Leading the Way
Dana decided in the fall of her senior year of high school that she would pursue her dream of becoming a veterinarian. With significant support from a local college access organization, she completed the necessary steps to apply for enrollment the following year. She was concerned about costs and loans, but was elated when she learned had been accepted to the local public university.

Unbeknown to Dana, many challenges lay ahead. Between receiving her acceptance letter and fall move-in day, she had done little to prepare for her transition to college. From her perspective she had done everything she had to do, unaware that she needed a more detailed plan concerning how she would pursue her degree and career. At orientation she encountered her first obstacle, she tested into developmental mathematics. It was not until she met with her advisor that she came to fully understand what impact this would have on her future plans. Her academic schedule would have to be reconfigured in order to compensate for the non-credit course, and her new trajectory included the crowding together of significant biology and chemistry prerequisites, a situation she had hoped to avoid.

Dana had not even sat in her first course yet, and already she was being told that summer school or an additional year of college were on the horizon. With the burden of financing additional time in college on her shoulders, there was no way to account for how other facets of curricular or co-curricular life would impact her success as a student moving forward.

Introduction
This is the second paper in the Commission’s series concerning the major areas of the Commission’s new master plan and compact process. Each paper elaborates on a particular theme sharing additional best practices and insights. It is the intention of the Commission that these additional resources assist in fostering discourse among institutional administrators, faculty, staff and students, enabling them to develop a common understanding of the challenges, goals, and the mechanisms necessary to meet them.
Defining College Success in West Virginia
In order to increase the number of West Virginia students that persist in their academic programs and earn their degrees, it is important to promote progress in retention and completion. Moreover, given historical gaps in achievement for certain underrepresented groups and the Commission’s commitment to improving equity in outcomes in addition to opportunity, it is necessary to target populations related to income and race/ethnicity. To correspond with efforts to re-enroll and graduate adults who have some college credits but no degree, there is a focus on the retention of returning adults. Adults face additional barriers to completion including balancing home and work responsibilities and constraints related to geographical access to campuses. Finally, evidence that West Virginia transfer students persist and graduate at lower rates than other students demands a focus on the outcomes of this population as well. To both sustain and move West Virginia’s postsecondary success agenda forward, the state’s four-year public colleges and universities will need to enhance efforts in this area.

West Virginia Success Data Trends
Data from the 2013 Higher Education Report Card points to the need for continued attention toward efforts to promote student success. The system average retention rate of first-time freshmen to their second year of college declined to its lowest point in five years, from 76.4 percent in 2008 to 73.6 percent in 2012. West Virginia is currently ranked last among Southern Regional Education Board (SREB) states in retention. Six-year graduation rates have also declined. After the 2005 cohort peaked at 48.8 percent, the graduation rate of the 2007 cohort declined to 46.9 percent. The most recent year of comparable SREB six-year graduate data is for the 2005 cohort, where West Virginia ranked 11th among its state peers (SREB average of 54 percent).

The 2013 Academic Readiness Report, which focuses on the fall 2012 cohort, paints a clear picture of how high school performance relates to success at college. Students who enrolled at Commission institutions with a high school GPA of 3.0 or higher earned an average college GPA of 2.91, compared to students with a high school GPA of 2.99 or lower who earned an average college GPA of 1.74. High school GPA also highlighted a dramatic difference in student retention from the fall to spring semester. Students with a high school GPA of 3.0 or higher were retained at a rate of 94.7 percent, compared to a rate of 79.5 percent for students with a high school GPA of 2.99 or lower.

In addition, 25.7 percent of the entering 2012 four-year in-state cohort (1,543 of 6,006 students) was required to take either development English and/or math. Students enrolling in developmental courses earned an average GPA of 2.19, compared to an average GPA of 2.79 for students who did not. Far more students enrolled in developmental math (23.4 percent), than in developmental
Leading the Way - SUCCESS - West Virginia Higher Education Policy Commission

They found that student advising plays a pivotal role in the academic lives of students. Each campus addressed advising differently based on their size and campus population, however, the authors found that multiple, coordinated approaches had the best results to improving student retention and graduation.

English (10.4 percent). Students who were not required to enroll in developmental education courses were more likely to be retained to the spring semester (92.8 percent) than those students required to take developmental courses (86.5 percent).

Low-income, First-generation Students: Facilitating Success
A new era of postsecondary academic accountability has increased interest in institutional, state, and federal level data. Higher education stakeholders are creating a new student success paradigm in which the onus of success is shared by both the student and the institution. We know that low-income students who enroll at our institutions require a significant amount of support in order to just matriculate. Although these students received support in completing their institutional applications and completing their financial aid, they often did not receive additional information on how to prepare for the multiple facets of their transition to college. Academic coursework expectations, interacting with faculty and staff, registering for courses, finding on-campus employment, learning new technology and software, and understanding what the bursar’s office does, are just a few of the tasks we assume that students can navigate upon entry.

The current nexus of the national degree completion agenda, rising tuition and fees, declining public support, and significant increases in student debt has created a sense of urgency to address these challenges for the sake of students, institutions, and the overall public good. Although the timing of this movement is inconvenient due to the recent recession, the problem of so many low-income, first generation students not completing their degrees is not a new one. However, institutions have the resources to work toward improving success with our state’s most at-risk student populations.

The challenge before colleges and universities across the nation is to reconceptualize our ongoing relationships with low-income, first-generation students. No one is suggesting that college students need to be “hand-held” throughout their academic career. Rather, the postsecondary community, via new research and emerging best practices, is discovering that there are critical challenges and milestones that many at-risk students share. By helping students navigate through these impediments, institutions not only aid their students with successfully completing their degrees, but also enable them to grow both inside and outside of the classroom.

Best Practices
Commission institutions continue to be in an ongoing cycle of planning and implementation of initiatives surrounding college success. Below is a list of best practices concerning college success, garnered from the most recent research in the field. It is the Commission’s hope that institutions will consider these practices as they continue to plan for future efforts:

- Advising and support matter
  Kuh, Kinzie, Schuh, and Whitt (2005) studied best practices concerning student success at 22 public and private colleges across the nation. They found that student advising plays a pivotal role in the academic lives of students. Each campus addressed advising differently based on their size and campus population, however, the authors found that multiple, coordinated approaches had the best results to improving student retention and graduation. For example, a student is required to take a freshmen seminar course which is lead by their academic advisor. After the seminar is complete, the student retains that advisor through graduation, unless the student
The challenge before colleges and universities across the nation is to reconceptualize our ongoing relationships with low-income, first-generation students. No one is suggesting that college students need to be "hand-held" throughout their academic career. Rather, the postsecondary community, via new research and emerging best practices, is discovering that there are critical challenges and milestones that many at-risk students share. By helping students navigate through these impediments, institutions not only aid their students with successfully completing their degrees, but also enable them to grow both inside and outside of the classroom.

Targeted support programs for special populations (first-generation, low-income, underrepresented minorities) have proven to be successful (Engle & Lynch, 2011). Targeted programs often rely on "intrusive" advising that require a student to have regular meetings with an advisor or a team of advisors. The programs are usually tied to an economic incentive, such as a grant, and require the student to participate in additional activities. Even small scale targeted interventions with small dollar amount incentives have been found to boost student persistence. A recent study by Stephens, Hamedani, and Destin (2013) found that a one hour intervention peer week that was hosted by senior students and focused on student diversity reduced the achievement gap at that institution between low- and high-income students by 63 percent. When the resources do not exist for intrusive targeted programs, Engle & Lynch (2011) suggest accounting for what services already exists on-campus for the specific populations and ensuring that students are contacted and made aware of the services they offer.

STRATEGIES IN ACTION

UNC Greensboro began the UNCG Guarantee program in 2010. The program offers a generous institutional aid package to low-income, in-state students (who also receive state and federal financial aid) that is designed to help students graduate in four years. Along with qualifying for the program, students must also enter into a contract with the institution to participate in academic workshops, attend meetings with staff members, and live in specific communities on-campus.

Virginia Commonwealth University created University College in 2006. The College centralizes academic advising, tutoring, new student orientation, and oversees the institution’s core curriculum. The combined services culminate in a two-course experience (Focused Inquiry I and II) that spans the freshmen. The courses focus on the essential skills that students require to succeed at a college-level academic work: written and oral communication, critical thinking, and quantitative skills.

- Eliminate developmental education as an obstacle

Recently, developmental education has become the focus of both researchers and national education organizations that are focused on undergraduate degree completion. Although most reform efforts have been targeted at the two-year sector, developmental education is a significant hurdle for students attending four-year colleges and universities. Students that are required to enroll in remediation are more likely to stop-out or take additional time to complete their degrees.
Research by Complete College America (CCA) found that placement test cut scores situate too many students in developmental courses that do not immediately address the specific content areas that students require. Rather, students are forced to sit through course(s) that address content that they have already mastered in order to reach those specific areas in which they require assistance. Compounding the placement issue further, students receive no academic credit for courses they are paying for and the courses lead to scheduling complications concerning programmatic prerequisites. CCA (2013) recommends utilizing a placement "range" instead of a cut score, allowing most students to enroll in a co-requisite class that addresses remediation while allowing students to earn credit and advance their course of study.

Two other models of addressing developmental education that have been proven effective are college transition courses and summer "boot camps". Through cooperating high schools, students can be placed in transitional literature and math courses their senior year that will help prepare students for the rigor of college course, while averting the need for developmental education. With boot camps, students who require remediation arrive early to campus prior to the start of their first year. These intense courses allow students to brush-up on specific areas of the curriculum, before retaking placement tests and moving forward with for-credit course work.

**STRATEGIES IN ACTION**

Texas State University-San Marcos's FOCUS Program allows students with math placement test scores in a range below but near the “cut score” to enroll simultaneously in remedial math and one of two options — college algebra or college algebra with statistics — depending on their academic and career needs. The students also receive two hours of tutoring each week on the day the class meets. Students who successfully complete the courses receive three credit hours for remedial math and three semester hours for either College Algebra or Elementary Statistics. (CCA, 2013)

The Southern Regional Education Board (SREB) has developed curriculums for college transition courses in literature and math. West Virginia is collaborating with 11 other SREB states to pilot the new courses in local high schools. Currently, 500 West Virginia high school seniors are enrolled in the courses. These courses are not available in all West Virginia high schools, but present an excellent opportunity for curricular and co-curricular early outreach.

- **Provide a clear path to on-time degree completion**
  
  As mentioned in the Access paper, developing clear pathways to degree completion has the ability to increase student retention and decrease the time it takes for students to complete their degrees. More so than ever, technology allows institutions to plan a student's entire four-year schedule at the point of enrollment, maximize classroom and laboratory space to ensure that students can take prerequisite and milestone courses at the time of need, and to quickly adjust schedules if a student experiences an academic complication. Programs, like Degree Works, let students, advisors, and other interested parties interact on a more frequent basis to discuss academic progress and intervene when problems arise. Developing individualized term-by-term degree schedule guides help to remove the guesswork and anxiety that students experience during registration. Furthermore, these guides allow staff and faculty to estimate what courses and facilities will be needed and plan accordingly.

**STRATEGIES IN ACTION**

Since, 2003, Florida State University has used an online service that lists the courses that students need to take each semester, for each academic major, to graduate on-
time. If students go “off the map,” a hold is put on their registration, forcing them to meet with advisors.

At the City University of New York (CUNY), students enrolled in the Accelerated Study in Associate Programs (ASAP) benefit from consolidated structured schedules, cohorts by major, small class sizes, required full-time study, and comprehensive advisement and career development services. There have been six ASAP cohorts totaling 4,594 students. The ASAP graduation rate is more than three times the national average for other urban community colleges. (CCA, 2013)

• Enrolling in 15 hours per semester makes a difference

A growing trend at public institutions is for students to take less than 15 credit hours a semester. Enrolling in less than 15 credit hours was once considered a “fallback” position to ensure students maintained their financial aid while encountering an academic obstacle such as a course withdraw. Today, enrolling in less than 15 hours is becoming a norm, with 50 percent of students public university doing so (CCA, 2013). This practice can have a profound impact on both institutional and student costs. For low-income and underrepresented minority students it can mean the difference in completing college altogether. Creating a campus culture where 15 credit hours a semester becomes the new normal can have a significant impact on retention and completion, especially among our more at-risk students. Developing such a culture requires collaboration between faculty and staff members responsible for academic scheduling and advising.

In West Virginia, preliminary results of a new and ongoing Commission study highlight the impact that enrolling in 15 credit hours per semester has on student success. The study is currently focusing on the 2004 entering cohort, since the majority of students have completed their degrees. Across all measures (GPA, first & second year retention rates, and four & six year graduation rates) students who enrolled in 15 hours outperformed their peers. For instance, students who matriculated with a high school GPA between 3.00 and 3.99 (5,590), and who enrolled in 15 hours of coursework (4,532), had an average fall semester GPA of 2.88 and were retained to the spring at a rate of 95 percent. Similar students who enrolled in less than 15 hours (1,058) earned a fall GPA of 2.52 and were retained to the spring at a rate of 90 percent.

Students who were Pell eligible and enrolled in 15 hours had a fall GPA of 2.59 and were retained to the spring at a rate of 93 percent, compared with Pell students who enrolled in less than 15 hours whose fall GPA was 2.07 and were retained at a rate of 85 percent. There were also distinct differences in four and six year graduation rates. Pell students who took 15 hours per semester their first year of college graduated in four years at a rate of 26 percent, compared to 7 percent for those who enrolled in less than 15 hours. For six year graduation rates, Pell students graduated at a rate of 53 percent, compared to their less than 15 hour peers at 28 percent.

More so than ever, technology allows institutions to plan a student’s entire four-year schedule at the point of enrollment, maximize classroom and laboratory space to ensure that students can take prerequisite and milestone courses at the time of need, and to quickly adjust schedules if a student experiences an academic complication.
Supplementing existing grant aid programs, even in small dollar amounts, can have an impact on student retention.

A randomized experiment found that students who received an additional supplement that met the uncovered costs after the application of a state grant reduced the amount that students borrowed, while increasing retention to the sophomore year. The supplement had a profound effect with students who had the most unmet need.

STRATEGIES IN ACTION

The University of Hawai‘i system implemented a college graduation initiative in 2010 that includes 15 to Finish, a campaign to promote enrollment in at least 15 hours a semester. The system found that over 60 percent of students were enrolling in 12-14 credit hours a semester between 2009 and 2011. The program has several goals: to demonstrate that students can successfully complete 15 hours a semester, show faculty that students who enroll in 15 hours outperform their peers who do not, and promote the cost savings and other benefits involved with enrolling in 15 hours.

The Commission is currently in the research and planning stages of a 15 to Finish effort similar to that of Hawaii’s, here in West Virginia. This initiative will involve a public awareness campaign, outreach to high school and enrolled students, institutional support, and a research component.

• Financial aid as a retention and completion tool

As the the structure of state, federal, and institutional aid has shifted over the last 30 years, scholars have researched the effects of these changes on students and institutions. The shift from grant aid to loans has had a profound impact on students matriculating to and completing degrees (Hearn & Holdsworth, 2004). Although many think of grants and loans as tools to promote the college-going and matriculation, financial aid also impacts student success and completion. As expected, merit- and need-based grant programs, at any level, have significant effects on degree attainment (Bettinger, 2004; Castelman & Long, 2013; Dynarski, 2008). In addition to grant aid, other emerging financial aid practices are demonstrating positive retention and completion outcomes.

Supplementing existing grant aid programs, even in small dollar amounts, can have an impact on student retention. Through a randomized experiment, Goldrick-Rab, Kelchen, Harris, and Benson (2014) found that students who received an additional supplement that met the uncovered costs after the application of a state grant reduced the amount that students borrowed, while increasing retention to the sophomore year. The supplement had a profound effect with students who had the most unmet need. The researchers also found that aid supplements were the most effective at institutions where Pell students were already performing well academically. This finding suggests that aid dollars bolstered existing support programs focused on low-income success. A similar study found that randomly assigned supplemental grants increased persistence, the number of credits earned, and had positive effects on social and psychological outcomes (Richburg-Hayes et al., 2006).

Offering general financial literacy at the postsecondary level is also a growing phenomenon. Students and their families live in a complex financial environment, complicated by the rising cost of college and a convoluted financial aid system, where small missteps can have significant long-term consequences (Harnisch, 2010). Educating students in topics from credit card use, to purchasing a home, to budgeting their family’s income can impact a student’s ability complete college, repay loans, and support their alma mater.
STRATEGIES IN ACTION

The nonprofit organization One Stop USA is partnering with community colleges across the nation to provide guidance on how institutions can help their students partner with local social support agencies to receive benefits that they qualify for. Such partnerships allow students to take advantage of childcare, healthcare, legal assistance, and transportation. As of 2012, the organization estimates that students served by their partnership sites received close to $2,000, savings that help students reduce borrowing and reduce the reasons that students drop-out.

Ohio Northern University has developed a new program that requires students who wish to change majors to undergo mandatory financial aid counseling. Although initial results point to students going ahead with the major change after counseling, students leave the sessions well aware of the financial impact of their decision.

- Connect skills with general education and major courses
  As assessing postsecondary learning outcomes continues to grow in popularity, business and political leaders have encouraged states and institutions to adopt formal processes to measure not only what students learn in their major field of study, but also the skills that students are expected to possess upon graduation. In 2011, the Lumina Foundation unveiled the Degree Qualifications Profile (DQP). The DQP was developed in order to establish a common vocabulary for best practices, demonstrate to the public what higher education’s abilities really are, and to create common reference points for accountability (Lumina Foundation, 2011). While the DQP was being finalized and implemented at preliminary group of colleges and universities, including Marshall University, West Virginia was also in the process of establishing a uniform set of competences and skills.

In 2013 the West Virginia Higher Education Assessment Council, which had members from all two and four-year public institutions, developed a set of common academic competencies. Students receiving a bachelor's degree should be proficient in the following:

- **Quantitative Literacy**: students will validate visual representations of quantitative information, formulate plausible estimates, differentiate valid from questionable statistical results, and analyze real-world problems quantitatively.

- **Citizenship**: students will analyze and evaluate the tenets of citizenship to include ethical reasoning; interpersonal engagement in areas such as teamwork, global awareness, and civic engagement; and intrapersonal engagement in areas such as lifelong learning, wellness, and meta-cognitive reflections.

- **Critical Thinking/Analytic Inquiry/Problem Solving**: students will examine the reliability of sources, analyze own and others’ assumptions, evaluate the success of various strategies to solve problems, and discuss possible conclusions, taking opposing viewpoints into consideration.

- **Communications**: students will determine and implement appropriate techniques to deliver messages to a specific audience using a combination of conversing, speaking, listening, corresponding, and writing using various communication channels.

West Virginia's academic competencies reflect, if not accentuate, Lumina's DQP. The opportunity with both of these tools is to demonstrate to students how their course content and skills are inter-connected from course to course, from general studies to major, and from college to career. Tying skills and knowledge to their place in the workforce and society also demonstrates the relevance of college studies and incentivizes completion. These articulation efforts can also be associated with advising, course mapping, and career guidance.
• Analyze and use your data
As discussed earlier, the national college completion agenda has been fueled, in part, by access to better data surrounding student outcomes. Currently, federal and state data sources are being used by academics, foundations, legislators, and state systems to shape policies around college completion. Additionally, institutions are taking it upon themselves to examine their own data to find the most effective ways to serve their campuses.

The Education Trust (2014) recently published a new report on the "top 10" analyses that can support college completion:

1. Examine year-to-year retention rates
2. Track the rate of second-year students that achieve sophomore standing
3. Analyze the impact of course withdrawals
4. Analyze the 25-35 courses with the largest annual enrollment
5. Analyze the success rates in the first credit-bearing math course
6. Understanding developmental education outcomes
7. Analyze the success of students in different fields (i.e. undeclared vs. nursing)
8. Analyze degree/credit efficiency
9. Analyze student transcripts for patterns
10. Utilize data to identify successful pathways that align with at risk student profiles

These analyses can be used to foster just-in-time interventions with current students as well as identifying patterns to drive more long view changes in policy and practice. Although these data projects are aimed at retention and completion, many could be used to inform early outreach efforts. Institutions should use these findings, along with these suggested best practices to guide their development of strategies and plans.

Adult Students and Success
Currently, only 17.9 percent of West Virginians over the age of 25 possess a postsecondary degree. With a decline in the graduating high school cohort predicted for the immediate future, adult students will become an increasing presence on institutional campuses. The Commission estimates that there are close to 200,000 West Virginians who have begun a two- or four-year degree and are not currently enrolled. So there is potential to recruit not only new adult students, but also those who have begun but not completed their degrees. As of 2012, over 19,000 nontraditional students (age 25+) were enrolled in public four-year institutions across the state. The majority of adult students attend college part-time and have family and professional responsibilities that differ dramatically from their traditional aged peers. Still, many of the best practices discussed in this paper can be applied to the non-traditional population as well. Remedial boot camps, financial literacy support, course mapping, and specialized advising are already having an impact on adult student success.

Putting it together: Connecting success to access and impact
Although the three focal areas of the master plan were designed to be mutually reinforcing, Success is by far the most important due to the fact that this is the one area where institutions have the most control over student experiences and outcomes. As mentioned earlier, this is a critical time for improving student retention and completion. Nevertheless, we cannot lose sight that these objectives are also influenced by other forces that occur prior to enrollment and within our communities. The ways in which institutions engage students prior to matriculation can have positive effects on how they perform in college. Developing relationships with students, parents, and community members through civic partnerships and projects may not immediately be reflected in Success metrics. However, the results of these efforts will contribute to these outcomes in the future.

Questions and Continued Support
The staff of the Commission’s Division of Policy and Planning are eager to answer any questions you or your campus teams might have concerning any aspect of master plan and compact process. The Commission offers a range of expertise and programs that are the disposal of our institutions. In addition to providing support through existing programs, the Commission can provide additional contacts and information to aid institutions in developing and supporting success initiatives.
Although the three focal areas of the master plan were designed to be mutually reinforcing, Success is by far the most important due to the fact that this is the one area where institutions have the most control over student experiences and outcomes.