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Nonresident Tuition and Fees at SUNY

Rates, Policies, and Consequences

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Introduction

The current recession and sharp downturn in state revenues have increased interest in raising tuition charges at higher education institutions in New York. Out-of-state tuition has drawn special attention, as such rates are lower among campuses in the State University of New York (SUNY) than those charged by most states.¹ To inform the discussion of out-of-state tuition, SUNY officials asked the Nelson A. Rockefeller Institute of Government to conduct a study that addresses three questions. First, how do SUNY's undergraduate nonresident tuition and fees compare to those charged by comparable higher education institutions?² Second, what is known about the effects of hypothetical changes in nonresident policies and rates on student enrollment and total revenues? Third, what other important effects might result from changes in nonresident charges and enrollments, including effects on the state's economy and demographics?

The findings in this report are based on an analysis of SUNY policies and enrollment data, a review of the scholarly literature on the topic of nonresident students at state-supported higher education institutions, and consultations with other experts. The study found that SUNY's nonresident tuition and fees are lower overall than those charged by other state university systems. But the picture varies depending on the type of campus. Although nonresident tuition for undergraduates at institutions granting

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bachelor's and master's degrees is comparable to national and regional averages, nonresident tuition for undergraduates at SUNY's research campuses is among the lowest in the nation.

The study found, however, that increases in nonresident tuition and fees do not always yield increases in total revenues for universities or university systems. Increases in tuition and fee rates can reduce out-of-state student enrollments, and enrollment declines may, under some circumstances, produce substantial reductions in total revenues. The effects of nonresident tuition and fees on total revenues appear to depend on specific market circumstances facing each campus. The study also found some evidence that nonresident enrollments can have significant economic and demographic effects on the communities and regions where campuses are located. Taken as a whole, these findings suggest that the same changes in nonresident tuition and fees are likely to produce very different effects depending on the specific competitive and economic conditions facing each campus. An across-the-board approach to nonresident tuition increases could lead to increased revenues at some campuses, while at other campuses it might decrease revenues, undermine academic quality, and lead to economic losses in the regions where those campuses are located.

Reasons Public Colleges and Universities Enroll — and Limit Enrollment of — Nonresident Students

Public institutions of higher education are established to benefit the states in which they are located. Among other purposes, they are expected to educate state residents and provide an educated workforce to power the state's economy. Yet nearly all public colleges and universities admit students from out of state and often from other nations. This section discusses the educational and economic reasons that lead public colleges and universities to enroll nonresident students, the arguments for charging out-of-state students a higher rate, and the reasons why such institutions may want to limit nonresident student enrollment.

Several issues may influence a public college or university's policies regarding nonresident students. One is the need to ensure sufficient *access* for qualified in-state students. Given that need, institutions want to ensure that nonresident students do not crowd out qualified in-state students.³ On the other hand, institutions may avoid raising nonresident tuition too high, or adopting policies that exclude nonresident students, because of the possibility that institutions in neighboring states will retaliate against that state's students.⁴

A related set of concerns has to do with institutional *capacity*. Colleges and universities that are operating with excess capacity may attempt to fill slots with nonresident students.⁵ Institutions may also recruit nonresident students to support particular degree programs that are prestigious but that cannot be supported by resident student demand. Some small states, such as Delaware

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and Vermont, attract large numbers of nonresident students to their public research universities in order to have a larger institution, with a greater economic impact and a broader range of high-quality academic and athletic programs than their state could support alone. Nonresident students made up 66.6 percent and 60.8 percent of first-time freshmen at public four-year institutions in Delaware and Vermont, respectively, in the fall of 2008.⁶

Some institutions seek to create a more *diverse student body* by drawing students from other parts of the United States and the world. This exposes resident students to people from different cultural and geographic backgrounds, which colleges and universities value as part of liberal education.⁷

Universities may set higher admissions standards for nonresident students and thus use nonresident students to raise the *academic quality* and reputation of their institutions.⁸ Many institutions also recruit talented *athletes* from out of state.⁹ Drawing students from out of state can spread an institution's *reputation* beyond the state's borders.

Finally, there are *financial and economic considerations*. Institutions can seek to increase revenues by increasing enrollment of tuition- and fee-paying students from out of state, or by hiking the amount they charge them. Whereas in-state students ordinarily receive a substantial state-financed subsidy, tuition and fees for nonresident students are higher. Nonresidents sometimes pay a tuition rate that is above the marginal per-student expenditure, which helps subsidize resident students' education.

One rationale for the price differential is that residents and their parents pay state taxes, while nonresidents do not, and state taxpayers may be opposed to the idea of subsidizing the education of nontaxpayers.¹⁰ Another reason may be that residents are more likely to remain in the state after graduation and thus contribute future tax revenues.¹¹

This leads to the broader consideration of the impact of nonresident students on the host state's economy. Students from out of state bring money to, and generate economic activity within, the host state, both by spending while in school and in some cases by remaining in the state as taxpaying residents after graduation.¹²

These considerations are not mutually exclusive, nor are they the same for every institution. The optimal mix of students at a particular institution depends on demographics, the political environment, economic factors, and institutional mission.

SUNY and Its Nonresident Students

In the fall of 2008, nonresidents made up 13,118 — or 8.9 percent — of the 147,357 full-time undergraduates at SUNY's state-operated campuses.¹³ SUNY's enrollment of nonresident students has increased over the past decade: In 1998, just 4.6 percent of SUNY's first-time freshmen were nonresidents, compared with 8.0 percent in 2003 and 10.3 percent in 2008.

Table 1. A Relatively Small Percentage of SUNY Freshmen Are From Out of State

Percentage of Out-of-State Freshmen at SUNY and Public Institutions in Large and Neighboring States, 2008			
State	Total Freshmen	Number Nonresident	Percent Nonresident
Vermont	3,878	2,358	60.8%
Pennsylvania	48,347	9,135	18.9%
Connecticut	9,425	1,645	17.5%
Massachusetts	15,393	1,971	12.8%
SUNY	31,567	3,243	10.3%
New York (SUNY and CUNY)	52,291	4,596	8.8%
New Jersey	18,316	1,236	6.7%
California	90,574	4,555	5.0%
Texas	70,290	3,426	4.9%

Source: Authors' analysis of National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS) data.

SUNY enrolls a larger number of nonresident students than public institutions in many other states, but nonresidents make up a relatively small percentage of SUNY's first-time freshmen. This is similar to the pattern at public four-year institutions in some other large,

populous states, as shown in Table 1. Indeed, the three states with the smallest percentages of out-of-state freshmen in the nation in 2008 were New Jersey (6.7%), California (5.0%), and Texas (4.9%). The comparable figures for New York's neighbors to the east were 17.5 percent in Connecticut and 12.8 percent in Massachusetts. By contrast, Vermont enrolled the second-highest percentage of out-of-state freshmen in the nation, with 60.8 percent, and Pennsylvania (18.9%) enrolled 9,135 nonresident freshmen, more than any other state.

Roughly half of full-time nonresident undergraduates at SUNY's state-operated campuses were from the United States,

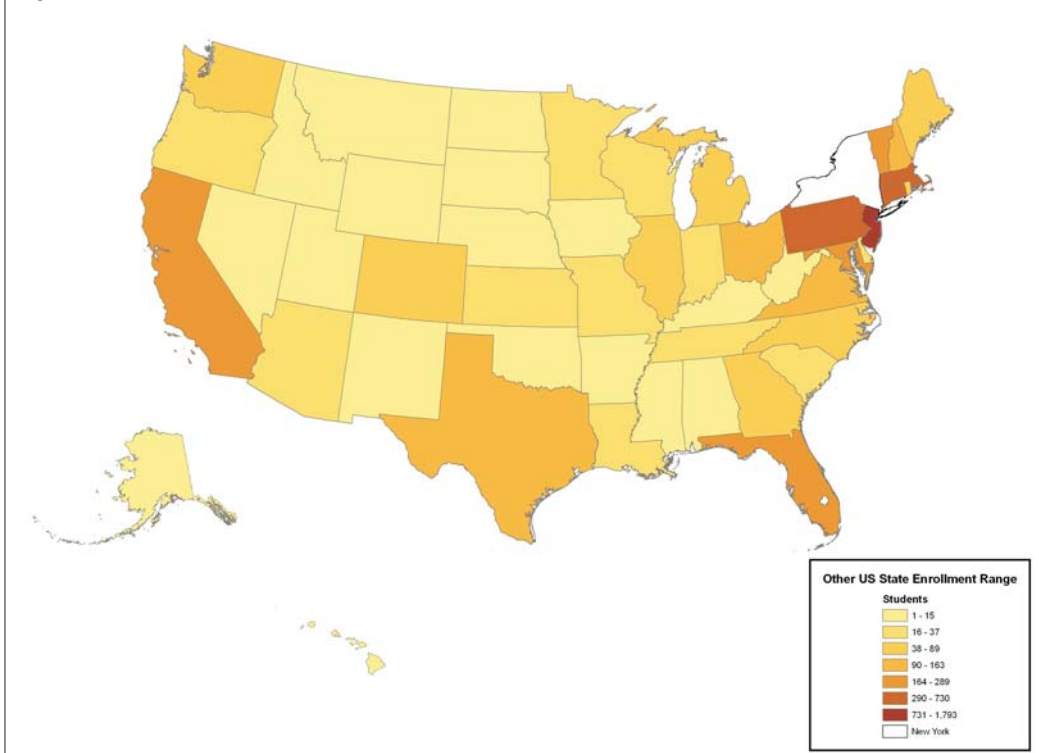
and half were inter-

national students. The countries that sent the most international students were South Korea, China, Japan, Canada, India, and Turkey. Of SUNY's nonresident students from the U.S., the largest numbers came from neighboring states, as seen in Figure 1.

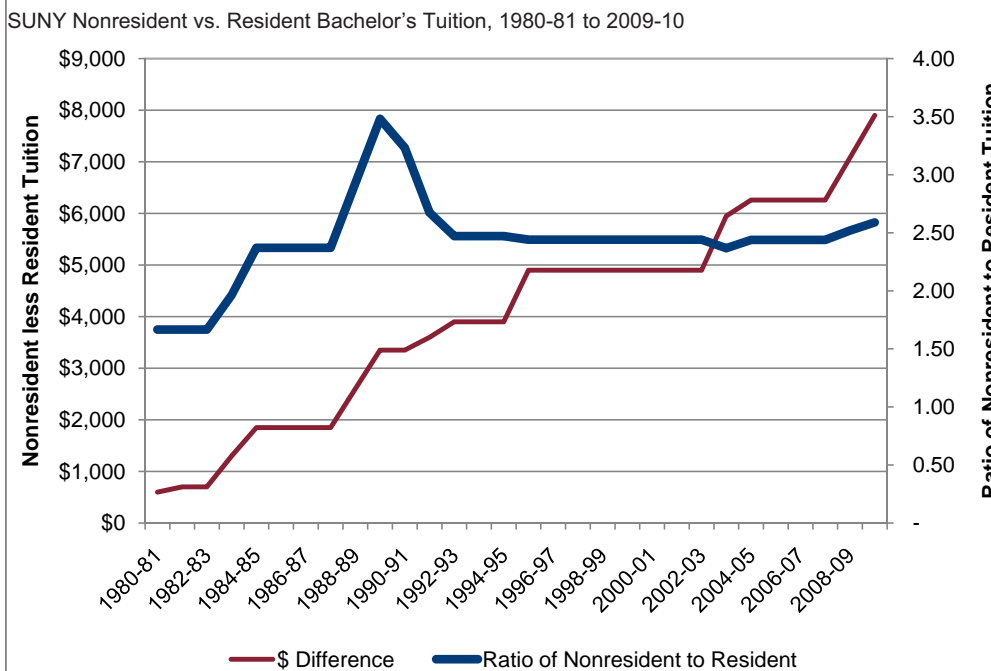
The top five states were, in order, New Jersey, Pennsylvania, Connecticut, Massachusetts and Vermont. Though more distant, the populous states of California, Florida, and Texas also sent large numbers of

Figure 1. SUNY Draws Many Nonresident Students from Neighboring and Large States

Origin of US Nonresident SUNY Students



Source: SUNY Student Data File (SDF), Fall 2008.

Figure 2. Nonresident-to-Resident Tuition Ratio Has Been Between 2.4 and 2.7 Since 1991

Source: SUNY System Administration Budget Office records. Authors' calculation of ratio.

students. Thirty-two states send fewer than 50 of their residents to SUNY.

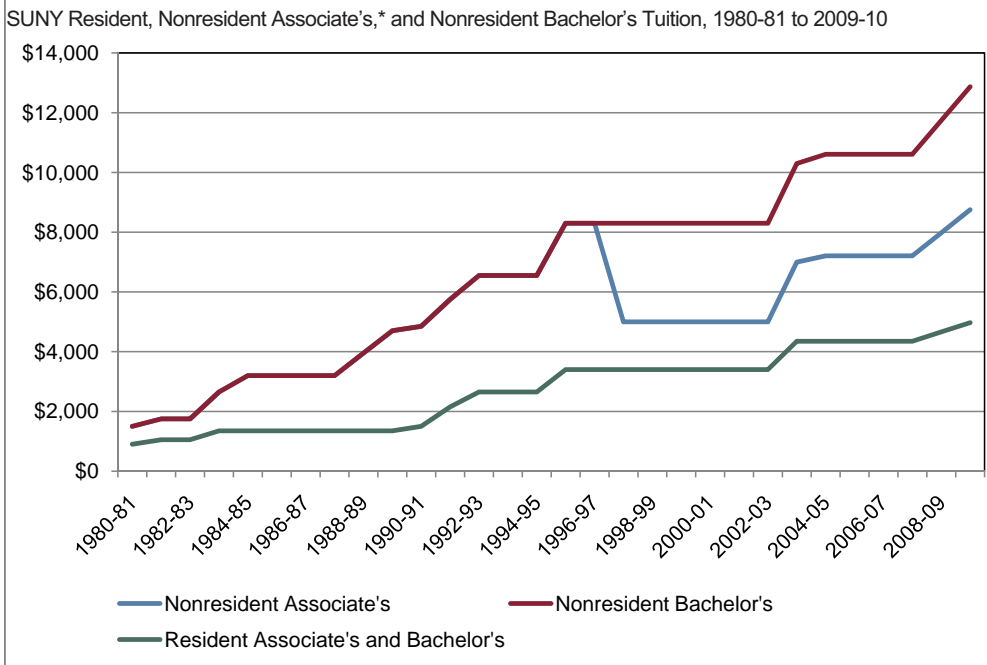
Under state law, SUNY has the authority to set "different tuition rates based on state residency."¹⁴ Over the past 30 years, SUNY has charged nonresident students an average of 2.4 times more than resident students, as shown in Figure 2. A spike in the late 1980s and early 1990s sent the ratio to 3.5 before it settled into the 2.4 to 2.7 range since 1991-92. The 2009-10 nonresident tuition rate is \$12,870 – which is \$7,900 and 2.6 times the

resident tuition rate of \$4,970.

SUNY's resident tuition (the denominator in that ratio) is comparatively low, which helps to boost SUNY's nonresident-to-resident tuition ratio higher than most of its neighbors'. So, for example, the ratio is just 1.7 in New Jersey and Pennsylvania, where resident tuition tops \$9,500. Vermont's and Massachusetts's ratios are similar to one another, at 2.1 and 2.2, respectively, although Vermont's nonresident tuition and fees are among the highest in New England. Even though Connecticut's nonresident tuition rates (\$18,400) are the highest in the region, Connecticut has a nonresident-to-resident tuition ratio of 2.6, the same as SUNY's.¹⁵

SUNY campuses do not automatically get to keep and spend their tuition revenues. Tuition rates – for both residents and non-residents – have historically been set as part of the state budget process. Tuition revenues are paid into the state's treasury. SUNY itself can only spend the money if the state Legislature appropriates it for campus use – and on occasion, as with the resident tuition increase last year, the Legislature in effect captures some or all of the increased revenues for general purposes, reducing General Fund (taxpayer) support for SUNY by an amount that offsets some or all of the increased tuition receipts. Once an appropriation is made, SUNY's Board of Trustees and its central administration distribute the appropriated funds to individual SUNY institutions. Under current SUNY policy, each campus is reimbursed for the full amount it raised in tuition and fees. SUNY distributes the remaining state operating support to campuses based on enrollment by discipline and

Figure 3. Nonresident Tuition Has Increased More Frequently Than Resident Tuition



Source: SUNY System Administration Budget Office records.

Table 2. SUNY's Undergraduate Tuition Rates, Selected Years, 1980-81 to 2009-10

	1980-81	1985-86	1990-91	1995-96	2000-01	2005-06	2009-10
Nonresident Associate's*	1,500	3,200	4,850	8,300	5,000	7,210	8,750
Nonresident Bachelor's	1,500	3,200	4,850	8,300	8,300	10,610	12,870
Resident Associate's and Bachelor's	900	1,350	1,500	3,400	3,400	4,350	4,970

Source: SUNY System Administration Budget Office records.

* Note to Figure 3 and Table 2: In 1997-98, SUNY adopted a lower nonresident tuition rate for associate's degree students. (New York State Education Law §355(2)(h)(4) provides that SUNY can charge different tuition rates for different degrees.) This was done in an effort to increase nonresident enrollment at its associate's-degree-granting Technology Colleges, which were struggling with low enrollment and were in the process of morphing into bachelor's-degree-granting institutions. For a list of SUNY's Technology Colleges, see Appendix B.

level, to reflect differences in costs.

Not surprisingly, increases in nonresident tuition have tended to occur in economic downturns when state tax receipts fall and state tax support for SUNY is cut. As shown in Figure 3, nonresident tuition has increased more frequently than resident tuition – 13 times since 1980-81 – and more steeply.¹⁶ Nonresident bachelor's tuition has increased more than 850 percent since 1980-81, from \$1,500 to \$12,870, as shown in Table 2, while resident tuition has increased 550 percent, from \$900 to \$4,970. Inflation, as measured by the Consumer Price Index, was 162 percent over the same period.

These patterns at SUNY echo national trends. During the early and mid-1990s – and again during the economic downturn of the

early 2000s – state support for public higher education shrank in inflation-adjusted terms nationwide. In response, public universities increased their reliance on tuition revenues, especially nonresident tuition, with rate increases that outpaced inflation. At the same time, states began increasing funding for student financial aid and tuition tax breaks, which helped to lessen political opposition to further tuition increases.¹⁷

No Tuition Differentiation by Institution Type: A SUNY Anomaly

New York law is unusual in that SUNY is required to set a single tuition rate for all nonresident bachelor's degree students.¹⁸ Fees vary somewhat by campus, but all bachelor's degree students must be charged the same tuition, regardless of the type of institution they attend. (See Table 3, which groups SUNY institutions by the type of degrees awarded.) South Dakota, Alaska, and

Table 3. Categorization of SUNY State-Operated Campuses

Institution Type	General Description	SUNY State-Operated Institutions
Doctoral-Granting/ Research Universities	Institutions that award at least 20 doctoral degrees per year. SUNY's University Centers fall primarily into this category.	Albany, Binghamton, Buffalo, Downstate Medical, Environmental Science and Forestry, Stony Brook, Upstate Medical
Master's-Granting Colleges and Universities	Institutions that award at least 50 master's degrees, but fewer than 20 doctorates. SUNY's Comprehensive or University Colleges fall primarily into this category.	Brockport, Buffalo State, Cortland, Empire State, Fredonia, Geneseo, New Paltz, Oswego, Oneonta, Plattsburgh, Potsdam, SUNY IT
Bachelor's-Granting Colleges	Institutions where bachelor's degrees accounted for at least 10 percent of all undergraduate degrees and where they awarded fewer than 50 masters degrees per year. This category is made up primarily of SUNY's Technology Colleges.	Alfred State, Canton, Cobleskill, Delhi, Farmingdale, Maritime, Morrisville, Old Westbury, Purchase
No undergraduate programs		College of Optometry

Source: Categorization based on Carnegie classification system, with modifications by authors. For further explanation, see Appendix B.

Idaho are the only other states with doctoral and master's institutions that do not vary price by institution type.

By contrast, in many states, nonresident undergraduate tuition and fees are set and adjusted in light of market considerations, which change over

time and can be unique for each individual institution. What do competing institutions charge? What price are prospective students willing to pay? How much revenue does the institution need to generate in tuition and fees? Research institutions with doctoral programs require high-cost facilities, and may want to see that fact reflected in their tuition charges. Many public institutions also charge higher tuition for particular programs that cost more to offer, and that lead to higher-paying jobs upon graduation, such as engineering.

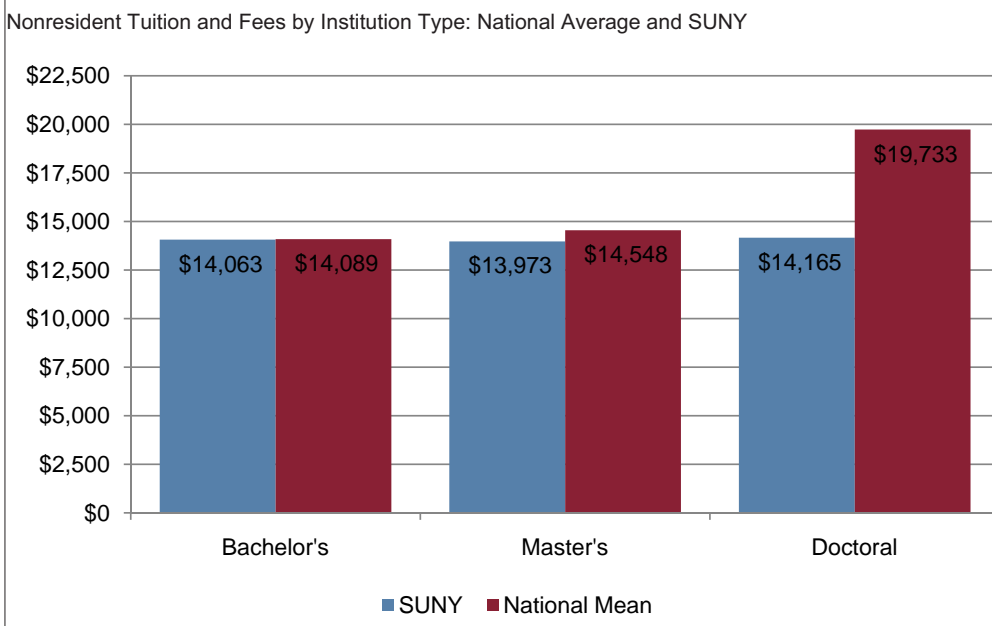
Comparing SUNY's Nonresident Tuition and Fees

At around \$14,000 in 2009, SUNY's nonresident tuition and fees for undergraduates at bachelor's and master's institutions are in line with national averages. As Figure 4 illustrates, however, the national average for doctoral institutions is much higher than

what SUNY charges nonresident undergraduates at its research institutions. Table 4 shows that SUNY's undergraduate tuition and fees are 28 percent below the national average for doctoral institutions – a difference of almost \$5,600.

SUNY is also distinctive in the small difference in nonresident rates between doctoral and bachelor's institutions. On average, doctoral institutions nationwide charged nonresident undergraduates an average of about \$5,650 more than

Figure 4. SUNY's Bachelor's and Master's Institutions Are In Line With National Averages



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Table 4. SUNY Doctoral Institutions Charge 28 percent Less Than National Average
Nonresident Tuitions and Fees by Institution Type

Carnegie Group	SUNY		National		Difference	
	Number of Institutions	Mean	Number of Institutions	Mean	SUNY - Natl	%
Bachelor's	9	\$14,063	129	\$14,089	-\$26	0%
Master's	12	\$13,973	249	\$14,548	-\$575	-4%
Doctoral	7	\$14,165	175	\$19,733	-\$5,568	-28%

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institutions offering only bachelor's degrees. At SUNY, this difference was just \$102. (As noted above, SUNY does not have the authority to charge differential tuition rates for nonresident students; the difference between charges –

that is, the \$102 – is the result of different fees.)

Figure 5 compares SUNY's nonresident tuition with average rates in nearby regions.¹⁹ The most dramatic comparison is at doctoral-level institutions. SUNY's nonresident doctoral tuition and fees are \$6,800 below the Great Lakes average, \$7,000 below the Mid East average, and \$11,000 below the New England average. By contrast, tuition at SUNY's bachelor's-level institutions is \$700 higher than the Great Lakes regional average, and tuition at SUNY's master's-level institutions is just \$1,100 to \$2,000 lower than regional averages.

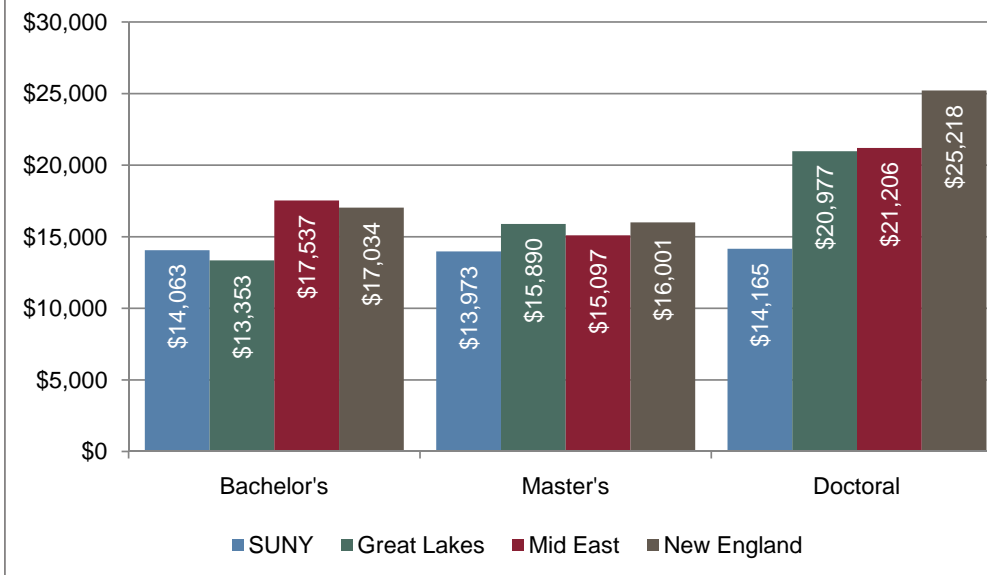
In every region, doctoral campuses are priced thousands of dollars higher than master's and bachelor's campuses. Again, it is interesting to compare this with the small difference in nonresident rates between SUNY's doctoral and bachelor's institutions (just \$102). In the Mid East region, nonresident tuition is almost \$3,700 higher at doctoral institutions than at bachelor's institutions; in the Great Lakes region, the difference is \$7,600; and in New England, the difference is almost \$8,200.

Comparing Nonresident Tuition Levels at Doctoral/Research Universities

Approximately 7,000 – or 60 percent – of SUNY's nonresident students are enrolled at its research campuses. Nonresident tuition and fees at SUNY's research campuses are among the lowest in the nation. The map in Figure 6 shows the highest doctoral tuition and fees for each state. New York is

Figure 5. SUNY's Doctoral Tuition and Fees Are Far Below Regional Averages

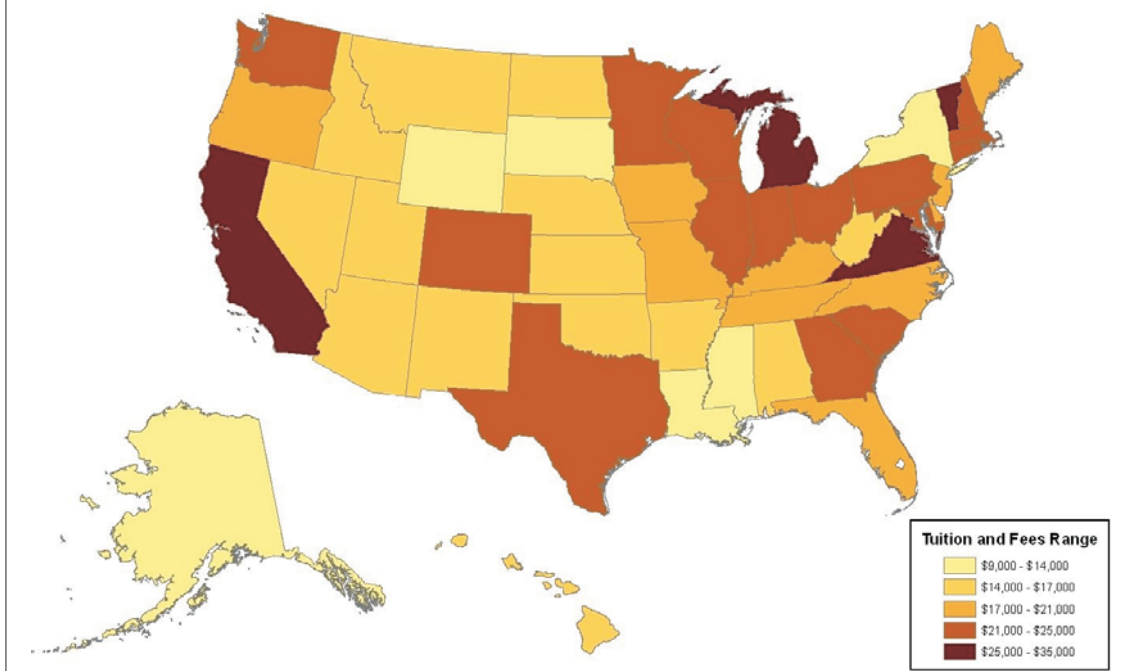
Nonresident Tuition and Fees by Institution Type: Regional Average and SUNY



Source: Annual Survey of Colleges 2009. Copyright © 2009 The College Board. This material may not be copied, published, rewritten or redistributed without permission. Note that SUNY was excluded from calculation of the Mid East regional average.

Figure 6. SUNY's Nonresident Tuition Is Among the Nation's Lowest

Highest Nonresident Doctoral Tuition and Fees by State



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in the bottom group. Strikingly, all of New York's neighboring states charge much higher rates. New York ranks 45th out of the 50 states. Only Alaska, Wyoming, South Dakota, and Mississippi have lower nonresident undergraduate tuition and fee rates for doctoral institutions than New York.

Two of SUNY's cam-

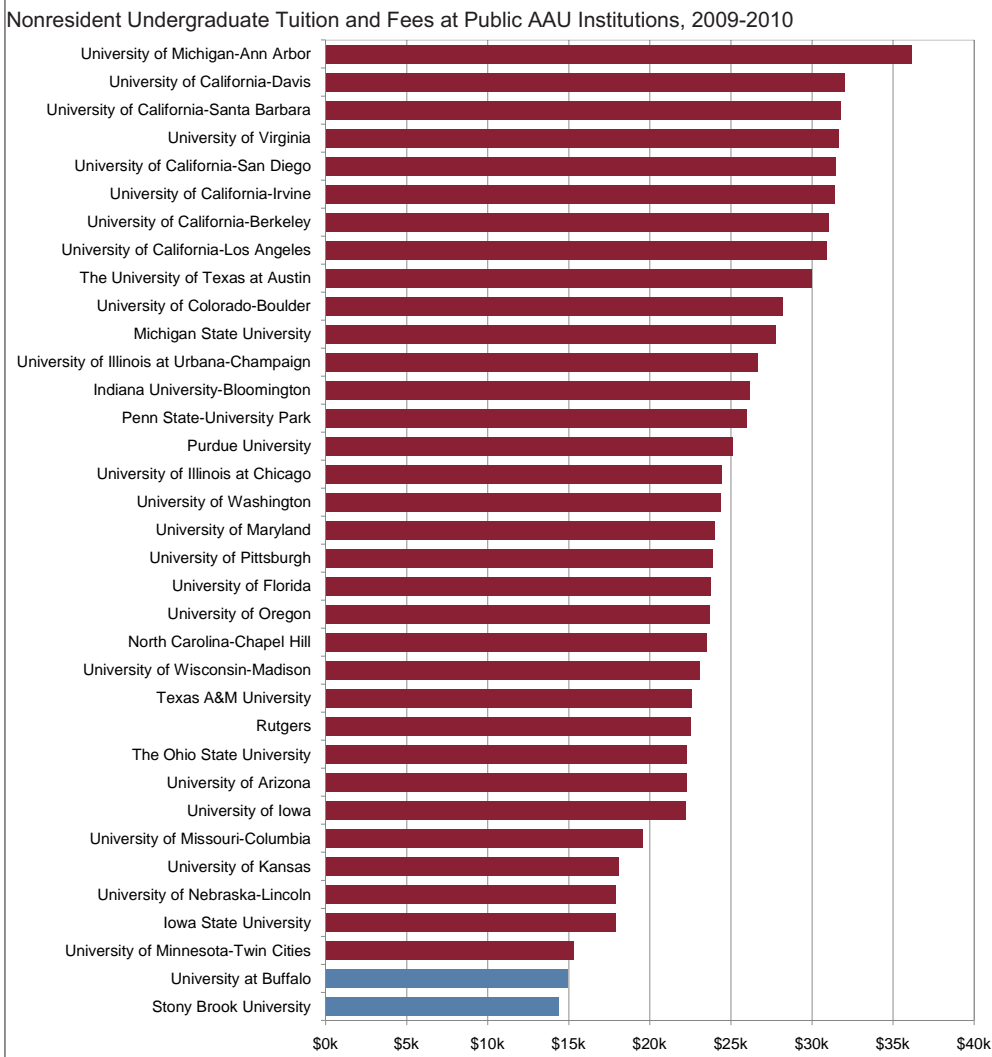
pus, Buffalo and Stony Brook, are members of the Association of American Universities (AAU), a group of 62 leading public and private research universities.²⁰ The comparison of nonresident tuition and fee charges between SUNY's AAU members and other publics, shown in Figure 7, is revealing. Buffalo and Stony Brook have the lowest nonresident tuition among public AAU peers. The median AAU institution is priced at \$23,990, more than \$9,000 higher than the nonresident charges at Buffalo and Stony Brook.

Effects of Nonresident Tuition Changes on Revenues and Enrollment

Increases in SUNY's nonresident tuition rate have been proposed as a means of increasing revenues.²¹ However, a nonresident tuition increase will not necessarily increase revenues. This is because prospective students are essentially customers who are going to decide to enroll only if they think the education they will receive is worth the asking price. If the price goes too high, enrollment could drop enough to cancel out the increased revenue per student.

Three effects could be observed if nonresident tuition and fees rise: demand could drop, stay the same, or increase. Economists use the term *elasticity* to describe how demand for a product changes in relation to changes in its price. An inelastic good is one

Figure 7. SUNY Has the Lowest Nonresident Tuition in the AAU



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for which the price increases result in only a small change in demand. These goods are essentials such as food, shelter, and medicine. A highly elastic good is one for which the quantity demanded drops sharply in response to a small increase in its price. Typically, these are non-essential goods or services that are not needed in daily life (i.e. luxury goods). Consumers may respond to price increases in an elastic good by substituting another good in its place. Similarly, when consumers' income drops, they may substitute a less costly alternative for a non-essential good. Margarine and butter are classic examples of substitutes for each other. Nonresident students will always consider the option of substituting education from a lower cost institution in their own state for their SUNY education.

Typically, consumers do not consume more of a good as its price rises. However, as price increases, so does demand for certain high-end goods. These so called Veblen goods, such as luxury cars, become more desirable if priced higher. In some instances, high tuition and fees are seen as denoting high quality. This phenomenon has been observed at nationally ranked, public flagship institutions.²² The far more typical student response to increases in nonresident tuition and fees would be a decrease in demand, however.

Factors that Determine Nonresident Enrollment Demand

Estimates of the elasticity of demand for nonresident students vary widely, depending on whether they are estimated for a national sample of institutions, for a particular state, or for an individual institution. For example, one study that used states as

Is New York Subsidizing Nonresident Students?

Higher education is a very competitive enterprise. Unlike for-profit firms, however, colleges and universities always sell their product (an education) to their customers (students) below their cost of production. They are able to do this because society values an educated populace and subsidizes the price to encourage more people to buy it. These subsidies take many forms. Private gifts are used to cover operating expenses and build endowments. Especially in the case of public institutions, governments subsidize higher education through tax support. Citizens generally support these tax-funded subsidies for residents of their own state. Support for subsidizing the education of nonresidents is likely not as widespread and has been the subject of recent concern.

Is there a “subsidy”? One way of addressing that is to look at the average state support per student and compare that to the difference between nonresident and resident tuition. If the difference between nonresident and resident tuition is less than state support per student, then it’s likely a subsidy exists. Given recent reductions in state tax support for SUNY and the 2008-09 mid-year nonresident tuition increases, it is unlikely that, on average, New York taxpayers are subsidizing nonresident SUNY undergraduates. Some students may be receiving a subsidy at a small minority of campuses.

However, for a university trying to decide whether to admit, or not admit, additional nonresident students, the real issue is the marginal cost associated with each additional student. That is, how much extra does it cost the university to serve one additional student — or, conversely, how much might it save if it admitted one student less — and how does that compare to the tuition revenue brought by that single student?

Estimating marginal costs is a complicated analytical task and is beyond the scope of this report. But the question itself illustrates the complexities inherent in identifying a tuition level or levels that will bring the maximum economic benefit to the SUNY system.

the unit of analysis found an elasticity of -0.75 to -0.9.²³ A recent study of the Pennsylvania state system estimated that the elasticity of nonresident student demand in response to changes in tuition was -1.15 (see sidebar on page 12).²⁴ Another recent study that focused on the University of Oregon found that a 1 percent increase in price yielded a 0.62 percent decrease in the probability that a nonresident applicant would enroll at the university.²⁵

Researchers have found that nonresident demand depends on many factors. For example, institutions that have large applicant pools and can therefore be more selective in admitting students are likely to be able to raise nonresident tuition somewhat without losing enrollment or lowering admissions standards. Institutions that are stronger academically generally have an easier time attracting nonresident students and can charge them higher tuition without losing enrollment.²⁶ An institution’s participation in intercollegiate sports has also been found to be an important determinant of nonresident student demand.²⁷

Nonresident students are less attracted to institutions located in areas where the prospects for future employment are weak, and nonresident tuition rates tend to be lower in areas with higher unemployment.²⁸ Similarly, regions that are losing population, particularly college students, stand to gain by attracting potential future high-income residents, and thus tend to charge lower nonresident tuition.²⁹

The Pennsylvania State Experience

When the Pennsylvania State system almost doubled nonresident tuition between 1990 and 1996 (with annual increases of almost 20 percent per year between 1991 and 1993), it lost approximately 40 percent of its nonresident student population. Researchers studying the case estimated that the elasticity of nonresident student demand in response to changes in tuition was -1.15. In other words, nonresident student demand appeared to be elastic.

A case study revealed that the lost nonresident student enrollment was not replaced by additional resident enrollment, and that this resulted in substantial excess capacity and a significant reduction in revenues. Declines in nonresident student enrollment shifted more of the costs to state taxpayers and in-state students.

Source: Abbas Noorbakhsh and David Culp, "The Demand for Higher Education: Pennsylvania's Nonresident Tuition Experience," in *Economics of Education Review* 21 (2002): 277-286.

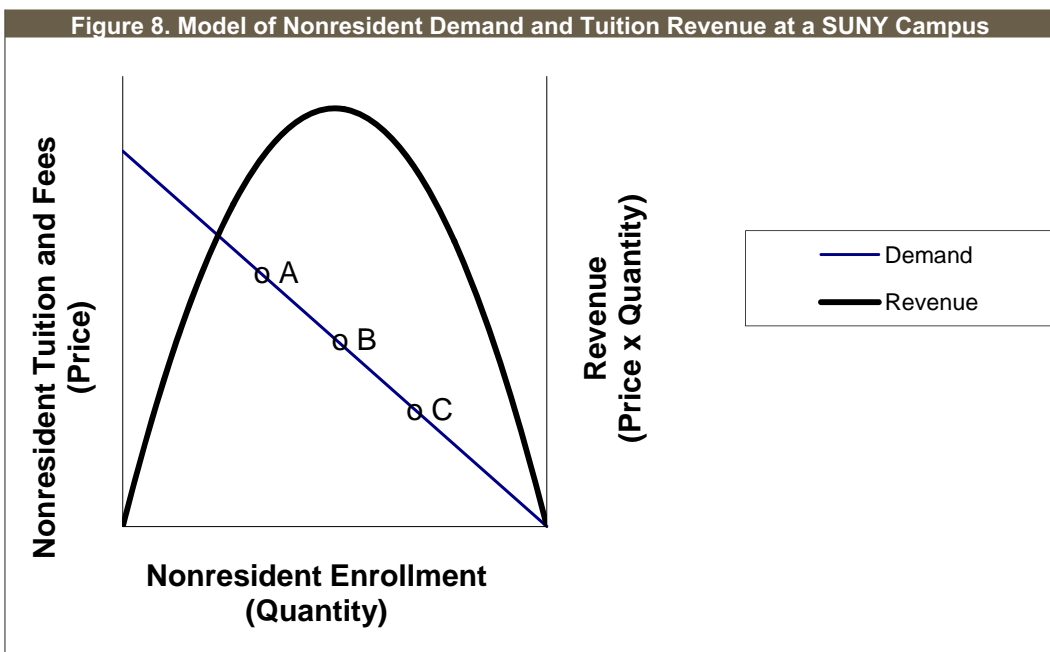
Estimated Effects of Nonresident Tuition Changes on SUNY's Enrollment and Revenues

A recent study of nonresident tuition, which estimated the elasticity of demand separately for each state as well as for individual institutions, found that increases in New York would lead to a decrease in out-of-state student enrollment. The study estimated that each 1 percent increase in nonresident tuition and fees results in a 0.98 percent decrease in enrollment demand.³⁰

Figure 8 is a graphic depiction of how changes in SUNY's nonresident tuition might affect enrollment and gross revenue. The downward-sloping line represents a demand function, while the arched line represents total revenue (price x quantity) for each point on the demand curve. Because each SUNY institution faces a unique competitive environment, the slope – or *elasticity* – of the demand curve would be different for each institution. According to this model, a SUNY campus that is charging just the right

amount to nonresident students is at point B, the revenue-maximizing point; any increase or decrease in tuition would cause revenues to decline. A SUNY campus that is charging a relatively low level of nonresident tuition compared to its competition might be at point C; if it increased nonresident tuition to level B, the campus would see a slight

Figure 8. Model of Nonresident Demand and Tuition Revenue at a SUNY Campus



drop in nonresident enrollment but an increase in nonresident tuition revenues. Perhaps most interestingly, a campus that is at point A is currently charging too much; if this campus were to decrease its nonresident tuition, more nonresident students would enroll and revenues would go up.

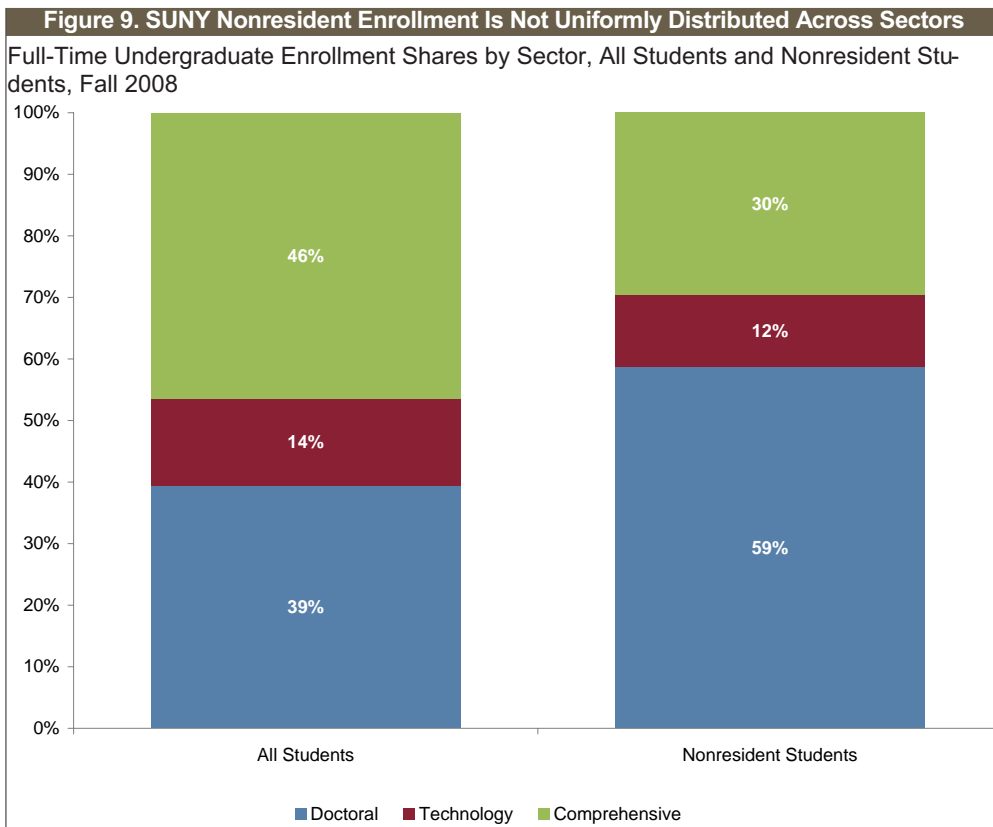
Note that tuition and fees are not the only revenues brought into SUNY by nonresident students. Student expenditures on living expenses are discussed later in the report. On-campus spending on room and board, books and supplies, entertainment, and laundry help to pay the debt service on residence halls and employ residence hall and food service workers.

Differential Effects Across SUNY Campuses

The effects from increases in nonresident tuition rates would vary across SUNY’s campuses, for two reasons.³¹ First, nonresident enrollment is not uniformly distributed across SUNY sectors and campuses. SUNY’s doctoral-granting University Centers enrolled almost 7,700 nonresident undergraduates in Fall 2008, or 59 percent of the SUNY-wide total – a disproportionately large share, as shown in Figure 9; therefore, any change in nonresident tuition rates would have a greater effect at those campuses. SUNY’s Comprehensive sector enrolled 30 percent of nonresident students – a substantial number of students, but a relatively small share in comparison with the sector’s total full-time undergraduate enrollment.

The Technology Colleges enrolled just 12 percent of SUNY’s nonresident students in Fall 2008.

Second, demand at individual institutions varies depending on programs offered, perceived quality, and other tangible and intangible factors. If the reduction in demand from price increases were uniform across sectors, we might expect the doctoral sector to bear approximately 59 percent of the revenue decrease associated with a substantial nonresident tuition increase. But the pattern of enrollment can also be viewed as nonresident students’ willingness to pay for the



Source: SUNY Student Data File (SDF), Fall 2008.

To maximize nonresident tuition revenue, SUNY would need to take market forces into account in setting rates.

education provided by these sectors at the Fall 2008 price. It follows, therefore, that nonresident demand at doctoral universities is less elastic than for the SUNY as a whole, and that demand is more elastic for Comprehensive and Technology colleges. This conclusion is consistent with research that suggests that SUNY's doctoral campuses and more selective campuses could raise their rates somewhat without a significant loss of out-of-state students or revenue.³² Of course, given the great diversity of institutions within each sector, it is possible that demand at individual institutions is more or less elastic than statewide or sector means.

To maximize nonresident tuition revenue, SUNY would need to take market forces into account in setting rates. Since SUNY currently sets a single nonresident tuition price for all campuses, it cannot maximize revenue.³³ Tuition increases disproportionately impact some campuses, making it difficult to aid campuses that could charge higher rates without harming other campuses. In fact, some campuses might find that charging a lower rate might maximize revenue. This was the case for the technology colleges when a lower associate's degree rate was approved for the 1997-98 academic year.

Potential Counter-Effects of Changes in Numbers of High School Graduates

In October, the National Center for Education Statistics (NCES) forecast that, based on school enrollment and other trends, the number of high school graduates coming out of New York's schools every year will decline for at least the next decade – dropping 11 percent by 2019, the seventh largest decline in the country. That could lead to a decline in in-state enrollment and tuition revenues.

But the NCES report also forecast dramatic surges in the numbers of graduates pouring out of high schools in states that are already having a hard time increasing the capacity of their university systems to keep up with demand. These include Florida (where the number of high school graduates is expected to increase 23 percent), Virginia (+18 percent), North Carolina (+33 percent), and Georgia (+41 percent). As we saw in Figure 1, all of those states currently send significant numbers of students to SUNY. When their young people face closed doors or overcrowding at their state schools in the years to come, they are likely to apply to SUNY in even greater numbers.³⁴

Effects of Nonresident Tuition Changes on New York's Economy and Demographics

A precise analysis of the likely economic and demographic effects of nonresident students was beyond the scope of this study. Economic impact would need to be analyzed separately for each region of interest, and surveys of nonresident students and graduates would probably be necessary. The literature and data we reviewed, however, suggest that decreasing SUNY's enrollment of

Nonresident students at SUNY are bringing out-of-state dollars that would not otherwise come to New York.

nonresident students could have a negative impact on the economy and demographics of New York State, whereas increasing enrollment could have a positive impact – particularly in regions where the young adult population is declining. Consideration must be given to both the economic impact of nonresident students while they are enrolled at SUNY, and their impact on the economy and demographics after graduation.

Economic Impact While Enrolled at SUNY

Nonresident students bring “new” money to, and generate economic activity within, New York State – particularly the regions where their campuses are located – both because of what they pay to their colleges and because of what they spend on living here.

To find out how much, we can begin by asking how much better off local residents and economies are than they would be if those nonresident students had not come to SUNY.³⁵ In some cases a nonresident student who was not admitted to a SUNY campus might nonetheless come to New York to attend a private college. But in all other cases, nonresident students at SUNY are bringing out-of-state dollars that would not otherwise come to New York.

The first step is to calculate how much a typical nonresident student spends in the region each year. This would include tuition, currently \$12,870, plus fees, room and board, books and supplies, living expenses such as laundry and gasoline, and discretionary spending. (To the extent that the Legislature captures SUNY nonresident tuition for general purposes, the regional economic benefit is lessened.) If a student’s friends and family come to visit from outside the region, their spending – on accommodations, entertainment, dining, shopping, and transportation – can be counted as well. Because nonresident students pay \$7,900 more in tuition than in-state students, and are more likely to have visitors from outside the region, each additional nonresident student that SUNY enrolls will, on average, have a greater economic impact than an additional in-state student.

Some estimates of SUNY students’ off-campus spending are available. An analysis at the University at Buffalo found that each student (whether from in or out of state) spent an average of nearly \$7,000 in Western New York per year, on items such as rent, food, transportation, books and supplies, and personal items.³⁶ An analysis of Stony Brook University’s impact on the Long Island economy found that each full-time student living off campus spent \$13,520 per year on off-campus items, and that overnight visitors accounted for an additional \$300 per student per year.³⁷ (Both the Buffalo and Stony Brook analyses were for academic year 2005-06.)

This new spending ripples through the local economy, creating income for other firms and individuals, who respense some of the additional dollars in the region or state, thereby “multiplying” the original amount.³⁸ The larger the geographic area under

Data show that college-educated adults are not moving to upstate New York and Long Island fast enough to make up for out-migration of young, prime-age workers.

consideration, the larger the appropriate multiplier. This is not to suggest that total economic impacts are many times larger than the initial spending, however; regional multipliers are typically between 1.0 and 2.0.³⁹ The UB Regional Institute used an overall regional multiplier for the University's economic impact of about 1.28. If that multiplier were applied to the nonresident student's tuition plus incidental spending, the Regional Institute's numbers would indicate that each nonresident student at UB has an annual economic impact in the region of about \$25,400 — or about \$10,000 more than a student who comes from within the state but outside the region.

Impact of Nonresident Students Who Remain in New York After College

Nonresident students who stay in the region after they graduate from SUNY contribute further to the regional economy. But these contributions are difficult to estimate, in part because we have identified no studies that have determined the places where SUNY nonresident students settle after they graduate, and, hence we do not know how many stay within the state.

Studies have generally found that significant numbers of nonresident students remain in a host state after graduation.⁴⁰ The most comprehensive such study found that, 15 years after college, 17 percent of students who attended college outside their home state ended up working in the state where they attended college. Furthermore, the study found that students who attend public rather than private institutions were more likely to end up working in the state where they attended college, perhaps because they tended to meet more students with ties to that state.⁴¹ Another study, which identified seven states as "high attractors" and labeled the other 43 (including New York) "low attractors," according to the percentage of college students coming from out of state, found that, on average, around 10 percent of out-of-state graduates stayed in low-attractor states after graduation.⁴²

Assuming a number of graduates from out-of-state do remain, to what extent does their addition to the population benefit existing residents in terms of tax revenues, employment, and income?

The impact is difficult to predict. It is possible that these new graduates will create increased competition for a limited number of jobs, thereby making existing residents worse off in terms of employment, and leaving tax revenues unchanged. However, one study that modeled the future tax payments of 1976 college entrants found that states would have gained more in expected future state tax revenues by admitting an additional nonresident student than by admitting an additional in-state student.⁴³ Whether this would hold true for SUNY today would depend, in part, on the qualifications of nonresident students. Better qualified students would likely command higher future earnings and thus pay more in taxes over a lifetime.

Furthermore, the number of jobs in a region is not fixed. Employers may decide to locate — or remain — in the region based

Table 5. Upstate New York and Long Island Are Losing Young Workers

Population in the 25-34 Age Cohort, 1990 and 2000				
	25-34 Age Cohort		# Change	% Change
	1990	2000		
New York State	3,138,188	2,757,324	-380,864	-12%
Upstate New York*	1,136,900	864,676	-272,224	-24%
Albany County	49,399	39,421	-9,978	-20%
Broome County	35,515	22,740	-12,775	-36%
Erie County	159,712	119,168	-40,544	-25%
Monroe County	126,091	97,480	-28,611	-23%
Nassau County	202,625	162,568	-40,057	-20%
Oneida County	41,164	29,497	-11,667	-28%
Onondaga County	81,449	58,488	-22,961	-28%
Suffolk County	227,777	191,695	-36,082	-16%
Long Island	430,402	354,263	-76,139	-18%

* Defined as New York State north and west of Westchester, Putnam, and Rockland Counties.
Sources: U.S. Bureau of the Census; New York State Data Center.

on whether there is an adequate supply of skilled labor. An increase in the percentage of a local labor force that is college-educated has also been associated with higher incomes for local workers who are not college-educated — perhaps because a higher percentage of college-educated workers leads to faster adoption of new technologies and greater productivity growth.⁴⁴ Thus, the addition of out-of-state graduates

to the labor supply may help to improve economic opportunities for local residents.⁴⁵

In fact, data show that college-educated adults are not moving to upstate New York and Long Island fast enough to make up for out-migration of young, prime-age workers. “In 1980, upstate New York’s age distribution was virtually identical to the nation’s. Yet by 2000, upstate had a greater share of its population over sixty-five than the nation had, as well as a corresponding lower percentage in younger age groups,” a 2005 report by the Buffalo branch of the Federal Reserve reported.⁴⁶ As shown in Table 5, between the 1990 and 2000 Censuses, upstate New York’s population in the 25-34 age cohort dropped by more than 272,000, or 24 percent, and Long Island’s 25-34 age cohort dropped by 76,000, or 18 percent.

The Federal Reserve report explained the economic implications of this trend. “As baby-boomers reach retirement age, the trend will tend to reduce the availability of labor — especially in high-skill occupations — as fewer younger workers will be on hand to replace retirees.”⁴⁷

The Federal Reserve concluded in a subsequent 2007 report that the drop in the young adult age cohort upstate was not attributable to unusually high rates of out-migration. “Upstate New York’s out-migration rate of 13.4 percent is roughly equivalent to the 13.5 percent median across states,” the report said. Instead, New York lost ground because of low rates of in-migration. “If upstate New York were a state, it would have the nation’s lowest in-migration rate, 9.3 percent,” the report said. “Compared with U.S. states, upstate New York’s net outflow of college-educated workers reflects a lack of a ‘brain gain’ rather than unusually large ‘brain drain.’”⁴⁸

Discussion

Our research has demonstrated that SUNY's competitive position varies significantly by type of campus — its current nonresident prices at nondoctoral institutions are quite close to other states', whereas charges at doctoral institutions are well below average. So the effects of a uniform nonresident tuition increase would likely vary by type of campus as well. An across-the-board increase might generate substantial additional revenues at certain campuses, which could be invested in improving educational quality. At other campuses, however, it might lead to a decline in the size and qualifications of the nonresident applicant pool, as well as reductions in nonresident enrollment, which could, in turn, produce reductions in total revenues and losses to the regional economy.

How might a nonresident tuition increase affect academic quality? On the one hand, it is possible that fewer students would apply if nonresident tuition were raised, and that many of those opting not to apply would be those with stronger academic qualifications and a greater likelihood of getting into other institutions; this would leave SUNY with a smaller pool of less-qualified applicants.⁴⁹ Any departments or programs that tend to rely on nonresident students to boost enrollment would be particularly at risk. To help counteract such an effect, SUNY campuses could announce a corresponding increase in scholarship aid for the strongest nonresident students, or for those interested in specific programs.⁵⁰ On the other hand, there are ways in which a nonresident tuition increase might help SUNY attract stronger applicants — if the higher price were to generate increased revenue, and if the campuses were able to use the revenue to upgrade facilities, attract and retain top faculty, and take other steps to strengthen educational quality.

If the State University reexamines nonresident tuition policy, it is unlikely to be able to predict in advance exactly what approach to tuition for nonresident students is most likely to benefit each campus, the system, and the state. An attempt to do so would require that the system perform campus-specific analyses to get a more precise estimate of how nonresident enrollment would change in response to changes in tuition or fees. A large number of variables would come into play — how SUNY's nonresident tuition and fees compare to the in-state charges at campuses in the states and countries from which each campus attracts (or wishes to attract) nonresident students; the size and quality of the applicant pool at each campus; the selectivity of the SUNY campus compared to the competing institutions in other states; the perceived quality or ranking of out-of-state institutions that charge more (or less) than a SUNY campus competing with them; the size of current and future high school graduating classes in this and competing states; and other factors that might be expected to influence the desirability of the SUNY campus vis-à-vis competitors,

How might a nonresident tuition increase affect academic quality? Any departments or programs that tend to rely on nonresident students to boost enrollment would be particularly at risk.

such as athletic teams, the number of majors offered by the SUNY institution, etc.⁵¹

Given the uncertainties, it may be most fruitful for SUNY to allow some experimentation and variation by its campuses, to see what works. Perhaps more flexibility would enable the system to raise revenues at some doctoral campuses while avoiding the economically and educationally deleterious effects such increases might have at other campuses.

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Endnotes

- 1 Office of the State Comptroller, *SUNY Tuition: Low Out-of-State Tuition Results in Millions of Dollars in Lost Revenue* (September 2009).
- 2 The costs of attending a public higher education institution include not only tuition and fees, but also auxiliary items such as room and board, books and supplies, transportation and other miscellaneous expenses. States generally do not subsidize auxiliary services, however, and public higher education institutions therefore have not charged differing rates based on residency. Because this portion of our study focuses on the cost differential that nonresident students face, our cost comparisons focus solely on tuition and fees. For more on this, see **Appendix A**.
- 3 Scott Jaschik, "Out-of-State Dreams," *Inside Higher Ed* (October 16, 2009).
<http://www.insidehighered.com/news/2009/10/16/outofstate>
- 4 Michael J. Rizzo and Ronald G. Ehrenberg, "Resident and Nonresident Tuition and Enrollment at Flagship State Universities," in *College Choices: The Economics of Where to Go, When to Go, and How to Pay for It*, ed. Carolyn M. Hoxby, 303-354 (Chicago: University of Chicago Press, 2004), 304.
- 5 Similarly, private universities in Japan are actively increasing enrollment of foreign students in response to shifting demographics which has reduced the number of native 18-year-olds, leaving them with excess capacity. David McNeill, "Enrollment Crisis Threatens Japan's Private Colleges," *The Chronicle of Higher Education* (October 25, 2009).
- 6 Data compiled by the authors from the IPEDS Enrollment, Residence Migration data. See also Rizzo and Ehrenberg, "Resident and Nonresident Tuition," 307.
- 7 Kenneth V. Greene, "The Public Choice of Non-Resident College Tuition Levels," in *Public Choice* 78 (1994) : 234; Jaschik, "Out-of-State Dreams."
- 8 See Jeffrey A. Groen and Michelle J. White, "In-State Versus Out-of-State Students: The Divergence of Interest Between Public Universities and State Governments," in *Journal of Public Economics* 88 (2004): 1794 (public universities set higher admissions standards for nonresident applicants).
- 9 James F. Fryman, "Factors in the Interstate Migration of College Students," in *College and University* (Spring 1988): 246 (around 65 percent of football players in Iowa public universities in Fall 1984 were nonresidents).
- 10 James N. Morgan, "Tuition Policy and the Interstate Migration of College Students," in *Research in Higher Education* 19, 2 (1983): 183; Michael A. Olivas, "Administering Intentions: Law, Theory, and Practice of Postsecondary Residency Requirements," *Journal of Higher Education* (59, 3 (May/June 1988): 264.
- 11 Jeffrey A. Groen, "The Effect of College Location on Migration of College-Educated Labor," in *Journal of Econometrics* 121 (2004): 136-137; Gary Fethke, "Subsidy and Tuition Policies in Public Higher Education," *Economic Inquiry* 44, 4 (October 2006): 645.
- 12 Morgan, "Tuition Policy," 184.
- 13 SUNY's state-operated campuses do not include its community colleges or the state-funded statutory colleges at Cornell and Alfred University.
- 14 New York State Education Law §355(2)(h)(4).
- 15 Ratios for neighboring states calculated by authors, using Fall 2008 data from the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS).
- 16 These increases are on an actual annualized basis. A single Board of Trustees resolution authorizing tuition increase passed mid-year can have the effect of raising the annual rate twice. No attempt was made to count the actual number of resolutions passed by the SUNY Board.
- 17 Roger L. Geiger, *Knowledge & Money: Research Universities and the Paradox of the Marketplace* (Stanford, CA: Stanford University Press, 2004), 44-50; Harold Hovey, *State Spending for Higher Education in the Next Decade: The Battle To Sustain Current Support* (San Jose, CA: National Center for Public Policy and Higher Education, 1999), 20, 28.
- 18 New York State Education Law §355(2)(h)(4) states that "All students enrolled in programs leading to like degrees at state-operated institutions of the state university shall be charged a uniform rate of tuition except for differential tuition rates based on state residency."

- 19 The regions are constituted as follows: Great Lakes (IL IN MI OH WI), Mid East (DE DC MD NJ NY PA), New England (CT ME MA NH RI VT). For purposes of this analysis, we exclude SUNY from the Mid East average.
- 20 For more information on the Association of American Universities, see <http://www.aau.edu/about/default.aspx?id=58>.
- 21 Office of the State Comptroller, *SUNY Tuition*.
- 22 Liang Zhang, "Nonresident Enrollment Demand in Public Higher Education: An Analysis at National, State, and Institutional Levels," in *The Review of Higher Education* 31, 1 (Fall 2007): 1-2.
- 23 Morgan, "Tuition Policy," 191-193.
- 24 Abbas Noorbakhsh and David Culp, "The Demand for Higher Education: Pennsylvania's Nonresident Tuition Experience," in *Economics of Education Review* 21 (2002): 282-283.
- 25 Bradley Curs and Larry D. Singell, Jr., "An Analysis of the Application and Enrollment Processes for In-State and Out-of-State Students at a Large Public University," *Economics of Education Review* 21 (2002): 117.
- 26 Edward A. Baryla, Jr. and Douglas Dotterweich, "Student Migration: Do Significant Factors Vary by Region?" in *Education Economics* 9, 3 (2001): 277-278 (significant correlation between nonresident enrollment and institutional selectivity; institutions with a prestigious reputation may have greater pricing power in attracting nonresident students); Aloysius Siow, "Some Evidence on the Signalling Role of Research in Academia," *Economics Letters* 54 (1997): 274-275 (institutions with more successful researchers tend to have larger shares of nonresident and foreign students); Richard V. Adkisson and James T. Peach, "Non-Resident Enrollment and Non-Resident Tuition at Land Grant Colleges and Universities," *Education Economics* 16, no.1 (March 2008): 86 (higher tuition does not seem to deter nonresident students from attending public institutions that are perceived to be of high quality); Robert K. Toutkoushian, Jacob P.K. Gross, John V. Moore, III, and Donald Hossler, "Effects of Nonresident Market Size on Public Institution Pricing and Enrollments," (October 3, 2007 draft paper for presentation at the annual meeting of the Association for the Study of Higher Education, Louisville, KY, November 8-10, 2007) (institutions whose students have higher SAT scores tend to charge higher tuition to nonresident students); Rizzo and Ehrenberg (2004) (nonresident tuition at state flagship institutions varies with the SAT scores of in-state students).
- 27 Franklin G. Mixon, Jr., and Yu Hsing, "The Determinants of Out-of-State Enrollments in Higher Education: A Tobit Analysis," *Economics of Education Review* 13, 4 (1994) 329-335.
- 28 Toutkoushian et al., "Nonresident Market Size," 15-16; Baryla and Dotterweich, "Student Migration," 278.
- 29 Morgan, "Tuition Policy," 193-194; Greene, "Public Choice," 238.
- 30 Zhang, "Nonresident Enrollment Demand," 23.
- 31 The elasticity of demand for individual SUNY institutions could not be estimated in time for publication of this paper.
- 32 Zhang, "Nonresident Enrollment Demand," 15 -17 (elasticity of demand close to zero for doctoral and more selective institutions); Douglas Dotterweich and Edward A. Baryla, Jr., "Non-Resident Tuition and Enrollment in Higher Education: Implications for Tuition Pricing," *Education Economics* 13, 4 (December 2005): 383-384 (ability of public institutions to raise non-resident tuition varied across tuition deciles; institutions that charged relatively lower tuition rates might be able to marginally adjust prices without producing sizeable impacts on the non-resident student enrollment percentage).
- 33 Whether or not SUNY has the legal authority to set multiple non-resident tuition rates by campus is unclear. New York State law gives the SUNY Board of Trustees the authority to set non-resident tuition rates and SUNY has used this authority to set a lower non-resident tuition rate for certain non-resident, non-matriculated students. Whether this legal authority extends to different rates by campus is uncertain.
- 34 Wonseon Kyung, "In-Migration of College Students to the State of New York," *Journal of Higher Education* 67, 3 (May/June 1996): 354-355 (the larger the size of the high school graduating class and the lower the admit rate in an origin state's public institutions, the greater the number of undergraduate student migrants to New York).
- 35 John J. Siegfried, Allen R. Sanderson, and Peter McHenry, "The Economic Impact of Colleges and Universities," in *Economics of Education Review* 26 (2007) 546-558.
- 36 Kathryn A. Foster, Sharon Ana Entress and Peter A. Lombardi, *The Difference a University Makes: An Impact Analysis of the University at Buffalo* (Buffalo: The Regional Institute, University at Buffalo, The State University of New

- York, August 2007), pp. 11-12. http://www.buffalo.edu/community/pdfs/UB_Impact_Analysis.pdf These figures do not include other economic activity that may be associated with nonresident students, such as the travel expenses of parents and visitors. It could also be argued that the entire tuition payment by such students – and not just the additional increment charged out-of-staters – should be regarded as part of their economic benefit to the state, since (unlike tuition from in-state students) it is coming from out-of-state sources.
- 37 Center for Regional Policy Studies, Stony Brook University, *The Impact of Stony Brook University: Driving the Long Island Economy* (Stony Brook University Office of Communications, 2008), pp. 12-15.
 - 38 Siegfried et al., “Economic Impact,” 553
 - 39 One recent study found that “any multiplier exceeding two for an area less than an entire state is suspect.” Siegfried et al., “Economic Impact,” 556.
 - 40 One study found that approximately 20 percent of out-of-state graduates of a large southern research university stayed in the state after graduating (Cara Mia Braswell and Robert W. Gottesman, “Analysis of Factors Influencing Employment Migration of Recent Degree Recipients” (paper presented at the 41st annual forum of the Association for Institutional Research, Long Beach, CA, June 3-6, 2001). Another found that the average southern state retained 43 percent of nonresident students who graduated with a bachelor’s or master’s degree in science or engineering (Louis G. Tornatzky, Denis O. Gray, Stephanie A. Tarant, and Cathy Zimmer, *Who Will Stay and Who Will Leave? Individual, Institutional and State-Level Predictors of State Retention of Recent Science and Engineering Graduates* (Southern Technology Council, May 2001).
 - 41 Jeffrey A. Groen, “College Location,” 136-137.
 - 42 Kristen Keough Perry, “Where College Students Live After They Graduate” (ERIC database ED453739, 2001), 19.
 - 43 Groen and White, “In-State Versus Nonresident Students,” 1809, 1813.
 - 44 Timothy J. Bartik and George Erickcek, “The Local Economic Impact of ‘Eds and Meds,’” (Washington, D.C.: The Brookings Institution, December 2008), 13-14.
 - 45 Siegfried et al., “Economic Impact,” 549.
 - 46 Richard Deitz, “Population Out-Migration from Upstate New York,” in *The Regional Economy of Upstate New York* (Buffalo: Buffalo Branch, Federal Reserve Bank of New York, Winter 2005), 2-3.
http://www.newyorkfed.org/research/regional_economy/upstate/winter05.pdf
 - 47 Ibid.
 - 48 Ibid., 1-2.
 - 49 The authors wish to thank Donald Boyd for raising this point.
 - 50 See Gordon C. Winston, “The Economic Structure of Higher Education: Subsidies, Customer-Inputs, and Hierarchy,” (paper presented at the Southern Economic Association Meetings, Washington, D.C., November 23, 1996), 28-29.
 - 51 The authors wish to thank Ronald G. Ehrenberg for his suggestions regarding how such analyses could be conducted.

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Appendix A: Defining the Basic Cost of Attendance

The basic cost of attending a higher education institution consists of tuition and fees. In general, tuition is the amount charged to a student for instructional services. Required fees are sums charged to students for items not covered by tuition. These fees are paid so widely that it would be exceptional for a student to not have to pay them. Both tuition and fees must be considered when analyzing higher education prices.

In New York, much attention gets paid to tuition as the cost of attending SUNY, with relatively little attention paid to fees in the media and public debates. This may be an outgrowth of New York's need-based Tuition Assistance Program (TAP). TAP does not cover required fees, with one exception. The College Fee (\$25) enacted in 1964, which does not support instruction but rather is used to offset residence hall bond fund costs, was specifically included when TAP was enacted in the mid-1970s.¹ As fee increases do not increase the state's TAP expenditure, the way a tuition increase does, they have not been a prominent budget issue.² As New York has reduced its share of support for higher education, fees have become an important source of revenue to support functions no longer covered by tuition and state tax support.

Table A-1 shows tuition and fee data for fall 2008 for three public universities to illustrate the differences in institutional price structures. The University of California-Berkeley does not charge resident students tuition; rather, they charge required fees of \$7,656. By consolidating all their fees into their tuition rate, the University of Texas-Austin now charges only tuition. The University of Massachusetts-Amherst charges \$1,417 in tuition and \$8,518 in required fees, for a total of \$9,935. Clearly, focusing on only tuition would not yield comparable data for analysis.

Table A-1. Required Fees and Tuition at Three Public Universities, Fall 2008

	Tuition	Required Fees	Tuition and Required Fee Total
University of California-Berkeley	\$0	\$7,656	\$7,656
The University of Texas at Austin	\$8,532	\$0	\$8,532
University of Massachusetts - Amherst	\$1,417	\$8,518	\$9,935

Source: IPEDS Institutional Characteristics, Fall 2008.

1 See New York State Law, Article 14, Subpart 2, section 667.1.

2 There has been concern expressed about fees from an affordability standpoint, however.

Appendix B: Comparing Similar Institutions

Not all higher education institutions produce the same educational service, and their costs of production vary accordingly. Tuition, fees, and subsidies vary greatly depending on the type of institution. In order to compare like institutions, higher education experts have developed a classification system that groups similar institutions, as shown in Table B-1.

While the Carnegie Classification system groups roughly comparable institutions together, not all the basic classifications are relevant for our study of nonresident tuition. SUNY does not have tribal colleges. SUNY's Optometry school does not have undergraduate programs. The Downstate and Upstate campuses' undergraduate educational cost structures are similar enough to Doctorate-Granting Universities for us to place them in that category for a nonresident tuition analysis. Similarly, we can combine the Associate's Colleges with the Baccalaureate Colleges. These judgments are reflected in Table 3 (main text).

Table B-1. Basic Carnegie Classification

Carnegie Group	General Description	SUNY State-Operated Institutions
Associate's Colleges	Highest degree conferred is the associate's degree or if bachelor's degrees accounted for less than 10 percent of all undergraduate degrees.	<i>Technology Colleges:</i> Canton, Morrisville
Doctorate-Granting Universities	Institutions that award at least 20 doctorates per year.	<i>University Centers:</i> Albany, Binghamton, Buffalo, Environmental Science and Forestry, Stony Brook
Master's Colleges and Universities	Institutions that award at least 50 master's degrees, but fewer than 20 doctorates.	<i>University Colleges:</i> Brockport, Buffalo State, Cortland, Empire State, Fredonia, Geneseo, New Paltz, Oswego, Oneonta, Plattsburgh, Potsdam <i>Technology College:</i> SUNY IT
Baccalaureate Colleges	Institutions where bachelor's degrees accounted for at least 10 percent of all undergraduate degrees and where they awarded fewer than 50 master's degrees per year.	<i>Technology Colleges:</i> Alfred State, Cobleskill, Delhi, Farmingdale, Maritime <i>University Colleges:</i> Purchase, Old Westbury
Special Focus Institutions	The special-focus designation is based on the concentration of degrees in a single field or set of related fields, at both the undergraduate and graduate levels. Institutions are determined to have a special focus with concentrations of at least 75 percent of undergraduate and graduate degrees	<i>University Centers:</i> College of Optometry, Downstate Medical University, Update Medical
Tribal Colleges	Tribal colleges are defined as members of the American Indian Higher Education Consortium.	None.

Source: Authors' summary of Carnegie Basic Classifications, <http://classifications.carnegiefoundation.org/descriptions/basic.php>; SUNY Complete Campus List, http://www.suny.edu/Student/campuses_complete_list.cfm

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