

# The Impact of The Great Recession on Enrollments and Residency Status at Public Universities: New England

John I. Sharp

*Department of Geography and Environmental Studies  
New Paltz, USA*

Following the Great Recession, state appropriations for public higher education declined in nine out of ten states, including every state in New England. Public universities responded to the decline in state funding by increasing enrollments while admitting more out-of-state (non-resident) students in order to increase revenues. This was particularly true for national public universities, but less so at regional public universities. This study finds that in New England, both national and regional public universities were able to increase enrollments, but in both cases, trailed the national average with respect to their peer group. With regard to the out-of-state students, both national and regional public universities in New England increased their share of non-residents at rates equal to or greater than the national average in their respective peer group. In addition to examining enrollment and residency status at the regional level, this paper more carefully examines the experiences of the University of Connecticut, University of Vermont, University of Massachusetts Boston, University of Massachusetts Lowell, and Plymouth State University in order to gain further insight. *Key Words: Great Recession, public universities, enrollment, out-of-state students, New England.*

The Great Recession, which took place between 2007 and 2009, had major impacts on the economy and higher education was no exception. On the positive side, as is typical of most economic recessions, more young adults enter college when the job market tightens, seeking better qualifications while delaying entry into the job market. At the individual level, this economic motivation can be seen in student surveys such as the American freshman (Eagan et al., 2016), in which students listed “better job opportunities” as more important than “learning about things that interested them” for the first time in decades.

However, though more students attended college, these gains were offset by countervailing negative impacts. Most significantly, there was a reduction in state appropriations for public higher education in 45 out of 50 states between 2008 and 2015, as funding was reduced on a per FTE basis, even when adjusting for inflation. And as state appropriations went down, student tuition went up in 49 out of 50 states, as measured by per capita net tuition revenues—meaning that students paid more in tuition, on average, after factoring in financial aid, waivers, and other discounts (“State Higher Education Finance” 2016).

In the face of declining state appropriations, the two primary methods for universities to balance their budgets were increasing the number of students attending or increasing tuition, which was most easily achieved by admitting more out-of-state students. Research has confirmed that following the Great Recession, public universities 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 New England.

While there was a significant decline in state support for higher education across the country, in New England the drop was even greater. Nationally, per pupil educational

appropriations for higher education declined by 15% in the seven years following the Great Recession while in New England there was an 18% reduction. This took place despite the fact that educational appropriations in New England were already the lowest of any region in the country (see Table 1). Leading this trend were Vermont and New Hampshire, which were not only the two lowest ranking states in New England in per student funding for higher education but held a considerable lead in this category nationally.

While New England is often thought of as a region that provides strong state support for education, there is a dichotomy between K-12 and higher education, as states that have prioritized spending on K-12 education--and sometimes Medicaid--having less money for higher education (Archibald & Feldman, 2006). This reflects a political and economic reality where public spending on social services is limited and results in competition between various educational and healthcare interests (Kane et al., 2003). The spending choices in New England assume that

Educational Appropriations*				Tuition Revenue*			
Region	2008	2015	Δ 08-15	Region	2008	2015	Δ 08-15
Pacific	\$9,281	\$8,318	-10.4%	Pacific	\$3,484	\$4,980	42.9%
Mountain West	\$9,180	\$7,544	-17.8%	Mountain West	\$3,582	\$5,169	44.3%
Great Plains	\$7,631	\$7,023	-8.0%	<b>U.S. Average</b>	<b>\$4,556</b>	<b>\$6,006</b>	<b>31.8%</b>
<b>U.S. Average</b>	<b>\$8,220</b>	<b>\$6,966</b>	<b>-15.3%</b>	Southeastern	\$4,551	\$6,267	37.7%
Southeastern	\$8,721	\$6,500	-25.5%	Great Plains	\$5,015	\$6,295	25.5%
Midwest	\$6,779	\$6,267	-7.5%	Midwest	\$5,693	\$7,316	28.5%
Middle Atlantic	\$7,629	\$6,236	-18.3%	New England	\$7,770	\$8,831	13.7%
New England	\$6,381	\$5,260	-17.6%	Middle Atlantic	\$7,134	\$8,994	26.1%
State	2008	2015	Δ 08-15	State	2008	2015	Δ 08-15
Connecticut	\$9,945	\$8,090	-18.6%	Massachusetts	\$5,421	\$5,028	-7.2%
Massachusetts	\$8,028	\$6,728	-16.2%	Rhode Island	\$6,583	\$7,812	18.7%
Maine	\$7,323	\$6,546	-10.6%	Connecticut	\$6,463	\$8,077	25.0%
Rhode Island	\$6,226	\$4,785	-23.2%	Maine	\$7,295	\$8,728	19.7%
Vermont	\$3,180	\$2,818	-11.4%	New Hampshire	\$8,577	\$9,843	14.8%
New Hampshire	\$3,581	\$2,591	-27.6%	Vermont	\$12,279	\$13,496	9.9%

Source: State Higher Education Finance: 2015. 2016.

\*Constant adjusted 2015 dollars.

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

households that can afford the higher sticker price will do so and those households that cannot, will receive financial aid. It is a form of wealth redistribution where higher income households support lower income households. Vermont provides the clearest example of this juxtaposition, ranking third in spending per pupil on k-12 education and first in terms of percent of state taxpayer income (“Public Education Finances” 2017), while ranking 49 out of 50 in per student appropriations for higher education (“State Higher Education Finance” 2016). The state makes up for this shortfall by having the highest average tuition of any state university and by enrolling the highest percentage of out-of-state students at any state university.

In addition to the economic impacts of the Great Recession, demographic shifts in New England also pose problems for universities in the region. New England had the lowest growth in high school graduates of any region in the country (see Table 2), with half the states in New England seeing declines in the number of graduates between

2005 and 2015. Furthermore, these trends are likely to get worse as demographic predictions indicate New England will continue to have the least enrollment growth of any region in the country through 2032, with all states in the region experiencing an enrollment decline by that time (Grawe, 2018). Further evidence of the problem can already be seen in the closure of 18 colleges and universities across the region since the Great Recession—including two colleges in Connecticut, five colleges apiece in Massachusetts and Vermont, and another six in New Hampshire.

## Defining National & Regional Public Universities

The literature on higher education typically separates public colleges and universities into two categories: research institutions and master’s universities. Research institutions tend to operate at the national scale while master’s universities typically operate at the regional scale. National universities place a heavier emphasis on graduate programs, often recruiting students internationally, while regional universities 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 of research institutions identified as national public universities (NPU) and a larger category combining research and master’s institutions identified as regional public universities (RPU).

Research on enrollment trends has focused on the most prestigious public research institutions, though the categorization of these institutions is inconsistent. Some studies examine flagship universities (e.g., Burd 2020), or land-grant institutions (e.g., Adkisson and Peach, 2008), while others have used the Carnegie Classification system’s top category, “Research Universities—with very

<b>Regions</b>	<b>2005-15</b>
Southeast	21.5%
Great Plains	21.3%
Pacific	16.7%
Mountain West	14.7%
<b>United States</b>	<b>13.9%</b>
Mid-Atlantic	9.2%
Midwest	4.9%
New England	4.4%
<b>States</b>	<b>2005-15</b>
Massachusetts	10.3%
Connecticut	4.6%
Rhode Island	0.2%
New Hampshire	-1.9%
Maine	-4.0%
Vermont	-12.8%

**Source:** Digest of Education Statistics. 2017.

**Table 2.** Change in Public High School Graduates by State and Region.

high research activity,” otherwise known as Research 1 (R1) universities (e.g., Jaquette 2017). The primary problem with the use of flagship institutions is that the category is too restrictive, excluding many high-profile research universities, land-grant institutions in particular. There are also exceptions like New York, which does not have a flagship campus in its public university system. The use of land-grant institutions poses the same problem as flagship universities, only in reverse, and New York, once again, poses problems as it gave its land grant to a private institution. The use of Carnegie’s R1 classification helps to expand the parameters but it too has shortcomings. First, there are a number of campuses that are more heavily focused on graduate education, including medical schools, that fit the R1 criteria but operate differently when it comes to undergraduate admissions. The CUNY Graduate School in New York City, a graduate-only institution, and Wayne State University in Detroit, which is an R1 institution largely due to its medical and related health science programs, offer two such examples. Second, there are a number of institutions that qualify as flagships institutions but do not meet the R1 criteria. The University of Alabama and the University of Vermont offered two such examples at the beginning of the study period, despite the fact that they generate high demand in the undergraduate admissions process.

In order to capture a more representative list, this study employs a broader methodology for identifying national public universities. First, all flagship campuses and state land-grant institutions are categorized as NPUs. Second, to address differences in the undergraduate admissions process, only those R1 institutions ranked among the top three national tiers in the US News annual ranking of colleges & universities were included. Applying these criteria to 2005 IPEDS data produces 95 national public universities, including 6 in New England.

Turning to regional public universities, all remaining research universities, mostly at the R2 and R3 level, along with all master’s level universities, are categorized together. This creates a large and heterogeneous group, but it offers a broad point of comparison with the literature on national public universities. While there is less written on regional public universities, there are more of them and the total number of students attending them is greater. Applying these criteria to 2005 the IPEDS data produces 316 regional public universities, including 19 in New England.

## Discussion of Results

### *National Public Universities in New England*

Nationally, the overwhelming response of NPUs to declining state appropriations has been to increase enrollments in the years following the Great Recession. In keeping with that trend, national publics across New England did so, in all but one instance, though enrollment growth in the region trailed the national average (see Table 3 for data; see Figure 1 for definition of regions). Within the region, there was minimal variation between states as every school in the region, with the exception of Maine, achieved double digit enrollment growth. Maine stood out as the only state in New England that saw a decline and was one of only nine NPUs in the country to do so. This was largely due to the declining number of high school graduates in the state (Gallagher, 2015), along with difficulties in attracting out-of-state students to its peripheral location in northern Maine.

The modest enrollment growth for NPUs in New England is not surprising given that growth in public high school graduates was the lowest in the country and the region had already invested heavily in recruiting out-of-state students (see Table 3). However,

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	21.2%	11.4%	26.0%	14.6%	Pacific	22.5%	5.5%	8.3%	2.8%
Mid-Atlantic	18.7%	25.4%	30.9%	5.5%	Great Plains	22.3%	7.1%	7.8%	0.7%
Great Plains	18.4%	19.6%	24.5%	4.9%	Mountain West	18.2%	16.0%	24.8%	8.8%
Southeast	17.5%	22.4%	30.8%	8.3%	Mid-Atlantic	12.3%	11.1%	10.2%	-0.9%
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%
Mountain West	12.4%	28.4%	36.8%	8.4%	Midwest	4.2%	11.8%	15.7%	3.9%
<b>United States</b>	<b>16.8%</b>	<b>23.0%</b>	<b>31.9%</b>	<b>8.9%</b>	<b>United States</b>	<b>12.8%</b>	<b>12.1%</b>	<b>13.5%</b>	<b>1.4%</b>

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

Table 3. Change in Enrollment (ENR) and Out-of-State-Student (OSS) population, by Region.



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

enrollment growth rates were not the lowest in the country and enrollments in New England grew by 14% while the number of high school graduates increased by only 4% raises questions of how.

The simplest explanation is that the increase in enrollments was that it was the result of an increase in the number of out-of-state students admitted, not tied to the number of in-state students. This narrative holds true as the number of in state students admitted at NPU's actually dropped by 6% during the study period while there was a corresponding 42% increase in the number of out-of-state students admitted.

However, the overall trends mask some intraregional differences taking place in New England as there is a notable demographic division between northern and southern New England. In northern New England (Maine, New Hampshire, and Vermont), the number of high school graduates declined in every state while in southern New England (Connecticut, Massachusetts, and Rhode Island), the number of high school graduates increased in every state. This demographic division contributed to a much steeper decline in the number of in-state students admitted to national publics in northern New England versus southern New England.

The combined impact of a larger drop in in-state admissions and a smaller increase in out-of-state admissions resulted in significantly smaller enrollment increases across northern New England. Maine was hit hardest, as it relied most heavily on in-state admissions with a resident population of 80% at the start of the study period, while New Hampshire and Vermont had similar declines but were less reliant on in-state enrollments. The end result was a rate of growth in northern New England that was less than half as much as southern New England. Enrollments across southern New England were much stronger with every state above the national average, led by the University of Connecticut (UConn) with 20% growth. In fact, over one third of the enrollment growth at NPUs in New England came from UConn, which had both the highest rate and largest total enrollment growth.

The explanation for UConn's growth centers around the generosity of the Connecticut legislature and productive relationships between a series of governors and campus presidents. The growth at UConn dates back to the mid-1990s and continues through the Great Recession. It began in 1995 when the Connecticut general assembly authorized UCONN 2000, a \$1 billion dollar plan to upgrade facilities and add faculty over ten years at five campuses in the UConn system, with the largest share going to the main campus in Storrs. In 2002, before the plan was finished, a second bill for another ten-year plan was passed, the \$1.3 billion 21st Century UConn initiative, which targeted the Storrs campus. By the time both bills had reached completion in 2012, every building on the UConn campus was either new or newly renovated. Among the changes to the Storrs campus were new chemistry and pharmacy buildings, a newly renovated library, a new fine arts center designed by Frank Gehry, and a significant increase in new student housing.

In addition to consecutive legislative bills, the Storrs campus also benefited from two additional projects. The first project was the development of a new town center in Storrs. The UConn campus originally grew out of Storrs Agricultural School, a model farm built in the rural township of Mansfield, that ultimately became the state's land-grant campus. Because of this, there was never a nucleated settlement associated with the campus, and student surveys consistently indicated that the lack of such was a deterrent to attending school in Storrs. Absent a town center, the school embarked on an ambitious plan to build one, securing funding from various sources and hiring a firm from upstate New York to build a town center in the spirit of the New Urbanism movement (Gordon 2006). The 17-acre plan included approximately 300 rental housing units and 500 residential units, along with a mix of retail, restaurant, office, and civic space, all centered around a village green updated for the 21st century. The second project was a state-funded football stadium in East Hartford, 20 miles from Storrs. The state built the stadium explicitly for the UConn football team, which was transitioning to Division I-A, the highest NCAA division, and needed a larger stadium to meet qualification standards. Raising the profile of athletics at the university was part of a larger plan for growth at UConn. The use of college athletics to drive student applications was an idea that began to gain traction as researchers took note of events at Boston College following the unexpected success of their football team in 1984. This was the so called "Flutie effect," named after the quarterback who's on-the-field heroics came to define the team's success, that referred to the dramatic spike in applications at the school the following year. While initial studies on the subject varied, more recent studies have shown that athletic success in highly televised sports can have a demonstrable effects on the quality and quantity of student applications (Pope and



Pope, 2009; Chung, 2013).

It should also be pointed out that the timing of this study likely benefited UConn, as both the men's and women's basketball teams won national championships in 2014, preceding the largest incoming class in school history in 2015. There have even been suggestions that the success of the men's and women's basketball teams contributed to the passage of the UCONN 2000 bill. Coming on the heels of the women's team's first national championship in 1995, and the first men's basketball championship earlier in the decade, then college president Harry Hartley attributed part of the bill's passage to lobbying efforts on behalf of star women's player Rebecca Lobo (Rabinovitz 1995).

Looking at the recruitment of out-of-state students, national public universities in New England had the highest rates of non-resident students of any region in the country throughout the study period and the rate of change was also above the national average such that the difference between New England and the rest of the nation grew during the study period. By 2015, exactly 50% of the NPUs in New England admitted the majority of their students from out of state, compared to only 14% of their peers nationally. Nonetheless, while New England maintained the highest rates of non-resident students of any region in the country, there was considerable variation in the proportion of out-of-state students ranging from the University Vermont (UVM) at 80% to the University of Massachusetts (UMass) at 28% in 2015.

In addition to the desire to use non-resident tuition to offset declining state appropriations, there were at least two other factors driving out-of-state growth at New England NPUs. First was the small population size of most New England states. States with smaller populations have fewer students to draw on and, thus, are more likely to recruit students from out of state in order to fill their

incoming classes. Looking at national publics in the ten least populated states, which includes four from New England, this trend becomes clear. In 2015, national publics from those ten states admitted 54% of their incoming class from out-of-state versus only 30% for the rest of the country (authors own calculation based on IPEDs data). Second was the demographic pattern that was emerging in the region forcing schools to look elsewhere for applicants. As noted above, New England experienced the lowest growth rate for high school graduates of any region in the country and outside of Massachusetts there was little growth in the number of high school graduates, if not outright decline. The result was that every NPU in New England, with the exception of Rhode Island, experienced decreased in-state admissions during the study period, though gains in out-of-state enrollment outpaced the in-state losses in all cases.

In the challenging demographic situation across northern New England, the state facing the biggest hurdles was Vermont, where high school graduation rates in the state have been declining every year since 2008, including a 12% decline between 2005 and 2015. While there have been rumors that UVM frequently passes overqualified in-state students, school officials noted that in 2014, 39% of all high school graduates in Vermont applied to UVM and 64% were accepted (Despart, 2015). Yet, given the state's shrinking high school population, this yielded less than 500 students in an incoming class of 2,400. Alternatively, of the roughly 25,000 applications that the University of Vermont received in 2014, less than 10% were from Vermont residents (UVM Sourcebook, 2016).

The demographic problems facing Vermont resulted in a share of out-of-state admissions at UVM that was demonstrably higher than any other public NPU in the nation. In 2015, 80% of students admitted to UVM were from out-of-state, while the

University of Alabama, at 65%, ranked a distant second. Administrators at the University of Vermont attribute the low in-state numbers not only to the state's declining pool of high school graduates but also point out that a more talented applicant pool of in-state students, due in part to high K-12 educational standards, is increasingly being recruited by out-of-state colleges, a growing phenomenon that makes securing the dwindling number of in-state graduates more difficult. The combination of a small and declining population, a trend that isn't likely to reverse any time soon (Grawe, 2018), means that for states in northern New England, the trend toward out-of-state students will likely continue.

### *Regional Public Universities in New England*

While enrollment growth was strong and out-of-state enrollments grew significantly across the country at national public universities, it was a different story at regional public universities. Lacking the same level of funding, resources, and visibility, regional publics faced a more difficult environment in which to recruit students, particularly out-of-state students. Because of this, enrollment growth at RPUs trailed NPU's by three percentage points nationally while growth in out-of-state admissions trailed by nine percentage points.

In New England, enrollment growth at RPUs was slightly below the national average, while growth in out-of-state students was in line with the national average. However, while the change in enrollment and residency at regional publics in New England were in line with their peers, the overall figures mask important geographic variations across the region. Enrollment gains were greatest in southern New England while northern New England saw a combined decline in enrollment of 13% across New Hampshire, Maine, and

Vermont.

These geographic differences become especially clear when looking at the map of enrollment change by county, with an overlay of northeast megalopolis counties (see Figure 2). When examining the areal distribution, it becomes clear that most enrollment growth was within the Boston-Washington corridor. Large sections of northern New England lying outside megalopolis had low levels of enrollment growth while areas inside the northeast corridor had much higher rates. Not surprisingly, Massachusetts, lying almost entirely within the northeast megalopolis, had the highest rates enrollment gains in the region. Virtually all of the growth at RPUs in New England was confined to the Greater Boston area, reflecting the significance of the northeast corridor and the fact that Massachusetts had the highest rate of public HS graduation growth in the region. Northern New England showed low levels of enrollment growth, if not outright decline (declining populations are shown in red on the map).

Within Greater Boston, the enrollment growth at regional publics disproportionately took place at just two schools, both in the University of Massachusetts system: UMass Boston and the UMass Lowell. Both were research universities looking to transition toward R2 status and the two schools combined for 80% of the total enrollment growth across regional publics in New England.

UMass Boston, founded in 1964 and located in the heart of the city, was a latecomer to the state's austere public university system. The state created UMass Boston to meet the growing need for public higher education in Boston over the objections of the city's main private universities--Boston College, Boston University and Northeastern--as well as Boston State College, the only public university in the city. Boston State's objection was based on its own hope to secure the funding for itself, though the school lacked space to



expand its campus in the crowded Longwood neighborhood of Boston where it was located, and it was eventually forced to sell its campus, consolidating into UMass Boston.

UMass Boston was created as a commuting school, originally located in Park Square, however, when the university needed room to expand, its original location proved inadequate. After much political haggling, the campus was moved to Columbia Point, which at the time was home to the largest public housing project in New England and had been serving as both the city's dump and sewage pumping station. While the financial investment in the Columbia Point campus was substantial--it was the largest publicly funded capital project in the state at the time--the campus saw little subsequent development until the twenty-first century. In 2004, the first new campus building in over 25 years was built as the school added a state-of-the-art campus center, soon followed by several academic buildings, including an integrated science complex. Several dorms were added to the campus for the first time in school history, though assurances were made to not strip the university of its fundamental role as a commuter school (Feldberg, 2015). The combined impact helped the school achieve a 52% enrollment growth rate during the study period.

UMass Lowell is located just outside of the Boston metropolitan area but within the combined statistical area of Greater Boston. The school originated as two separate colleges, each founded in the late 19th century. The first, Lowell State College, was a normal school built on the south bank of the Lowell River while the second, Lowell Technical Institute, was originally built for textile trades on the north bank of the Lowell River one year later. The two schools merged in 1975 and were folded into the University of Massachusetts system in 1991. Since that time, the school has seen tremendous growth, particularly since the creation of an ambitious strategic plan in

2008, under the influential leadership of Marty Meehan, that furthered the university's move in the direction of research institution and residential college.

Among the developments that took place as part of this plan was the purchase of a former hospital located between the north, south and east campuses--the latter a recently added residential campus--that was turned into a student and administrative center, designed to unite the three nearby campuses. The university also built a major new academic building for the health and social sciences as well as an emerging technology and innovation center, allowing students to engage in public-private research around printed electronics and nanotechnologies. On the student life side, UMass Lowell opened several new residence halls on its east campus as well as additional student housing and campus recreation on its south campus as well as moving all of its athletics teams from Division II to Division I. Though not as important as the overall academic quality of the institution, survey research has shown that the attractiveness of a campus and the quality of facilities plays a significant role in the recruitment and retention of undergraduates (Reynolds, 2007). Thus, like a successful athletics program, the physical quality of the campus can play a deciding role in attracting students, all other things being equal. These policies helped produce a 71% rate of enrollment growth during the study period, the highest of any university in New England.

While schools such as UMass Boston and UMass Lowell saw tremendous growth, this was not the case across New England, as the northern states of Maine, New Hampshire, and Vermont, all saw enrollment decreases. Not surprisingly, the declining number of high school graduates in all three states accompanied the decline in regional public enrollments. With a 13% drop in public high school graduates, Vermont was the

most affected and took the most drastic steps to address the problem. In 2016 Vermont announced a merger between Johnson State and Lyndon State campuses under one administration, creating Northern Vermont University. It was later announced that the remaining RPU campus, Castleton State, along with Vermont Technical College, will be merging with Northern Vermont University and the combined four campus school will be known as Vermont State University, beginning in 2023. Maine, the state with the second largest drop in high school graduates, did not fare much better, though with only one RPU it did not have options like Vermont in terms of consolidation and economies of scale. However, with a \$16 million deficit, trustees approved extensive cuts to academic programs, including faculty positions (Kelderman, 2014).

With regard to recruiting out-of-state students as a strategy to offset declining state appropriations, regional publics have faced greater challenges than their resource rich counterparts. Compared to national publics, regional publics 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 3). However, when compared to their peers, regional publics in New England exceeded the average for RPUs throughout the study period, trailing only the Southeast and Mountain West in their ability to attract out-of-state students. Some of this can be attributed to the fact that New England has a disproportionate number of small states, as mentioned above. Similar to NPUs, RPUs in small states were more likely to have large out-of-state populations, fully 31% versus 13% for the remainder of their peer group. The ability to attract out-of-state students in an increasingly competitive market was made difficult by the fact that tuition in the region was so high. Prior to the Great Recession, New England had the highest tuition costs of any region in the country, and that figure grew by

26% to make it the highest of any region in the country.

While out-of-state enrollment at regional publics was higher than average, the ability of New England schools to increase recruitment of non-residents has proven difficult. Typical of the national overall, RPUs in New England struggled to increase the number of out-of-state students who might otherwise make up for the lack of growth in public high school graduates. Much like enrollment growth, increases in out-of-state admissions were uneven across the region and even more highly concentrated in just a few institutions.

Overall, out-of-state enrollment growth was mixed across the region, with nine institutions seeing increases in their out-of-state admissions and ten institutions seeing decreases. What stood out was that 87% of all increases in out-of-state students came from just three institutions: Plymouth State, UMass Boston, and UMass Lowell. The latter two schools were discussed at length and the increasing research orientation of those schools and major enhancements to student life on the campus were drivers of enrollment increases, for both in state and out of state cohorts.

Plymouth State was a slightly more unusual case, it had experienced a 30% enrollment decline after seven consecutive years of falling enrollments prior 2015. As a result, the school was investing heavily in admissions and marketing, while simultaneously upgrading academic and athletic facilities in an effort to turn its admissions shortcomings around ("Behrend's Bix Chosen"). The year 2015 marked the largest incoming class of the past 20 years for both in state and out of state undergraduates, though that still left the school 20% below the highwater enrollment mark in 2008. Thus, while the school did traditionally have among the highest proportion of out-of-state students of any regional public in New England, its robust 2015 numbers benefited from the timing of the study.

## Conclusion

With regard to enrollments and the proportion of out-of-state students at national public universities, New England was in line with national trends in the years following the Great Recession. Regionally and nationally, enrollment growth outpaced high school graduation rates and there was an overall increase in the proportion of out-of-state students admitted. However, when compared to its peers, NPUs in New England had lower enrollment growth, which is not surprising given that regional growth in high school graduates was the lowest in the nation. Nonetheless, while NPUs in New England saw a decrease in the number of in-state students attending college, they were able to grow by increasing their share of out-of-state students. The result was that New England had the highest rate of out-of-state admissions in the country throughout the period of this study.

The ability of national publics in New England to recruit out-of-state students and increase enrollments suggests these institutions will continue to thrive in the coming years. The anticipated demographic declines coming at the end of this decade may make that harder, but proximity to the Boston-Washington corridor provides a fertile region in which to continue to recruit high achieving out-of-state students. A preliminary look at the impacts of the Covid pandemic on higher education using IPEDS enrollment data underscores this point. National public universities across New England saw a 1% drop in enrollments in 2020 as a result of Covid but saw enrollments rebound in 2021 to pre-Covid levels (author's calculation based on IPEDS data). When compared to trends at regional publics and community colleges, their ability to withstand the impact of the Covid pandemic is an overwhelming success.

Regional public universities, similar to NPUs, saw an increase in their enrollments

and in the proportion of out-of-state students, though their totals were much lower. This was true both nationally and regionally, though RPUs had a slightly lower growth rate than NPUs at both scales. With regard to out-of-state students, RPUs had a much lower proportion of out-of-state students prior to the Great Recession, both nationally and regionally, and that difference grew larger during the study period. Compared to their peers, RPUs in New England were slightly below the national average in enrollment growth and at the mean for out-of-state student growth. This points to the struggles that regional publics are likely to face in the future in a challenging demographic environment.

The impact of the Covid pandemic on RPUs in New England appears to be an early indicator of this. While NPUs in New England rebounded quickly following the pandemic, RPUs saw an enrollment decline of 5% in 2020 followed by a further 6% drop in 2021 (author's calculation based on IPEDS data). The overall decline is alarming and suggests there is work to do if regional publics are to maintain their current role in higher education across New England. Such efforts will be critical given the downturn in high school graduation rates that are predicted for New England in the latter half of this decade.

Despite the challenges facing regional publics, the RPUs attracting the most students, UMass Boston and UMass Lowell, were both research universities looking to transition to R2 status. This demonstrates the growing gap between research and master's universities and underscores the difficulties faced by RPUs in the region that wish remain primarily teaching institutions. Though this research does not offer a road map to fixing the problems faced by master's level RPUs, it does illustrate the crisis these institutions are experiencing as budgets tighten and the high school age population declines.

## ORCID

JOHN I. SHARP is Associate Professor in Geography and Environmental Studies at the State University of New York at New Paltz. Email: sharpj@newpaltz.edu

## References

- Adkisson, R., and J. Peach. 2008. Non-Resident Enrollments and Non-Resident Tuition at Land Grant Colleges and Universities. *Education Economics* 16(1): 75–88.
- Archibald, R., and D. Feldman. 2006. State Higher Education Spending and the Tax Revolt. *Journal of Higher Education* 77(4): 618–644.
- Behrend's Birx Chosen as President of Plymouth State. 2015. *Erie Times-News*, May 15. <https://www.goerie.com/story/news/education/2015/05/15/behrend-s-birx-chosen-as/24838399007/> (Accessed: March 26, 2022).
- Burd, Stephen. 2020. Crisis Point: How Enrollment Management and Merit-Aid are Derailing Public Higher Education. New America. Washington DC. [https://d1y8sb8igg2f8e.cloudfront.net/documents/CrisisPoint2020-02-10\\_FINAL.pdf](https://d1y8sb8igg2f8e.cloudfront.net/documents/CrisisPoint2020-02-10_FINAL.pdf) (Accessed: October 9, 2021).
- Chung, D. 2013. The Dynamic Advertising Effect of Collegiate Athletics. *Marketing Science* 32(5): 679–698.
- Digest of Education Statistics. 2017. Public High School Graduates, by Region, State, and Jurisdiction: Selected Years, 1980–81 through 2026–27. National Center for Education Statistics, U.S. Department of Education. [https://nces.ed.gov/programs/digest/d16/tables/dt16\\_219.20.asp](https://nces.ed.gov/programs/digest/d16/tables/dt16_219.20.asp) (Accessed: February 6, 2020).
- Despart, Z. 2015. UVM's Incoming Class has Fewer Vermonters. *Burlington Free Press*, September 28. <https://www.burlingtonfreepress.com/story/news/education/2015/09/28/uvms-incoming-class-has-fewer-vermonters/72566076/> (Accessed: November 2, 2021).
- Eagan, K. et al. 2016. The American Freshman: Fifty-Year Trends 1966–2015. Higher Education Research Institute, UCLA. <https://www.heri.ucla.edu/monographs/50YearTrendsMonograph2016.pdf> (Accessed: November 13, 2019).
- Feldberg, M. 2015. UMass Boston at 50: A Fiftieth-Anniversary History of the University of Massachusetts. University of Massachusetts Press.
- Noel Gallagher, N. 2015. “Fall Enrollment in UMaine System Down Overall, But Out-of-State Numbers Up.” *Portland Press Herald*, September 13. <https://www.pressherald.com/2015/09/13/fall-enrollment-at-umaine-system-down-overall-but-out-of-state-up/> (Accessed: March 26, 2022).
- Gordon, J. 2006. “UConn Decides to Build Its Own College Town.” *New York Times*, August 9. <https://www.nytimes.com/2006/08/09/realestate/09storrs.html> (Accessed: March 19, 2022).
- Grawe, N. 2018. *Demographics and the Demand for Higher Education*. Baltimore, MD: Johns Hopkins University Press.
- Integrated Postsecondary Education Data System (IPEDS). 2000 to 2021. Fall Enrollment: Residence & Migration of First-Time Freshmen. National Center for Education Statistics, U.S. Department of Education. Retrieved from <https://nces.ed.gov/ipeds/> (Accessed between 10-24-2019 and 11-10-2023).

- Jaquette, O. 2017. State University No More. Jack Kent Cooke Foundation, Lansdowne, VA. [https://mrodriguez01.wpenginepowered.com/wp-content/uploads/2018/06/Cooke\\_Foundation\\_State\\_University\\_No\\_More.pdf](https://mrodriguez01.wpenginepowered.com/wp-content/uploads/2018/06/Cooke_Foundation_State_University_No_More.pdf) (Accessed: October 25, 2019)
- Jaquette, O., and B. Curs. 2015. Creating the Out-of-State University: Do Public Universities Increase Nonresident Freshman Enrollment in Response to Declining State Appropriations? *Research in Higher Education* 56:535-565.
- Kane, T., P. Orszag, and D. Gunter. 2003. State Fiscal Constraints and Higher Education Spending: The Role of Medicaid and the Business Cycle. Urban Institute/Brookings Institute Tax Policy Center. <http://webarchive.urban.org/publications/310787.html> (Accessed: September 16, 2021).
- Kelderman, E. 2014. The Plight of the Public Regional College. *The Chronicle of Higher Education*, November 19. <https://www.chronicle.com/article/The-Plight-of-the-Public/150127> (Accessed: March 26, 2022).
- Pope, D., and J. Pope. 2009. The Impact of College Sports Success on the Quantity and Quality of Student Applications. *Southern Economic Journal* 75(3): 750-780.
- Public Education Finances: 2015. 2017. U.S. Census Bureau. Washington, DC: U.S. Government Printing Office. <https://www.census.gov/content/dam/Census/library/publications/2017/econ/g15-aspef.pdf> (Accessed: April 5, 2020).
- Rabinovitz, J. 1995. UConn to Get \$1 Billion For a Face Lift. *New York Times*, June 23 <https://www.nytimes.com/1995/06/23/nyregion/uconn-to-get-1-billion-for-a-face-lift.html> (Accessed: March 19, 2022).
- Reynolds, G. 2007. The Impact of Facilities on Recruitment and Retention of Students. *New Directions in Institutional Research* 135: 63-80.
- State Higher Education Finance: FY 2015. 2016. State Higher Education Executive Officers, Boulder, CO. [https://shef.sheeo.org/wp-content/uploads/2020/04/SHEEO\\_SHEF\\_FY15\\_Report.pdf](https://shef.sheeo.org/wp-content/uploads/2020/04/SHEEO_SHEF_FY15_Report.pdf) (Accessed: October 10, 2019).
- University of Vermont Sourcebook*. 2016. Office of Financial Analysis & Budgeting, University of Vermont. Burlington, VT. <https://www.uvm.edu/oir/sourcebook> (Accessed: November 2, 2021).