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## **Pathways through College: Strategies for Improving Community College Student Success**

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**Bob Rath  
Kathryn Rock  
Ashley Laferriere**

**Our Piece of the Pie<sup>®</sup>, Inc.**

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Our Piece of the Pie®, Inc.  
20-28 Sargeant Street  
Hartford, CT 06105

[www.opp.org](http://www.opp.org)



# Table of Contents

<b>Executive Summary</b> .....	<b>3</b>
<b>The Issue</b> .....	<b>6</b>
<i>Building the Workforce of the Future</i> .....	6
<i>The Community College Dropout Crisis</i> .....	6
<i>The Economic Benefits of College Graduation</i> .....	8
Why Do Students Leave Community College? .....	10
<i>Inadequate Academic Preparation</i> .....	10
<i>Remedial Education</i> .....	11
<i>Student Financial Aid</i> .....	11
<i>Lack of Non-Academic Skills</i> .....	12
<i>Competing Obligations</i> .....	13
<b>The Solution</b> .....	<b>15</b>
Strategies to Improve Community College Retention and Completion Rates.....	15
<i>Secondary and Postsecondary Curriculum Alignment</i> .....	15
<i>Remedial Education Reform</i> .....	16
<i>Early College Experiences</i> .....	17
<i>Student Supports</i> .....	19
<i>Financial Aid and Funding Incentives</i> .....	20
<i>Supportive Transfer Policies</i> .....	22
<i>Program and Labor Market Outcome Alignment</i> .....	22
Case Study: The Postsecondary Success Initiative .....	24
<b>The Conclusion</b> .....	<b>28</b>

## Executive Summary

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By 2018, 63% of all occupations will require a postsecondary credential. While job growth for all workers is expected to average 10%, job growth for those specifically armed with an associate's degree is expected to peak at nearly 19%. This paints a positive picture of opportunity for community college students in the U.S., tainted only by the fact that less than 30% of students who enroll full-time in community college complete an associate's degree in three years. For minority, low-income, older, and part-time students, graduation rates are even lower. At Connecticut's community colleges, between just 7% and 24% of students graduate within 3 years of entering school. This means that between 76% and 93% of students are paying 3 years of community college tuition without receiving a diploma as a result of their investment. This brief highlights the issues preventing students from succeeding in college and offers solutions to improve outcomes for the community college student population.

### *The Issue*

Exploring the reasons why community college students leave school is essential to understanding how we can reengage and retain them in community college.

- *Inadequate Academic Preparation* – Many students arrive at college without the academic foundation necessary to excel. This sets students up for failure and often causes them to waste time and money on remedial education.
- *Remedial Education* – Almost 50% of 2-year community college students are required to take expensive and time consuming remedial courses that do not provide college credit, but increase a student's chances of dropping out. Approximately \$3 billion is spent each year on remedial education.
- *Student Financial Aid* – Attending community college is expensive. It is estimated that an average annual budget of \$15,000 is required for students to cover tuition, books, food, housing, and transportation costs. To reduce dropout rates, it is essential that students are adequately funded, and supported.
- *Lack of Non-Academic Skills* – Many students lack the non-academic abilities, such as social skills, study habits, and time management strategies, necessary to succeed in college. Expectations of these skills are often left unspoken, leaving students confused or discouraged when they receive negative feedback or poor grades.
- *Competing Obligations* – Community college students disproportionately face work, family, and other competing duties outside of the classroom that make it difficult to complete their degree. For example, 60% of community college students work 20 hours a week, and 25% work 35 hours a week.

### *The Solution*

States and community colleges must implement and support promising practices and strategies to improve community college retention and graduation rates.

- *Curriculum Alignment* – High school and college curriculums should be aligned so students enter college prepared and ready to learn. This will not only help students get in to college, but will also help them stay enrolled. The Common Core State Standards are designed to provide students with the academic foundation required to succeed in college.
- *Remedial Education Reform* – Improving remedial education is necessary to increase graduation rates. States and college systems are implementing new reforms such as: fast-track courses, learning communities, and embedded supports in entry-level courses to reform remediation.
- *Early College Experiences* – Exposing students to college early increases college-readiness. Dual enrollment and summer bridge programs prepare students for college by exposing them early to college culture and coursework. Students that take college level courses while still enrolled in high school increase their chances of graduating.
- *Student Supports* – To succeed in college, students need more than strong academics, they need supports that foster a smooth transition from high school to college. When students receive the academic, social, and career supports they need, they remain in school and achieve success.
- *Financial Aid and Funding Incentives* – Financial aid and performance-based scholarships can be used as incentives to keep students on track. Postsecondary institutions should also receive funding based on student success factors, not enrollment counts.
- *Supportive Transfer Policies* – 28% of bachelor degree earners began their studies at community college, and 47% took at least one community college course. To continue and strengthen this trend, transfer policies should support students so community colleges can serve as a pipeline to a 4-year college degree.
- *Program and Labor Market Outcome Alignment* – To ensure that community college graduates find jobs after graduation, more information should be made available on how career or major choices match employer needs. Students should receive career counseling to take advantage of labor market indicators, and community colleges and states should implement the latest technologies to provide accurate, up-to-date, labor market information.

### *Case Study: The Postsecondary Success Initiative*

In August 2011, Our Piece of the Pie<sup>®</sup>, Inc. (OPP<sup>®</sup>) implemented The Postsecondary Success Initiative (PSI) at Capital Community College in Hartford, Connecticut. The PSI utilizes OPP's *Pathways to Success* program model to provide community college students with the supports they need to succeed. OPP staff works with youth to develop realistic plans that map out a pathway from where they are to where they want to be. They also provide supports such as, employment assistance, job shadowing, resume help, and academic assistance. The PSI has shown impressive results in its first year, with 86% of students returning to their second year of college, a rate 35-38% better than Capital's overall first to second year retention rate.

### *The Conclusion*

The economic and social benefits of a college degree are enormous, yet students enrolled in community college continue to drop out at tremendously high rates. Whether due to inadequate academic preparation, financial aid issues, or competing work and family obligations, community college students

need help to stay on track. Better academic preparation and student supports such as dual enrollment, financial aid, and improved transfer policies to 4-year institutions, can all make a difference in student success. Programs that embed supports into the community college setting, such as the PSI, can also improve student perseverance and graduation rates. When community college students receive the support they need, they can succeed, and experience the economic and social benefits that come with college graduation.

### *Building the Workforce of the Future*

*"In the coming years, jobs requiring at least an associate degree are projected to grow twice as fast as jobs requiring no college experience. We will not fill those jobs – or keep those jobs on our shores – without the training offered by community colleges." – President Barack Obama<sup>1</sup>*

The United States economy is expected to grow by 14.4 million jobs between 2008 and 2018, with 97% of these new positions, and 63% of all occupations, requiring a postsecondary credential of some type.<sup>2</sup> With these demands in mind, the US is currently on track to face a shortage of nearly 5 million workers to fill positions that require postsecondary credentials by 2018.<sup>3</sup> Policymakers, educators, nonprofit organizations, and postsecondary institutions, must rise to meet President Obama's challenge of graduating an additional 8.2 million postsecondary students by 2020.<sup>4</sup> We must come together to ensure that college students receive the support and guidance they need so they can succeed in obtaining a postsecondary credential. These graduates will fill tomorrow's high-demand positions and thrive as the workforce of the future.

While job growth for all workers is expected to average 10%, job growth for those with an associate's degree is expected to grow at nearly double that rate, at almost 19%. Job growth for associate's degree holders is expected to even surpass new job growth for bachelor's degrees.<sup>5</sup> Not only will associate's degrees be in high demand, but jobs requiring associate's degrees will offer competitive wages. As recently as 2006, nearly 1 in 6 jobs paying above average wages, and experiencing above average growth, required an associate's degree. In fact, the average expected lifetime earnings for an individual with an associate's degree is approximately \$1.6 million, nearly \$400,000 more than the expected earnings of a high school graduate.<sup>6</sup>

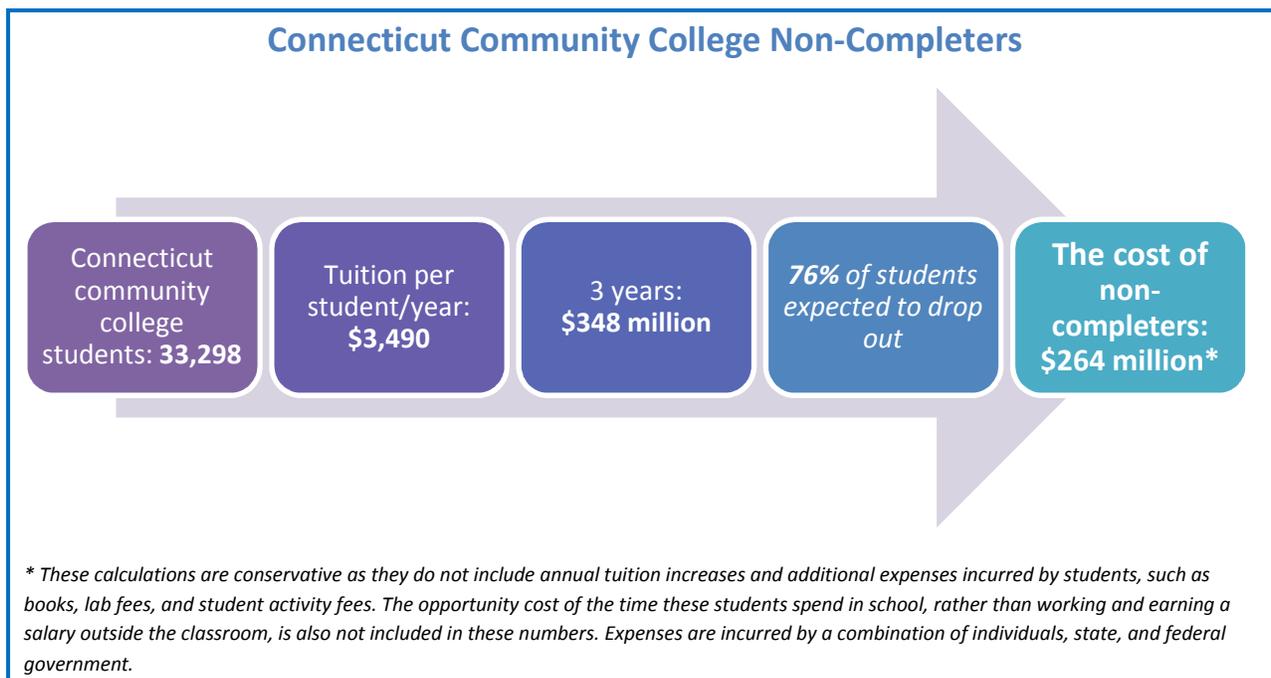
The workforce demands of the future cannot be met by our current postsecondary education system. To produce the number of graduates necessary to meet the rising demand, community colleges must play a central role and graduate a greater number of students. Because community colleges typically cost less to attend than 4-year institutions, have open enrollment policies, and offer more flexibility than 4-year programs, they offer a feasible path to graduation for many students who may not otherwise pursue a degree.

### *The Community College Dropout Crisis*

Reducing the high school dropout rate is a national priority. Youth development organizations, states, and school districts are working tirelessly to develop strategies to help struggling students succeed. Unfortunately, the same emphasis, support, and assistance are not offered to another group of struggling young people: community college students. Too often, student supports stop at high school graduation and community college students are overlooked, despite the fact that dropout rates among this population are extremely high and the economic and social benefits of completion are extensive.

According to Complete College America, less than 30% of students who enroll full-time in community college complete an associate’s degree in three years. Completion rates are especially low for minority, low-income, and older students. Just 7.5% of African American students, 11.1% of Hispanic students, 11.8% of low-income students, and 14.4% of students over the age of 25, enrolled full-time, complete a 2-year associate’s degree in 3 years. Part-time students complete at even lower rates, with just over 2% of African American students, 2.6% of Hispanic students, and 4.3% of low-income students completing an associate’s degree in 3 years.<sup>7</sup>

In Connecticut, the situation is equally dire. According to a 2009 report by the P-20 Council, just 7% to 24% of community college students (depending on the institution) graduate within 3 years of entering school. This means that between 76% and 93% of students are paying 3 years of community college tuition without receiving a diploma as a result of their investment.<sup>8</sup> This wasted tuition money not only affects personal finances, but state and federal funds as well, since many community college students receive student loans to cover tuition costs. In fact, between 2003 and 2008, states across the country gave over \$1.4 billion, and the Federal government gave over \$1.5 billion, to college students who ultimately left school after just 1 year. Total state expenditures for first year college dropouts in Connecticut topped \$62 million between 2003 and 2008. The graphic below depicts spending on a Connecticut community college education over a 3-year period, and the economic impact of dropouts. Funds expended can include a combination of personal, state, and federal dollars.

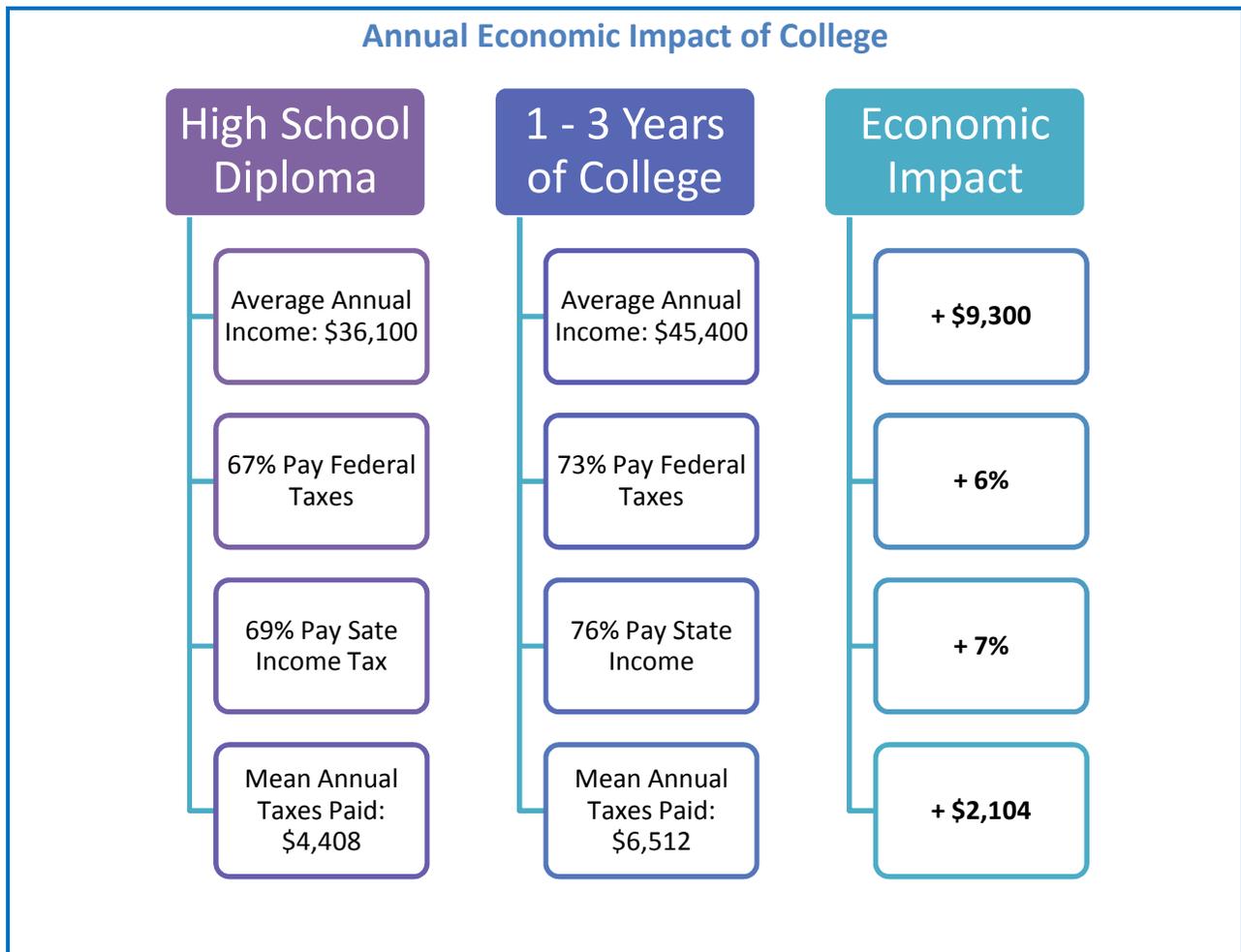


This is not to say that community colleges do not serve an essential purpose, or that investing state and federal funds in these programs is a waste. Graduates of community college produce significant social benefits over non-graduates including, lower unemployment rates, increased tax revenue, and reduced crime rates.<sup>9</sup> In addition, community college provides an affordable, accessible postsecondary option, where young people can acquire the credentials they need to meet labor market demands. As it is

estimated that by 2018, jobs requiring an associate’s degree will grow at a rate faster than those requiring any other academic credential<sup>10</sup>, improving community college student success rates will not only increase the likelihood of individual student achievement, but save students and taxpayers a significant amount of money in the process.

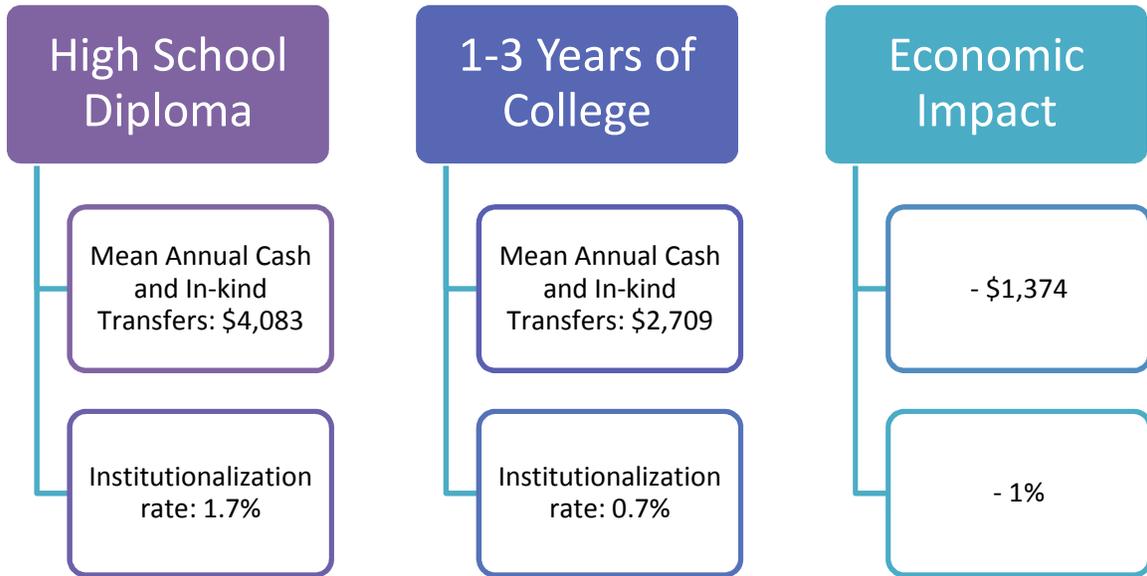
*The Economic Benefits of College Graduation*

Obtaining a college degree results in many economic benefits. The graphic below compares income<sup>11</sup> and tax contribution outcomes<sup>12</sup> for Connecticut residents who earn a high school diploma with those who have completed 1 to 3 years of college.



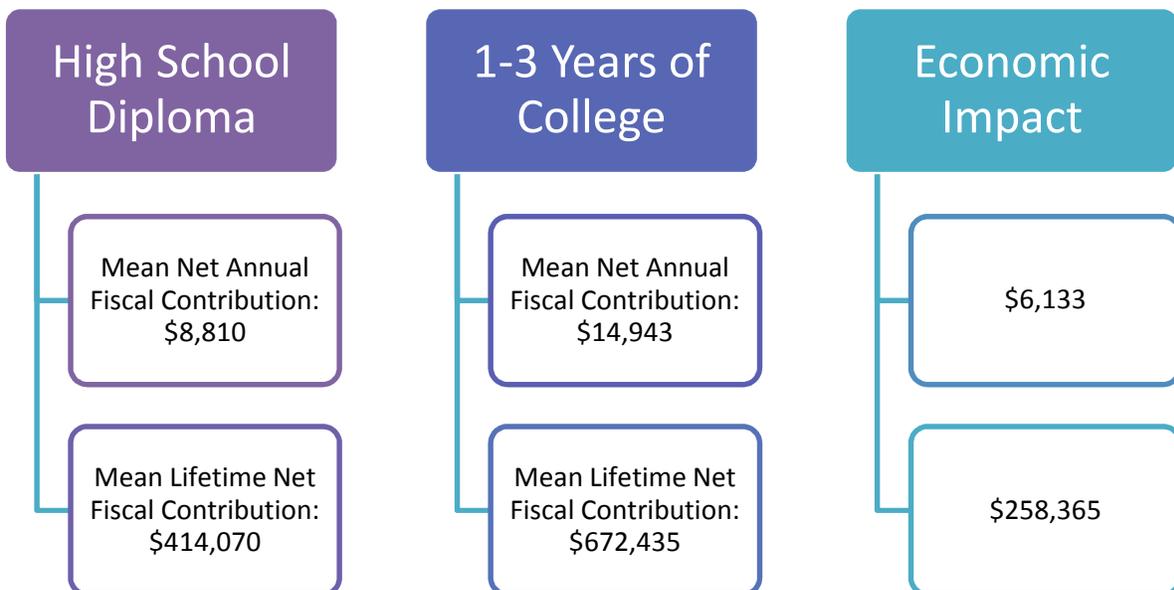
In addition to earning higher incomes and contributing additional tax revenue, individuals with more education require less cash and in-kind government support benefits such as, Medicare/Medicaid, food stamps, and rental subsidies, and they are institutionalized at a far lower rate. The graphic below compares cash and in-kind government supports utilized by high school and college graduates.<sup>13</sup>

### Impact of College on Annual Government Support



Using the data depicted above, the Center for Labor Market studies at Northeastern University calculated the mean net annual fiscal contributions of Connecticut adults by educational attainment. This number includes cost savings due to decreased cash and in-kind government support benefits. The graphic below compares the mean net annual and mean net lifetime fiscal contributions for Connecticut residents who earn a high school diploma with those who have completed 1 to 3 years of college.<sup>14</sup>

### Impact of College on Mean Net Fiscal Contributions



Judging by the above data, it is clear that community college serves as an important gateway to greater economic security and increased state benefit. In fact, after completing an associate's degree, many community college students continue their education by transferring to a 4-year institution, to produce even greater economic benefits. Between 25% and 39% of students who enroll in community colleges with the intention of transferring to a 4-year institution ultimately transfer.<sup>15</sup> To achieve the economic returns that come with higher education, we must increase these numbers, and improve outcomes for community college students. To do so, it is important to address both *why students are dropping out* of community college at such high rates, and *what we can do* to improve the rates of retention and completion at these vital institutions.

### Why do Students Leave Community College?

Graduating from college is difficult; careful study, concentration, and long-term commitment are required to obtain a degree. Because of this, many students struggle to complete their credential. For community college students, the road is often more difficult. Many enter college unprepared or under-prepared for the academic rigor of college level work. Others are shuttled into remedial courses, which often serve as a roadblock to credit-bearing classes and college completion. Still others become lost in the maze of majors, lectures, and high cost. Whether students experience all or just some of these problems, the reasons that many community college students fail to complete their degree must be carefully examined so high-quality solutions can be found to help students succeed.

#### *Inadequate Academic Preparation*

While more students are attending college than ever before (attendance rates have increased from 49% in 1972 to 69% in 2005) many students are arriving at college without the academic foundation necessary to excel.<sup>16</sup> Weak curricula, unclear standards, and a lack of alignment between high school and college coursework leaves students stranded in college without the academic foundation they need.<sup>17</sup> This is particularly the case under the new Common Core State Standards for English Language Arts and math. These new standards are more rigorous, intended to better prepare students to succeed in postsecondary education. However, schools are struggling to ensure that all students are truly mastering these skills before graduating.

This sets students up for failure, with time and money wasted taking remedial courses to fill gaps in the knowledge they should have acquired while still enrolled in high school. In fact, inadequate academic preparation is a cost that must be paid twice, with taxpayers paying first for students to learn academic material while in high school and again once students are enrolled in college. Student's lack of academic preparation and the need for remediation comes at an estimated national cost of \$3.6 billion.<sup>18</sup> Avoiding this path, and improving a student's chances of college success, should start long before students begin college level work. Acquiring a strong academic foundation prior to college is central to a student's successful admission to college and to the likelihood that they will not require remediation once they are enrolled.<sup>19</sup>

Inadequate academic preparation also contributes to one of the most prohibitive factors in a student's ability to complete an associate's degree - the amount of time that they must remain enrolled in college.

According to Complete College America, the longer a student is enrolled in school, the less likely they are to finish their degree. Many students cannot afford to attend school full-time, because 75% are working, raising children, commuting to school, or juggling some combination of these three obligations. In addition to personal obligations lengthening their enrollment, students find themselves inadequately prepared for college and, as a result, are forced to take non-credit bearing remedial courses.<sup>20</sup> The combination of outside obligations and inadequate academic preparation is often too much, causing students to drop out.

### *Remedial Education*

Increased time in school is prohibitive – so much so that it has been shown that the longer it takes a student to complete developmental or remedial education requirements, the less likely they are to remain in school.<sup>21</sup> This is extremely alarming when considered in light of the large number of students required to take remedial courses each year. Complete College America reports that almost 50% of students entering 2-year colleges are required to take remedial classes. This number is even higher for minority and low-income students. In fact, over 67% of African American students, 58% of Hispanic students, and 64% of low-income students pursuing a 2-year degree require remediation.<sup>22</sup>

Despite being noncredit-bearing, remedial courses cost students the same amount as credit bearing classes. Nationally, approximately \$3 billion is spent annually on remedial courses, and the cost is constantly growing.<sup>23</sup> According to The College Board, the average tuition at public, two-year colleges increased by just 5% from 1992 - 2002. Yet, in the following decade (2002 – 2012), the average tuition at public, two-year colleges increased by 45%.<sup>24</sup> These rising costs are especially disconcerting for remedial students who do not receive credit for their coursework. Students placed in remedial classes can spend thousands of dollars on their education and have no credits to show for their time, money, and hard work.

Remedial education is detrimental not only to students who are required to take these courses, but to state and national economies. Because students who take remedial courses are less likely to complete school the added economic contributions of these potential college graduates are lost. When students enter, but do not complete college, they lose future earning potential, and governments lose future tax revenue.<sup>25</sup>

### *Student Financial Aid*

While academic preparation for college is essential, adequate preparation does not always translate into successful enrollment and completion of school. In fact, after accounting for differences in academic achievement, a significant gap persists between the percentage of low-income students and high-income students that attend college. Research indicates that low-income high school graduates in the top academic quartile attend college at the same rate as high-income graduates in the bottom achievement quartile. A key factor in this difference is the cost of a college degree and the financial aid available to make college affordable. The bottom line is that college is expensive, prohibitively so for many community college students, especially for students that are low-income.<sup>26</sup>

According to The College Board, the average annual tuition at a public, two-year college, in the 2010 to 2011 school year, was \$2,713. This does not include other costs incurred by students such as food, housing, books, and transportation. When these expenses are considered, it is estimated that the average budget required by a community college student is \$15,000 per year.<sup>27</sup> This amounts to a significant expense, especially for the many low-income students who often depend on community college to access higher education, and in light of recent changes to Pell Grant funding.

In 2011, the number of semesters in which student could receive a Pell Grant award was shortened from 18 semesters to 12 semesters. This change was implemented in 2012 and, according to the Association of Community College Trustees, is expected to impact 63,000 Pell Grant recipients.<sup>28</sup> This modification is especially detrimental for the community college student population, since Pell Grants typically cover a higher proportion of a community college students' tuition than other college students.<sup>29</sup> In addition, many community college students take longer to complete their degrees than students at 4-year colleges. In fact, 40% of students are only able to attend school part time.<sup>30</sup> This extends the amount of time it takes for students to achieve their degree and the amount of time they require the assistance of a Pell Grant. Now, with fewer semesters of Pell eligibility, these students must receive better supports to ensure that they can get through a degree program.

While this is an issue facing students who apply for Pell grants, many students and families are not even aware of the financial aid that is available. They often overestimate the cost of college and do not know about financial aid options. This problem is particularly prevalent among low-income students and families who are also often deterred by the Free Application for Federal Student Aid (FAFSA). As a result, many students fail to complete the FAFSA, miss important filing deadlines, and lose out on aid that could help them afford college.<sup>31</sup> This forces them to take on work obligations, oftentimes lengthening their time in school, or deterring them from enrolling entirely. Whether due to inadequate financial aid information, rapidly rising costs, or a financial aid system that is complex and confusing, student financial aid plays a key factor in why students leave, or fail to enter, college.

### *Lack of Non-Academic Skills*

To achieve success in college, students need more than just academic skills. They must adapt to new expectations, learning styles, professors, and surroundings. They must learn to collaborate with new students, and satisfy college course and graduation requirements.<sup>32</sup> For many community college students, these new responsibilities can be overwhelming. This is because many students lack the essential non-academic skills necessary to tackle college challenges. In fact, even students that are deemed *academically* college-ready, through test scores or the completion of developmental coursework, often fail to complete their degree. Clearly, academic preparation influences college success, but it is certainly not the only success factor.<sup>33</sup>

Professors and peers expect community college students to meet certain non-academic behavioral standards, such as navigating complex bureaucratic requirements, utilizing good study habits and time management strategies, and engaging in new kinds of social relationships. These standards are often left unspoken and unwritten, leaving students that lack these non-academic skills, unsure or unaware of

expectations. The lack of clarity regarding non-academic skills is particularly detrimental to first-generation and older college students, who make up a large portion of the community college student population.<sup>34</sup> Because non-academic preparation and support for college often depends on parents, teachers, guidance counselors, and other supportive adults with college knowledge and insight on how to succeed, students without access to these adult guides are often left behind. For many first-generation and low-income community college students, support for non-academic skills is simply not available.<sup>35</sup>

A lack of non-academic preparation and support can undermine college student success at any point. Many students are impacted at the very start of the college process, even before they enroll, when they must take concrete steps to explore college and financial aid options.<sup>36</sup> Other students make it to college, but receive negative feedback, poor grades, and experience discomfort on campus, causing them to ultimately drop out.<sup>37</sup> While many community colleges have some type of orientation program in place to combat potential confusion, explain college policies, and highlight support resources, just 38% of colleges report instituting mandatory orientation programs. In fact, after three weeks of college, approximately 19% of entering students are still unaware of their school's orientation program.<sup>38</sup> Skipping orientation can be especially detrimental to students lacking non-academic skills, as orientation provides a valuable opportunity for them to understand how their school works and begin forming new relationships.

### *Competing Obligations*

Many community college students face significant obligations outside of the classroom that make it difficult to persist in school and concentrate on completing their degree. Work and family life demands are perhaps the most influential among the challenges that community college students face. Because many students have jobs, children, and a commute to school, they are more likely than their 4-year college peers to have poor academic outcomes and, ultimately, drop out. It is critical that students feel connected to their school, and supported by their environment in order to combat these competing obligations and persist in the face of obstacles that threaten to derail their success.<sup>39</sup>

Community college students work a substantial number of hours to support themselves, their education, and their family. According to a study conducted for the Bill & Melinda Gates Foundation, working and going to school simultaneously is the number one reason students provided when asked why they left school. In fact, 60% of community college students work 20 hours a week, and 25% work 35 hours a week. The stress of going to college while working is often too much, causing students to drop out before completing their degree.<sup>40</sup>

Many students work while enrolled in school because of the high cost of postsecondary education. While college costs have risen over 400% in the past 25 years, median family income has only increased 150% - not enough to keep pace. This leaves many families unable to contribute to their children's education, forcing students to work while enrolled in school and resulting in poor outcomes. In fact, research has found that 6 out of 10 students who leave school had to pay for college themselves, and could not rely on support from their families.<sup>41</sup>

Students leave school for a variety of reasons. Whether due to inadequate academic preparation, insufficient financial aid, underdeveloped non-academic skills, or competing life obligations, young people need help to reach their postsecondary goals. With the problems identified, we can begin to develop sound strategies and supportive solutions to improve student success.

### Strategies to Improve Community College Retention and Completion Rates

High schools are falling short by sending ill-prepared students to college, and colleges are falling short by lacking critical supports and steering too many students toward the dead-end of remediation. To improve student retention and graduation rates, states and community colleges must implement and support aggressive and promising strategies.

#### *Secondary and Postsecondary Curriculum Alignment*

A strong academic foundation is necessary to diminish the need for wasteful and discouraging remedial courses, and to promote student success. High school and college curricula should be aligned so students can enter college prepared, and continue to build new knowledge on a strong academic foundation. Not only will this help students get in to college, but it will also help them persist in their studies and graduate. In fact, when traditionally underperforming students, like minority and low-income students, enter college with a solid academic foundation, achievement gaps narrow significantly.<sup>42</sup> For those students who still require help once they begin school, academic supports should be embedded into first year courses and programs. By making academic help a co-requisite rather than a pre-requisite, students can receive the support they need while still building credits towards graduation.<sup>43</sup>

To promote college readiness and academic alignment, many states have adopted the Common Core State Standards (CCSS) that are designed to provide students, teachers, and families with the information and skills required to succeed in college and a career. As of December 2012, 45 states and three territories have adopted the standards that were developed collaboratively with teachers, school administrators, and educational experts.<sup>44</sup> The states that have adopted the Standards broadly agree that they are more rigorous than previous standards, and that students will benefit from their implementation.<sup>45</sup> The continued adoption and implementation of high education standards will raise the academic bar, ensuring that more students will have the opportunity to attend college, and will excel once they are enrolled.

Another promising method being used to ensure secondary and postsecondary curriculum alignment is early assessment. Using this method, students are tested in high school to gauge their college readiness and given the opportunity to improve their skills before they enroll in a postsecondary program. Instead of students being surprised by their lack of preparedness once they enter college, they are able to address the problem before they enroll.<sup>46</sup>

### *State Strategies to Watch: Howard Community College*

At Howard Community College in Maryland, early assessment is being utilized to improve student success rates. In 2008, Howard Community College began a partnership with the Howard County Public School System to assess 11<sup>th</sup> grade college readiness. In addition to taking an assessment test, students meet with their guidance counselors and community college English faculty to discuss their preparedness for college level work. Students who find that they are not prepared are provided with additional supports during their senior year of high school, aimed at increasing their preparedness. This approach appears effective, as two years after the program started students who transition from Howard public schools show an 80% fall-to-spring retention rate. This is especially impressive when compared with the 56% retention rate for all first-time college students. In addition, 73% of students improved their test scores as compared with their test results while still enrolled in high school.<sup>47</sup>

### *Remedial Education Reform*

Improving remedial education is essential for increasing community college completion and retention rates. The current remedial system fails to provide an effective means for students to overcome their academic weaknesses and excel in school. Community colleges and states have begun to recognize this and are now taking steps, and experimenting with new programs, to improve their remedial education systems. Remedial education reform aims to revise the system, in order to provide students with the academic foundation they need without diminishing their overall chances of success.<sup>48</sup>

There are several different approaches to remedial education reform. Some community colleges have instituted “fast-track” courses that allow students to focus on specific, targeted issues, progress at their own pace, and complete remedial work more quickly.<sup>49</sup> Other programs have developed learning communities, where students take several remedial classes with the same group of peers. This provides the opportunity for students to develop extra academic and social supports, as they form friendships and help one another in their studies. Other innovative programs have combined remedial education with college-credit career training programs. This helps keep students motivated. Early results show that students enrolled in this type of program are more likely to earn a job-related credential than their non-enrolled peers.<sup>50</sup>

Whatever the chosen method of reform, it is important that states and colleges continue to modify remedial education and move toward a system that works. With continued experimentation and research, remedial education will transform into a useful system to help students develop a solid academic foundation while moving them closer to graduation and successfully entry into the workforce.

### *State Strategies to Watch: Connecticut – Public Act No. 12-40*

Connecticut recently took an important step toward reforming remedial education. Public Act 12-40, signed in May 2012, requires colleges to embed remedial supports into entry-level courses for which students receive credits, instead of forcing students into remedial classes where no credit is available. Under this bill, colleges must do away with remedial courses entirely by 2014. By 2016, colleges and high schools will partner to align curricula and ensure that students are prepared for the academic rigors of college, with the goal of making remediation unnecessary.<sup>51</sup>

This legislation is especially important in light of a recent reduction in the amount of time a student can use federal Pell Grants. P.A. 12-40 ensures that Connecticut students will not waste additional time and money on non-credit bearing remedial classes, while jeopardizing the long-term funding of their education. Without Connecticut's changes to the remedial system, students who take longer to complete their degree may be trapped in remediation, ultimately using up to 12 months of Pell eligibility and losing out on a way to finance their education.

In addition to encouraging the use of Pell grants for credit bearing courses, Public Act 12-40 also has the potential to save the state a significant amount of money. According to the New England Board of Higher Education, providing remediation to students entering Connecticut colleges costs \$84 million every year.<sup>1</sup> In addition to these savings, reducing the need for remediation is estimated to generate an additional \$19 million<sup>2</sup> in Connecticut annual earnings, due to increased educational attainment, for a total state benefit of \$103 million each year.<sup>52</sup> Of course, embedding remedial supports into entry-level courses will have a price. According to the Connecticut Office of Fiscal Analysis, this bill will cost higher education institutions \$750,000 in Fiscal Year 2014, with \$500,000 spent to develop and embed remedial supports in college level courses, and \$250,000 spent by Regional Community-Technical Colleges to develop an intensive college readiness program. Additional costs would be dependent on the types of programs developed. Despite the cost of these programs, the potential for long-term savings is high. By aligning high school and college curriculum, remediation will ultimately become rare, if not obsolete. Not only will this save millions in remediation costs, but it will increase the likelihood that students will graduate, vastly increasing their earning potential.<sup>53</sup>

### *Early College Experiences*

Exposing students to college early helps them increase their college-readiness and develop both the academic and non-academic skills necessary for postsecondary success. Whether through dual enrollment, summer bridge or other early college programs, exposing students to college while they are still enrolled in high school is an effective practice that increases their chances of attending college, persisting in their studies, and ultimately obtaining a degree.<sup>54</sup>

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<sup>1</sup> This number was calculated by the Alliance for Excellent Education by multiplying the cost of a course by the number of students who took at least one remedial course.

<sup>2</sup> This number was calculated by the Alliance for Excellent Education by multiplying the salary difference between students who earn a 2-year degree by the number of students who are expected to graduate if they do not need remedial reading.

One of the most popular early college program models is dual enrollment. These programs prepare students by exposing them early to college culture and rigorous college coursework, as well as providing them with the opportunity to accumulate early college credits. Jobs for the Future analyzed longitudinal data that followed Texas high school students for six years after graduating, ascertaining not only if students attended college, but if they also completed their degree. They found that students that participated in dual enrollment programs, by taking at least one college course prior to high school graduation, were nearly 50% more likely than their peers to graduate college within 6 years. The study also found that within 6 years, dual enrollment participants were significantly more likely to persist in college and earn an associate's degree or higher. In fact, the more dual enrollment courses a student took, the more likely they were to enroll in and complete college, with the greatest benefit stemming from the early completion of a math or English course. These results were found to be consistent across economic and racial groups. Low income students were especially likely to benefit from dual enrollment and attend a 4-year college after high school.<sup>55</sup>

Building on evidence of dual enrollment's success, states should invest in dual enrollment programs to grant more students access to college courses while still in high school.<sup>56</sup> Lawmakers should craft policies that reduce barriers to dual enrollment for low-income or underrepresented populations, such as tuition waivers. Support is needed at the state level for dual enrollment partnerships to ensure that these beneficial programs can continue.<sup>57</sup> By bolstering efforts to expose students to college early, states will ultimately increase the college graduation rates and benefit from the resulting positive economic and social returns.

Other promising early college experiences for community college students are summer bridge programs. These programs typically take place for 4 to 6 weeks during the summer and provide recent high school graduates with intensive instruction in essential college subjects such as math and writing. They also provide students with an introduction to college campuses, expectations, and other college students. Summer bridge programs are often aimed at helping students avoid placement in remedial courses by moving them through remedial requirements during the summer, so they can begin the fall semester enrolled in college-level work.<sup>58</sup>

The non-academic skills that are so essential to college success can also be cultivated in summer bridge programs. Building relationships with other classmates, learning to navigate the college system, and adjusting to college workloads are all key skills that summer bridge programs can foster. These programs also introduce students to the supports available on campus so they know where to go if they experience difficulty at any point during their enrollment.<sup>59</sup>

The National Center for Postsecondary Research evaluated the impact of 8 summer bridge programs in Texas in 2009. The evaluation found evidence that students who completed summer bridge programs were more likely than non-summer bridge students to pass college-level courses in reading and math in the fall semester. Summer bridge students were also more likely to take courses at higher levels in reading, writing, and math.<sup>60</sup>

### *State Strategies to Watch: California's Concurrent Course Initiative*

A recent study by the National Center on Postsecondary Research reveals the promise of dual enrollment. The study focused on the Concurrent Course Initiative (CCI), a 2008 – 2011 California-based dual enrollment program, aimed at supporting low-income, academically struggling youth who are part of a historically underrepresented college population. CCI provided support to eight partnerships between secondary and postsecondary institutions with the goal of developing, enhancing, and expanding dual enrollment. The programs offered career-focused dual enrollment with the goal of improving high school and college outcomes for the students enrolled.

CCI's results are promising. When student outcomes from the first two years of the CCI were evaluated, and compared to the outcomes of students from the same district who did not participate, the CCI was found to have a significant impact on the college success of participants. CCI students demonstrated higher credit accumulation, persistence, and graduation rates than their nonparticipating peers. In fact, after two years in college, CCI participants had 20% more credits than their peers, placing them squarely on the path toward college graduation.<sup>61</sup>

### *Student Supports*

At the heart of the community college student success issue is the need for additional student supports. Student supports provide a way for students to smoothly transition from high school to community college life. Many students arrive at community college without knowing where to go, what to do, and how to take advantage of the supports that are available. In fact, 30% of first year community college students do not attend orientation. About 90% of students indicate an interest in academic advising, but less than 33% of students report actually meeting with an academic advisor or creating a plan for achieving academic and career goals. In addition, while a large number of students struggle with college-level work, 76% do not take advantage of tutoring services.<sup>62</sup>

Student supports can cover a range of areas, both academic and non-academic, that are critical to student success. Non-academic supports can include encouraging social interactions, defining student goals, enhancing workforce readiness, developing college knowledge, and assisting with unanticipated challenges and conflicts. They can also include enhancing students' academic skills such as note taking, college-level writing, and time management. These supports all help community college students to persist and stay committed to their postsecondary education.<sup>63</sup>

Social supports can also help community college students form meaningful connections with their classmates. Community college students often have greater difficulty than traditional college students in forming social relationships due to outside obligations, such as family and work, and limiting time constraints. Meaningful social relationships are important to student success because they help students feel comfortable and engaged on campus and give them access to pertinent information. Interpersonal connections can help students obtain advice, information, and motivation.<sup>64</sup>

Finally, support services that help students see the value of their education are also critical to student success. Defining student goals and helping students understand how a college degree will help them reach those goals is essential. Supports that help students understand that a college degree is integral to gainful employment, along with workforce development programs, can help students stay on track. In addition, students require assistance navigating the unfamiliar community college landscape. Supports in this area should assist students in knowing how to ask for help, participate in class, and navigate the various resources available to them, such as financial aid.<sup>65</sup>

### *Financial Aid and Funding Incentives*

Financial emergencies have been cited as a top reason for community college dropout. To avoid this, emergency aid should be made available for students who encounter financial roadblocks and changes to their economic circumstances.<sup>66</sup> Even beyond this safety net, however, states are beginning to use finances as a student motivator. Keeping students engaged in school is critical to their success and overall chances of graduation. Financial aid and performance-based scholarships can be used as incentives to keep students on track and reward their success as they progress through school.

Financial aid incentives have many benefits. They simultaneously reduce the cost of attending college while rewarding positive academic performance. Reducing the cost of college can decrease the number of hours students spend working, an important factor in college success. It can also influence another success factor, the amount of time students spend in school, allowing some part-time students to switch to full-time. These programs are increasing in popularity.

Since 1991, at least 14 states have introduced merit-based scholarship programs that require students to meet academic criteria for entry, as well as for annual renewal.<sup>67</sup>

A good example of financial aid used to incentivize performance can be found in Colorado. In January 2013, The Colorado Department of Higher Education approved a new

financial aid policy that uses incentives to encourage college completion. The new performance-based model is aimed at motivating low-income students through the use of financial aid incentives as they advance through school. Under this new system, need-based financial aid funding is distributed based on credit hours completed, instead of based on the cost of the institution, as in previous years. The new system provides a base of \$610 for freshmen and an additional \$200 for every 30 hours of credit

#### *Connecticut - H.B. 5500*

The Connecticut General Assembly recently proposed an important bill to help students navigate the complex world of financial aid. H.B. 5500 requires Connecticut institutions of higher education to adopt the U.S. Department of Education and Consumer Financial Protection Bureau's Financial Aid Shopping Sheet. The Shopping Sheet is a personalized document designed to help students understand their financial aid options and compare aid packages between institutions. The Sheet helps students understand the amount of grant and scholarship aid they will receive, as well as the amount of loans they will require. This bill is important in helping students understand their financial aid options prior to enrolling in school, as well as the loan debt they will owe once they complete college.

completed, for a total of up to \$1,210 by a student's senior year. Under consideration for the future are policies that would decrease funding if students take too long to graduate, to encourage timely completion.<sup>68</sup>

Financial aid at the institutional level can also impact student success. Currently, most states fund postsecondary institutions based on student enrollment. This creates an incentive for colleges to enroll as many students as possible, with no connection to the rate of success students experience at a particular postsecondary institution. To align incentives with student success, states should provide funding to colleges based on student performance. Instead of being motivated by head count, colleges will be financially invested in each individual student's success.<sup>69</sup>

In Ohio, the General Assembly recently approved a new community college funding formula that works on this system. The Ohio Student Success Initiative awards student "success points" that determine up to 20% of their public community college funding. By 2015, it is expected that the initiative will be fully implemented.<sup>70</sup> Similarly, in Indiana, postsecondary funding is aligned with state goals for course and degree completion. Funding is tied to the state's goals of graduating more students on time, graduating more low-income students, and transferring students from two- to four-year institutions. When budget cuts became necessary in the state, student performance data from each institution was consulted to inform funding decisions.<sup>71 72</sup>

#### *State Strategies to Watch: Washington State*

State policy reforms in Washington State are designed to provide financial incentives to award community colleges for student success, rather than student enrollment.<sup>73</sup>

In Washington State, the Student Achievement Initiative was adopted in 2006, as a performance funding system for community and technical colleges. The Initiative identified key academic benchmarks that students must achieve to complete a degree or certificate. Through a partnership with the Community College Research Center at Columbia University, achievement measures that are meaningful for all students, regardless of background, enrollment status, academic program, or type of institution were identified. These measures focus students on short-term outcomes that serve to build momentum towards the completion of their degree. They can be grouped into four basic categories: building toward college-level skills (passing developmental courses, and making basic skill gains); first year retention (earning 15 and then 30 credits); completing college-level math (passing required math courses); and completions (degrees, certificates, and job training). The Initiative rewards two-year colleges that assist students in meeting key outcome goals and increases their level of achievement.<sup>74</sup>

Washington State has seen student performance gains, as a result of the Initiative, beginning in the Initiative's first year. After implementation, student achievement increased by 19% over the previous year. These gains occurred in all categories. During the second year, achievement gains continued, with total achievement increasing by 12%. While results from the third, and most recent, year of implementation do not show improvements in all areas, officials believe that this can be attributed to budget cuts and fewer students enrolled.<sup>75</sup>

### *Supportive Transfer Policies*

Community colleges play an important role in preparing students to transfer to 4-year colleges and complete a Bachelor's degree. In fact, 28% of Bachelor degree earners began their studies as community college students, and 47% took at least one community college course.<sup>76</sup> While community colleges already serve as steppingstones to bachelor degree programs, more supportive transfer policies would allow community colleges to play an even greater role in the acquisition of a bachelor's degree.

To encourage this, students who complete an associate's degree should be provided with accessible transfer options, and community college programs should be aligned and structured so they coincide with Bachelor degree program transfer requirements. This way, when students complete the general education requirements they need while enrolled in community college, they can transfer directly into 4-year programs, **with junior standing** (many can transfer all credits, but they do not necessarily align with Bachelor degree programs, and so set students back), and begin taking classes concentrated in their particular field of study. Students who get these core requirements out of the way early are more apt to follow through with their education in the long term.<sup>77</sup> In addition, research indicates that when 4-year colleges have community college friendly transfer policies, students succeed. For instance, when a 4-year college accepted all of a community college student's credits, 82% of students earned a Bachelor's degree, as compared to 42% of students when only some community college credits were accepted.<sup>78</sup>

Students should also be encouraged and incentivized to earn an associate's degree prior to transferring. Research shows that students who complete an associate's degree have better outcomes when they transfer to a 4-year college. In fact, the National Student Clearinghouse found that just 54% of students who transferred prior to earning an associate's degree earned a bachelor degree, while approximately 71% of students who completed an associate's degree earned a bachelor degree within four years.<sup>79</sup>

### *Program and Labor Market Outcome Alignment*

The ultimate goal of a college degree lies beyond graduation, in the attainment of gainful, fulfilling employment. But there is growing concern that postsecondary institutions are not providing students with the skills they need to fill available jobs. Too often, students find themselves unemployed after graduation, because their career choice or job skills do not match employer needs.<sup>80</sup> To ensure that graduates can find jobs, more information should be provided to students on how their chosen major, and subsequent career path, align with the demands of the labor market. Students should receive counseling on how they can best position themselves to take advantage of labor market indicators and land a good job after graduation.<sup>81</sup>

To support this idea, current labor market trends and information should be tracked and made available to colleges and college students. This can be achieved by integrating data systems across sectors, so states can collect workforce and unemployment data and make this information accessible to college advisors and counselors.<sup>82</sup> While some states already track this type of information, data is typically collected too infrequently, and reports are published too slowly, making information outdated and less useful when it finally arrives. Internet job postings offer an excellent opportunity to provide up-to-date

labor market information. These postings, combined with recent technology that can aggregate and analyze information, can provide highly accurate labor market and hiring information. States should embrace this technology to increase analytical capabilities and provide colleges and students with more accurate and detailed data.<sup>83</sup>

In 2008, the Maine Department of Labor partnered with three career advertisement companies to improve their labor market analysis. They can now compare the number of employed workers in the state to changes in online job posts. They can also analyze the postings to understand preferred job qualifications, required experience, and high-demand skills. Through this new analytical capability, Maine discovered worker shortages in the health care sector.<sup>84</sup> This allows them to direct students toward high needs fields such as the health care industry, benefitting both the students and the state's economy as a whole.

While access to this information is critical, community college students need help understanding what it means. Community college advisors and counselors should receive training and professional development to ensure they can navigate state labor market data systems and successfully convey this information to students. Training on how to use this information effectively with students will go a long way in improving student labor market outcomes after graduation.<sup>85</sup>

#### State Strategies to Watch: Florida

Florida has one of the nation's oldest longitudinal student data systems. It tracks each student, from school entry, to exit, and beyond. In 2004, Florida determined through its data system that a large percentage of students who passed its Comprehensive Assessment Test in high school were unable to pass college placement exams. In fact, just 41% of Florida's full-time community college students were completing an associate's degree or certificate within 3 years of entering school for the first time. In addition, 65% of students were requiring college remediation. Florida understood that action was necessary to reverse these unsettling trends.<sup>86</sup>

Seven years after Florida's initial data discovery, a number of major reform measures were adopted to improve K-12 education and college innovation. K-12 changes included raising standards for curriculum and content in all subject areas; adding a college-preparation student indicator to the state data system; and implementing senior review courses to avoid college remediation. At the college level, several changes were made including the development of new Postsecondary Readiness Competencies aligned with Common Core Standards; the development of a new Postsecondary Education Readiness Test; the restructuring of remedial courses to include a standardized two-course sequence of math, reading and writing; the creation of modular courses where students complete only the areas where they struggled on the Postsecondary Education Readiness Test; and the development of a diagnostic test to provide detail on student remedial needs.<sup>87</sup> In addition, Florida students who earn an associate's degree are guaranteed admission, with junior standing, to a state 4-year college.<sup>88</sup> While it is too early to truly determine the effectiveness of these changes, other states, such as Virginia, Texas, and California, have begun to adopt Florida's reform strategies. Many hopeful eyes will be on Florida to see if student outcomes improve at the level expected by state officials.<sup>89</sup>

## Case Study: The Postsecondary Success Initiative

The Postsecondary Success Initiative (PSI) being implemented at Capital Community College by Our Piece of the Pie®, Inc. (OPP®) - a youth development agency based in Hartford, Connecticut - exemplifies what students need to succeed in community college. OPP has a long history of successfully engaging youth and understands the importance of supporting young people at each stage on their path to success. The agency works with over-age, under-credited (OU) youth, and other at-risk urban youth, to address the challenges they face through its signature *Pathways to Success* program, which integrates the best of the youth development, academic support, and workforce development fields. OPP does this in three ways – in high schools, in the community, and most recently, at community colleges. The Pathways to Success program is the model on which services in all three areas are based.

The Postsecondary Success Initiative was launched in August 2011, as part of a program with the National Youth Employment Coalition with support from the Bill and Melinda Gates Foundation, the Nellie Mae Education Foundation and the Open Society Foundation. A small Pathways program was placed directly inside of Capital Community College (Hartford, CT) with the goal of helping students navigate the community college landscape by offering student supports to help them succeed.

OPP's partnership with Capital Community College has allowed two vital staff members - a Youth Development Specialist (YDS) and Workforce Development Specialist (WDS) - to be stationed on campus. These individuals build trust with young people and encourage them to stay focused and achieve their goals. In particular, the YDS works with youth to create a plan that maps out a pathway from where they are, to where they want to be, and helps them overcome barriers. The WDS is tasked with helping students reach their employment goals by preparing them for the workforce, through the delivery of a Career Competency Development Training course, as well as providing job shadowing, internship, and resume, and employment assistance. OPP staff advocates for students, keeps them engaged, and helps them with any problems that may arise as obstacles on their path to success. For many OPP youth, the YDS and WDS are the only adults in their lives who are consistently present and supportive.

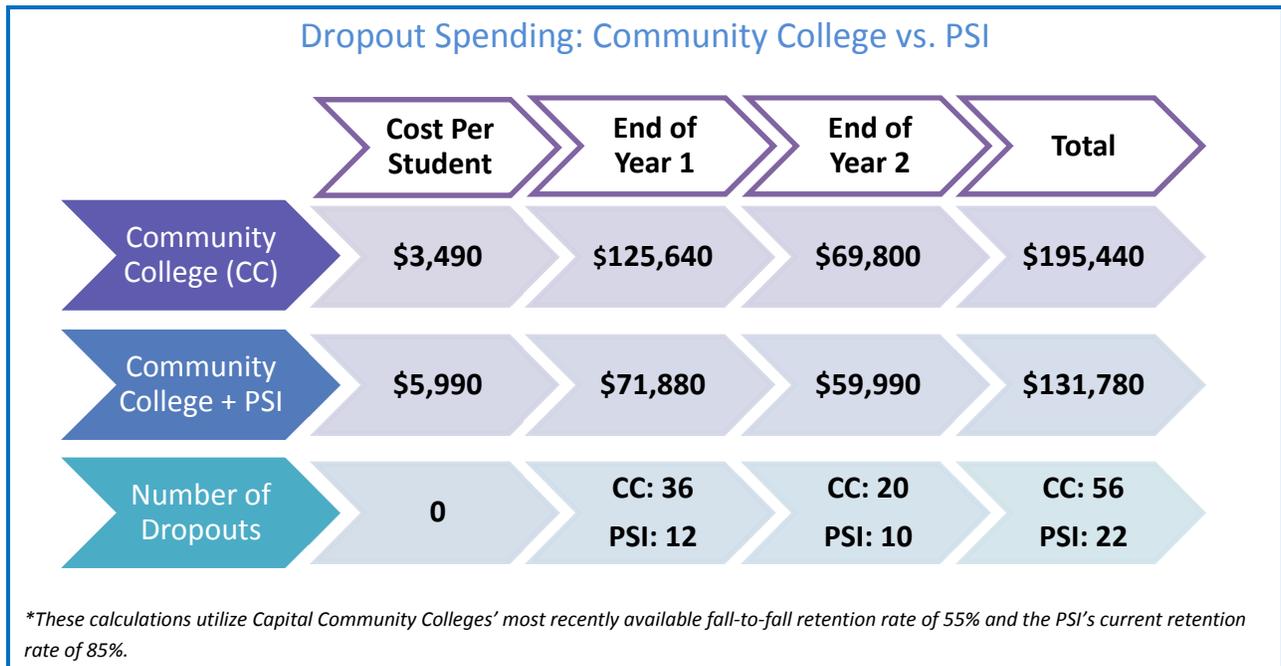
### *Who's enrolled in the PSI?*

In total, 87 Capital Community College students became part of the PSI. These students ranged from ages 18-23 (average age was 21) and 69% of them were female. The majority of students were African-American (61%) and Hispanic (37%).

OPP recently conducted a study - focusing on data collected from January through June of 2012 - to preliminarily assess the effectiveness of the PSI. While upon entering college, the majority of PSI students (78%) did not test out of developmental courses, over half of all the students that took a developmental course passed at least one of them. Students that tested out of developmental courses, however, fared even better, with 65% of these students passing their courses. Impressively, the supplemental support and guidance students received led to 87% of students returning to their second year of college. This rate is 35%-38% better than Capital Community College's overall first-to-second year retention rate (52% for full-time students and 49% for part-time students for the same time period).

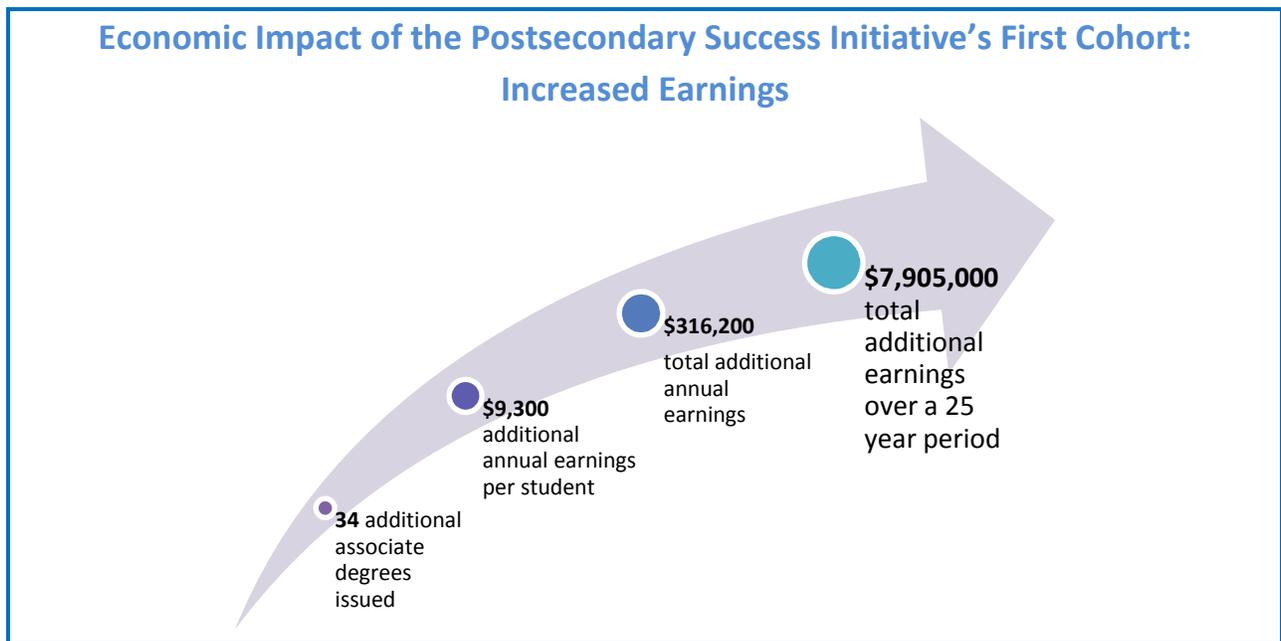
OPP also investigated to see if any of the supports provided by the YDS helped contribute to students passing courses during their first academic year. While all 85 youth met with the YDS, 55% of them spent between 1-5 hours a month utilizing that meeting time for academic advising. Academic advising, in particular, seemed to have a greater influence in helping students along the path to achieving their credential. To test this, OPP compared students who used YDS meeting time for academic advising with those who did not. All of the students in these groups had approximately the same number of credits needed to graduate (credit difference at the start of semester was insignificant ( $t(56) = 0.73, p = 0.47$ ). A t-test revealed a significant mean difference between those who utilized academic advising vs. those who did not. Students who utilized academic advising services from the YDS had statistically significantly ( $t(82) = -2.731, p < 0.01$ ) fewer credits needed to graduate than those who did not utilize academic advising services (approximately 3 credits less). This means that on average, students entered the semester needing the same amount of credits to graduate but at the end of the semester, students utilizing academic advising needed significantly fewer credits to graduate. Though the evidence is preliminary, the results of OPP’s study highlight the importance of having supplemental support and guidance services to help students through their college career.

In addition to achieving these positive results, the Postsecondary Success Initiative is cost effective. Using the year-to-year retention rates discussed above, the graphics below depict student success in community college alone, as compared with community college enrollment paired with PSI supports.



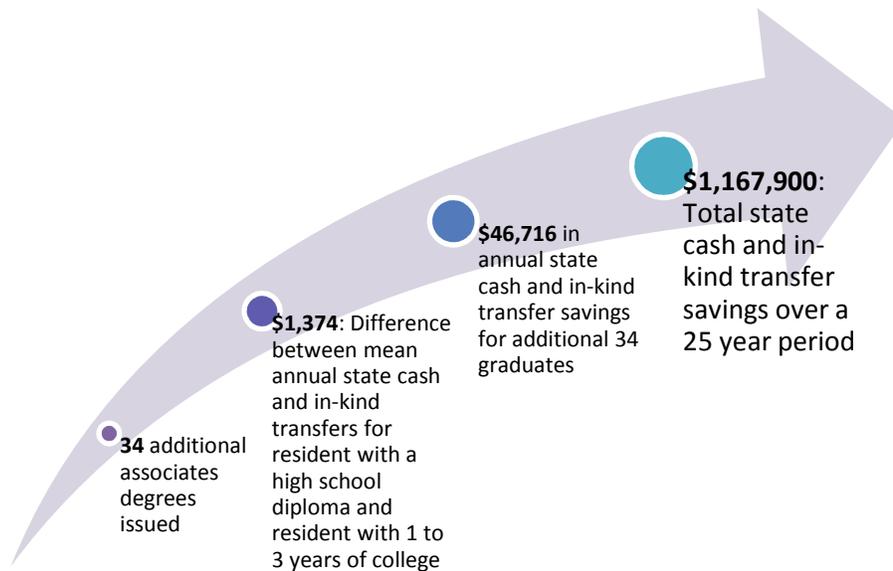
As the graphic demonstrates, the will not only PSI more than double the number of community college graduates, the initiative spends over \$60,000 less on students that do not complete their degree than community college alone. This means that more money is being used to help students succeed, rather than being funneled into a broken system that does not yield the expected economic returns.

The 34 additional graduates of the PSI initiative will not only improve their own lives, but impact the economic well-being of the state as a whole. According to data from the U.S. Census, Connecticut residents who are high school graduates, or who have their GED, earn an average of \$36,100 annually. Residents with an associate's degree earn an average of \$45,400 annually - \$9,300 more than those with just a high school diploma or GED. When these numbers are considered in light of the Postsecondary Success Initiative, the positive economic impact of the program becomes apparent. In fact, the anticipated return is over 6 times the total initial investment. It is important to remember that these economic results are from a single cohort of students. As the PSI continues, each cohort can be expected to generate similar economic returns.



As mentioned previously, the economic benefits of obtaining an associate's degree go far beyond annual salary. According to research by the Center for Labor Market Studies at Northeastern University, the proportion of adults who pay all types of taxes increases relative to educational attainment. Individuals with more education also require less cash and in-kind government support benefits such as, Medicare/Medicaid, food stamps, and rental subsidies. They are also institutionalized in jails, prisons, and mental health facilities, at far lower rates. These differences amount to huge cost savings, and greater tax benefits, for state and federal government, significantly increasing the value of the PSI.

## Economic Impact of the Postsecondary Success Initiative's First Cohort: State Cash and In-Kind Transfer Savings



Thanks to the Postsecondary Success Initiative, more community college students will have the opportunity to realize their goals. Bills addressing remediation, like Connecticut's P.A. 12-40, and Washington State's Student Achievement Initiative, can bring states closer to the possibility of community college success, but pairing such reforms with embedded programs like PSI can make success a true reality. Additional funding and policy support must be provided to keep programs like PSI in colleges and encourage new initiatives to develop. Community college support programs are worth the initial investment and have the potential to improve students' lives while producing significant economic returns.

## The Conclusion

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Increasing the rate of community college graduation is essential for the economic success of our students, state, and nation. High rates of remediation, paired with low graduation rates, paints a gloomy picture of poor academic preparation, faulty remediation policies, and inadequate student supports. The current system does not work. It is time to provide the in-school supports, early college experiences, and financial aid incentives that students need to stay engaged and enrolled. By aligning community college programs with labor market outcomes, reforming remedial education, and providing supportive bachelor degree transfer options for associate degree earners, more students can access the significant economic benefits that come with a college diploma.

State policies must endorse the strategies that work and remove barriers that cause students to fail. We should look to successes in Florida, Washington, Ohio, and other states, to inform policy and improve student success. We should also support embedded programs like The Postsecondary Success Initiative, which proves that community college students can achieve success, when given the proper tools.

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