

Report - June 2013

Completion Day

Community colleges are a critical resource for a growing number of New Yorkers and a key component of the state's economic competitiveness. But they are taken for granted by policymakers and continue to face enormous challenges in graduating students.

by Tom Hilliard and Tina Spaic

The following is the introduction to Completion Day. Click here to read the full report (PDF).

As New York State transitions from a manufacturing economy to a knowledge economy, few institutions are playing a more important role than the state's 35 community colleges.

With more than 328,000 students enrolled statewide, community colleges are boosting New York's economic competitiveness by upgrading the skills of a large chunk of the state's workforce. They are enabling displaced workers to acquire skills in occupations that are growing, and helping businesses across the state meet their evolving workforce needs—from photonics in Rochester to nanotech in Albany. Perhaps most importantly, community colleges have become the state's key opportunity institutions. At a time when a high school diploma is no longer sufficient to obtain a decent paying job in most industries but the cost of getting a college education has skyrocketed, the state's community colleges offer the most accessible path for tens of thousands of low- and moderate- income New Yorkers to obtain a post-secondary credential.

Due in large part to their importance as vocational resources in a quickly changing economy, student enrollment has been growing faster at two-year institutions than at four-year institutions in New York. Over the last decade, enrollment at State University of New York (SUNY) and City University of New York (CUNY) community colleges increased by 28 percent, compared to 13 percent at SUNY and CUNY four-year institutions and 12 percent at all four-year colleges and universities in the state.

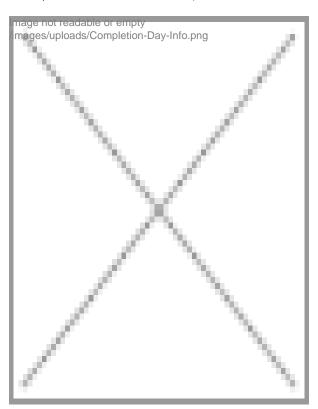
However, the state's community colleges have only just begun to deliver on their potential and face enormous challenges in the years ahead. Far too few students who enroll at community colleges in New York end up graduating or moving on to a

four-year institution. Statewide, only 35 percent of full-time students who enroll in community college courses obtain an associate or bachelor's degree after six years. And in New York City, where a much higher percentage of students qualify as low-income, the six-year graduation rate is just 29 percent. While some schools do better than others at graduating students, every community college in the state has a six-year graduation rate below 50 percent.

Community college students fail to graduate for a number of reasons. Although more New Yorkers are choosing to enroll in community colleges, many are unprepared for college level work. Fifty percent of students across the state—and 79 percent in New York City—need remedial work before they can begin on a more specialized career track. Moreover, even as enrollment has increased, state funding has declined by 29 percent over the last decade, leading to higher tuition costs and a larger financial burden for many students of moderate means.

Raising community college graduation rates will be an enormous challenge for both academic leaders and state policymakers, but doing so is clearly worth the investment. As we demonstrate in this report, higher graduation rates would not only provide growing industries with the workers they need to remain competitive, it would dramatically increase the earning potential of thousands of New Yorkers, leading to both increased regional GDP and government revenue. We estimate that increasing graduation rates by just 10 percentage points would provide a \$150 million one-year boost to the state economy; a \$41 million increase in the annual incomes of those who graduate; a \$32 million increase in economic activity as those higher earning graduates spend more on goods and services; and \$44 million in taxpayer investments going toward graduates rather than dropouts.

Over the next decade, the combined value of raising community college graduation rates from 35 percent to 45 percentwould be \$1.5 billion, over two decades \$3 billion, and over three decades \$4.5 billion.



This report details the increasing importance of community colleges to New York State's economy and documents why raising graduation rates at the state's community colleges by even a small amount would result in significant benefits to the state's employers, young adults and the working poor. A follow-up to our 2011 Mobility Makers study, which focused on the importance of improving the graduation rate at the six community colleges in New York City, this report details graduation rates for all 35 community colleges statewide and focuses mainly on SUNY community colleges across the state. Funded by

the Working Poor Families Project—a national initiative supported by the Annie E. Casey, Ford, Joyce and Kresge Foundations, which partners with nonprofit organizations to strengthen economic conditions and state policies affecting working families—the report is based on extensive data analysis and more than two dozen interviews with community college leaders, education experts and employers from nearly every region around the state.

Low graduation rates have been a chronic affliction of community colleges in New York and nationwide, stemming in part from their open access mission to accept all students regardless of test scores or high school GPA. But as the economy continues to put a premium on postsecondary credentials, even for traditionally low-tier positions, the lack of progress in raising those rates is posing larger and larger problems. The jobs that community college graduates fill are not only projected to grow significantly in the coming decade; they are in industries that are pivotal to the state's economic future, including advanced manufacturing, technology, health care, and high-end services such as finance and law.

Many of the employment experts we spoke to during our research for this report told us that postsecondary credentials are becoming increasingly important for the vast majority of middle skill jobs. "The number of our employees who have at least an associate's degree has grown over the past decade" says Chris Sansone, the production manager at the Keller Technology Corporation, a high-tech manufacturer in Buffalo. "Depending on the job, I expect there will be a two-year degree minimum in the next five years or so."

Employers also value occupational certificates and industry certifications which respond directly to employer demand. Erie Community College in Buffalo developed a one-year certification program in Computer Numeric Control (CNC) to support employer needs in the region's growing advanced manufacturing sector. According to Sansone, all of Keller Technology's precision machinists are now required to go through the program.

"The jobs filled by community college students are very important [for our local economy]," says Mark Peterson, president and CEO of Greater Rochester Enterprise, a business group. "At least 50 percent of the new jobs in Rochester will require some type of degree beyond high school."

Community colleges prepare residents for higher skilled jobs in the knowledge economy in a variety of ways. They offer two-year degrees and certificates in specific career skills, ranging from nursing to welding; serve as a workforce development resource by providing customized training courses for local industry; offer a low-cost starting point for people who plan to move on to a four-year college; and offer programs in high school equivalency, adult literacy and English as a second language. Community colleges are critical for working adults who need to upgrade or retool their skills. The rapid spread of technology and outsourcing has resulted in the dislocation of millions of adults across the state, and community colleges train these dislocated adults for new occupations in growing industries.

More than any other educational provider, community colleges serve the needs of their regional economies and have proven themselves adept at responding to changing economic conditions with new professional degree and certification programs. For example, Monroe Community College is the only two-year institution in the nation that offers a degree in optical systems technology and regularly places its graduates at local firms, including Xerox, Bausch and Lomb, Corning and Kodak. More recently, Hudson Valley Community College in Troy built a high-tech outpost near the new GlobalFoundries semiconductor plant in order to prepare students for the anticipated 1,400 new jobs there.

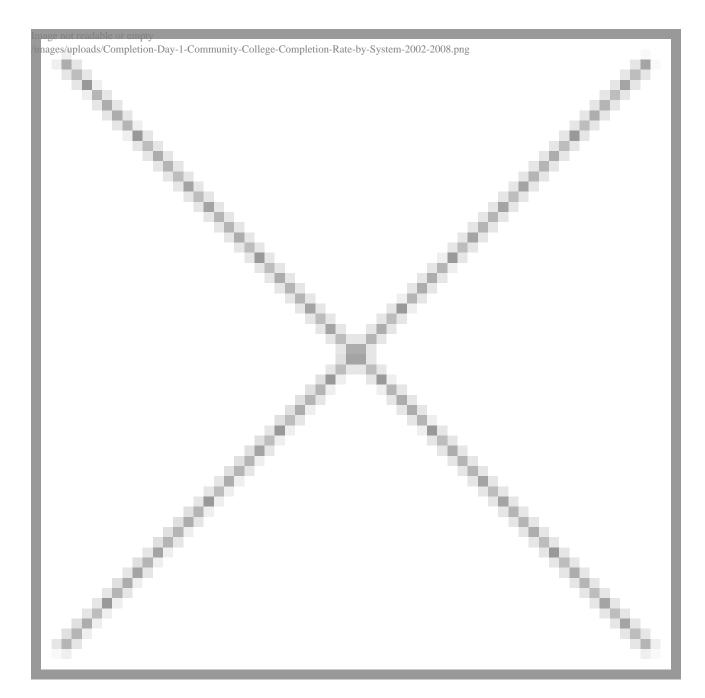
Outside of New York City, where it is harder to attract talent from other regions of the country or globe, preparing local residents for higher-skilled jobs in local industries could mean the difference between economic revival and continued decline. Businesses need to have a competitive workforce if they are going to be competitive themselves, and economic research has shown that more education can lead to an exponential rise in productivity, since the person who has acquired the extra learning and skills is not the only one who benefits—their co-workers and collaborators do as well.

"If you look at the numbers," says Randall Wolken, president of The Manufacturers Association of Central New York

(MACNY), "people just do better when they have been certified in skills, and employers feel more comfortable hiring them, even if it is at the basic skill level and they have to stack on additional skills."

Their increase in earning power is also significant. According to the New York State Department of Labor, an individual who earns an associate degree will make an average of 18 percent more per year than someone with a high school diploma. Moreover, a significant number of community college students go on to earn a bachelor's degree, and these individuals earn an average of 73 percent more than those with a high school diploma. Full-time workers with only a high school diploma could increase their median salary by \$3,540 annually if they attend college but don't earn a degree and by \$6,100 annually if they earn an associate degree. An adult who attends college but does not complete is therefore giving up nearly \$3,000 a year in additional income. These figures are actually significantly understated since they don't take into account pay raise patterns or other incidental benefits such as increased job satisfaction and improved health.

CUNY and SUNY community colleges are already meeting many local employment needs, but with hundreds of thousandsof New Yorkers in low-wage jobs, at the same time that many employers are complaining about their inability to find suitably skilled job applicants, the need to graduate more community college students is obvious. Our analysis finds that of the 42,000 students who enrolled at community colleges statewide in 2002, only 15,000 graduated six years later with a degree, 26 percent with an associate degree and 9 percent with a bachelor's degree. Five percent were still enrolled, and the other 60 percent had either dropped out or transferred out of the system where their outcomes could not be tracked.



Outcomes at SUNY community colleges were substantially better than at CUNY. The average graduation rate at SUNY institutions was 37 percent, compared to 29 percent at CUNY. The two systems were fairly similar in connecting students to four-year colleges where they could earn bachelor's degrees, but SUNY was about 30 percent more effective in graduating students with associate degrees.

| Table 1: NYS Community Colleges with the Highest and Lowest Graduation Rates | | | | | | |
|--|---------------|---------|----------------|--------------|--------------|-----------|
| | Avg Grad Rate | Avg Pop | Avg Low-Income | Avg Minority | Avg Remedial | Avg Adult |
| Top 5 schools by graduation rate | 45% | 722 | 38% | 19% | 52% | 33% |

| Bottom 5 schools by graduation rate | 24% | 1,248 | 54% | 80% | 65% | 39% | |
|-------------------------------------|-----|-------|-----|-----|-----|-----|--|
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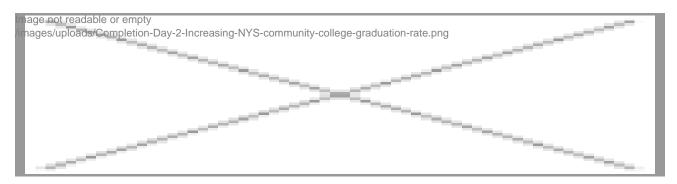
Individually, the top and bottom performing schools seemed to diverge in a number of important ways. The top five community colleges in the cohort—Jefferson, Niagara County, Finger Lakes, Jamestown and Cayuga—had an average graduation rate of 45 percent, while the bottom five—Borough of Manhattan, Westchester, Bronx, Sullivan and Hostos—had an average rate of just 24 percent. As Table 1 shows, the top performing schools had smaller student bodies on average and were all located in upstate regions, while the bottom performing schools were larger and were all located in downstate areas. To a striking degree, demographics and income level were both strong predictors of graduation success. The 2002 cohort at the top five schools consisted of 38 percent low-income students and 19 percent minority students. The bottom five schools had 54 percent low-income students and 80 percent minority students.

Statewide, the student bodies of the top performing schools tended to be overwhelmingly white, reflecting the demographics of their communities, and better off economically than those in lower-performing schools (though the vast majority of students even at these schools come from moderate income families). For example, the top five schools all had fewer than 30 percent minority students while the bottom five schools all had more than 50 percent. Out of 20 schools with above average graduation rates, none had a student body with more than a third minority students, and only five out of 20 had low-income student populations that were even close to 50 percent, namely Jamestown, Fulton-Montgomery, Herkimer, Mohawk Valley and Tompkins Cortland.

Colleges with low graduation rates were more likely to have a large share of entering freshmen placed into remedial courses. Interestingly, however, the reverse is not necessarily true: colleges with high graduation rates had an average share of remedial students, not a low share. In addition, colleges with higher graduation rates had a smaller share of adult students (defined here as ages 25-49), who are more likely to have work and family obligations than recent high school graduates.

Nationally, several other large states do a much better job of moving community college students toward graduation than New York. According to Complete College America, 39 percent of students at community colleges in New York either graduate with an associate degree or transfer to a four-year institution for a bachelor's within three years of matriculating, compared to 52 percent of students in Florida, 50 percent in Wisconsin, and 48 percent in Illinois. Washington and Minnesota also do much better by this metric.

In addition to the economic costs, high dropout rates exact a large toll on the public purse. Considering both operating aid and student tuition assistance, we estimate that each community college dropout in New York costs the municipal, state and federal governments over \$10,400. Overall, the dropouts in the 2002 cohort cost \$260 million in taxpayer subsidies.



Thus, increasing the number of community college graduates even by just a little bit would provide significant material benefits to employers, individuals, local economies, and taxpayers. On the basis of the 2002 cohort, we calculate that the value of increasing graduation rates in New York State from 35 to 45 percent would result in:

- \$29 million more in increased annual earnings.
- \$23 million more in economic activity.
- \$6 million more in federal and state income tax receipts.
- \$44 million in tax payer contributions in the form of base operating aid, Pell and TAP Grants going towards community college graduates rather than dropouts.
- 4,205 more skilled and educated employees with credentials to fill local employer needs.

However, while the need to increase graduation rates at community colleges across the state is clear, there is no silverbullet. The causes of dropout are diverse, and strategies to keep students on track to graduation must not come at the cost of weakening academic rigor or compromising the open access mission. In addition, strategies to address student dropout must accommodate the autonomy of community colleges in the SUNY system. Unlike CUNY, SUNY's twenty-nine community colleges are self-governed, and their presidents are appointed by local boards. SUNY is trying to create a more cohesive system for all of its institutions, but institutional autonomy will continue to be highly valued and defended.

Despite the diversity, community colleges across the state also face common drivers for dropout, even in very different communities. The lack of basic literacy and numeracy and preparation in Science, Technology, Engineering and Math (STEM) disciplines among entering students are major concerns across the state, but so are rising tuition costs and social issues. Many community college students are the first members of their family to attend college and are easily confused by its unfamiliar culture. Others struggle to balance the demands of work and family with their classes and study, and many older students need to brush up on subjects that have gathered dust since high school graduation.

Boosting student success at New York's community colleges will not be simple or easy. But it can be done. We know this because it is happening in other states. Crucially, however, change will require New York State government to take ownership of the issue. The first step New York State needs to take is simply to acknowledge the problem, and forthrightly commit to solving it. The Governor, Legislature, and Board of Regents should publicly identify community college completion as a top state priority. This will send the message to agency managers, employers and leaders at SUNY and CUNY that they should step forward and take action.

Next, Governor Cuomo and the Board of Regents should develop institutional capacity to assist community colleges in boosting success in every phase of their students' college experience: from pre-collegiate preparation to graduation and first employment. New York benefits from having public institutions that are accountable to their local elected officials. But those institutions need to be accountable as well to the expressed priorities of state leaders.

Finally, New York needs to build new capacity for raising community college completion rates. It can accomplish this in several ways:

- A competitive grant program for community colleges to try evidence-based innovations around student success, learning from established programs like Achieving the Dream and Pathways to Completion;
- A web-based student success dashboard similar to that recently launched by the California Community Colleges system, which provides not only overall completion rates, but also completion rates for low-income, remedial, older and minority students;
- A Student Success Center, similar to foundation-funded institutes in Michigan and Arkansas, that builds the evidence base on what completion strategies work, disseminates that evidence to policymakers and frontline providers, and convenes faculty and administrators for professional development around student success, open access and academic rigor.
- Expansion of the Tuition Assistance Program to support low-income students who are now partially or fully excluded, including DREAMers, part-time students, foster youth and single adults.

Without a doubt, policymakers are starting to understand the important role that community colleges play across the state, and the economic toll of low-graduation rates has been specifically acknowledged by Governor Cuomo and other political leaders. In the 2013-14 budget, the Governor and Legislature agreed to create the Next Generation Job Linkage Program Incentive Fund, which will disburse \$5 million to community colleges "based on measures of student success." Earlier this year, Governor Cuomo also announced a plan to establish 10 new schools around the state modeled on Brooklyn's Pathways in Technology Early College High School (P-TECH), an innovative partnership with IBM where students stay for six years and leave with an associate degree and hands-on experience in the working world.

Still, far too little has been done to tackle this enormous problem. Remarkably, while enrollment has climbed dramatically over the last decade, state funding has actually dropped. From the 2001-02 academic year to the 2011-12 academic year, state funding per student, in inflation-adjusted terms, dropped by 29 percent. Community colleges were forced to raise tuition by almost \$1,500, a burden for which modest increases in need-based financial aid only partially compensated. The end result is a poorer community college system in which the largest funder is no longer the state, but the students themselves.

This is an enormous lost opportunity for New York. The future of the state's economy rests on its skilled workforce, and that workforce is now being forged in the state's 35 community colleges.

| Table 2: 6-year Graduation Rates for New York State's 35 Community Colleges | | | | | |
|---|--------------------------|-------------|-------------------|--------------------|--|
| College | Cohort Entered Fall 2002 | All Degrees | Associate Degrees | Bachelor's Degrees | |
| Community Colleges | 42,045 | 14,902 | 10,990 | 3,912 | |
| Jefferson (SUNY) | 592 | 46% | 29% | 17% | |
| Niagara County (SUNY) | 913 | 45% | 33% | 13% | |
| Finger Lakes (SUNY) | 790 | 44% | 34% | 10% | |
| Jamestown (SUNY) | 779 | 44% | 29% | 15% | |
| Cayuga County (SUNY) | 536 | 43% | 34% | 10% | |
| Columbia-Greene (SUNY) | 215 | 43% | 34% | 8% | |

| Broome (SUNY) | 1,330 | 42% | 25% | 17% |
|-----------------------------|-------|-----|-----|-----|
| Fulton-Montgomery (SUNY) | 427 | 42% | 30% | 13% |
| Monroe (SUNY) | 2,733 | 42% | 31% | 11% |
| North Country (SUNY) | 272 | 41% | 32% | 9% |
| Herkimer County (SUNY) | 819 | 40% | 30% | 10% |
| Adirondack (SUNY) | 662 | 39% | 28% | 11% |
| Clinton (SUNY) | 336 | 39% | 26% | 12% |
| Hudson Valley (SUNY) | 2,364 | 39% | 29% | 10% |
| Kingsborough (CUNY) | 1,776 | 39% | 28% | 10% |
| Erie (SUNY) | 2,140 | 38% | 27% | 11% |
| Mohawk Valley (SUNY) | 1,320 | 37% | 25% | 13% |
| Nassau (SUNY) | 4,042 | 37% | 30% | 7% |
| Dutchess (SUNY) | 940 | 36% | 26% | 10% |
| Genesee (SUNY) | 595 | 36% | 25% | 10% |
| Corning (SUNY) | 645 | 35% | 29% | 7% |
| Tompkins Cortland (SUNY) | 584 | 35% | 24% | 11% |
| Onondaga (SUNY) | 963 | 34% | 24% | 11% |
| Rockland (SUNY) | 1,069 | 34% | 25% | 9% |
| Schenectady County (SUNY) | 403 | 34% | 29% | 5% |
| Suffolk County (SUNY) | 3,385 | 34% | 27% | 6% |
| Ulster County (SUNY) | 443 | 33% | 21% | 12% |
| Queensborough (CUNY) | 1,833 | 30% | 19% | 11% |
| LaGuardia (CUNY) | 1,902 | 29% | 21% | 8% |
| Orange County (SUNY) | 995 | 28% | 21% | 7% |
| Borough of Manhattan (CUNY) | 2,775 | 27% | 20% | 7% |
| Westchester (SUNY) | 1,493 | 27% | 22% | 4% |

| Bronx (CUNY) | 976 | 24% | 18% | 5% |
|------------------------|------|-----|-----|----|
| Sullivan County (SUNY) | 428 | 23% | 18% | 6% |
| Hostos (CUNY) | 570 | 21% | 18% | 3% |
| All Community Colleges | 100% | 35% | 26% | 9% |

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CENTER FOR AN URBAN FUTURE 120 Wall Street, 20th Floor, New York, NY 10005

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