rate
Percentage of high school graduates attending college	Wisconsin <sup>7</sup> 59%	VFZ 64% <sup>8</sup>	8% higher than state average
Percentage change in proportion of students reacting positively to climate questions on overall school atmosphere, safety and orderliness – AY 2005 (pre-VFZ) versus AY 2010 (post-VFZ)	MPS High Schools  21%	SCTE  60%	64% more SCTE students reacting positively to school climate as compared to MPS high school students overall

**TABLE 3-B: ROI ANALYSIS**

TYPE OF PROGRAM SAVINGS	OUTCOME	AVERAGE SAVINGS PER INCIDENT	TOTAL SAVINGS
Annual average reduction in suspensions per year	487	Direct savings in reduced administrative costs (\$290/suspension)	\$141,230 annual
Average annual projected reduction in police service calls to school	64	Direct savings (\$239/ service call)	\$15,309 annual
Projected annual reduction in the number of juvenile delinquents	10	Direct savings from reduced juvenile detention costs (\$4,812/juvenile delinquent)	\$45,608 annual
Projected reduction in auto thefts within 1,000 feet of the school	15.8	Projected indirect savings from reduced auto thefts (\$6,152/ automobile)	\$96,990 annual \$193,981 residual <sup>9</sup>
Projected reduction in the number of underage binge drinkers	3.24	Projected indirect savings (\$5,480/ binge drinker)	\$17,756 annual \$35,512 residual
Projected reduction in incidences of intimate partner and self-directed violence	3.3	Projected indirect savings (\$5,454/ incident)	\$17,988 annual \$99,773 lifetime <sup>10</sup>
Projected increase in the number of high school graduates and students pursuing college.	7.6	Projected lifetime increase in income taxes from higher earnings as a result of higher academic achievement (\$214,400 per high school graduate)	\$1.6 million lifetime
Total estimated Annual ROI for every \$1 invested in Milwaukee VFZ	\$1.39	Total estimated Lifetime ROI for every \$1 invested in Milwaukee VFZ	\$8.32

<sup>7</sup> <http://www.higheredinfo.org/dbrowser/?year=2008&level=nation&mode=data&state=0&submeasure=63>

<sup>8</sup> Of the 41 VFZ graduates, 28 (78%) are planning on going to college and 23 (64%) have already received acceptance letters.

<sup>9</sup> Total projected savings throughout teenage years.

<sup>10</sup> Women who were physically assaulted by an intimate partner in the previous 12 months experienced an average of 3.4 separate assaults.

**TABLE 3-C: SCHOOL-LEVEL PRE-POST EVALUATION (RICHMOND)**

EVALUATION MEASURE	PRE-VFZ	POST-VFZ	% IMPROVEMENT
Average number of suspensions and suspension days/ student (George Wythe High School – AY 2009 versus AY 2012)	1.46 suspensions 4.86 suspension days	.81 suspensions 3.51 suspension days	44% reduction 27% reduction
Average number of suspensions/ student (Armstrong High School – AY 2011 versus AY 2012)	.52 suspensions 2.32 suspension days	.32 suspensions 1.45 suspension days	39% reduction 38% reduction
Average number of behavioral incidents/student (George Wythe High School – AY 2009 versus AY 2012)	1.55	1.45	6% reduction
Average number of behavioral incidents/student (Armstrong High School – AY 2011 versus AY 2012)	.91	.91	no change
Average GPA (George Wythe High School – AY 2009 versus AY 2012)	1.98	2.18	18% increase
Average GPA (Armstrong High School – AY 2011 versus AY 2012)	2.31	1.95	16% decrease <sup>11</sup>

**TABLE 3-D: PRE-POST EVALUATION OF VFZ MENTEES (MILWAUKEE – 10 SCHOOLS)**

EVALUATION MEASURE	PRE-VFZ	POST-VFZ	% IMPROVEMENT
Average number of non-violent incidents per student per marking period	.72	.67	7% decrease
Average number of violent incidents per student per marking period	.16	.11	31% decrease
Average number of suspension days per student per marking period	.42	.41	2% decrease
Average attendance per student per marking period	91%	78%	14% decrease
Average GPA per student per marking period	1.69	1.34	21% decrease

<sup>11</sup> *Italics denotes a negative finding.*





THE CENTER FOR NEIGHBORHOOD ENTERPRISE'S VIOLENCE FREE ZONE (VFZ) INITIATIVE



## **STUDY #1: PRE/POST ANALYSIS OF MIL- WAUKEE VFZ STUDENTS AT SCTE (ACADEMIC YEARS 2007- 2010)**

### ***Introduction & Study Overview***

This evaluation builds on previous research on the Violence-Free Zone (VFZ) initiative in Milwaukee through the Baylor University Program on Prosocial Behavior led by Byron Johnson, who also serves as the principal investigator for this evaluation. The earlier studies<sup>12</sup> examined the VFZ program by comparing aggregate school trends for variables such as school-wide behavioral incidents, suspensions, and school climate at the seven Milwaukee schools with VFZ programs.<sup>13</sup> The results of that research suggested the VFZ program was successfully mitigating violence within those schools. Subsequently, Dr. Johnson, in partnership with ICF International, accepted CNE's invitation to serve as a third party evaluation subcontractor on CNE's successful Multi-State Mentoring grant application from the U.S. Department of Justice Office of Juvenile Justice and Delinquency Prevention to gather additional data and further explore the previous studies' implications.

In contrast to the earlier research, which examined aggregate trends in the number of incidents, suspensions, and GPA for high schools with the VFZ program, this current evaluation examines the impact of the VFZ program specifically on youths directly receiving mentoring services from the VFZ "Youth Advisors" at a specific school.<sup>14</sup> The selected VFZ high school was the School for Career and Technical Education (SCTE).<sup>15</sup> This research draws primarily from data provided by the Milwaukee Public Schools' (MPS) research division with a primary

focus on pre- and post- trends (i.e., before and after VFZ participation) for those youth enrolled as mentees.

While the previous evaluation indicated positive overall trends for the VFZ schools in comparison to MPS high schools without VFZ (i.e., lower number of overall incidents, suspensions and improved student responses on school climate), this study allowed us to isolate the specific impact on the students receiving formal mentoring services, not only in terms of changes in the number of behavioral incidents but also in terms of GPA, truancy, and graduation rates. Future research will attempt to determine how much of the school-wide VFZ benefits observed in both studies are a result of the Youth Advisors formal mentoring activities, and how much is attributable to the mentors' more generalized, school-wide efforts (e.g., greeting students, walking the hallways and cafeteria, etc.).

The three main research questions for the current evaluation are:

1. How do the improvements in behavioral outcomes already shown at the school-level compare to changes in behavioral outcomes specifically for the VFZ caseload youth?
2. What measurable academic improvements (i.e.; overall GPA improvements and received graduation diploma) can be seen over time from initial Youth Advisors' contact until projected graduation date for the youth in the VFZ caseload?
3. What effect does the positive behavioral changes in VFZ mentored students, and the general presence of Youth Advisors in the school, have upon the overall school climate?

The first section of this report provides an explanation of the current study's design and methodology. The second section examines the findings and the

<sup>12</sup> The Milwaukee Violence Free Zone Initiative: [http://www.baylorisr.org/wp-content/uploads/case\\_milwaukee1.pdf](http://www.baylorisr.org/wp-content/uploads/case_milwaukee1.pdf); Tracking the Milwaukee Violence Free Zone Initiative:

<sup>13</sup> As of 2012, the VFZ Initiative was in nine of Milwaukee's fourteen public high schools.

<sup>14</sup> As described more fully in the previous studies, VFZ Youth Advisors also informally mentor other students beyond those on their official caseload.

<sup>15</sup> The Milwaukee VFZ program at SCTE High School was selected for this study based both on the fact that it was one of the original, and therefore most established, VFZ programs, and also because it was a site where CNE's community partner, Runnin' Rebels, was able to provide the needed information on the VFZ caseload youth to include in our data request to MPS. This school was previously known as Custer High School.

implications of the findings, especially in comparison with the results from previous studies. The final section provides an overall summary of results, along with a discussion of future research plans.

## ***Study Design and Methodology***

For this evaluation, the team requested data from MPS for all VFZ students attending SCTE, for both the time period preceding and subsequent to their enrollment in the program. The Baylor research team provided the MPS Data Center with a list of ID numbers for all students enrolled in the VFZ program at SCTE High School from AYs 2007 through 2010. The data included the individual students' grade levels, disciplinary incidents, GPA, suspensions, suspension days and graduations. MPS coded all data with identification numbers to protect students' anonymity. The data provided by CNE's community partner at SCTE, Running Rebels, included the date the student was enrolled in the VFZ program.

The team sought to answer the following research questions:

- Does VFZ membership impact VFZ students' disciplinary incident rates?
- Does VFZ membership influence students' GPA?
- Does VFZ membership impact graduation rates?

The following sections describe the methodology used to address these questions.

### ***Changes in Key Variables for Pre- and Post-VFZ Students***

The evaluation team was interested in the potential effect of the VFZ program to reduce incidents involving VFZ students.

1. MPS provided a list of incidents by month for all VFZ students occurring both before and after their enrollment in the program;
2. Student incidents were separated into two groups: 1) those that occurred on or before the month and year they began the VFZ program; and 2) those that occurred the month and year after they joined the VFZ program;
3. The number of months pre-VFZ was determined by counting from the month/year when the student was first involved in an incident to the month/year when they enrolled in VFZ (excluding July and August);
4. For students that reported no incidents prior to VFZ, we referred to the MPS Evolved Demographics file and looked at the earliest "SYS\_BEGIN\_DATE" date for an approximation of when the student began at SCTE High School, and then counted the number of months to when they enrolled in the VFZ program;
5. We wanted at least 2 months of pre-VFZ data, therefore we did not include any VFZ students for which there were not at least two months of time between when they entered SCTE and when they enrolled in VFZ. We also did not include any VFZ students for which there were not at least two months of time in school post-VFZ (i.e., we required at least 2 months of post-VFZ data).
6. Once the sample group was defined, we could analyze changes in variables such as average GPA and discipline incidents. Since we have paired samples of pre- and post- VFZ program data, we can compare the change in outcomes for students before and after their participation in the VFZ program. We used t-test/null hypothesis analyses to determine whether the average pre and post-VFZ samples were statistically different from each other. The paired t-test examines whether the mean of the differences (effect of VFZ pro-



gram) is discernible from zero (no effect). The null hypothesis is that the population mean of individual differences of paired observations is zero. Therefore, if the null hypothesis is rejected, there must be a significant difference (VFZ program effect) between the two samples (pre and post outcomes).

## ***School Level Variables***

MPS tracks variables such as GPA and disciplinary incidents at the school and population subset level. The annual reports, each summarizing data for three school years, are posted online at [www.milwaukee.k12.wi.us/acctrep/rc11.html](http://www.milwaukee.k12.wi.us/acctrep/rc11.html). We relied on these reports for summary data, but supplemented these data with additional MPS and VFZ data, detailed at the student level and coded to protect individual student identities.

## **FINDINGS: STUDENTS PRE - AND POST - VFZ IN COMPARISON TO SCHOOL LEVEL**

### ***Disciplinary Incidents***

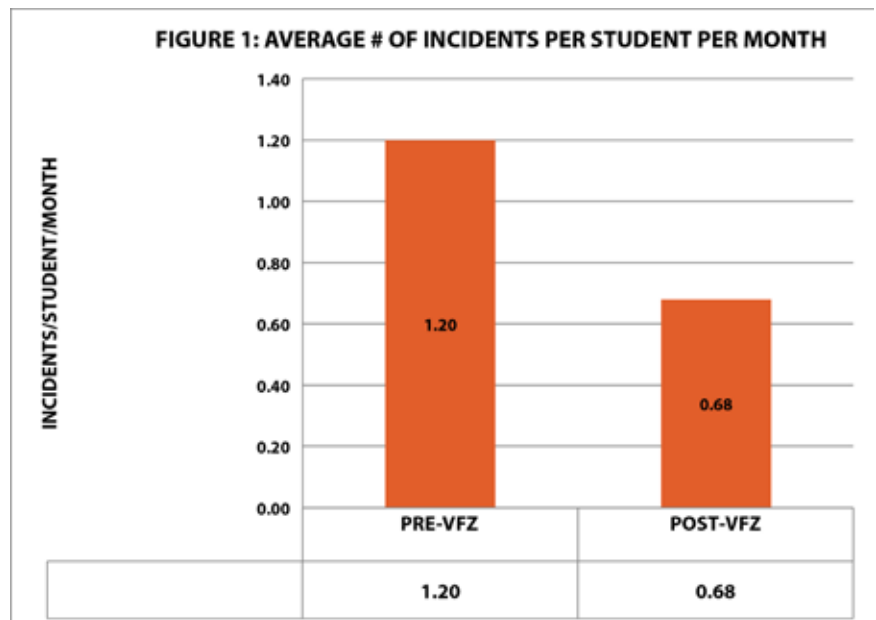
We examined incidents for which students were disciplined, from school years 2006-07 through 2010-11. MPS categorizes incidents by type to include:

- Assault;
- Battery;
- Bullying;
- Chronic disruption or violation of school rules;

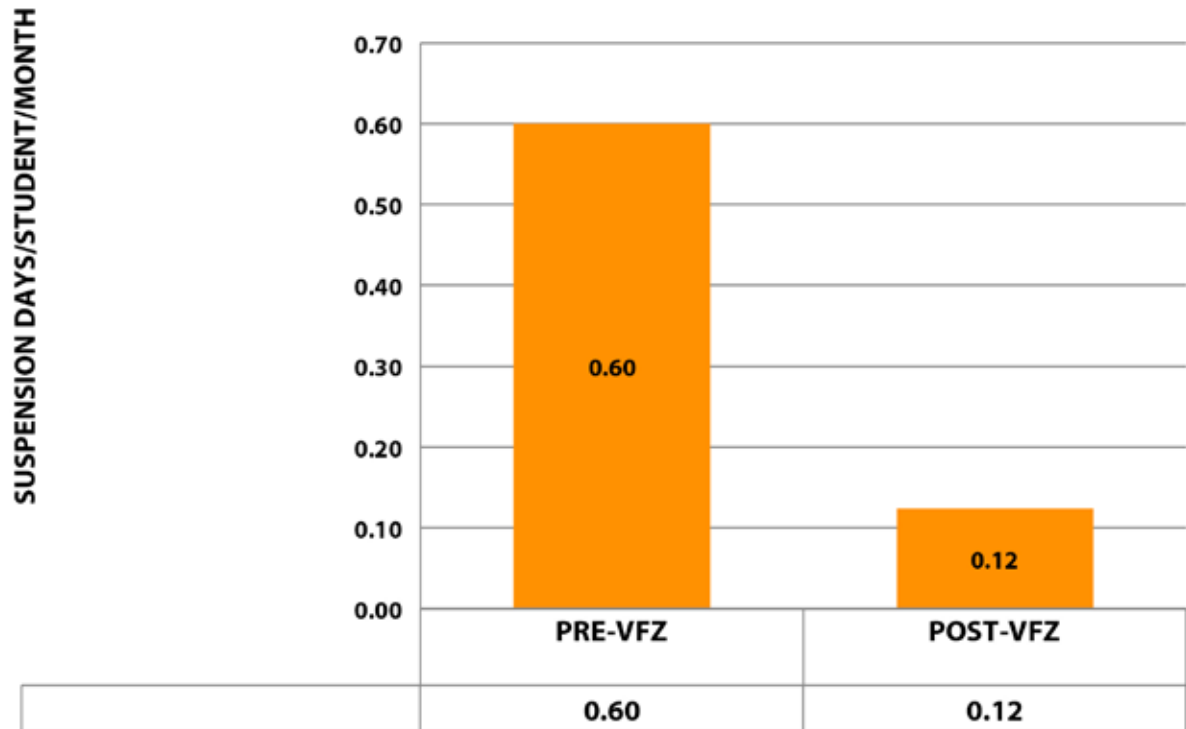
- Disorderly conduct;
- False fire alarms;
- Fighting;
- Gambling;
- Inappropriate personal property;
- Intent to distribute;
- Use of, or possession of drugs, alcohol or medications;
- Leaving classroom without permission;
- Loitering;
- Possession of stolen property;
- Possession/use of weapon;
- Refusal to work or follow instructions;
- Repeated classroom disruption;
- Tardiness;
- Truancy; and
- Verbal abuse

We had complete data for 90 VFZ student records, which we examined using the previously described methodology, comparing average discipline incidents before and after the students joined VFZ.

Figure 1 shows the reduction in average incidents per month for VFZ students before and after enrollment in the VFZ program (see Appendix for statistical results).



**STUDENT/PER MONTH (PRE- AND POST-VFZ INTERVENTION)**



**FIGURE 3: AVERAGE # OF TRUANCY INCIDENTS/PER STUDENT/PER MONTH (PRE- AND POST-VFZ INTERVENTION)**



As can be seen in Figure 1, prior to participation in the VFZ program, VFZ students averaged 1.2 incidents per student whereas after being in the VFZ program longer than two months, these averages drop by about 44% to about .68 incidents per student. These results provide initial evidence that the VFZ program reduces behavioral incidents effectively.

## ***Changes in Discipline Method***

The monthly post-VFZ mean of .12 is smaller than the .60 suspension days/student received before joining the VFZ program, resulting in a 79% reduction in suspension days/month. This shows the VFZ program is linked to significant reductions in suspension days (see Appendix for statistical results).

It is reasonable to expect a reduction in suspensions based on the reduced behavioral incidents shown in Figure 1. However, this reduction could not fully account for the 79% reduction from .6 suspension days/month to .12 suspension days/month as a subset shown of Figure 2. This result may point to the VFZ's role not only in reducing the occurrence of disruptive incidents in school, but also in changing the manner in which the school chooses to discipline for those incidents that do occur. VFZ youth advisors often intervene on the students' behalf for a reduction in severity of punishment, such as proposing alternatives to suspension. As with discipline days, this may produce positive outcomes for the school if it correlates with behavioral improvements.

## ***Attendance***

Data on attendance for VFZ students pre- and post-VFZ was somewhat contradictory and did not reveal any significant improvement or decline. This may

be a result of how data on attendance was captured, as some entries were coded as "absent" in one database and coded as "tardy" elsewhere.

## ***Truancy***

We isolated truancy incidents from total incidents, utilizing the same pre-/post-analysis described earlier (i.e., examining VFZ students with at least 2 month pre-VFZ and post-VFZ).

Figure 3 shows reduction in average number of days of truancy incidents per month for VFZ students before and after enrollment in the VFZ program (see Appendix for statistical results).

The average number of truancy incidents/month for VFZ students decreased from .13 to .10 truancy incidents per student per month, a reduction of 23% from pre-VFZ levels. Given the fact that almost half (48%) of VFZ youth had at least one truancy incident, this represents a reduction in total days lost from school of 162 days per year. Furthermore, since the punishment for truancy was suspension in most instances (92%), an additional annual reduction of 149 schools days from suspension days, resulting in a total projected increase of 311 school days per year as a result of the VFZ intervention.

## ***Changes in Grade Point Average (GPA)***

To determine the possible impact of the VFZ mentoring on academic performance, we compared the GPA of VFZ students prior to VFZ enrollment and six months after enrolling in the program. Figure 4 shows a 9.3% increase in GPA for VFZ students. This is a particularly impressive finding, given the fact that Youth Advisors do not provide tutoring to youth on their VFZ caseload (see Appendix for

\* Amelia Earhart Elementary School has had a community liaison for many years, who works to bridge needs of both campus and community. The community liaison is also being used as a facilitator to make sure that all efforts and resources are used to ensure alignment of Dallas ISD Imagine 2020 and SOAR goals in such a manner that guarantees sustained student achievement for all students at Amelia Earhart Learning Center.



statistical results).

## ***High School Graduation and College***

Notwithstanding the significance of the findings listed above, there is strong consensus that achieving high school graduation is the most important success indicator of all. Here the impact of the VFZ program is especially significant. The graduation rate used in this analysis is a function of the percentage of 12th grade students that graduate (i.e., total 12th graders less those students that did not complete but are still registered with MPS and those students that have withdrawn from MPS). Figure 5 shows the comparative graduation rates for VFZ students in contrast to SCTE 12th graders overall. VFZ student 12th graders graduation rates are 24% higher than those for SCTE high school students as a whole (see Appendix for statistical results).

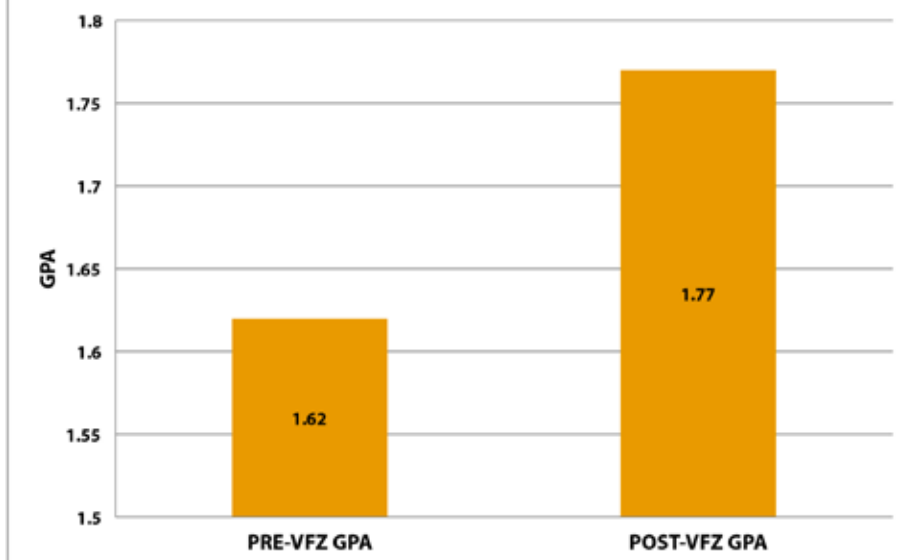
Examining more recent data, the 2011-12 VFZ graduating class was also significantly more likely to pursue college.<sup>16</sup> Of the 41 VFZ graduates, 28 (78%) are planning on going to college and 23 (64%) have already received acceptance letters. These percentages are significantly higher than the estimated 59% of high school graduates in Wisconsin that go directly from high school to college. In addition, 12 of the VFZ graduates have declared majors including biology, arts/graphics, medicine, culinary arts, cosmetology, accounting, and liberal arts. Three VFZ gradu-

ates have chosen not to attend college. Two of those not attending college have jobs and another is joining the National Guard. As of August 2012, VFZ was aware of all but five occupational or educational plans of VFZ graduates.

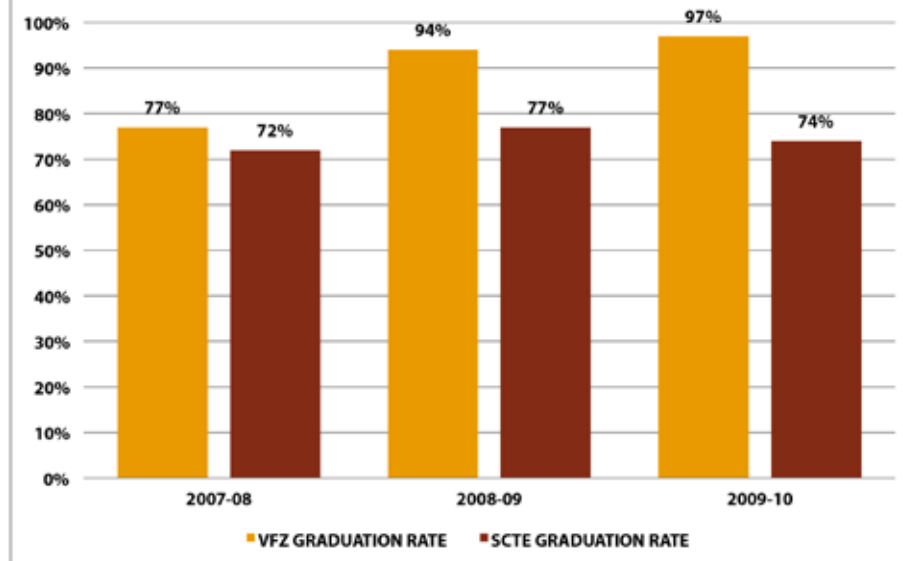
## ***SCTE High School Climate Survey Trends***

We also compared the trends in MPS-administered climate survey responses for SCTE High

**FIGURE 4: AVERAGE GPA(PRE- AND POST-VFZ INTERVENTION)**



**FIGURE 5: COMPARISON OF VFZ VERSUS SCTE HIGH SCHOOL GRADUATION AND COLLEGE ENROLLMENT**



<sup>16</sup> <http://www.higheredinfo.org/dbrowser/?year=2008&level=nation&mode=data&state=0&submeasure=63>

**TABLE 4: MPS CLIMATE SURVEY QUESTIONS**

DOMAIN	QUESTION
Atmosphere/ Environment	"My school has a friendly and welcoming atmosphere."
	"My school building has a positive atmosphere for learning."
	"Students at my school focus on learning."
Safety	"My school makes sure that students are safe and orderly while outside on school grounds."
	"The halls, bathrooms, cafeteria and other common areas in my school are safe and orderly."
Orderliness/ Adherence to Rules	"When students at my school break the rules, staff members help them improve their behavior."
	"The staff at my school enforces the rules."

School students with those for MPS high school students overall for the questions relevant to where VFZ would be expected to have an effect (see Table 4). As shown in Figure 6, we found that climate scores for MPS student respondents improved in all three of these domains from academic years 2005-06 to 2009-10.<sup>17</sup> It also shows significantly higher positive responses for SCTE High School students during that same time period.

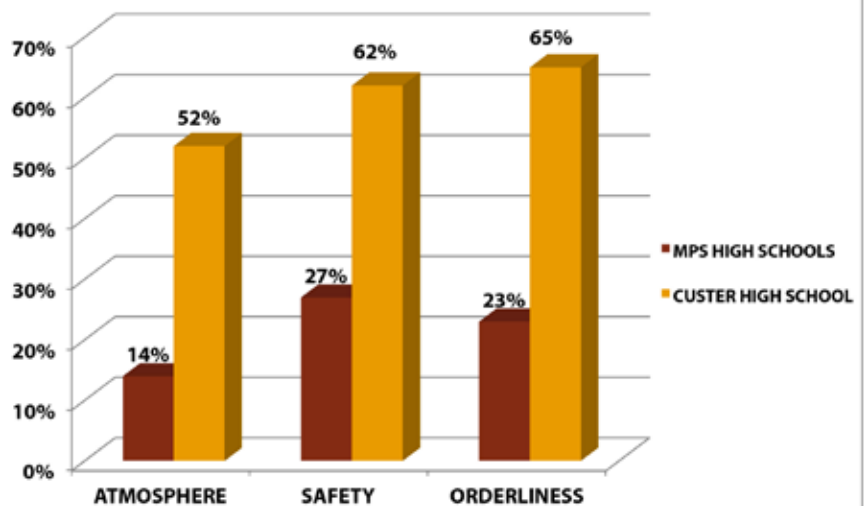
associated with increases in GPA. Most importantly, the SCTE VFZ program shows a positive effect on the number of 12th graders that graduate and pursue college.

Specific disciplinary remedies are implemented at the discretion of school authorities within certain

## IMPLICATIONS OF FINDINGS

These are encouraging results for the VFZ program, its Youth Advisors and participants. Although data on attendance was incomplete, the other findings suggest that the VFZ has led to reduced behavioral incidents (including truancy incidents), suspensions, and is positively

**FIGURE 6: IMPROVEMENTS IN SCHOOL CLIMATE SURVEY RESPONSES FROM HIGH SCHOOL STUDENTS: AY 2005-06 TO AY 2009-10**



<sup>17</sup> The climate survey was not administered at SCTE high school during AY 2006-07.

<sup>18</sup> Milwaukee Public Schools. 2011. Parent/Student Handbook on Rights, Responsibilities and Discipline. MPS Division of Communications and Public Affairs, Milwaukee, WI.



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MPS guidelines.<sup>18</sup> The VFZ mediates with authorities on students' behalf in some cases of disciplinary incidents, and VFZ Youth Advisors consult the individual students in an effort to reduce negative behaviors. The number of discipline days a student receives may reflect this mediation, indicate a less severe offense, or be a result of variation in administrative styles. Apart from how authorities make their judgments, fewer discipline days mean less time spent away from school for the offending student.

The effect of this on the student as well as the school body may be positive if the student also decreases his or her disruptive behavior. The study documents that the average number of discipline incidents/month for VFZ members decreased by approximately 44% after VFZ membership. This preliminary finding is a compelling and positive indicator for the school as well as for the VFZ students.

A decrease over time in average suspension days should also be recognized as a positive indicator for the students, especially when co-occurring with a declining trend in average incidents. The study found that as a group, the VFZ students received about 79% percent fewer suspension days after participating in the VFZ program. This dramatic decrease in suspension days reflects well upon the efforts by the MPS to revise and improve upon their suspension policies and practices.

The combined effect of higher GPAs and fewer incidents and, consequently more days in school, may have also contributed to the comparatively higher rates by which VFZ 12th graders graduate in comparison to SCTE students overall. For the 2011-12 school year, most of the VFZ seniors (87.8%) graduated with their class and most of those graduates (78%) planned to go to college. This class is the first to graduate with students who could have potentially been VFZ members during their entire educational experience at SCTE High School (ie. enrolled in the 9th grade).

Although the attendance data was inconclusive, we did find decreases in truancy rates for VFZ students

as compared to before they enrolled in the VFZ program. Besides being an indicator of poor student performance, high levels of chronic truancy are often associated with increases in off-campus delinquencies. Therefore, the indication that shows VFZ affiliation may lead to fewer truancy incidents could impact not only the entire school but also the local community. The decline in truancy days and associated decline in suspension days not only mean more time spent in school for the VFZ students but may well be a contributing factor associated with lower crime rates. Many classic and contemporary studies link truancy with increases in deviant behavior and increased opportunities to commit crime.<sup>19</sup> Stated differently, more time in school reduces the chances that youth will have additional free time and thus the opportunity to be involved in criminal or delinquent acts.

The climate survey analysis was the one piece of our evaluation that focused on changes in school-wide indicators. While MPS high schools are improving on climate surveys overall, the dramatic increases in student responses to positive statements about the SCTE school environment, safety and orderliness, point to a positive association of the VFZ presence beyond the mentoring services provided to the overall SCTE school climate. We will continue to closely monitor these improvements in climate change in VFZ schools, and examine what other research literature points to in terms of the benefits to student learning.

## SUMMARY & CONCLUSION

The overall results of this research show a correlation between VFZ membership and improved student performance. One puzzling aspect of these findings is that the improved VFZ student performance should also correlate with improved performance at the school level which is not always the case. One might make the argument that since VFZ targets many of the most at-risk students within the

most at-risk schools, variables such as discipline incidents would be even worse if not for VFZ's presence. However, this is an unverifiable assumption. Therefore, the team looks forward to the broader and more detailed information it will gain in future evaluations. We also hope to explore the potential monetary return on investment associated with some of the VFZ's positive outcomes (see Study # 2). The Baylor-ICF research team very much appreciates the Department of Justice's support of our endeavor.

## **STUDY #2: RETURN-ON INVESTMENT ANALYSIS OF VIOLENCE FREE ZONE PROGRAM EVALUATION RESULTS**

### ***Introduction***

The Baylor research team conducted an analysis of the projected cost-benefits associated with providing in-school mentoring to 168 students attending SCTE High School, located in Milwaukee Wisconsin.<sup>20</sup> The methodology applied in this analysis is called Expected Value – Return On Investment (or EV-ROI).<sup>21</sup> Much of this ROI analysis is based upon the previously described Pre/Post evaluation of VFZ students from 2007-2010 in Study #1, and includes other findings relating to the VFZ program from previous Baylor Case studies.<sup>22</sup>

### ***Summary of Findings***

The outcomes associated with the VFZ program yield an estimated residual<sup>23</sup> EV-ROI of \$8.32 for every dollar expended. This dollar value was derived partially by comparing the total projected annual savings from three direct measures.

These measures are:

- Administrative savings from reduced suspensions
- Savings from reduced service calls to the high School
- Savings from reduced truancy and lowered cost of juvenile detention

Added to this are the projected residual savings from five indirect measures<sup>24</sup> which are:

- Savings from reductions in auto thefts within 1000 feet of the high school
- Savings from reductions in attempted suicides and intimate partner violence
- Savings in cost related to underage alcohol consumption
- Savings in cost from reduced incidents of teen pregnancy
- Additional lifetime tax revenue from improved academic and career outcomes

### ***Background***

The Expected Value-Return On Investment (EV-ROI) methodology allows organizations to represent the impact and outcomes produced by their programs and services in a monetized form. EV-ROI measures relate the projected cost savings and dollar gains realized by successful program interventions against the financial cost of operating that program. In other words: "For every dollar spent on the program, how many dollars' worth of benefits did stakeholders, namely taxpayers, receive in return?"

For example, from a tax-payer's point of view, EV-ROI measures for a prisoner re-entry program would include the cost of re-incarceration

<sup>20</sup> As of 2012, the CNE/VFZ program operated in 9 high schools within the Milwaukee Public Schools (MPS).

<sup>22</sup> EV-ROI was developed by Social Capital Valuations, LLC (SCV), a subcontract partner of the Baylor Research team.

<sup>23</sup> As of 2012, the VFZ Initiative is in nine of Milwaukee's fourteen public high schools.

<sup>24</sup> Residual savings refer to savings over the course of a youth's teens years, or, in the case of high school graduation, projected lifetime earnings.

<sup>24</sup> Indirect measures refer to other projected behavior changes associated with reduced high-risk behaviors beyond fighting in school.

avoided as a function of successfully assisting ex-offenders in transitioning back to the community to prevent recidivism. If the ex-offender also got a job with assistance from the program, then the program could also claim the projected income tax revenue, and taxes collected from increased economic activity. The EV-ROI calculation of benefits does not include the benefits experienced directly by the participant (e.g., the ex-offender themselves), but only those cost-benefits that accrue to others (e.g., taxpayers from reduced public costs).

## ***Mentoring At-Risk Youth and the Root Causes of High-Risk Behaviors***

As shown in the results from Study #1, CNE has evidence that the students in their VFZ program learn to replace negative behaviors, such as fighting, with positive ones. In the process of reducing one high-risk behavior, research shows that other high-risk behaviors, such as alcohol consumption and premature sexual activity, are also reduced. This EV-ROI analysis likewise includes correlations between reduced fighting and other violence avoided, reduced underage drinking, and reduced teen pregnancies.<sup>25</sup> Study #1 also demonstrated higher high school graduation and college enrollment rates for VFZ students, which is also associated with better long-term career and financial outcomes.

The EV-ROI analysis shows what a community and taxpayers overall, can save in financial terms by reducing these high-risk behaviors even when a program only reaches a few hundred teens. The more teens reached, the greater the savings would be. The results below represent only a preliminary projection based on VFZ results showing the effects of their program on fighting and other disruptive behaviors in school. Future iterations of this EV-ROI analysis will broaden the methodological base to eventually be able to use the reduction in teenage fighting to project school climate and its effect on the entire high school population as well as long-term outcomes such as adult criminal activity.

## ***Key Assumptions***

The key assumptions that underlie our cost-benefit measures are as follows:

- SCTE High School had an annual average reduction of 487 school suspensions in Academic Years 2007-08 and 2008-09 when compared to the baseline Academic Year of 2006-07 (the year prior to the SCTE VFZ program)
- 94% of 12th graders enrolled in VFZ graduated high school between academic years 2007-08 and 2009-10, as compared to only 76% for 12th graders at SCTE High School overall.
- 78% of VFZ High School Graduates in academic year 2010-11 applied for college<sup>26</sup> (64% of those VFZ SCTE Graduates were accepted), as compared to the estimated statewide rate of only 58% of high school graduates in Wisconsin that went directly into college in that year.

## ***EV-ROI Projected Savings***

There are a total of eight (8) categories of EV-ROI savings/revenues for which we were able to obtain data for estimation of benefits. Three (3) of these measures generate direct savings, meaning that the benefits occur each year the program is in operation. The other five (5) indirect measures project significant residual, long-term benefits, based on behavior changes extended through teen years and, in the instance of high school graduation and college enrollment improvements, are forecast for a lifetime. These indirect measures are so named because they are not formally part of the CNE/VFZ's immediate mission of reducing school violence. These indirect outcomes are, nonetheless, attributable to the new positive life trajectory that is experienced by youths served by the VFZ Youth Advisors.

Below is a brief explanation of the rationale and assumptions behind each category:

<sup>25</sup> These correlations were developed based on an analysis of data from the Youth Risk Behavior Surveillance System (YRBSS).

<sup>26</sup> This data was not available for VFZ graduates from SCTE for academic years 2007-08 through 2009-10.

## **Direct Savings**

### *1. Projected Annual Savings of \$141,230 in administrative costs due to fewer suspensions:*

These savings are based on an annual average reduction of 487 suspensions per year<sup>27</sup> between academic years 2006 and 2008 times the estimated direct costs of \$290 per suspension.<sup>28</sup>

### *2. Projected Annual Savings of \$15,309 from reduced number of police service calls --* These savings are based on an estimated 27% reduction in the average annual number of service calls<sup>29</sup> (64 fewer calls) times the estimated average cost of \$239 per service call.<sup>30</sup>

### *3. Projected Annual Savings of \$45,608 from reduced truancy leading to reduced costs of juvenile detention --* These savings are based on an average annual reduction of 27 chronically truant students. Given that about 30% of truants are arrested per year<sup>31</sup>, this results in a projected average of 9.6 fewer juvenile arrests (inclusive of an annual re-arrest rate of 18.7%), times an average detention cost of \$4,812.<sup>32</sup>

## **Indirect Savings**

### *1. Projected Annual Savings of \$96,990 from reductions in auto thefts within 1,000 feet of SCTE High School --* These savings are based on an estimated 15.8 fewer auto thefts each year in the area surrounding SCTE High School as a result of the VFZ program. This analysis showed a

43% decline in auto theft rates within 1,000 feet of VFZ schools, as compared to a 8% overall reduction in auto thefts for the city of Milwaukee as a whole.<sup>33</sup> These 15.8 fewer auto thefts are multiplied by the average value of a stolen car (\$6,152<sup>34</sup>), to project the annual savings attributable to the VFZ program.

### *2. \$17,988 in savings from other violence avoided (i.e., attempted suicide and intimate partner violence) --* These savings are from an estimated reduction of 2.9 youths from either being perpetrators or victims of intimate partner violence<sup>35</sup> at an average medical cost of \$3,201 per physical assault<sup>36</sup> and .4 youths saved from attempted suicide with injury.<sup>37</sup> At an estimated cost per suicide attempt of \$11,171.<sup>38</sup> More significant is the projected \$99,773 in residual savings from intimate partner violence and attempted suicide, primarily due to the finding that women who were physically assaulted by an intimate partner in the previous 12 months experienced an average of 3.4 separate assaults<sup>39</sup> over that time period.

### *3. \$17,756 in annual savings in law enforcement and medical costs due to underage drinking<sup>40</sup> --* Based on an estimated reduction of 3.24 underage binge drinkers, at an average cost of \$5,480 per alcohol-involved youth.<sup>41</sup> The residual EV-ROI of \$35,512 for this measure assumes an average of two remaining teen years without unlawful incidents or medical cost due to underage drinking.

<sup>27</sup> This represents reductions in suspension for all students at SCTE High School, since the presence of VFZ Youth Advisors also impact, other students who are not formally enrolled in VFZ. During this same time period, suspensions increased by 4% at non-VFZ high schools in Milwaukee.

<sup>28</sup> A suspension cost \$30/day for an average length of suspension of 3 days funds loss of (\$90) from absence; and 4 administrative hours loss (@ \$50/hour) dedicated to fact gathering, witness interviews, calls, meetings, data entry, and record-keeping totaling (\$200). Source: Safe School Ambassadors Suspension Cost Analysis, as found at: [www.safeschoolambassadors.org](http://www.safeschoolambassadors.org).

<sup>29</sup> Based on data supplied to the Center for Neighborhood Enterprise by the Milwaukee and Richmond Police Departments.

<sup>30</sup> Charkoudian, Lorig. "A Quantitative Analysis of the Effectiveness of Community Mediation in Decreasing Repeat Calls for Service". Conflict Resolution Quarterly. Volume 23, Number 1. Fall 2005. P87-98.

<sup>31</sup> The Effect of Truancy on the Onset of Drug use & Delinquency; Kimberly L. Henry and David Huizinga; November 16, 2005.

<sup>32</sup> The Cost of Confinement; Why Good Juvenile Justice Policies Make Good Fiscal Sense (Page 4); Justice Police Institute; May 2009.

<sup>33</sup> Based on data provided by the Milwaukee (covering academic years 2006 and 2007) and Richmond Police Department (covering academic years 2008 and 2009), as published through Tracking the Milwaukee Violence Free Zone Initiative (March 2010) and Richmond Violence-Free Zone Initiative (April 2010); Program for Pro-social Behavior; Baylor University.

<sup>34</sup> Uniform Crime Data Report; FBI (2011).

<sup>35</sup> Violent teens are almost 3 times more likely to be victims/perpetrators of intimate partner violence than non-violent teens. Youth Risk Behavior Surveillance System (2008) -- Youth self-reporting that they were hit by their boyfriend/girlfriend one or more times in the past 12 months.

<sup>36</sup> Costs of Intimate Partner Violence Against Women in the United States; Department of Health and Human Services - Center for Disease Control and Prevention; Atlanta, GA, March 2003.

<sup>37</sup> Approximately 3.69% of violent teens attempt suicide with resulting injury each year, as compared with only 1.0% of non-violent youth (defined via YRBSS as not fighting in school over the past 12 months). YRBSS.

<sup>38</sup> <http://www.sprc.org/>

<sup>39</sup> Costs of Intimate Partner Violence Against Women in the United States; Department of Health and Human Services - Center for Disease Control and Prevention; Atlanta, GA, March 2003.

<sup>40</sup> Sexually active youth are almost 2 times more likely to report they had five or more drinks on one or more occasions over the past 30 days (YRBSS).

<sup>41</sup> Underage Drinking Enforcement Training Center (OJJDP) underage drinking cost the citizens of The United States \$68.0 billion in 2007. These costs include medical care, work loss, and pain and suffering associated with the multiple problems resulting from the use of alcohol by youth. This translates to a cost of \$2,280 per year for each youth in the State. Excluding pain and suffering from these costs, the direct costs of underage drinking incurred through medical care and loss of work cost the United States \$22.3 billion each year.



4. *Projected Annual Savings of \$16,437 in medical costs and subsequent projected public assistance costs associated with teen pregnancy* – Based upon a reduction of .6 pregnancies and .3 births.<sup>42</sup> These taxpayer-funded costs include, but are not limited to: justice system, TANF, EITC, SSI, Food Stamp, LIHEAP and Medicaid costs. The residual EV-ROI estimated savings of \$150,984 is based primarily on the public assistance benefits extended to single mothers and their children for up to 18 years.<sup>43</sup>

5. *Projected Residual Savings of \$1,620,864 due to improved high school graduation rates and subsequent college enrollment among VFZ students* – This projected residual savings is based on the finding that 94% of VFZ seniors graduate high school, as compared to the overall SCTE graduation rate of 76%. In addition, 64% of VFZ high school graduates enrolled in college. There is an incremental lifetime gain in the net present value of tax revenues generated of \$214,400<sup>44</sup> per person, calculated by taking the \$117,198 times the 36% of high school graduates that do not pursue college, plus 64% times the \$269,076 for those students who at least begin a college education.<sup>45</sup>

## STUDY #3: SCHOOL-WIDE MULTI-YEAR TREND ANALYSIS OF THE RICHMOND VFZ PROGRAM

### *Introduction & Study Overview*

This evaluation builds on previous research on the Violence-Free Zone (VFZ) initiative in Richmond through the Baylor University Program on Prosocial

Behavior led by Byron Johnson, who also serves as the principal investigator for this evaluation. The earlier VFZ study<sup>46</sup> compared George Wythe High School, with the demographically-comparable Armstrong High School in Richmond, over a two-year period in terms of: school incidents, unexcused absences, suspensions and suspension days, truancy rates, and total teaching days gained during 2007-2008. The results of that research showed significant improvements in the VFZ School (George Wythe) in comparison to the “control” school (Armstrong).<sup>47</sup>

The Richmond Police Foundation provided funding for six Youth Advisors for two years at George Wythe. However, CNE’s community partner, the Richmond Outreach Church (ROC) was so motivated by the opportunity to work within the school; they redirected five of their youth ministry staff to augment the number of Youth Advisors to eleven. As Pastor Rsen from the ROC explained:

*We jumped at the opportunity to increase the staffing for the VFZ, because it would give us more time to interact with the kids. Without VFZ, we had to work time in around the school. VFZ helps to blur the distinction between school and the community in a positive way. Our general philosophy is that, given enough time with them, we can effectively counter-act the negative influences of peer pressure and impact these kids’ lives, and so improve the school environment in the process.*

The added staff at George Wythe High school allowed VFZ Richmond to provide mentoring to 18% of the student population, almost double that of a typical VFZ site, where the number of mentored students typically constitutes 10% of total school enrollment.

<sup>42</sup> The pregnancy rate among sexually active teenagers was 152.8 pregnancies per 1,000 women aged 15–19. Accordingly, 15.28% of sexually active teens became pregnant. U.S. Teenage Pregnancies, Births and Abortions: National and State Trends by Race and Ethnicity. Alan Guttmacher Institute (based on 2006 data).

<sup>43</sup> The primary study is The Taxpayer Costs of Divorce and Unwed Childbearing: First-Ever Estimates for the Nation and All Fifty States; Benjamin Scafidi, Georgia College & State University. Certain cost categories reference The One Hundred Billion Dollar Man – The Annual Costs of Father Absence; Steve L. Nock, University of Virginia, Christopher Einhorn, DePaul University School of Public Service.

<sup>44</sup> Including Social Security contributions, a high school dropout will contribute nearly \$98,000 (\$117,198 in 2014 dollars) less in taxes than a high school graduate, and \$225,000 (\$269,076 in 2014 dollars) than someone with at least a high school diploma (i.e., at least starting college).  $(64\% * \$117,198) + (36\% * \$117,198) = \$214,400$  or the average gain in tax and SSI contributions for SCTE graduates that otherwise would have dropped out.

<sup>45</sup> Labor Market Consequences of an Inadequate Education; Rouse, Cecilia Elena; Princeton University and NBER; Prepared for the Equity Symposium on “The Social Costs of Inadequate Education” at Teachers’ College, Columbia University; September 2005.

<sup>46</sup> Richmond Violence Free Zone Initiative: [http://www.baylorisr.org/wp-content/uploads/case\\_richmond.pdf](http://www.baylorisr.org/wp-content/uploads/case_richmond.pdf). The Richmond VFZ program is no longer in operation.

<sup>47</sup> The VFZ was subsequently implemented at Armstrong High School beginning in AY 2011

Beginning in academic year (AY) 2011, the VFZ program was extended to Armstrong High School as well. Since Armstrong could no longer be used as a comparison school, and additional data of other demographically-comparable Richmond High Schools was unavailable, this study simply employed a multi-year trend analysis of both George Wythe and Armstrong to determine whether and how the VFZ program was able to bring about improvement in student attendance, behavior and academic performance. Given the fact that 18% of the students at each school were directly mentored by Youth Advisors from the VFZ program, the Baylor Research team considered this methodology to be appropriate for measuring the impact of the VFZ program.

The three main research questions for this evaluation were:

1. Do the reduction in behavioral incidents and the number of students with at least one behavioral incident continue the longer the program is in place?
2. Do reductions in suspensions and suspension days sustained themselves over time?
3. Have there been overall academic out-

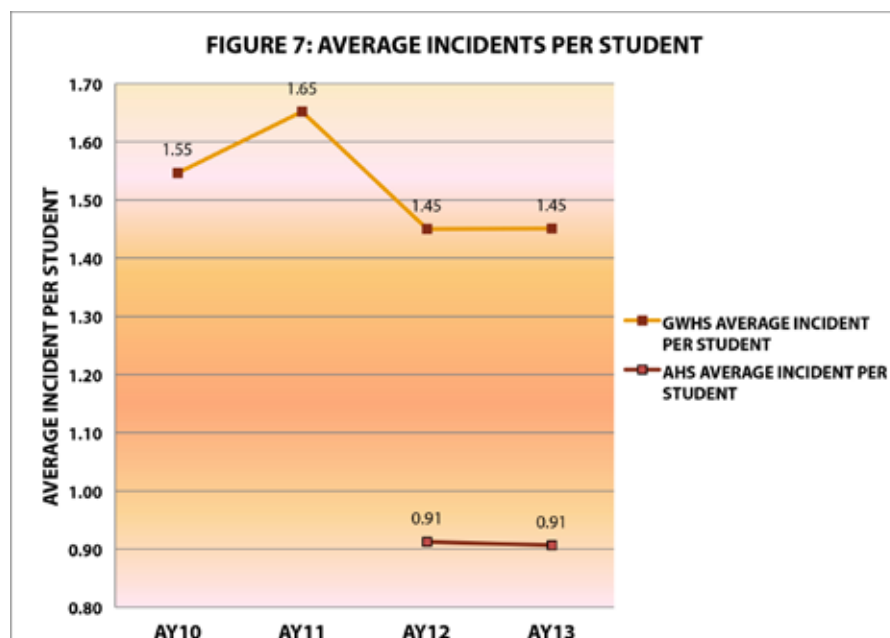
come improvements in the George Wythe and Armstrong High schools over the time that the VFZ program was in operation?

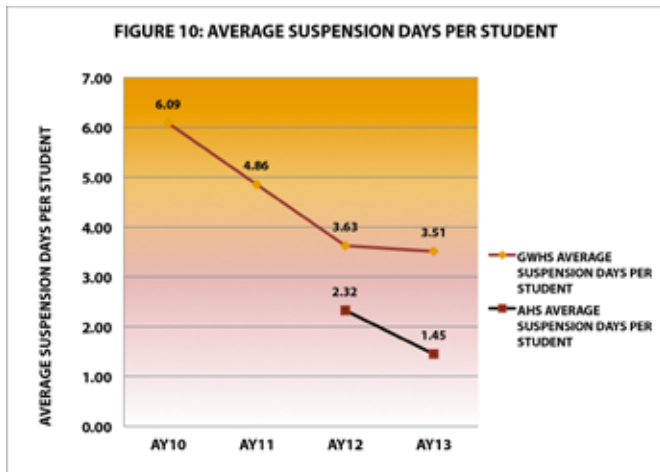
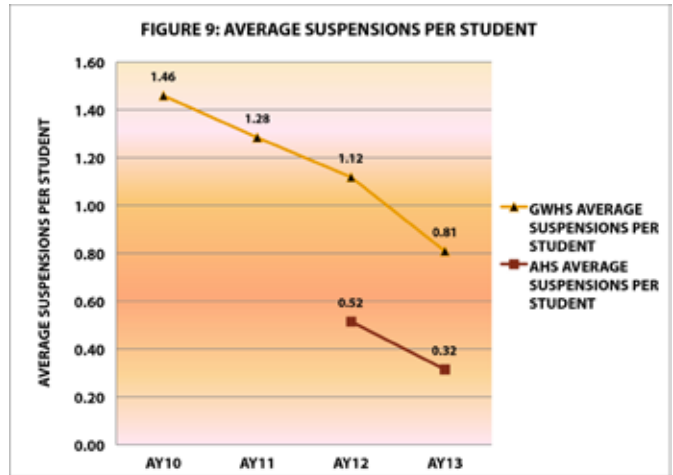
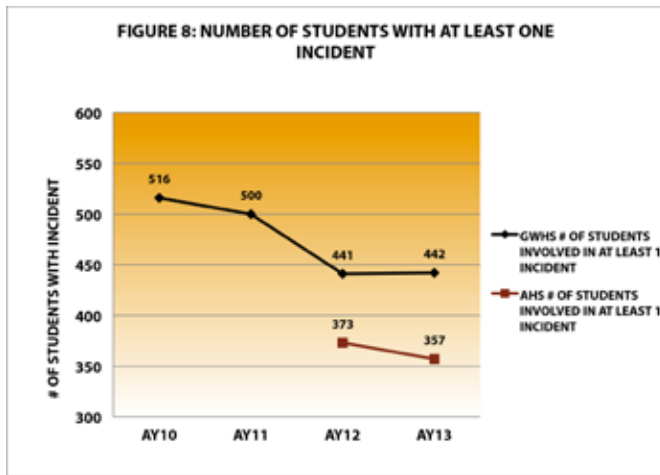
The first section of this report provides an explanation of the current study's design and methodology. Section two examines the findings and the implications of the findings. Finally, section three provides an overall summary, along with a discussion of future research plans.

## Study Design & Methodology

The Richmond VFZ program was implemented at George Wythe High School (GWHS) in AY 2008 and Armstrong High School (AHS) in AY 2011. CNE's community partner in Richmond, the ROC, requested and obtained aggregate data for GWHS for AYs 2008-2011 and AHS for AYs 2011 and 2012 from the Richmond Public Schools (RPS). The data results received from RPS included:

- Enrollment;
- Out of School Suspensions (OSS);
- Number of days of OSS;
- Number of Behavioral Incidents; and
- Overall School GPA





the multi-year trends for annual average incidents per student for both GWHS and AHS. Figure 8 shows the yearly decrease in the absolute number of students with at least one incident.

As can be seen in the results, the Richmond VFZ program is associated with both reductions in average incidents per student and overall reduction in the number of students with behavioral incidents.

## *Suspensions and Suspension Days*

We also tracked the average number of suspensions and suspension days per student per year for both schools. Figures 9 and 10 both show the multi-year trend for both of these measures.

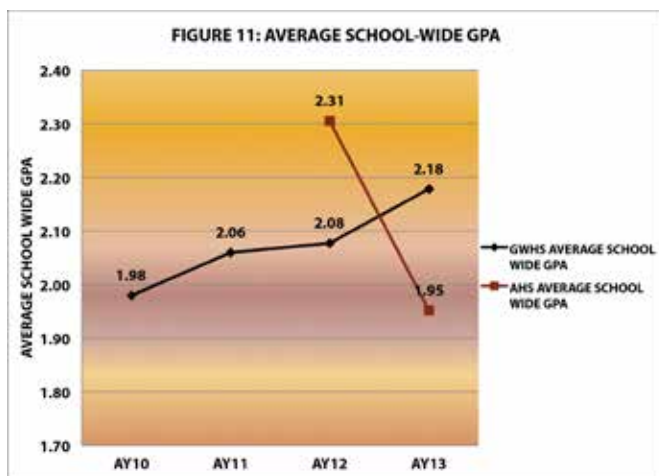
These figures show significant declines in both the average number of suspensions as well as declines in the total number of suspension days at both these High schools.

The following sections describe the methodology used to address these questions.

## METHODOLOGY AND FINDINGS

### *Disciplinary Incidents*

We examined incidents for which students were disciplined, beginning from AY 2009 (for GWHS) and AY 2011 (for AHS). In order to adjust for changes in school enrollment levels from year to year, we used the metric of average number of incidents per student per year. Figure 7 (previous page) shows



## *Changes in School-wide Grade Point Average (GPA)*

To determine the possible impact of the VFZ mentoring on academic performance, we tracked the overall GPA in both schools. Figure 11 shows the four-year GPA trend GWHS and two year GPA trend for AHS.

As shown above, there were mixed results concerning the association between aggregate school GPA and implementation of the VFZ program. There are certainly a number of factors affecting GPA beyond the VFZ program, although the improvement in GPA at GWHS is encouraging, given the fact that Youth Advisors do not provide academic tutoring to the VFZ youth they are mentoring.

## IMPLICATIONS OF FINDINGS

The research team is encouraged by these results concerning the projected impact of the Richmond VFZ for two reasons:

1. Significant reductions in suspensions and suspension days, as well as overall number of students with a behavioral incident, occurred at a school-wide level, even though only about 18% of the students at each school were directly served by a Youth Advisor.

2. In the case of GWHS, these reductions sustained themselves over multiple years. The estimated VFZ impact was not simply a one-time effect, but generally showed year-to-year improvements, particularly concerning suspensions and suspension days, throughout the four-year period of this study.

Specific disciplinary remedies are implemented at the discretion of school authorities within certain Richmond Public School (RPS) guidelines. The VFZ mediates with authorities on students' behalf in some cases of disciplinary incidents and VFZ Youth Advisors consult with individual students in an effort to reduce negative behaviors. The number of discipline days a student receives may reflect this mediation, indicate a less severe offense, or be a result of variation in administrative styles. Apart from how authorities make their judgments, fewer discipline days mean less time spent away from school for the offending student. The effect of this on the student as well as the school body may be positive if the student also decreases his or her disruptive behavior.

Although the GPA results were positive at GWHS, it is also important to recognize other school developments and reorganizations that were occurring simultaneously with the introduction of the VFZ program in 2008. For example, a new principal was assigned to GWHS the same year the VFZ program was introduced. Also, as mentioned before, it is important to keep in mind that the VFZ program is not a tutoring program. Nonetheless, the social and emotional support garnered from the Youth Advisor mentee relationship promoted a more positive attitude to the school setting among the student participating in the VFZ Program. The Youth Advisor relationship is designed to provide relational support and guidance to mentee students to impact their decision-making and subsequent behaviors. Therefore, although VFZ was not the only factor contributing to GPA improvements at GWHS, it was certainly a significant contributor in terms of reducing time out of school through reduced suspension days.



## SUMMARY & CONCLUSION

The overall results of the Richmond VFZ evaluation show a positive association between reduced suspensions, suspension days and the number of students involved in incidents and the VFZ program. Although the Richmond VFZ program is no longer active, the evidence presented here, as well as in previous evaluations of the program, provides strong evidence of significant positive impact on both GWHS and AHS. These results show more students with less time away from school due to significant decreases in out of school suspensions issued. Unfortunately, there was no student climate survey data available to ascertain how overall school climate changed during the period of this study. In the event RPS decides to re-instate the VFZ program, the Baylor research team would welcome the opportunity to conduct a more in-depth, comprehensive analysis of the VFZ Program's contribution to a healthier school climate and improved academic performance.

## STUDY #4: PRE AND POST ANALYSIS OF ALL MILWAUKEE VFZ STUDENTS (ACADEMIC YEAR 2013)

### *Introduction & Study Overview*

This evaluation builds on previous research on the Violence-Free Zone (VFZ) initiative in Milwaukee through the Baylor University Program on Prosocial Behavior led by Byron Johnson, who also serves as the principal investigator for this evaluation. The earlier studies<sup>48</sup> examined and compared school-wide trends for variables, such as: violent and non-

violent incidents, suspensions, and school climate at the seven Milwaukee High schools which at that time had active VFZ programs.<sup>49</sup> The results of that research suggested the VFZ program was successfully mitigating violence within those schools. Subsequently, Dr. Johnson, in partnership with ICF International, accepted CNE's invitation to serve as a third party evaluation subcontractor on CNE's successful Multi-State Mentoring grant application from the U.S. Department of Justice Office of Juvenile Justice and Delinquency Prevention to gather additional data and further explore the previous studies' implications.

The previous research on Milwaukee VFZ in this report (see Study #1) examined trends in the number of incidents, suspensions and GPA for students mentored by Youth Advisors over the course of several years at a single school. Study #1 examined the impact of the VFZ program specifically on youths directly receiving mentoring services from the VFZ "Youth Advisors"<sup>50</sup> at the School for Career and Technical Education.<sup>51</sup>

Study #4 also draws from data provided by the Milwaukee Public Schools' (MPS) research division, but this time the primary focus will be on pre- and post-trends for all Milwaukee VFZ mentored youth, from nine high schools and three middle schools.

The primary distinctions between this study and Study #1 is that this study separated violent and non-violent behavioral incidents, and that this study only looked at one academic year (2013-14). The first section of this report provides an explanation of this study's design and methodology. Section two examines the findings and the implications of the findings, chiefly in comparison with the results from the original study. Finally, section three provides an overall summary, along with a discussion of future research plans.

<sup>48</sup> The Milwaukee Violence Free Zone Initiative: [http://www.baylorisr.org/wp-content/uploads/case\\_milwaukee1.pdf](http://www.baylorisr.org/wp-content/uploads/case_milwaukee1.pdf); Tracking the Milwaukee Violence Free Zone Initiative: [http://www.baylorisr.org/wp-content/uploads/case\\_milwaukee\\_revised.pdf](http://www.baylorisr.org/wp-content/uploads/case_milwaukee_revised.pdf). These studies were published in January 2009 and March 2010.

<sup>49</sup> As of 2012, the VFZ Initiative is in nine of Milwaukee's fourteen public high schools.

<sup>50</sup> As described more fully in the previous studies, VFZ Youth Advisors also informally mentor other students beyond those on their official caseload.

<sup>51</sup> Formerly known as Custer High School.

## Study Design and Methodology

For this evaluation, the team requested and obtained student IDs and program enrollment dates for all VFZ students in 12 schools.<sup>52</sup> The team then submitted a request to MPS for data on all violent and non-violent incidents, school attendance, GPA, and suspension days.

The team sought to answer the following research questions for study # 3:

1. Does the number of violent incidents decrease among VFZ mentored students after enrollment?
2. Does the number of non-violent incidents decrease among VFZ mentored students after enrollment?
3. Does the number of days of suspension decrease among VFZ mentored students after enrollment?
4. Does the attendance rate increase among VFZ mentored students after enrollment?

5. Does GPA increase among VFZ mentored students after enrollment?

6. What is the graduation rate for VFZ mentored students in comparison to MPS seniors overall?

The following sections describe the methodology used to address these questions.

## Changes in Key Variables for Students before and after VFZ Mentoring

The evaluation team was interested in the potential effect of the VFZ program on violent and non-violent incidents for VFZ students before and after their enrollment in the VFZ program.

- MPS provided a list of incidents by marking period for all VFZ students which, depending on when the student was enrolled in VFZ, represented incidents occurring both before and after their enrollment in the program.

**TABLE 5: VFZ PROGRAM RESPONSIBILITY BY COMMUNITY PARTNERS**

RUNNIN'REBELS	MILWAUKEE CHRISTIAN CENTER
Lincoln Middle School	Bay View Middle and High School
Roosevelt Middle School	
Hamilton High School	Bradley Tech High School
SCTE High School	Madison High School
Vincent High School	Pulaski High School
Washington High School	South Division High School

<sup>52</sup> One VFZ school, Groppi High School, was excluded from the analysis due to insufficient data.

- Student incidents were separated into two groups: 1) those that occurred during or before the marking period they began the VFZ program; and 2) those that occurred during the marking period after they joined the VFZ program.<sup>53</sup>
- Students enrolled previous to the start of AY 2013 were only counted in the results associated with post-VFZ. Likewise, students that enrolled in the VFZ program during the fourth marking period were only counted towards the results associated with pre-VFZ.
- Once the sample group was defined, we could analyze changes for VFZ students at each middle

or high school level in variables such as average GPA, attendance, discipline incidents, and suspension days. For incidents and suspension days, the rates were developed by dividing the total number of incidents or suspension days for all pre and post VFZ students by the respective number of pre and post VFZ students in that particular school. For attendance, we used the total number of school days for all VFZ students, less the number of days absent, to calculate the attendance rate by VFZ school. For GPA, we did an overall average of all VFZ students' GPA value as of the end of each marking period.

- The final values we calculated represented an average of each particular VFZ school grouped

**TABLE 6: CATEGORIZATION OF VIOLENT AND NON-VIOLENT INCIDENTS**

VIOLENT INCIDENTS	NON-VIOLENT INCIDENTS
Assault	Chronic disruption or violation of school rules
Battery	Disorderly conduct
Bullying	False fire alarms
Fighting	Gambling
Other Personal Safety/Criminal	Inappropriate personal property
Personal Threat	Intend to distribute, use of, or possession of drugs, alcohol or medications
Possession/Ownership/Use of Weapon Other than Gun	Leaving classroom without permission
Sexual Assault	Loitering
	Possession of stolen property
	Refusal to work or follow instructions
	Repeated classroom disruption
	Tardiness
	Verbal Abuse

<sup>53</sup> This differs from Study #1, which defined pre-VFZ as students with up to two months' participation in the VFZ program, and post-VFZ as any student with at least three months in the VFZ program.

by the community organization responsible for implementing VFZ in that particular middle or high school.

### ***VFZ Program Community Partner Student Enrollment Findings***

The Milwaukee VFZ program is operated through two community partners, each with responsibility for implementing the VFZ in different schools. Table 5 shows which organization operates VFZ programs in each school included in this study.

MPS provided the research team with data for 935 VFZ students representing a total of 3740 marking periods.<sup>54</sup>

### ***Disciplinary Incidents (Violent and Non-violent)***

We examined incidents for which students were disciplined in AY 2013. MPS categorizes incidents by type to include: assault, battery, bullying, chronic disruption or violation of school rules, disorderly conduct, false fire alarms, fighting, gambling, inappropriate personal property, intent to distribute, use of, or possession of drugs, alcohol or medications; leaving classroom without permission, loitering, possession of stolen property, possession/use of weapon, refusal to work or follow instructions, repeated classroom disruption, tardiness, truancy, and verbal abuse. We reviewed these incidents with VFZ program staff and sorted them into violent and non-violent incidents, as shown in Table 6.

### ***Behavioral Incidents (Violent and Non-violent)***

The Baylor research team calculated the average number of both non-violent and violent incidents per student per marking period over the course

of AY 2013 for both Running Rebels and for Milwaukee Christian Center. Figures 12 and 13 below show the pre/post changes in violent and non-violent incidents for both community partners over the course of AY 2013.

If we were to extrapolate the impact of the VFZ program from the above figures over a full year, these results indicate about 145 fewer violent incidents and 129 fewer non-violent incidents in VFZ schools. Each violent or non-violent incident in school by a student has an average estimated school administrative cost of \$290 per incident.<sup>55</sup> These reductions by themselves produce a savings in administrative cost to a school in an amount close to \$80,000 per year.

### ***Suspension Days***

The incidents reported above in Figures 12 and 13 all resulted in the levying of a suspension. Figure 14 compares the pre-post change in the average number of suspension days per student marking period for both community partners.

If we were to extrapolate the impact of the VFZ program from the above figure over a full year, this would result in attributing 1,100 fewer suspension days as a result of the Milwaukee VFZ program. Other research has shown that reducing school absence, leads to overall improvements in academics which result in an increase in high school graduation rates.

### ***Attendance***

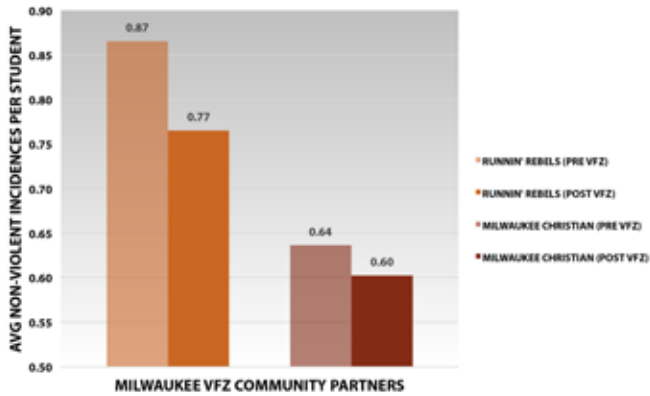
Data on attendance for VFZ students pre- and post-VFZ was somewhat contradictory and did not reveal any significant improvement. This may be a result of how MPS data on attendance was captured, as some entries were coded as “absent” in one database and coded as “tardy” elsewhere. Figure 15 below shows the overall before and after changes in attendance rates, alongside the overall attendance rates for MPS students

<sup>54</sup> The one exception is we could not obtain GPA data for VFZ students in Lincoln Middle School.

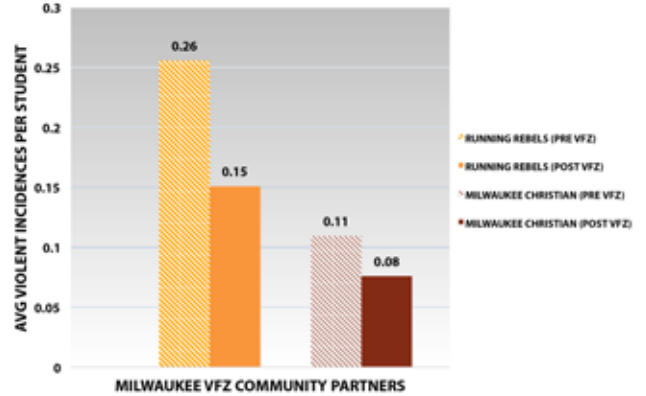
<sup>55</sup> Average Daily Attendance Funds loss of \$30/day for an average length of suspension of 3 days (\$90); and 4 administrative hours (@ \$50/hour) dedicated to fact gathering, witness interviews, calls, meetings, data entry, and record-keeping (\$200). Source: Safe School Ambassadors Suspension Cost Analysis, as found at: [www.safeschoolambassadors.org](http://www.safeschoolambassadors.org).



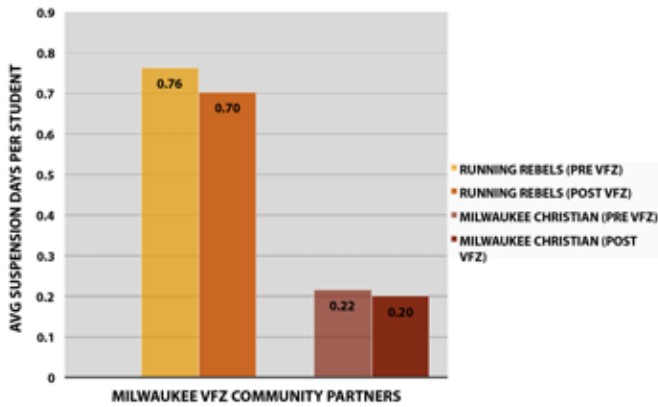
**FIGURE 12: AVERAGE NON-VIOLENT INCIDENTS PER STUDENT PER MARKING PERIOD (PRE VS POST)**



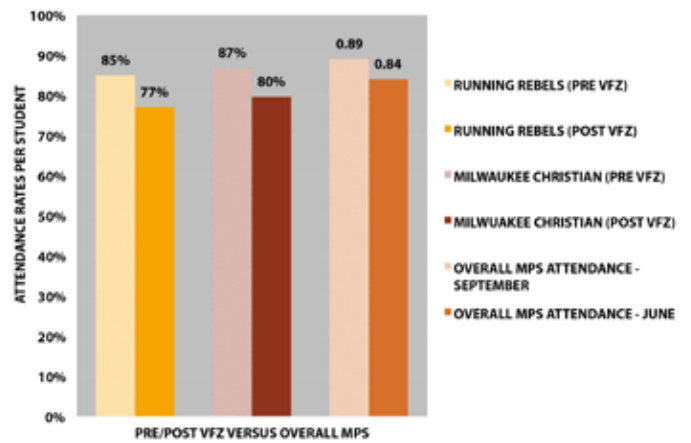
**FIGURE 13: AVERAGE VIOLENT INCIDENTS PER STUDENT PER MARKING PERIOD (PRE VS POST)**



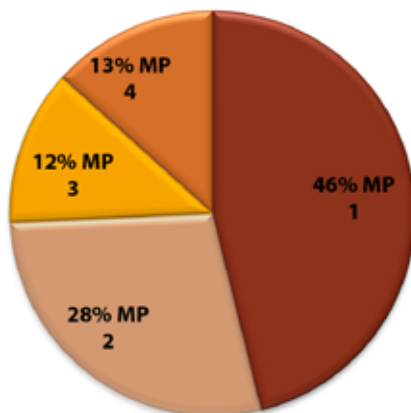
**FIGURE 14: AVERAGE SUSPENSION DAYS PER STUDENT PER MARKING PERIOD (PRE VS POST)**



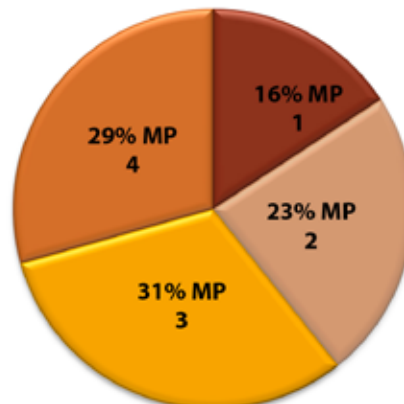
**FIGURE 15: ATTENDANCE RATES PER STUDENT PER MARKING PERIOD (PRE VS POST)**



**FIGURE 16: DISTRIBUTION OF PRE-VFZ MENTORED STUDENTS BY MARKING PERIOD**



**FIGURE 17: DISTRIBUTION OF POST-VFZ MENTORED STUDENTS BY MARKING PERIOD**



from September to June. This overall decline in attendance for MPS as a whole over the course of the year is relevant, considering the fact that, as shown in Figures 16 and 17, a higher proportion of the post-VFZ mentored students were drawn from the later marking periods, in which overall attendance decreases in comparison with the earlier marking periods of AY 2013. Therefore, much of the decreased post-VFZ attendance may be attributable to the overall attendance decreases at MPS schools.

### ***Changes in Grade Point Average (GPA)***

To determine the possible impact of the VFZ mentoring program on academic performance, we compared the GPA of pre-VFZ and post-VFZ students during AY 2013. Figure 18 shows the average GPA per school for pre-VFZ and post-VFZ students.

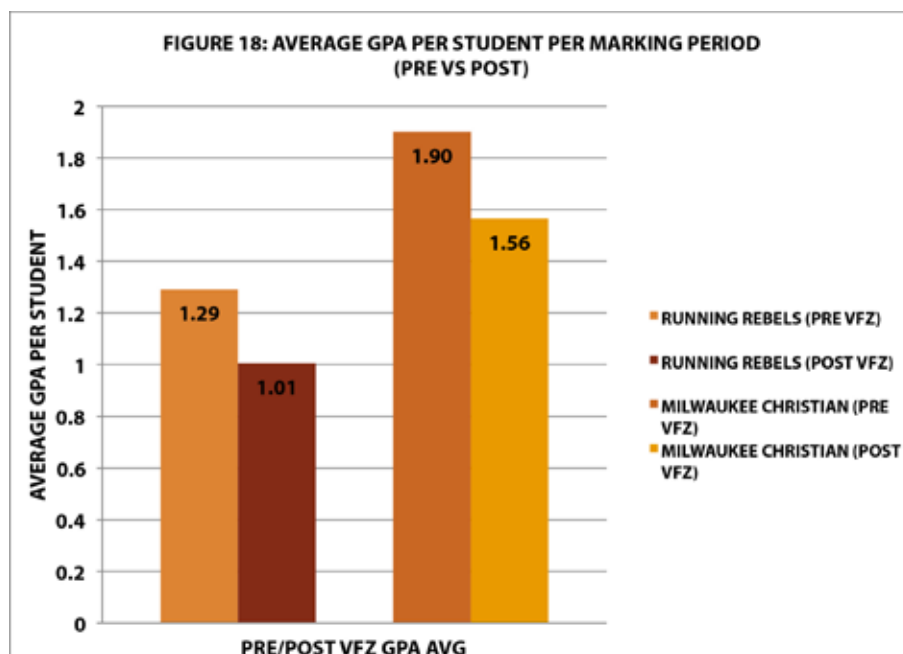
Although VFZ is not a tutoring program, the research team hoped to see some impact on academic success, as measured by GPA. This negative finding also contradicts the finding for VFZ students at SCTE High School from AYs 2007 to 2010 (see Study #1), which showed a 9.3% pre/post increase in GPA. However, as shown in Table 7, our analysis of a sub-set of VFZ seniors from the Running Rebels community partner showed not only a high rate of graduation, but also a higher rate of college enrollment in comparison with the Wisconsin statewide average.

### ***High School Graduation and College***

Notwithstanding the significance of the findings listed above, there is strong consensus that achieving high school graduation is the most important success indicator in adolescents' transitions into adulthood. The research team was able to collect information on a sampling of 72 VFZ seniors entering AY 2013-14, from three of the nine high schools. This particular group of VFZ seniors' graduation rate is determined by the percentage of 12th grade students that graduate, less those students that did not complete but are still registered with MPS and those students that have withdrawn from MPS.

Table 7 shows the senior graduation rate for these 72 students, as well as 65% of those graduates with plans to attend college or enroll in the military.

The research team was not able to obtain a comparable rate on the percentage of MPS seniors overall that graduated. The most comparable



statistic we could find regarding the MPS graduation rate is the six year completion rate, which refers to the percentage of 9th graders that graduate high school within 6 years. The 6-year High School completion rate for MPS students was 74.0%. Therefore, although the research could not demonstrate an impact of the VFZ program with respect to attendance and GPA, it would appear that the mentoring aspect of VFZ and its Youth Advisors does have a significant impact in terms of motivating VFZ students to complete their high school education.

In addition, this sampling of VFZ graduating seniors was significantly more likely to pursue college. Of the 70 VFZ graduates, 46 or (65%) are planning on going to college and 32 of those (70%) have already received acceptance letters. The other VFZ graduates are enrolling in the military. These percentages are significantly higher than the estimated 59% of high school graduates in Wisconsin that go directly from high school to college.<sup>57</sup>

## Implications of Findings

Overall, the research team is encouraged by these results. Although data on attendance and GPA did not show an improvement, the outcomes specific to the Violence-Free Zone did demonstrate a significant effect. The reductions in violent and non-violent incidents and suspension days relate directly to the VFZ program goals of deterring violent and inappropriate behavior, in the school setting, and are significant. With respect to impacts on GPA, it is important to note that VFZ is a mentoring program, not a tutoring program. Therefore, although an impact on GPA would be welcome, it is an indirect effect of VFZ. Attendance is likewise an indirect effect of VFZ.

Specific disciplinary remedies are implemented at the discretion of school authorities within certain MPS guidelines.<sup>58</sup> The VFZ mediates with authorities on students' behalf in some cases of disciplinary incidents and VFZ Youth Advisors consult the individual students in an effort to reduce negative behaviors. The number of discipline days a student receives may either reflect this mediation, or indicate a less severe offense, or may be a result of variation

**TABLE 7 – PERCENTAGE OF VFZ SENIORS GRADUATING IN AY 2013-14**

SCHOOL NAME	# OF VFZ ACTIVE SENIORS AS OF 9/13	# OF SENIORS HELD BACK <sup>56</sup>	# OF VFZ SENIORS GRADUATING 6/13	# OF VFZ GRADUATES APPLYING FOR COLLEGE OR MILITARY
Hamilton	14		10	7
Vincent	19		18	11
Washington	29		29	20
<b>Total</b>	<b>72</b>		<b>70</b>	<b>46</b>

<sup>56</sup> These represent students that are indicated in the MPS database as Active and Registered.

<sup>57</sup> <http://www.higheredinfo.org/dbrowser/?year=2008&level=nation&mode=data&state=0&submeasure=63>

<sup>58</sup> Milwaukee Public Schools. 2011. Parent/Student Handbook on Rights, Responsibilities and Discipline. MPS Division of Communications and Public Affairs. Milwaukee, WI.

in administrative styles. Apart from how authorities make their judgments, fewer discipline days mean less time spent away from school for the offending student. The effect of this on the student as well as the school body may be positive if the student also decreases his or her disruptive behavior. The study documents that the average number of discipline incidents per marking period for violent and non-violent VFZ mentees decreased by 7% and 31% respectively. This finding is a compelling and positive indicator for the schools as well as the VFZ students.

A decrease over time in average suspension days should also be recognized as a positive indicator for the students, especially when co-occurring with a declining trend in average inappropriate incidents as per the MPS guidelines. The study found that as a group, the VFZ students received about 26% fewer suspension days after participating in the VFZ program. This decrease in suspension days also reflects well upon the efforts by the MPS to revise and improve upon their suspension policies and practices.

### ***Summary and Conclusion***

The overall results of this research show a positive relationship between VFZ mentoring and improved student behavior and performance. One puzzling aspect of these findings is that the improved VFZ student performance as measured by high school graduation and pursuit of a college admittance, should also correlate with improved attendance and GPA, however, this was not always the case. One might make the argument that since VFZ targets many of the most at-risk students within the most at-risk schools, disruptive behavior and violence in such settings would be even worse if not for the presence of the Youth Advisors from the VFZ program. The Baylor-ICF research team very much appreciates the Department of Justice's support of our endeavor.





## APPENDIX 1

TABLE A1: INCIDENTS/MONTH (PRE- AND POST-VFZ INTERVENTION)

VARIABLE	# OF OBSERVATIONS	AVERAGE # OF INCIDENTS/MONTH	STANDARD ERROR	STANDARD DEVIATION	95% CONFIDENCE INTERNAL
PRE-VFZ INCIDENTS/MONTH	90	1.200	.0951	.9023	1.011 – 1.389
POST-VFZ INCIDENTS/MONTH	90	.677	.0751	.7128	.528 – .8277
% REDUCTION IN INCIDENT/MONTH		44%	.0832	.7897	.357 – .688

TABLE A2: AVERAGE SUSPENSION DAYS/MONTH (PRE- AND POST-VFZ INTERVENTION)

VARIABLE	# OF OBSERVATIONS	AVERAGE # OF INCIDENTS/MONTH	STANDARD ERROR	STANDARD DEVIATION	95% CONFIDENCE INTERNAL
Pre-VFZ Suspension Days/Month	75	.600	.0571	.495	.486 – .713
Post-VFZ Suspension Days/Month	75	.124	.020	.175	.083 – .164
% Reduction in Suspension Days/Month		79%	.055	.473	.366 – .585

**TABLE A3: AVERAGE TRUANCY INCIDENTS/MONTH (PRE- AND POST-VFZ INTERVENTION)**

VARIABLE	# OF OBSERVATIONS	AVERAGE # OF INCIDENTS/MONTH	STANDARD ERROR	STANDARD DEVIATION	95% CONFIDENCE INTERNAL
Pre-VFZ Suspension Days/Month	34	.13	.0667	.389	.145 - .417
Post-VFZ Suspension Days/Month	34	.10	.0355	.207	.088 - .233
% Reduction in Suspension Days/Month		23%	.0779	.454	-.038 - 0.278

**TABLE A4: AVERAGE GPA (PRE- AND POST-VFZ INTERVENTION)**

VARIABLE	# OF OBSERVATIONS	AVERAGE # OF INCIDENTS/MONTH	STANDARD ERROR	STANDARD DEVIATION	95% CONFIDENCE INTERNAL
Pre-VFZ Suspension Days/Month	124	1.62	.074	.824	1.47 - 1.765
Post-VFZ Suspension Days/Month	124	1.77	.070	.777	1.63 - 1.90
% Reduction in Suspension Days/Month		9.2%	.040	.435	-2.24 - -.070

**TABLE A5: COMPARATIVE GRADUATION RATES (AY 2007 – AY 2009)**

SCHOOL YEAR <sup>51</sup>	VFZ GRADUATES	VFZ WITHDRAWN/ REGISTERED	VFZ GRADUATION RATE	SCTE GRADUATES	SCTE WITHDRAWN/ REGISTERED	SCTE GRADUATION RATE
2007-08	10	3	77%	141	56	72%
2008-09	17	1	94%	128	39	77%
2009-10	33	1	97%	128	45	74%
3-year Average	60	5	92%	397	140	74%

<sup>51</sup> Data from the 2010-11 academic year were excluded from this analysis, since SCTE high school was being phased down and students were being transferred to other schools during the course of the school year.



# NOTES



## ABOUT THE AUTHORS

**Byron Johnson** is Distinguished Professor of the Social Sciences at Baylor University. He is the founding director of the Baylor Institute for Studies of Religion (ISR) as well as director of the Program on Prosocial Behavior. Johnson has just completed a series of studies on Boy Scouts and Eagle Scouts and is launching a longitudinal study of Boy Scouts in collaboration with colleagues at Tufts University. Professor Johnson was the principal investigator on a recent project funded by the Department of Justice to produce a series of empirical studies on the role of religion in prosocial youth behavior. He is a former member of the Coordinating Council for Juvenile Justice and Delinquency Prevention (Presidential Appointment). A leading authority on the scientific study of religion, the efficacy of faith-based organizations, and criminal justice, Johnson's recent publications focus on the impact of faith-based programs on recidivism reduction and prisoner reentry, and is the emphasis of his book, *More God, Less Crime*. Before joining the faculty at Baylor University, Johnson directed research centers at Vanderbilt University and the University of Pennsylvania. He is the 2013 Big Brother of the Year for Big Brothers Big Sisters Lone Star of Texas.

**William Wubbenhorst** served a total of 13 years as a Senior Management Consultant and Return On Investment (ROI) Specialist for ICF International and Macro International. He also serves as a Non-Resident Fellow for the Institute for Studies of Religion at Baylor University. Over the years, William Wubbenhorst has collaborated with professors from several prestigious academic institutions, including Baylor University, Boston University and Harvard University. He has published a variety of peer-reviewed journal publications and case studies. Most recently, he co-authored *Demonstrating the Value of Social Service Programs: A Simplified Approach to Calculating Return on Investment* -- a peer-reviewed article, published in the *Foundation Journal* (September 2010). Mr. Wubbenhorst co-authored an article entitled: *Assessing the Effectiveness of the Violence Free Zone in Milwaukee Public Schools: A Research Note*, to be released in an upcoming issue of the *Journal of Knowledge and Best Practices in Juvenile Justice & Psychology*, Fall 2013. Additionally, two case studies will be published and released through the Baylor Institute for Studies of Religion entitled: *Community Transformation in West Dallas: A Sustained Collective Between Churches, Faith-based Organizations and Government* and *The Prison Entrepreneurship Program*, in 2013.



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