REVIEW and **Analysis**





West Virginia Higher Education Policy Commission

Executive Summary

For every 100 9th grade students in West Virginia, only 43 will go on to enroll in college¹. The college matriculation rate of recent West Virginia high school graduates, while improving, still lags behind the national average, 62 versus 67 percent respectively². If the state wants to increase the educational attainment of West Virginia students, as indeed it must to meet workforce needs³, educators and college access providers need a clearer understanding of the types of information students have and lack with regard to college enrollment. In an effort to ascertain this information, a sample of West Virginia high school seniors was asked to respond to the High School Opinion Feedback Survey, in the spring of 2012. This survey was comprised of a series of questions about students' high school experiences and their plans after graduation. This was the third time the survey was administered twice previously in 2008 and 2010, which allowed for the tracking of trends in student responses. This analysis was intended to provide stakeholders, interested in increasing the college-going rate, with information about students' perspectives, experiences, and plans as they transitioned to life beyond high school. This report focused on the following five key areas:

Academic Preparedness

- Students reported an average GPA of 2.99 and ACT exam score of 21.23
- Nearly 7 out of 10 students earned a high school GPA of 3.0 or higher.
- More than 9 out of 10 students took at least Algebra II, a required course for enrollment at a West Virginia public four-year institution.
- 6 out of every 10 students were enrolled in a professional curriculum pathway in high school, a curriculum track that prepared them for entry to a four-year institution.

Sources of College Information

- Nearly 8 out of 10 students had been spoken to about college entrance requirements by a high school official and more than 8 out 10 were spoken to about financial aid requirements.
- Students cited college websites, direct mail, and e-mail as the three most important resources of college information.
- Parents were the greatest help in making the decision to apply to college and submitting the FAFSA.
- About 3 out of 4 of students visited at least one college campus.
- Students who found CFWV to be an important resource knew the requirements of financial aid and attended college at higher rates.

Financial Aid Awareness

- Approximately 57 percent of students overestimated the one year cost of tuition at public in-state four-year colleges and universities. An additional 15 percent reported not knowing the cost of tuition.
- In contrast, 54 percent of students in the GEAR UP program accurately estimated the one year cost of tuition at an in-state four-year public institution.
- More than two times as many GEAR UP students accurately estimated the one year cost of tuition at in-state public four-year institutions.
- The financial aid options students were most informed about were the PROMISE Scholarship, federal loans, and Pell grants.

Collegiate Plans

• Nearly 9 out of 10 students planned to attend college, with three quarters planning to attend beginning the fall of 2013.

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- Of those who planned to attend college, more than 6 out of 10 had already been accepted to college by the time they completed the survey.
- Of those who were accepted, more than 8 out of 10 students reported being accepted to a West Virginia public institution.
- More than 70 percent of students hoped to earn at least a bachelor's degree, with an additional 10 percent hoping to obtain an associate's degree.

College Decisions

- Students cited affordability as an impediment to them attending college.
- Students also cited affordability as one of the reasons they were most likely to choose a specific college.
- Nearly three quarters of students planning to attend college believed they could afford a public West Virginia college with the help of financial aid.
- Students perceived they would rely on their parents, personal savings, and institutional scholarships as sources to finance a college education.
- More than 8 out of 10 students planed on working to help finance their college education, with around 8 percent working full-time.

Overview

West Virginia's workforce is facing a skills gap. In order to meet workforce projections, the state will require at least 20,000 additional certificate or degree holders by 2018. The majority of this workforce gap falls within the "middle skill" occupations; those skilled technical jobs that require more than a high school diploma but less than a four-year degree⁴. To address this gap, the state will need to focus on the college attainment of both recent high school graduates and adult learners. Unfortunately, the state's college-going rate amongst recent high school graduate is 62 percent, five percent below the national average of 67. In an effort to improve this matriculation rate, the Higher Education Policy Commission (HEPC) embarked on a survey of high school seniors in the spring of 2012. The High School Opinion Feedback Survey asked students about their high school experiences and plans after graduation. This was the third time the survey was administered, once each in 2008 and 2010, which allowed for the tracking of trends in student responses. This analysis is intended to provide stakeholders, interested in increasing the college-going rate, with information about students' perspectives, experiences, and plans as they transitioned to life beyond high school.

The sample was designed to be representative of the seniors enrolled in public high schools in 2012. Due to considerable variation in high school size, the sample was drawn to be representative across small, medium, and large schools. A quasi-random sample of high schools was drawn from the 115 high schools across the state. The survey was also designed as an evaluation tool for the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP). GEAR UP provides educational services to help students plan, apply, and pay for college. All 14 GEAR UP schools were purposefully sampled for this analysis. Further, in an effort to ensure that GEAR UP students were compared to a similar sample of students who did not receive GEAR UP services, GEAR UP comparison schools were identified. Including all GEAR UP and GEAR UP comparison schools, the final sample consisted of 51 schools. A detailed description of the methods used for this report can be found in the methodological appendix.

This report focuses on five key areas: academic preparation in high school, sources of college information, financial aid awareness, collegiate plans, and college decisions. These areas were chosen because the college access literature has identified each as being associated with the college matriculation of high school seniors. In order to improve the college-going rate of students, college access providers need to understand what students do and do not know about the college-going process and why they are making decisions to and not to apply to college. The following sections are designed to investigate each of these topics.

Before exploring these areas though, we first provide some basic demographic information about the surveyed population and compare that information to state figures provided by the West Virginia Department of Education (WVDOE). Despite being designed to be representative of the state's high school senior class, individual high school response rates caused some sample demographic information to vary from what was reported statewide. Understanding these demographics will help contextualize the analyses found in the later sections of this report.

Age, Gender, and Race/Ethnicity

Table 1: Age, Gender, and Race/Ethnicity

Age	
17 or younger	4.7%
18	77.9%
19 or older	17.3%
Gender	
Female	50.8%
Male	49.2%
Race/Ethnicity	
African American or Black	5.2%
American Indian/ Native American	0.9%
Asian American or Pacific Islander	1.5%
Caucasian/White	84.0%
Hispanic/Latino	1.8%
Multiracial	4.4%
Other	2.2%

As expected, high school seniors in the sample were primarily 18 years old (77.9%) but there were also a considerable number of seniors that were 19 years old or older (17.3%). 50.8 percent of those surveyed were female, which was slightly higher than the state figure of 48.8 percent. Males were slightly underrepresented in the survey. Of survey respondents, 49.2 percent were male, 2 percent lower than the state's reported 51.2 percent.

The racial/ethnic composition of this report was only slightly different than what was reported statewide. Caucasian/White (84.0%) students were underrepresented in the sample when compared to the state figure of 97.2 percent. African American/Black students were accurately represented at 5.2 percent, the same as the official state figure. All other racial and ethnic groups were slightly overrepresented.

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Income

Table 2: Student Financial Information

\$30K or less	29.7%
\$30,001 to \$60K	32.3%
\$60,001 to \$100K	25.4%
\$100,001 or more	12.5%
Free/Reduced Priced Lunch Eligibility	
Not Eligible	56.6%
Eligible	43.4%

Socio-economic status (SES) has long been found to be one of the strongest predictors of college matriculation. In this survey, we approximated SES in two ways: self-reported family income, and free and reduced priced lunch status. 62 percent of students reported a family income of under \$60,0011. Further, 43.4 percent of students were eligible for free or reduced lunch. These statistics were consistent with information from the U.S. Census Bureau and the WVDOE which reported that the median household income of West Virginia residents was \$39,550 and about 39 percent of students qualified for free and reduced priced lunch respectively.

Family Educational Attainment

Table 3: Family Education

First-Generation Status	
Not First-Generation	65.5%
First-Generation Student	34.5%
Father's Level of Education	
High School or Less	54.8%
Some College	22.1%
BA or above	23.2%
Mother's Level of Education	
High School or Less	43.5%
Some College	29.5%
BA or above	27.0%
Siblings in College	
0	58.5%
1	29.9%
2	8.0%
3	2.3%
4	0.7%
5 or more	0.6%

The educational attainment of immediate family members is also a predictor of college matriculation. Often, first-generation students lack the necessary skills and knowledge required to navigate the collegiate landscape. First-generation college-goers are defined as those whose

It should be noted that this was self-reported family income and may not be representative of actual family income.

mother and father did not attend college. Having a parent that attended college gives non-first-generation students both tangible and intangible resources that increase their likelihood of matriculation. Parents who have attended college are more likely to have the financial resources to pay for their child's college education. Further, they are better positioned to mentor their children about what courses to take in high school, what to look for in a college, and how to apply. Having help with logistical college preparation issues such as understanding college requirements, applying, and simply knowing where to look for additional information provides students with invaluable intangible resources that make navigating the college-going waters that much easier.

About 35 percent of West Virginia high school seniors would be considered a first-generation student if they attended college. Approximately, 55 percent of students' fathers and 44 percent of students' mothers never attended college. These parents are less likely to be able to help their children navigate the complexities of the college bureaucracy. Therefore, it is particularly important for college access providers to offer special services for potential first-generation college-goers, so that these students also have access to this crucial intangible information.

Siblings who have gone to college can also provide their younger brothers and sisters with necessary information and support in preparing post-high school plans. About 42 percent of the students surveyed had at least one sibling enrolled in a college or university. Though the educational attainment of siblings does not factor into first-generation status, their experiences could be particularly informative for potential first-generation college-goers. Only 33.9 percent of this population had a sibling enrolled in college. The other 66 percent of possible first-generation students, then, had neither parents nor siblings who could provide many of the intangible resources shown to be correlated with matriculation. College access programs are uniquely positioned to help close this information gap. A supplemental report will explore the relationship between one access program, GEARUP, and the post-secondary plans of first-generation students.

I. Academic Preparedness

Academic preparation is an important indicator of college-going and college success⁵. Students with high grade point averages (GPAs) and ACT scores tend to have higher college enrollment and graduation rates than those with lower scores. Further, a rigorous high school curriculum better prepares students for the academic transition from high school to college curriculum⁶. In order to better understand the academic preparation of West Virginia seniors, students were asked several questions pertaining to their academic experiences including their: GPA, ACT score, course selection, and curriculum pathway. The following section reports on these metrics.

Table 4: Average GPA and ACT Score

	GPA	ACT Score
Average	2.99	21.23

Table 5: GPA Distribution

High School GPA	
0.00-0.99	9.5%
1.00-1.99	1.4%
2.00-2.99	20.6%
3.00-3.99	56.8%
4.00+	11.6%

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West Virginia high school seniors reported an average GPA of 2.99 and average ACT score of 21.23. The majority of students reported a GPA between 3.00 and 3.99 (56.8%), with an additional 11.6 percent reporting a 4.0 or above. The official average ACT exam score published in the West Virginia ACT Profile was a 20.9, but this score was reflective of all students who took the exam regardless of grade level. The national ACT composite average of 21.1 was similar to what those in this sample reported. According to the 2012 HEPC Standards and Procedures for Undergraduate Admissions at Four-Year Colleges and Universities these average scores (GPA and ACT), in conjunction with one another, would meet West Virginia's minimum requirements for admittance to an in-state four-year public institution. The code requires that students have either a minimum 3.0 GPA or a 2.0 GPA with a minimum 18 ACT composite score2.

Table 6: High School Class Selection

Selected High School Curriculum	
Unsure	11.5%
Entry Pathway	4.5%
Skilled Pathway	20.6%
Professional Pathway	63.4%
Highest Level of Math	
Less than Algebra 1	1.7%
Algebra 1	1.3%
Geometry	7.1%
Algebra 2	39.6%
Trigonometry	23.8%
Pre-Calculus	15.7%
Calculus or above	10.9%
Number of AP Classes Taken	
0	59.6%
1	12.7%
2	10.3%
3	6.4%
4	6.8%
5 or more	4.1%

While grades are correlated with future success, so too are the courses students choose to take. High schools in West Virginia have developed a variety of curriculum pathways designed to prepare students for their post-secondary plans. Currently, there are three available pathways for high school students: entry, which prepares students for the workforce; skilled, which prepares students for a two-year college; and professional, which prepares students for a four-year college. Only 4.5 percent of West Virginia high school seniors reported taking classes that prepared them to enter the workforce directly after high school. This does not reflect the matriculation pattern of high school seniors, as 38 percent of seniors do not enroll in college immediately after high school graduation. Meaning that even though students are enrolled in curriculum pathways intended to prepare them for college, they are not matriculating. About 21 percent of students took a pathway that prepared them to enter a two-year program, while the vast majority, 63.4 percent, reported enrolling in the pathway which prepared them for entry to a four-year college. About 11 percent of recent high school graduates in 2011 enrolled in an in-state public community or technical college and 34.1 percent enrolled in an in-state public four-year institution.

Institutions with doctoral programs, such as West Virginia University and Marshall University, have a higher ACT composite score requirement, 19.

Students who take higher level math courses and those who take Advance Placement courses (AP) are more like to be prepared for college than those who do not take such courses. As shown in Table 6, 90 percent of students took at least Algebra II, a course required for admittance to a public four-year institution. Approximately 40 percent took at least one AP class while in high school. AP classes are intended to help prepare students for the pace and rigor of college coursework. Unfortunately, the College Board reports only 42.4 percent of all West Virginia AP test takers, not just the senior class, scored at least a 3, the minimum score required for partial college credit. The national average for those passing similar exams was 57.2 percent. Given the difference in passage rates between test takers nationally and in-state, it seems that West Virginia AP students may need additional supports to get them prepared for college level work.

Table 7: Perceptions of College Preparedness

Degree of Preparedness	
Very Prepared	12.4%
Prepared	37.6%
Somewhat Prepared	39.3%
Not prepared at all	10.6%

Although academic preparedness may suggest students are ready to enter college, their perceptions of preparedness can also inform matriculation decisions. As seen in Table 7, 10.6 percent of high school seniors felt not at all prepared for college, while 50 percent felt that their high school education and experiences prepared them. Though it is important that students felt prepared, only 12.4 percent felt very prepared, meaning there is still work left to be done to improve students' feelings of college readiness. Increasing college access efforts and aligning high school curriculum with college entrance requirements may help students feel more prepared.

Academic Preparedness: Summary

These metrics represent a snapshot of the academic progress of high school seniors. The majority reported that they met or exceeded four-year in-state college entrance requirements. Students averaged a 2.99 GPA and a 21.23 ACT score. Nine out of ten students took at least Algebra II. These results align with the professional curriculum pathway in which over six of every ten students in high school enrolled. In total, nearly 90 percent of students felt their high school education at least somewhat prepared them for college. These findings suggest that the majority of West Virginia students were academically prepared to enter college. Why then does the state's college matriculation rate lag behind national averages? Attending college is not solely based on academic preparedness. Prospective college freshman need a variety of resources to help them understand the college-going process. The following section begins to explore some of these resources.

II. Sources of College Information

Respondents were asked several questions about the resources they used when deciding about college. These questions targeted specific areas such as the influence of others, importance of various resources, college visitation, and parental involvement with college preparation.

High School Staff

High school staff is uniquely positioned to provide students with valuable information about college entrance and financial aid requirements. For first-generation students and students with

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low socio-economic backgrounds, high school staff may take on particular importance in the college-going process. These students are less likely to have family members who can provide them with knowledge about how to navigate the college admissions process⁷. For some students, teachers, guidance counselors, and administrators are the most valuable resource in their decision to attend college. In fact, 61.2 percent of respondents noted that high school staff was influential in their decision about college. With such a high percentage of students feeling that high school staff was influential in their decisions, it was encouraging to see that 77.4 percent had been spoken to by high school staff about college entrance requirements and 82.4 percent about financial aid availability. Some students may be timid to pursue college because they do not know what is required to be admitted or receive financial aid. Simple interactions with teachers, counselors, or administrators in which general college information is passed to students can have a meaningful impact on whether they attend college, particularly for first-generation students8.

Table 8: Spoken to by High School Staff

	Yes	No
College Entrance Requirements	77.4%	22.6%
Financial Aid Availability	82.4%	17.6%

CFWV

There are numerous resources that students can utilize when researching college. One resource, the College Foundation of West Virginia (CFWV), was a primary focus this survey. CFWV is a non-profit foundation dedicated to helping students achieve the dream of earning a postsecondary credential. With early intervention CFWV is able to help students with high school, financial aid, college, and career planning. It also offers several programs dedicated to informing students about various college enrollment issues. Programs such as College Goal Sunday allow students and families the opportunity to receive free, confidential, support in completing the FAFSA. The website (www.CFWV.com) also offers information about all West Virginia state-level financial aid programs as well as information to assist aspiring college-goers prepare for life after high school.

Because of the state's investment in the program, this research intended to measure the influence CFWV has had on students' post-secondary plans. Data was compared with results of previous iterations of the High School Opinion Feedback Survey in order to measure the impact CFWV has had over the past two years as well as areas in need of improvement. Approximately, 51 percent of students in 2012 believed that CFWV was an important or very important resource for gathering information about college. In just two years this figure has increased 21.6 percentage points from the 2010 rate of 29.6 percent.

Table 9: Students who are very informed about WV Financial Aid Options by CFWV Importance (2012)

	Federal	Pell Grants	Work Study	PROMISE	WV HEGP	WV ESTS	Underwood	HEAPS	529 Plan	Tax
	Loans						Smith			Credit
CFWV Important	33.0%	33.2%	31.4%	58.4%	27.8%	20.9%	18.5%	18.1%	23.6%	19.7%
CFWV Not Important	18.2%	16.9%	15.1%	39.6%	13.8%	8.9%	6.8%	6.7%	10.2%	8.0%

In both 2010 and 2012, students who believed CFWV was an important or very important resource were significantly more likely to be very informed on every source of financial aid. Conversely, students who believed CFWV was an unimportant or very unimportant resource were significantly more likely to be not all informed on all types of financial aid. These results

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demonstrate that CFWV is a helpful and meaningful resource for financial aid information. In effect, students who use the resource are more likely than those who do not to feel well versed in financial aid options. Further, students who felt CFWV was important were also significantly more likely to receive state-sponsored financial aid.

Table 10: First Considered College by CFWV

Importance	Before High School	During High School	never considered going
CFWV Important (201	2) 73.2%	23.4%	3.4%
CFWV Important (201	0) 67.9%	28.0%	4.1%

Finally, students who found CFWV to be an important resource considered college at an earlier age. About 73 percent of students who felt CFWV was an important resource began considering college prior to high school. This rate was 11 percentage points higher than the rate of those who did not feel the resource was very important and 5 percentage points higher than the rate in 2010. It should be noted, though, that CFWV had not yet been created at the

time these high school seniors were in middle school. Therefore, CFWV did not cause these students to consider college prior to high school, but it is interesting that these students found CFWV to be such an important resource. Further, 92.4 percent of those who thought CFWV was important planned to attend college, a rate 12.2 percent higher than those who did not (80.2%).

These results indicate that the state's investment in CFWV is paying off. Students who found CFWV to be an important resource considered college earlier, knew the requirements of financial aid, and attended college at higher rates. With continued focus in this area, West Virginia may be able to realize an increase in the state's college-going rate. This increase is necessary to supply the changing workforce with qualified graduates to sustain and build the state's economy.

Although CFWV is an important resource, others are also available. Understanding how high school students receive information about college can help college access programs understand where to concentrate their efforts. With a plethora of resources available in the technological age, students are able to get information from resources as diverse as physical mail or a billboard, to targeted e-mails and collegiate websites. Knowing which resources are the most valuable to students allows stakeholders to prioritize which resources to invest in so that they have the best chance of reaching potential college goers.

Sources of Information

Respondents indicated that the top three most influential resources in researching options for college were college/university websites (50.9%), direct mail (31.4%), and e-mail (29.5%). Interestingly, direct mail is the second most important resource students cited, despite the emphasis placed on technology in today's world. The three least important resources were radio (46.2%), signs and billboards (37.7%), and magazines and newspapers (37.5%). While these are all effective means of marketing, they lack the ability to give substantive information to perspective college-goers.

Table 11: College Resources

Very Important Resources

College Websites	50.9%
Direct Mail	31.4%
E-mail	29.5%

Students who found CFWV to be an important resource, knew the requirements of financial aid and attended college at higher rates.

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Table 11: College Resources Continued

Very Unimportant Resources	
Radio	46.2%
Signs/Billboards	37.7%
Magazines/Newspapers	37.5%

Parents also serve as valuable resources to their children in the college-going process. To assess the degree to which parents provided their children with academic advice, students were asked about the extent to which their parents helped them in several different areas. This gives college administrators and college program staff an understanding of parental involvement and what types of information and resources are required to help children transition from high school to college.

Table 12: Extent Parents Advised Students About Academic Options

	Choose High	Create List of	Decide Apply	Decide how	Submit
S	School Classes	Colleges to Apply To	for College	to finance college	the FAFSA
Great Extent	t 37.1%	36.6%	59.8%	59.2%	59.2%
Some Extent	t 40.4%	29.3%	24.7%	22.6%	17.5%
Not At all	22.5%	34.1%	15.5%	18.2%	23.3%

Students reported that parents were very influential in helping decide whether or not to apply for college (59.8%). How parents influenced decisions related to college though, varied. The majority of students reported their parents helped them decide how to finance a college

education (59.2%) and submit the FAFSA (59.2%). With or without help from their parents, 84.1 percent of those surveyed had already filed their FAFSA, a requirement necessary to receive financial aid. Interestingly, students reported their parents were least helpful in creating a list of colleges to which students would apply (34.1%). Results from this question were distributed fairly evenly across the possible responses indicating that while parents helped students make the decision to apply to college, they were less likely to help students decide which college to attend. Parents were also less likely to aid their children in choosing high school courses. This metric is particularly important because the courses students take in high school

influences not only which colleges they can attend but also impacts their academic preparation. Given the lack of parental involvement in this area, it may be that high school staff and college access providers should incorporate curriculum advisement as a major focus of their work with students.

Table 13: College Visitation

# of times visited a college campus				
	0	26.4%		
	1	21.5%		
	2	20.8%		
	3	14.0%		
	4	5.7%		
	5 or more	11.5%		

Finally, visiting a college campus can also be a valuable source of information. When high school students visit a college campus they experience and learn about college life in ways that pamphlets and e-mails cannot explain. Sometimes city size, college location, student life, and available amenities make a difference in students' decisions to enroll. It also gives students the

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High school staff and college access providers should incorporate curriculum advisement as a major focus opportunity to speak with college admissions counselors about any concerns they may have with the admission requirements, application process, or financial aid. In this survey, 73.6 percent of students had visited at least one college campus.

Sources of College Information: Summary

Being academically prepared is essential for college enrollment and success but students must also have resources which provide them with information about college enrollment. It is encouraging to note that the vast majority of high school seniors have had staff speak to them about financial aid and college entrance requirements. It appears that students could also benefit from focused advising on the relationship between high school coursework and success in college. This advice could increase the college readiness of students and hopefully increase the college matriculation rate. As a state sponsored program, CFWV is having a profound effect as a collegiate resource for many students. Those who found it to be important considered college at an earlier age and were significantly more likely to be well informed about various financial aid sources.

These survey results can also inform university administrators and college readiness organizations about which resources prospective students utilize when researching and deciding on a college to attend. By targeting the most valued resources, college websites, direct mail, and e-mail, these interested stakeholders will be able to distribute important information about college and be confident that their message is being received.

III. Financial Aid Awareness

While the previous section was designed to see which resources students used to make decisions about college, this section will examine the degree to which students were informed about how to finance college. Financial awareness was measured by assessing students understanding of the costs of college and how well informed they were about financial aid opportunities.

Table 14: Estimated Tuition

Estimated cost of tuition	
Up to \$3K	2.4%
\$3,001 to \$7K	25.6%
\$7,001 to \$10K	18.5%
\$10,001 to \$15K	13.0%
\$15,001 to \$20K	13.8%
\$20,001 to \$25K	7.6%
More than \$25K	3.9%
Don't Know	15.2%

Financing college is a daunting task for potential college-goers, particularly those who come from low-income backgrounds, as do most students in West Virginia. Indeed, researchers have found that students from low socio-economic backgrounds are less likely to apply for college because of financial concerns and misconceptions⁹. Therefore, ensuring that West Virginian students accurately estimate the cost of tuition is essential to increasing the state's college-going rate. In 2012, the average undergraduate tuition for in-state students enrolled at West Virginia four-year public institutions was \$5,528 and \$2,997 at two-year institutions. According to a

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students surveyed, accurately

attending a public four-year

college in West Virginia.

However, 54 percent of

answered this question

students attending a

GEAR UP school

correctly

Only 25.6 percent of

report produced by the College Board, tuition at West Virginia public four-year institutions is less than one-third that of the national average, which is \$8,655. With lower than average tuition rates it is surprising that over half of the students across the state overestimated the cost

> of in-state public tuition. In fact, only 25.6 percent of students surveyed, accurately estimated the price of attending a public four-year college in West Virginia. However, 54 percent of students attending a GEAR UP school answered this question correctly.

> The GEAR UP program strives to create a strong college-going culture in its schools. One aspect of this endeavor has been to educate students, families, and local communities about the actual cost of tuition at West Virginia public higher education institutions. GEAR UP researchers noticed that misconceptions about college affordability impeded students' desires to matriculate. As a result, the program has employed a variety of methods to help students understand the true cost of college-going. The results of this analysis indicate that these efforts have been successful and have ramifications for students throughout the state.

> Despite the majority of students being incorrect about the price of college (59.2%), students were at least informed about the various options of financial aid available throughout the state. The College Board estimates that nationally, students receive an average of \$5,570 in college assistance, requiring them to only pay 30% of their college education out-of-pocket.

Students in West Virginia have a myriad of options when it comes to financial aid. They can receive federal, state, institutional, and program specific scholarships and aid to ease the financial burden of college.

Table 15: Financial Aid Awareness

	Federal	Pell Grants	Work Study	PROMISE	WV HEGP	WV ESTS	Underwood	HEAPS	529 Plan	Tax
	Loans						Smith			Credit
Very Informed	26.2%	25.6%	23.9%	49.4%	21.3%	15.4%	13.1%	12.9%	17.5%	14.3%
Somewhat Informed	38.9%	32.8%	33.0%	27.3%	31.3%	24.4%	21.4%	21.1%	25.0%	21.8%
Somewhat Uninformed	17.6%	18.3%	20.1%	11.3%	20.8%	22.5%	20.6%	20.4%	19.1%	19.9%
Not all Informed	17.3%	23.3%	23.1%	12.0%	26.5%	37.7%	13.1%	45.6%	38.4%	44.0%

Students were the most informed about the PROMISE scholarship (49.4%), federal loans (26.2%), and Pell Grants (25.6%). As a state-sponsored scholarship West Virginia prioritizes educating high school students on the requirements necessary to receive the PROMISE. Flyers, pamphlets, and posters are utilized by high school administrators and CFWV to further the effort. As a result, students were nearly twice as likely to be well informed about PROMISE scholarship requirements, than they were about any other type of financial aid. However, more attention needs to be placed on informing students of federal loans particularly regarding repayment requirements and steep penalties for default. According to the United States Department of Education, the three-year default rate for West Virginia graduates is 14.1 percent, which is higher than the national average of 13.4 percent. The three sources of financial aid that students were the least knowledgeable about were the Higher Education Adult Part-Time Scholarship (HEAPS) (45.6%), tax plans (44%), and 529 savings plans (38.4%). These results are expected as 99.7 percent of recent high school graduates, attending in-state colleges, enroll full-time. HEAPS is an award for part-time students and thus the vast majority of recent high school graduates are ineligible for this award. Further, financial planning options are usually initiated by parents long before college enrollment.

Financial Aid Awareness: Summary

Understanding the price of tuition is essential in college preparation. Students must have realistic expectations regarding tuition to accurately assess whether or not they are able to attend college and which college to attend. Nearly 57 percent of those surveyed overestimated the cost of tuition; however, students in a GEAR UP high school were almost twice as likely to estimate the price of tuition correctly. The successful strategies used by GEAR UP should be incorporated into access programs across the state to ensure students have realistic tuition expectations. Despite not knowing the average tuition, students were well informed about several different types of financial aid, primarily the state funded PROMISE scholarship. However, there is a lack of advisement about the repercussions of borrowing money across the state that needs to be addressed by access providers, higher education institutions, and high schools alike.

IV. Collegiate Plans

According to a report produced by the Center on Education and the Workforce, 49 percent of jobs in West Virginia by 2018 will require post-secondary education. For both the benefit of the state and its students, it is imperative high school seniors recognize that a changing economy demands some kind of post-secondary credential. To this end, students were questioned about their plans after high school and if they intended on attending college. Furthermore, if they planned to attend college they were asked about their application strategies, intended major, and institution selection.

Table 16: College Plans

Plan To Attend College				
Yes	86.2%			
No	13.8%			
Began Considering College	Began Considering College			
Prior to High School	66.8%			
During High School	24.8%			
Never Considered	8.4%			

College access efforts are usually coupled with early intervention techniques to ensure that students are fully aware of college entry requirements and to give them ample time to begin preparing academically. More than two-thirds of those surveyed indicated that they had begun considering college enrollment before high school, with only 8.4 percent never considering college. Another 24.8 percent of students began considering college while they were still enrolled in high school. When compared to 2010, the number of students considering college prior to high school rose by 2 percent while those never considering decreased by 2 percent. Further, the percent of students planning to attend college increased between 2010 and 2012 by 4.2 percent. In 2012, 86.2 percent of high school seniors were planning to attend college, while 82 percent were planning to do the same in 2010. Unfortunately, there is a disconnect between the proportion of students who plan to attend college and those who matriculate. When 86.2 percent of students intend to go to college but only 62 percent matriculate immediately after high school graduation, one has to wonder what makes the 24 percent who intend to enroll unable to do so.

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Table 17: Number of College Applications

N	umber of Applications	
	0	26.2%
	1	25.0%
	2	17.5%
	3	13.5%
	4	7.9%
	5	4.9%
	6 or more	5.0%

The intention to go to college was also reflected in the number of colleges to which students applied. About 26 percent of students had not applied to college, while nearly 73.8 percent had applied to at least one institution. One-quarter of students surveyed had applied to one institution, 17.5 percent to two, and 13.5 percent to three. Research has shown that a combination of parental college completion, high income, and strong academic ability typically result in students applying to multiple institutions¹⁰.

Table 18: College Attendance and Selection

Plan to Attend College Fall 2013	
Yes	74.2%
No	25.8%
Already Been Accepted	
Yes	63.8%
No	36.2%
Sector of Attending College	
2-Year WV Public	16.3%
4-Year WV Public	66.6%
WV Independent	5.7%
Out-of-State	10.5%
For-Profit	0.8%
Online	0.1%

Students were also asked about their plans immediately following high school. Approximately 74 percent of respondents indicated they would attend college in the fall of 2013 and 63.8 percent had already been accepted. The reported 63.8 percent of students already accepted into a college or university is slightly inflated from the state's 62 percent college-going rate. What is troubling about these statistics is that approximately 10 percent of students, who plan on attending college in the fall, do not matriculate. If access providers were able to identify the specific impediments these students face regarding matriculation, efforts may be made to target this group.

Students were also asked what college they would attend in the fall. This question was asked only to students who reported they intended to attend college. 82.9 percent of these students planned to attend a public institution in West Virginia with exactly two-thirds of respondents attending a four-year institution and 16.3 percent attending a two-year institution. An additional 5.7 percent of students planned to attend an in-state independent four-year non-profit institution resulting in nearly nine out of ten collegegoers remaining in the state for their post-secondary education. This trend was representative of enrollment patterns in West Virginia's public higher education

institutions, with 22.5 percent of traditional aged students enrolled in community and technical colleges, while 77.5 percent were enrolled in four-year institutions.

Having such a high proportion of high school seniors attend college in-state has important economic implications for West Virginia. According to the West Virginia Economic Outlook 2012¹¹, 48.1 percent of all graduates from West Virginia higher education institutions were employed within the state, a trend that has been on the rise since 2003. When only looking at West Virginia born students, that number jumps to 58 percent. Given the propensity for students to both continue their education in-state and also work in-state, it seems that increasing the college-going rate of this population would substantially aid the job skills gap the state's workforce is currently experiencing.

Table 19: Highest Degree Wished to Obtain

D	egree Goal	
	No Degree	3.3%
	High School/GED	9.8%
	Vocational	5.5%
	Associate's Degree	9.9%
	Bachelor's Degree	27.5%
	Master's Degree	27.9%
	Doctoral	16.0%

In addition to whether or not they intended to enroll, respondents were asked about the highest degree they wished to obtain. Similar to their plans to attend college, 81 percent of West Virginia seniors hoped to receive some kind of college credential. About 10 percent hoped to earn a vocational or associate's degree, 27.5 percent a bachelor's degree, 27.9 percent a master's degree, and 16 percent a doctoral degree. An additional 5.5 percent sought to achieve some vocational post-secondary training.

Table 20: College Attendance

	Attend Status				
		Full-Time	88.2%		
		Part-Time	11.8%		
ı	Ir	itended Major			
		Allied Health or Nursing	21.6%		
		Arts	5.3%		
		Business	7.6%		
		Career and Technical Education	4.4%		
		Communications	1.7%		
		Computer Science/Technology*	3.5%		
		Education	9.1%		
		Engineering/Math*	8.4%		
		Humanities	2.7%		
		Natural/Physical Science*	14.1%		
		Social Science	8.0%		
		Undecided	13.8%		

^{*}Indicates a STEM Major

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About 88 percent of college-goers planed on attending full-time. In West Virginia, full-time students are those that take at least 12 credit hours a semester and part-time students are those who are enrolled for anything less than 12 hours. When traditional aged students attend college part-time they have lower retention rates and are also less likely to graduate within five years than similar students who attend full-time¹².

The most popular intended majors of the class of 2012 were allied nursing (21.6%), natural/physical sciences (14.1%) and education (9.1%). Approximately 14 percent of students were still undecided. Another 26 percent of students intended to major in a STEM (science, technology, engineering, and math) field, 5 percent more than when the survey was given to students in 2010. Careers in STEM fields are always in demand but degree production is usually low. With this in mind, higher education institutions, high schools, and college access providers may want to develop support structures for students who are interested in pursuing STEM fields to help them enroll in and eventually graduate with these necessary credentials.

Collegiate Plans: Summary

Students in this survey had overwhelmingly chosen to attend college. Nearly nine out of ten students planned to attend college at some point in their life, while two-thirds had already been accepted. Moreover, 83 percent of those accepted to college were accepted to an in-state institution and 88.2 percent of students planed on attending college full-time. While degree goals have remained stable over time, the percent of those who planned to attend and those who had been accepted both increased since 2010. These are encouraging signs as numerous reports suggest that the number of West Virginia jobs requiring a college degree is expected to continue to rise.

V. College Decisions

The previous section was concentrated on the number of students attending college. In this section we explore why students made the decision to or not to attend college. Understanding the reasons students choose not to attend college is just as informative as knowing why they did. Respondents were asked several questions about this decision, along with questions pertaining to finances in order to better understand the relationship between tuition, financial aid, and attending college.

Students who did not plan on attending college, at any point in the future, were asked about factors that played into their decision. About 34 percent of those not attending cited needing a break from school, followed by affordability (28.1%), and having a well paying job lined up (28.1%) after high school graduation. These results indicate that financial awareness plays a key role for students who do not attend college. In this survey 57 percent of students who were eligible for free and reduced lunch did not plan on attending college, compared to 43 percent of those who were not eligible. It may be that students from lowincome families have to place immediate financial needs over their desire to attend college. As a result, these students are less likely to plan on enrolling in college after graduation.

Table 21 Very Important Factors in Decision to Not/Attend College

Reasons to Not Attend			
Need a break from school	34.0%		
Costs too much	28.1%		
Well paying job lined up	28.1%		
Need to save money for college	28.0%		
Reasons to Attend			
Offer Interested Major	69.0%		
Affordability	67.9%		
School offered scholarship	41.0%		
PROMISE Accepted	35.8%		
School Rep made good impression	32.0%		

Students who chose to attend college cited the availability of their intended major (69%) as the most important factor that influenced their selection of a specific college, followed by affordability (67.9%), and institutional scholarships (41%). While intended major was important, these results indicate that tuition and financial aid also play a large role in the decision to attend, as three of the top five reasons students chose a particular college were related to student finances. In fact, research has found that affordability and financial aid availability were the primary reasons that qualified high school students failed to matriculate¹³.

Table 22: Financial Aid

Able to Afford College in WV with Aid				
Definitely		35.7%		
Probably		38.2%		
Probably Not		6.3%		
Definitely Not		2.6%		
Not Sure		17.2%		
Sources of Financi	al Aid			
Federal Loan		43.3%		
Institutional So	cholarship	57.8%		
Military Progra	am	13.6%		
Other Loan		45.4%		
Parents or other	er relative	77.6%		
Pell Grant		42.3%		
Personal Saving	gs	62.4%		
Private Source	Scholarship	35.6%		
PROMISE Sch	nolarship	39.8%		
State need-base	ed aid	35.6%		
Work-Study		36.2%		

Encouragingly, nearly three-quarters of those who wished to attend college believed that they could afford tuition at a public West Virginia higher education institution with the help of various financial aid resources. Since affordability and financial aid are some of the most important reasons cited for attending college, attending a low-cost in-state public institution is often the most likely scenario for many students. Out-of-state and private institutions have

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higher tuitions and an increased total cost of attendance compared to in-state publics and thus would be less attractive to budget minded college-goers. This finding, coupled with the increased likelihood that in-state college-goers will subsequently work in-state, makes it critical for in-state public institutions to keep tuition costs low.

Finally, students were asked about what sources they planned to utilize to finance college. Parents (77.6%), personal savings (62.4%), and institutional scholarships (57.8%) were most frequently cited as sources to pay for their college education. According to the College Board more than three-quarters of students pay for college using federal loans, Pell grants, and institutional grants. The students' responses in this survey indicate there may be a disconnect between how they believe they will finance college and what will actually happen once they enter college. As shown earlier, students are unlikely to know the price of college and thus more work needs to be done to educate potential college-goers on realistic tuition estimates and financial aid resources available to help them afford college.

Table 23: Working in College

Work to Finance Education? Yes 82.4% No 17.6% Planned work hours per week 1-5 hours per week 5.4% 6-10 hours per week 13.7% 11-15 hours per week 17.8% 16-20 hours per week 22.0% 21-25 hours per week 16.0% 26-30 hours per week 11.7%31-35 hours per week 5.4% 36 hours per week or more 8.0%

The students' responses in this survey indicate there may be a disconnect between how they believe they will finance college and what will actually happen once they enter college.

Even though students have multiple options for financial aid, sometimes it is not enough. Students may not qualify for certain types of financial aid but still wish to work their way through college. For others, financial aid may help with a few expenses, but students need to work in order to cover living costs. Approximately 82 percent of students planned on working while in college in order to help finance

their post-secondary education. Over half (58.9%) of those planning on working said they would work part-time, under 20 hours, while the rest (41.1%) would work more hours. At many institutions students who work for the university, such as in work-study or assistantships are only allowed to work a maximum of 20 hours a week in order to maintain a balance between working and studying. Contrary to popular belief, research has shown that time spent working has no direct impact on academic ability. However, that is not to say that external factors do not play an important role¹⁴.

College Decision: Summary

One of the main concerns students had when choosing whether or not to go to college was affordability. This concern was also echoed in their choices about which college to attend. Over two-thirds of those surveyed indicated financial costs were the most important reason for choosing a specific college. Fortunately, 75 percent believe that with the help of financial aid they would be able to afford a post-secondary education in West Virginia. However, differences between how students traditionally pay for college and how they intended to pay while in high school paint two different pictures. Students are unable to accurately estimate tuition at an in-state institution and also believe their parents and personal savings will be able to cover tuition when in reality they are more likely to rely on federal loans, institutional scholarships, and Pell grants. Special attention should be given to educating high school seniors on the real cost of attendance and the most common financial aid resources used in financing a college education.

Discussion

The results of the survey reflect many of the positive initiatives underway in West Virginia to increase the college-going rate of high school students. The majority of students reported being enrolled in a high school curriculum pathway designed to prepare them to enter a two- or four-year higher education institution. High school staff actively spoke with students about college entrance requirements and financial aid, and students were well informed about the PROMISE scholarship. Encouragingly, almost 90 percent of students aspired to attend college at some point in the future. However, there is a disconnect between student aspirations and reality. Only 62 percent of previous year high school graduates enroll in a higher education institution. This research may help to shed light on some of the intermediary factors at play between student aspirations and enrollment patterns. We discuss some of these points here.

One mismatch discovered through this research was that on average, students reported being academically prepared for college, but a sizable portion of the 2012 graduating class required remediation upon college enrollment. Students reported an average GPA of 2.99 and ACT score of 21.23, which is similar to statewide averages. Based on this information alone, it would seem that students were academically prepared for college-level work. However, of the 2012 graduating class, 23 percent entering a four-year in-state public institution and 66 percent entering a two-year in-state public institution required remediation. ACT's academic readiness benchmarks may shed light on some of this mismatch. Academic readiness benchmark scores are defined as the minimum scores needed to predict success in corresponding credit-bearing college courses. In the class of 2012, only 18.7 percent of West Virginia students, who took the ACT, scored at or above ACT benchmarks on all four subject tests (English, math, science, and reading). The math benchmark is particularly troubling, as only 33 percent of students met or exceeded the academic readiness score associated with being prepared for college-level mathematics. With such a low percentage of students meeting these benchmarks, special attention should be paid to better aligning high school curriculum with college readiness benchmarks.

One effective strategy to better align expectations is to bring high school educators and college faculty together. Articulation agreements ensure that high school staff and college faculty are all familiar with what is required of students at the college level. If high school staff understands

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what is expected from students, they can begin to craft curriculum that gives students the best chance of succeeding in college. Recently, K-12 and higher education faculty have created college transition courses that are designed to provide this type of alignment. Students who are deemed not college-ready based on junior year test scores, take a transition math class in their senior year that is designed to target their specific deficiencies and get them college-ready. In so doing, students are made aware of the academic standards expected in higher education institutions and are given the opportunity to meet these expectations. The transition math courses have been implemented in all public high schools in West Virginia and transition English classes are set for full implementation in the fall of 2013.

A second mismatch discovered in this research was identified as a discrepancy between the actual price of tuition in West Virginia and what students perceived it to be. West Virginia currently ranks 45th in the country for average tuition and fees at four-year public institutions¹⁵. The price of tuition in West Virginia is more than 50 percent lower than the most expensive state, New Hampshire, and nearly one-third lower than the national average. So, why then, are students overestimating the cost of tuition when tuition rates at West Virginia public higher education institutions are among the lowest in the country? As a state, we need to place more emphasis on the true price of tuition.

Understanding that West Virginia institutions are affordable options, is critical in a state that currently ranks 49th in average salary¹⁶. Affordability was cited by both those who do and do not plan to attend college as playing into their decisions about enrollment. Students at GEAR UP high schools were significantly more likely to know the tuition of public in-state four-year institutions. GEAR UP schools maintain a college-going culture throughout all participating high schools and a main goal of the program is to educate students about tuition. The program's intense focus in this area should be replicated throughout the state. If students realize that higher education is affordable, especially in conjunction with financial aid, they may be more likely to attend college.

The final mismatch focuses on financial aid resources. Specifically, why do students overwhelmingly report that they will rely on their parents' income and savings to pay for college, rather than one of the many financial aid programs that are available to them? Approximately 43 percent of students qualified for free and reduced price lunch, which indicates that their families were not in a position to subsidize their college education. Nonetheless, they planned on using savings and family resources to pay for college tuition. This is particularly surprising given that students also tended to grossly overestimate tuition. The misunderstanding of payment options may have been a result of high school students simply not knowing how many financial aid resources were actually available to them.

According to the College Board's report, Trends in Student Aid, students across the country were most likely to use federal loans (38%), Pell grants (19%), and institutional grants (18%) to pay for college. Navigating the multitude of financial aid options available to prospective college bound students can be daunting. This is particularly true for first-generation students as they are less likely to have been exposed to information about college in their homes, let alone information about financial aid. It is important that all students are provided free, clear, and up to date information about available funding resources. CFWV offers such a service to students in West Virginia. Not only does CFWV provide students with an overview of state-sponsored funding opportunities, but it also provides a financial aid tutorial to help students build their own plans for the future. College access providers, parents, and high school staff alike should actively engage students with this resource so that students become knowledgeable and ultimately responsible for their financial aid planning. Armed with this information, students may be more likely to matriculate and less likely to contribute to an ever increasing student loan default rate.

If West Virginia wants to remain competitive in the 21st century economy, educating our students must become a top priority. As previously mentioned, West Virginia will be facing a middle skills job deficit by 2018. Estimates call for an additional 20,000 certificate or degree holders beyond what the state is already projected to produce. Understanding high school students' post-secondary enrollment patterns is essential to meeting these projections. While this research has shown that students throughout the state are succeeding in several areas, it has also identified several troubling mismatches between what students' report and what we know to be true. These mismatches likely contribute to the disconnect between the state's low matriculation rate and the high college aspirations of high school seniors. If stakeholders create programs to target these areas it may help to close the gap between aspiration and reality, increase the state's college-going rate, and ultimately help the state meet its workforce needs.

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Methodological Appendix

The target population for the survey was all West Virginia students who were high school seniors in spring 2012. Respondents were selected through quasi-random, stratified sampling. High schools were the primary sample unit, with the sampling frame constructed from a list of all high schools (n=115 in 2012) maintained by the West Virginia Department of Education. High schools were stratified by the size of the senior class as well as the three U.S. Congressional districts in West Virginia in order to make the sample as representative as possible. High schools were assigned to Congressional districts based on the address of their main administrative office. To stratify by senior class size, each high school was assigned to a quartile. The lowest quartile had 93 or fewer students in the senior class, followed by 94 to 145, 146 to 213, and 214 or more. Data on senior class size were obtained from the W.V. Department of School and District Data for 2012.

The survey was also designed as an evaluation tool for the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP). GEAR UP is coordinated by HEPC and provides educational services to help students plan, apply, and pay for college. All GEAR UP schools (n=14) were purposefully sampled for this analysis. Further, in an effort to ensure that GEAR UP students were compared to a similar sample of students who did not receive GEAR UP services, GEAR UP comparison schools (n=14) were identified. Comparison schools for GEAR UP were selected prior to survey administration using Euclidean distance similarity measures. These comparison schools were similar to the GEAR UP schools on both demographic and academic metrics. As such, they served as a control group to measure the program's success.

In total, 56 schools—including all GEAR UP and comparison schools were selected to receive the survey. The survey was administered via high school guidance counselors who were asked to distribute hard copies of the instrument during the homeroom period. To illicit a high response rate, four follow-up contacts were made with guidance counselors and principals. All told, 51 of the 56 (about 91%) high schools responded. The sample represents responses from 4,321 students, or about 24 percent of the target population (n=18,368). Data were weighted to ensure that responses were representative of the entire high school senior class of 2012

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