

THE IMPACT OF THE GREAT RECESSION ON ENROLLMENTS AND RESIDENCY AT PUBLIC UNIVERSITIES: THE MIDDLE ATLANTIC REGION

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ABSTRACT: *The Great Recession led to declining state appropriations for public higher education while simultaneously motivating more students to attend college. Many public universities increased enrollments and sought out-of-state students to offset the decline in state funding. This was especially true for national public universities (primarily R1 institutions), but less so at regional public universities (primarily R2, R3 and master's level institutions). This study finds that in the Middle Atlantic region, both national and regional public universities were able to increase enrollments, but national universities did so at an above average rate compared with their peers, while regional universities trailed the national average in their peer group. With regard to increasing the proportion of out-of-state students, national public universities in the Mid-Atlantic saw a net gain but trailed their peers while regional public universities experienced a decline in out-of-state enrollment unlike their peers who experienced slight gains. In addition to investigating enrollment and residency trends at the regional level, this paper more carefully examines the experiences of Montclair State, New Jersey Institute of Technology, Rowan University, Rutgers-New Brunswick, and Towson University.*

Key Words: state appropriations, higher education, out-of-state admissions, merit-based aid

INTRODUCTION

The Great Recession, touched off by the failure of Lehman Brothers in 2008, had major impacts across most sectors of the economy, and higher education was no exception. Most directly, college endowments took a serious, albeit short-term, hit as the stock market lost over 50% of its value, but like many economic downturns, the number of students looking to attend college increased at a rate faster than the increase in high school graduates (Barr and Turner, 2013). Furthermore, the economic motivation for attending college was clear as students increasingly listed “better job opportunities” as more important than “learning about things that interested them,” reversing a long-standing polling trend prior to the Great Recession (Eagan et al., 2016).

However, while the number of students attending college increased, a number of trends went in the opposite direction, including a reduction in state appropriations, increases in tuition, and an increase in student debt. Between 2008 and 2015, state appropriations for higher education per FTE decreased in 45 out of 50 states at the same time student tuition, as measured by per capita net tuition revenues, increased in 49 out of 50 states, even when adjusting for inflation (“State Higher Education Finance” 2016). Finally, in perhaps the most widely discussed impact in the national discourse, student loan debt increased from \$675 billion to \$1.465 trillion between 2009 and 2018 (Tanzi, 2018). While much of that debt involved private for-profit institutions and/or graduate and professional programs, the overall impact on all students has been increasingly burdensome.

Faced with declining state appropriations and diminished savings, the two main levers left for universities to maintain their balance sheets were increasing the number of students paying tuition, and/or increasing tuition, most easily achieved by admitting more out-of-state students. Research in the years following the Great Recession has confirmed that public universities have both increased enrollments and recruited more out-of-state students to make up for budgetary shortfalls (Jaquette and Curs, 2015). However, more research has focused on “flagship campuses” at the national scale, leaving gaps in terms of regional disparities and at less prestigious public universities. This research aims to fill in those gaps, examining both enrollment increases and out-of-state student recruitment at the regional and

state scale, using data from the Integrated Postsecondary Education Data System (IPEDS) with a focus on regional trends in the Middle Atlantic.

While the decline in state support for higher education was a national problem, it did not play out evenly across the country. In the Mid-Atlantic, the drop was even steeper, as per pupil educational appropriations for higher education declined by 18% versus 15% nationally, in the seven years following the Great Recession, despite the fact that funding levels in the region were already below the national average in three out of five states (see Table 1).

Table 1. Educational Appropriations and Net Tuition Revenue per FTE, by State and Region.

Educational Appropriations*				Tuition Revenue*			
Region	2008	2015	Δ 08-15	Region	2008	2015	Δ 08-15
Pacific	\$9,433	\$8,046	-14.7%	Middle Atlantic	\$7,134	\$8,994	26.1%
Rockies/Plains	\$7,932	\$7,376	-7.0%	New England	\$7,770	\$8,831	13.7%
Southwest	\$9,211	\$7,101	-22.9%	Southeastern	\$5,461	\$7,520	37.7%
United States	\$8,220	\$6,966	-15.3%	Midwest	\$5,693	\$7,316	28.5%
Southeastern	\$8,703	\$6,480	-25.5%	U.S. Average	\$4,556	\$6,006	31.8%
Midwest	\$6,779	\$6,267	-7.5%	Rockies/Plains	\$4,542	\$5,852	28.9%
Middle Atlantic	\$7,629	\$6,236	-18.3%	Pacific	\$3,398	\$4,842	42.5%
New England	\$6,381	\$5,260	-17.6%	Southwest	\$2,484	\$3,717	49.7%
State	2008	2015	Δ 08-15	State	2008	2015	Δ 08-15
New York	\$9,065	\$8,830	-2.6%	Pennsylvania	\$10,281	\$13,763	33.9%
Maryland	\$8,721	\$8,024	-8.0%	Delaware	\$7,829	\$9,637	23.1%
New Jersey	\$7,758	\$5,766	-25.7%	New Jersey	\$6,556	\$8,680	32.4%
Delaware	\$6,714	\$4,804	-28.4%	Maryland	\$7,113	\$7,819	9.9%
Pennsylvania	\$5,888	\$3,758	-36.2%	New York	\$3,890	\$5,073	30.4%

Source: State Higher Education Finance: 2015. 2016.

*Constant adjusted 2015 dollars.

In addition to declining state support throughout the region, the Mid-Atlantic also became the most expensive region in the country for tuition at public universities, as measured by net tuition revenue, which subtracts financial aid and other student discounts from the gross tuition revenues and adjusts it on a per FTE basis (see Table 1). The low levels of state support for higher education across the region, accompanied by the nation’s highest tuition, runs counter to perceptions of the region. However, while the Mid-Atlantic has a reputation for providing strong state support for education, there is a large split between K-12 and higher education funding.

The high tuition levels in the Mid-Atlantic region result from most states prioritizing spending on K-12 education, and Medicaid, in lieu of higher education (Archibald and Feldman, 2006). The reality of public spending parameters is that with limited tax dollars, there is a zero-sum competition between healthcare and educational interests and it’s not possible to fully fund them all (Kane, Orszag, and Lester, 2003). The logic behind higher education spending in the Northeast is that upper-income households that can afford higher tuition will subsidize lower income students who receive financial aid to make up the difference.

Delaware provides the clearest example of this dichotomy, ranking 15th in spending per pupil on K-12 education in 2015 (“National Public Education Financial Survey” 2018) but 44th in per student appropriations for higher education (“State Higher Education Finance” 2016). The state made up for this shortfall by having the highest average tuition revenue of any state university system and by enrolling the third highest share of out-of-state students of any flagship campus in the country.¹

DEFINING NATIONAL AND REGIONAL PUBLIC UNIVERSITIES

The literature on higher education typically separates public colleges and universities into two main categories: research institutions and master's universities. Research institutions tend to be national, if not international, in scope, while master's universities are typically regional in scale and focus more heavily on undergraduate education, drawing students from a much smaller radius. This paper similarly divides public higher education institutions into two groups: a narrowly defined group identified as national public universities (NPU) and a larger category identified as regional public universities (RPU).

The literature on enrollment and student migration patterns has focused primarily on the most prestigious public research institutions, though the categorization of these institutions varies slightly. Studies may look more selectively at flagship universities (e.g., Burd, 2020) or land-grant institutions (e.g., Adkisson and Peach, 2008), while others focus more broadly on public institutions classified in the Carnegie Classification systems top category, "Research Universities--with very high research activity," otherwise known as Research 1 (R1) universities (e.g., Jaquette, 2017). As with any classification system, there are limitations. The primary problem with the flagship category is that it is too restrictive, excluding a number of high-profile research universities, primarily land-grant institutions. There are also exceptions like New York State, which does not have a flagship campus in its public university system.² Alternatively, if one uses Carnegie's R1 classification as a way to expand the parameters, a couple of problems emerge. First, included are campuses with a primary focus on graduate education, medical schools in particular, that attract large research funding even if they are not equivalent in terms of undergraduate admissions. For example, Wayne State University in Detroit has the same R1 status as the University of Michigan, despite those institutions having vastly different recruiting footprints and academic standards for undergraduate admissions. Second, there are flagship institutions that did not qualify as R1 institutions, despite high demand in the undergraduate admissions process. The University of Alabama and the University of Vermont offer two such examples.

In order to capture a more comprehensive and realistic view of national public universities, this study employs a broader definition. First, given their research and funding advantages, all flagship campuses and state land-grant institutions are classified as NPUs.³ Second, to account for the importance of academic reputation in decision making process of incoming students (see Choy & Ottinger, 1998), only those R1 institutions ranked in the top three national tiers in the US News annual ranking of colleges & universities were included. Applying these criteria to 2005 IPEDS data produced 95 national public universities, including 10 in the Mid-Atlantic.

For this study, all remaining research universities, including those at the R2 and R3 level, along with all master's level universities are in the regional public university category. While there is less written on regional public universities, there are more regional universities than national universities and the total number of students attending them is greater. Applying these criteria to 2005 the Integrated Postsecondary Education Data Systems data produces 316 regional public universities, including 57 in the Mid-Atlantic.

DISCUSSION OF RESULTS

National Public Universities in the Middle Atlantic

Schools in the Mid-Atlantic region saw enrollment growth exceed the national average, ranking second overall and trailing only the Pacific region (see Table 2 for data; see Figure 1 for definition of regions). However, the growth was highly uneven, with most of the growth coming from just one state, New Jersey, while the remaining states were at or below average. New Jersey, which had a rate of growth more than double the national average, single-handedly brought the regional average up. If one were to remove Rutgers (New Jersey's only NPU) from the data set, the Mid-Atlantic would have below average enrollment growth, on par with neighboring New England.

The explanation for Rutgers' expansion during the Great Recession and in the year that followed has much to do with internal developments at the university under the leadership of Richard McCormick. Appointed as President of Rutgers in 2002, McCormick set about transforming the school in significant ways. In terms of its undergraduate education, McCormick sought to create a more unified undergraduate experience ending campus divisions that were

unique to the school’s history, but which created a complex system with differing admissions and curriculum standards (McCormick, 2014). At the time, the undergraduate liberal arts core of Rutgers was strewn across five colleges: Rutgers College, the traditional liberal arts core of the original college; Douglass College, the women’s college created in 1918 (Rutgers College did not formally admit women until 1972); University College, created in 1934 to meet the needs of part time and non-traditional students; Livingston College, created in 1969 to serve the unmet needs of New Jersey’s diverse population; and, to a lesser extent, Cook College, created in 1973 as the interdisciplinary arm of the land-grant school. McCormick also successfully navigated New Jersey politics, working with the governor and legislature to bring the University of Medicine and Dentistry of New Jersey under the Rutgers umbrella giving the school a full-fledged medical program. Thus, while changes at the undergraduate level were important and helped drive freshman admissions up, the bulk of the growth came from the absorption of the medical school as well as growth in the business school.

Table 2. Change in Full Time Equivalent Enrollment (ENR) and Out-of-State Admissions (OSA), by Region.

National Public Universities					Regional Public Universities				
Region	ENR 05-15	OSS 2005	OSS 2015	OSS 05-15	Region	ENR 05-15	OSS 2005	OSS 2015	OSS 05-15
Pacific	21.8%	11.7%	26.4%	14.7%	Southwest	26.3%	7.4%	9.2%	1.8%
Mid-Atlantic	18.7%	25.4%	30.9%	5.5%	Pacific	21.7%	6.6%	8.8%	2.2%
Southwest	17.6%	19.1%	24.8%	5.7%	Mid-Atlantic	12.6%	11.1%	10.2%	-0.9%
Southeast	17.5%	22.4%	30.8%	8.3%	Rockies/Plains	11.7%	12.0%	20.5%	8.5%
New England	14.3%	38.0%	47.9%	9.9%	New England	11.4%	14.6%	16.1%	1.4%
Midwest	13.7%	25.5%	36.4%	10.8%	Southeast	10.8%	16.8%	16.4%	-0.5%
Rockies/Plains	11.8%	29.7%	37.1%	7.4%	Midwest	4.2%	11.8%	15.7%	3.9%
United States	16.8%	23.0%	31.9%	8.9%	United States	12.8%	12.1%	13.5%	1.4%

Source: Integrated Postsecondary Education Data System (IPEDS). 2005 to 2015.

With regard to out-of-state admissions, the Mid-Atlantic region experienced the smallest rate increase of any region in the country. This is not to say that the region had the lowest rates, as the Mid-Atlantic went from slightly above average at the beginning of the study period and slightly below average at the end. However, despite the lack of change in non-resident admissions, there was great variation in the recruitment of out-of-state students.



Figure 1. Regional Map of the United States (used for all calculations).

At the high end in terms of out-of-state recruiting was Delaware, which has enrolled an extremely high number of non-resident students at its flagship campus for decades. This is largely the result of Delaware being one of the smallest states in the nation both in terms of population and geography. The low population numbers in the state present a particular problem for the University of Delaware when it comes to admitting in-state students. For example, in the 2005 enrollment period only 16% of applicants came from Delaware residents, fewer than either New Jersey, New York, or Pennsylvania, which combined to account for 64% of applicants (“Facts & Figures” 2006).

At the other end of the spectrum in terms of out-of-state recruitment were New York and New Jersey. The high number of in-state students in New York is consistent with the fact that the four campuses included in this study (Albany, Binghamton, Buffalo, and Stony Brook) all hail from the State University of New York (SUNY). When New York created the SUNY system shortly after World War Two, it was the last state in the country to create a state university system. It did so through a combination of new campus creation and transformation of preexisting schools. Buffalo was previously a private university, Albany a normal school, Stony Brook was newly created, and Binghamton was a private two-year school affiliated with Syracuse University. The system formed against the wishes of powerful private institutions in the state and was only supposed to supplement what the privates were doing (Ottman, 2010). As such, the schools had numerous restrictions placed on them such as the inability to raise private funds or offer athletic scholarships. The SUNY campuses have, thus, maintained a relatively low profile, quietly serving in-state residents. Were it not for low tuition rates that can make it cheaper for students in surrounding states to attend SUNY rather than staying home, out-of-state admissions at SUNY schools would be even lower.

Regional Public Universities in the Middle Atlantic

Regional public universities in the Mid-Atlantic were able to increase enrollments, though less so than national public universities. This mirrored the national trend which saw enrollment growth at RPUs trail national publics by 24% (see Table 3). Regional publics in the Mid-Atlantic also grew at a slightly lower rate than their peers nationally on the whole, which makes sense given that regional growth in the number of high school graduates was also slightly lower than the national average.

Table 3. Change in Public High School Graduates by State and Region.

Regions	2005-15
Southwest	23.1%
Southeast	21.5%
Pacific	17.6%
United States	13.9%
Mid-Atlantic	9.2%
Plains/Rockies	7.7%
Midwest	4.9%
New England	4.4%
States	2005-15
Delaware	21.0%
New York	16.9%
New Jersey	10.1%
Maryland	6.4%
Pennsylvania	-1.0%

Source: Digest of Education Statistics. 2017.

However, while the enrollment growth in the region was in line with the national average, there was considerable variation among the 57 regional publics in the Mid-Atlantic. Enrollment gains were greatest in New

Jersey and, to a lesser extent, Maryland, while New York was notable for its highly uneven enrollment patterns. New York saw growth spread across the City University of New York (CUNY) system, one of two state systems in New York, but that was mitigated by flat enrollments at SUNY campuses upstate.

The map of the of the region showing enrollment change by county, with an overlay of northeast megalopolis counties, illustrates these trends nicely (see Figure 2). When examining the areal distribution, it becomes clear that most enrollment growth was within the Boston-Washington corridor. Large sections of both New York and Pennsylvania lying outside megalopolis had low levels of enrollment growth while areas inside the northeast corridor had much higher rates. New Jersey, lying mostly within the northeast megalopolis, had, not surprisingly, the highest rates of enrollment gains in the region. The enrollment success in New Jersey was notable as high school graduation trailed the national average and there was both a sharp decrease in the state funding alongside an increase in the cost of tuition. However, these factors were offset by the region’s geographic position in the heart of the DC-Boston corridor and the introduction of several merit aid programs, in which New Jersey invested heavily.

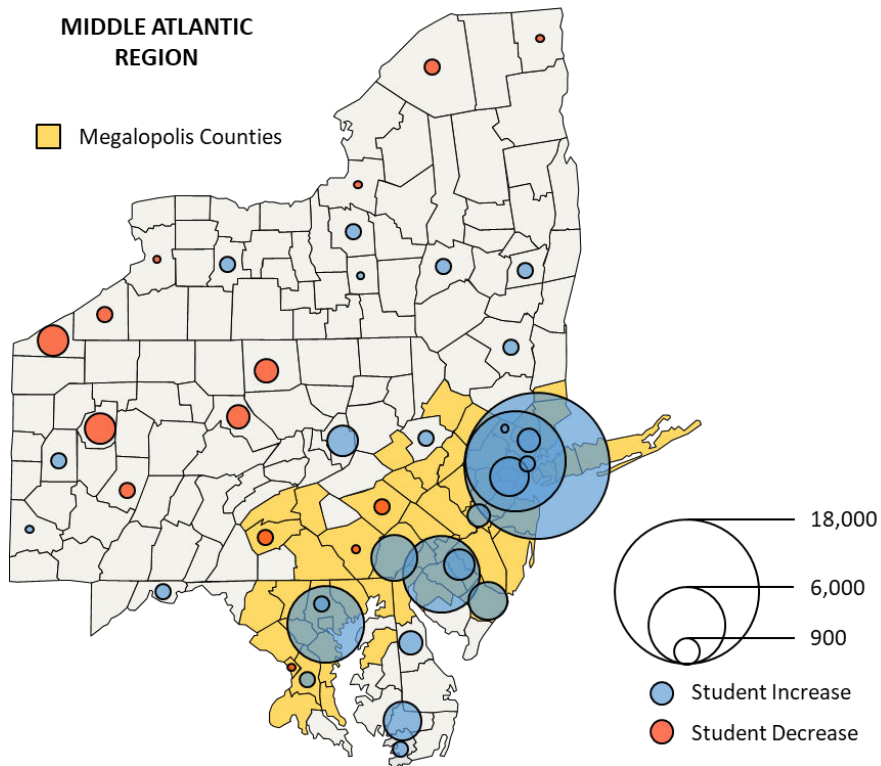


Figure 2. Enrollment Change at Regional Public Universities by County: 2005-2015.

The use of merit-based aid was part of a larger trend toward increased recruitment of academically successful students and the use of merit-based awards to entice them (Han, Jaquette, and Salazar, 2019; Burd 2020). This trend emerged at private colleges in the 1970s but was subsequently adopted by public research universities. By the turn of the twenty-first century over half of financial aid at public universities went to students who were not in need. Furthermore, as state support for higher education has declined in the twenty-first century, non-need-based aid has tripled at public research universities, increasing from \$1.1 to \$3.0 billion between 2001 and 2017 (Burd 2020). While merit aid has allowed states to retain more of their top students (see Zhang, 2010) and brought a windfall to enrollment in states like New Jersey, it did not come without costs. The most significant criticisms of merit aid are declining social mobility and lack of access for students with financial need (Burd, 2015). The result is that as of 2017, only 43% of students admitted to public universities in New Jersey demonstrated need. This contrasts starkly with a state like New York, which provides more adequate state support as part of a low cost-low aid model, where 67% of students admitted to public universities demonstrated need.

By whatever means, New Jersey was able to successfully increase enrollments, but growth was also highly uneven as nearly two-thirds came from just three universities in the state. One of those institutions, the New Jersey Institute of Technology, was an R2 institution that had more resources than the master's level institutions in the state, while the other two, Rowan University and Montclair State, were master's level institutions that were transitioning to the R3 level.

The New Jersey Institute of Technology (NJIT) had the second highest growth in the region at 47%, though some growth began prior to the study period and is independent of the Great Recession. Historically, NJIT was a small engineering school until the 1970s, when it added an architectural school and built its first dorm. The school underwent a major transformation in the early 2000s when it founded a College of Computing Science, built a new campus center, purchased additional land to build additional student housing while closing several roads to create a more residential campus, and moved its athletic teams to NCAA Division I. Survey research has shown that while it trails the academic quality of the institution, the attractiveness of a campus and the quality of its facilities plays a significant role in the recruitment and retention of undergraduates (Reynolds, 2007). NJIT also benefitted from a high-tech boom during this period, to which it contributed, that saw Audible and Panasonic, among others, move to Newark ("Panasonic Lured to Newark" 2011). The sum total was extremely high enrollment growth and an upward trajectory that now has the school ranked among the top 100 universities in the United States according to the highly publicized US News rankings.

Nationally, it was common for research institutions to grow more quickly following the Great Recession and the highest growth of any school in New Jersey was at Rowan, which was transitioning from a master's level to research university. Rowan was the recipient of advantages bestowed upon it by state and local officials, the construction of a technology park and the acquisition of medical facilities chief among them. In 2006, Rowan broke ground on the South Jersey Technology Park, jointly funded by the New Jersey Economic Development Authority and the New Jersey Commission on Science and Technology, along with funds from Rowan and a private investor. The technology hub has been able to successfully leverage Rowan's academic units and by 2015 was already generating an estimated \$1.23 billion for the New Jersey economy ("Rowan University's Impact" 2015). Shortly after breaking ground on the technology park, Cooper University Hospital, a clinical hospital associated with the University of Medicine and Dentistry of New Jersey, became an independent medical school under the umbrella of Rowan University, which issued \$100 million in bonds to provide the necessary funding. Shortly thereafter, the University of Medicine and Dentistry of New Jersey was disassembled with most of the units going to Rutgers University, but the School of Osteopathic Medicine, located 30 miles from campus became a part of Rowan. Similar to NJIT, the joint impact of these developments brought significant attention to Rowan and helped produce a growth rate of 70%, the highest of any university in the Mid-Atlantic region during the study period.

A second school in New Jersey, Montclair State, was also making the transition from a masters to research university and undergoing substantial growth. In 2010, the school launched a \$650 million master plan that included, among other things, a new communication & media center, a new visual arts & design center, and new facilities for business and environmental science. In addition to new academic facilities, the school also built new athletic facilities and increased its student housing capacity dramatically. Just prior to the study period, the school also got a boost when the New Jersey Transit opened a new train station at Montclair State along with a 1500 seat garage. This linked the school directly with New York City, 20 miles away, enhancing access for commuters.

While New Jersey saw the largest growth in the Mid-Atlantic, Maryland also had enrollment growth exceeding the national average, and nearly half that growth came from just one school, Towson University. Founded as a normal school in the 19th century, Towson became the premier teachers college in Maryland, and was integrated into the University of Maryland system in 1988. Towson's recent growth came primarily under the direction of Rob Caret in the early 2000s, as the school completed a key strategic plan and was targeted as the Maryland system's growth campus (Perl, 2015). This combination allowed Towson to take steps to help build enrollments. Key among these were partnering with local community colleges to offer Towson courses at satellite campuses, increasing the residential capacity of the school from 2,000 to 4,500 beds, and major capital investments such as a new building for

the College of Liberal Arts along with a new 5,000 seat multi-purpose arena (Knox, 2021). The cumulative impact of these developments aided the school's 27% enrollment increase between 2005 and 2015.

Turning to the recruitment of out-of-state students as a strategy to replace revenues lost from declining state appropriations, regional publics have faced structural challenges given their lack of resources as compared with national publics. Not surprisingly, RPUs held lower proportions of out-of-state students prior to the Great Recession and saw that difference grow in the period that followed (see Table 2).

Compared to other regions, the Mid-Atlantic trailed national averages for RPUs throughout the study period and was one of only two regions to see a decrease in the rate of out-of-state students admitted. The ability to attract out-of-state students in an increasingly competitive market was difficult given that tuition in the region was so high. Prior to the Great Recession, the Mid-Atlantic ranked second highest in terms of tuition costs, and that figure grew by 26% to make it the highest of any region in the country.

The primary exception to the trend in tuition was New York State, which maintained among the lowest tuition rates in the country, providing higher levels of state funding to offset the need for higher tuition. In 2015, educational appropriations per FTE were fifth highest in the country while net tuition revenue per FTE ranked 38th ("State Higher Education Finance" 2016). Best exemplifying this has been the City University of New York, which offered free tuition to all students up until 1976, when the program ended as New York City was facing bankruptcy. Recently there have been calls to bring back free tuition and New York State moved a step closer to that, offering free tuition at both SUNY and CUNY schools for qualified students coming from households making less than \$125,000 a year through its Excelsior program that launched in 2018 (Jaschik, 2017).

CONCLUSION

The Middle Atlantic was no exception to national trends in the years following the Great Recession that saw enrollment growth outpace high school graduation growth and an increase in the proportion of out-of-state admissions. When compared to nationwide trends, national public universities in the Mid-Atlantic had higher enrollment growth than the nation overall, despite the fact that high school graduation rates in the region were lower than the national average. Furthermore, while out-of-state admissions drove some of the increased enrollment, the rate of increase for non-resident admissions was the lowest of any region in the country. What set the region apart were enrollment gains from in-state students driving most of the increase in the Mid-Atlantic region. This was, in large part, a conscious decision on the part of higher education leaders, particularly in states like New York and Maryland, to concentrate on serving in-state students, though increased attention to cost on the part of students may have also played a part.

While the position of NPUs in the region coming out of the Great Recession was generally positive, the impact of the Covid pandemic and continued declines in the number of high school graduates are reasons for concern moving forward. A preliminary look at the impacts of the Covid pandemic using IPEDS enrollment data, which only extends through 2021 at present, highlights this trend. Between 2019 and 2020, NPUs in the Mid-Atlantic saw a 1% drop in enrollment and did not see them rebound to pre-Covid levels the following year either (author's calculation based on IPEDS data).⁴ Adding further concern, since the end of the study period, high school graduates have declined in every state but Delaware, with Pennsylvania seeing the sharpest decrease.

Regional public universities also saw enrollments and the proportion of out-of-state students grow, though at lower rates when compared to national public universities. Furthermore, the difference between NPUs and RPUs grew following the Great Recession. Compared to other regions, regional publics in the Mid-Atlantic closely mirrored national trends for its peers in both enrollment and out-of-state student growth. Among regional public universities, the schools that have grown the most are those that are transitioning from master's to research universities. This does not bode well for master's universities as it suggests an arms race among regional publics where success begets success. Short of transitioning to a research university, regional publics will confront an increasingly competitive market where demographic declines and uncertain state appropriations present potential pitfalls.

The impact of the Covid pandemic and the declining number of high school graduates are likely to pose even greater problems for RPUs in the region, given that they are less successful recruiting out-of-state students. While it will take some time to know the full impact, one year after Covid, enrollment at RPUs remained 7% below their pre-Covid levels. The increased impact on regional publics is likely due to the fact that RPUs are more dependent on in-state students and feeling the impact of declining high school graduation rates, a trend that is not expected to reverse itself, to a greater extent.

In addition to a closer examination of demographic trends, additional research on intrastate differences between RPU campuses could be insightful. Previous research has shown that the two principal factors driving student decision making at public universities are academic reputation and location (Choy and Ottinger, 1998). Thus, an examination of the academic reputation/rank of the institution and/or the distance from population centers, could offer additional insight into the opportunities and constraints that regional public universities face.

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¹ In 2015 the University of Vermont led all flagship schools with 80% of its freshmen class coming from out of state while Alabama ranked second at 65%. In 2005, at the start of this study, the University of Delaware ranked second behind Vermont (IPEDS 2005-15).

² In 2022, New York Governor, Kathy Hochul held a news conference to announce that both SUNY Buffalo and Stony Brook would serve as the state's flagship campus, much to the dismay of political and educational leaders representing SUNY Albany and Binghamton.

³ This refers to institutions created as a result of the Land-Grant College Act of 1862, sometime referred to as the Morrill Act for its sponsor Justin Morrill. Because not all states admitted African Americans, a second Morrill Act was passed in 1890 creating an alternative set of institutions.

⁴ Due to changes in their reporting methods, data from the Pennsylvania State University and the University of Pittsburgh were excluded from these calculations. However, head count data released independently by both campuses suggests that their enrollment drops were consistent with regional norms for national public universities.