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Debt Sentence

The Effects of New Jersey's Declining Public Investment in Higher Education

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A report prepared by graduate students of Rutgers Edward J. Bloustein School of Planning and Public Policy for the New Jersey Policy Perspective



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"It may be the case that the demand for student loan credit rose, as the recession eroded household wealth and caused job loss, reducing households' ability to pay for higher education while increasing people's desire to postpone employment and enroll in school."

> — Sarah Bloom Raskin United States Deputy Secretary of the Treasury

Executive Summary

Across the United States public investment in higher education at the state level has consistently trended downward. Simultaneously, student enrollment has steadily gone up. This combination means that public universities are increasingly expected to educate greater numbers with less funding, pushing more and more students into taking on larger and larger amounts of student loan debt.

New Jersey, far from an exception, has seen one of the largest decreases in funding per pupil when compared to other states in the Northeast and the national average. The state also falls well above average for student loan debt. In response, some may find it more difficult to complete their degrees, be forced to do so part time, be prevented from attending at all, or leave the state to do so. For those who do attend and complete degrees, their delayed earnings potential and more immediate repayment requirements sometimes translate into higher rates of delinquency and default, and concurrent declines in participation in the economy — they are less likely to buy cars and homes or start families.

Motivated by this situation, New Jersey Policy Perspective (NJPP) partnered with graduate students at the Bloustein School of Planning and Public Policy of Rutgers University — New Brunswick as part of the School's capstone practicum project. The NJPP proposal tasked students with analyzing the true extent and effects of changes in tuition and fees, state appropriations, and student debt levels in New Jersey, along with what steps the state should take to reverse the process. In the 2016 spring

semester; a team of four graduate students undertook the project, meeting weekly with a faculty advisor for guidance and reporting periodically to staff from NJPP for feedback and suggestions.

The project utilized data from the National Center for Education Statistics' Integrated Postsecondary Education Data System, the United States Census Bureau, The Institute for College Access and Success, the American Community Survey, the Federal Register and published New Jersey State budgets. Trends were examined for New Jersey and its senior public institutions and compared to data from six comparison states as well as national averages. State appropriation numbers were gathered from New Jersey budget fiscal years 2004 through 2015. Both tuition cost and funding were investigated in three ways: unadjusted dollars, CPI-U adjusted dollars, and HEPI adjusted dollars.

Findings indicate that in comparison to other states and the national average, New Jersey is experiencing lower than average public investment and higher than average tuition and fees, resulting in large proportions and amounts of debt among residents. Indicative of these shifts is that tuition and fees went from 6.6 percent of median income for a family of four in 1995 to roughly 12 percent in 2014-15.

Given the negative socioeconomic effects of higher levels of debt on both the individual and the state, we provide possible recommendations to reverse or at least decelerate the rise in student debt. The latter would entail a return to pre-recession levels of funding, reversing the cutbacks of that period. In CPI-U adjusted dollars a 40 percent increase from the \$735 million invested in 2015 to \$1.03 billion or a 49 percent increase from the \$6,439 appropriated per pupil in 20013-14, to \$9,605. It is not likely that either of these would meaningfully improve the affordability of university as declining trends predate the Great Recession. Of greater impact would be a return to public funding levels that would place tuition and fees to the more affordable 6.6 percent of family income seen in 1995 An increase of 63 percent, from the \$735 million in 2015 to \$1.2 billion would bring funding today to the state appropriations provided on average in the 1990s. This would serve as a true reversal, supporting not only the current middle class, but also providing for its expansion. Given job market trends, the state only stands to gain from a more educated workforce. Lastly, further research is warranted into alternative revenue sources the New Jersey legislature recently considered as well as the means through which other states in the region have fared so much better.

Project Motivation and Overview

This report is divided into ten sections. We first explain our reasons for investigating the state of public investment in higher education, followed by a literature review of the importance, both nationally and for the State of New Jersey, of higher education in bolstering the middle class and the economy. We then analyze trends in the Garden State's public investment, as well as shifts in tuition and fees over time for four-year public institutions, comparing each to the national average and key regional comparison states. Next, we investigate parallel trends related to changes in tuition and fees, and public investment within New Jersey's four-year public institutions, in particular enrollment and completion rates with sub-analyses based on race and ethnicity. This is followed by an examination of student loan debt within the state and the negative effects thereof, the most concerning likely result of changes in state appropriations and tuition and fees. Finally, we discuss recommendations of increased state investment levels, conclude with a brief summation of our research, and explain our methods and data sources.

Public higher education in New Jersey is in a precarious position despite the documented need for a financially accessible and quality university system. By 2018, New Jersey will be one of the top five states in the United States with the largest portion of job openings requiring bachelor degrees, and 56 percent of all jobs will require some level of postsecondary education (Carnevale et al. 2010, p. 118, 121). Job growth is occurring fastest for occupations that call for postsecondary education (Ibid., p. 8). Though this prediction was made prior to the recent economic recovery, it may understate the Garden State's economic shift since the Great Recession and its weak recovery accelerated rather than reversed job market trends.

Simultaneously, as this report indicates, the cost of tuition at four-year public institutions continues to rise as state appropriations decrease. Possible correlated effects of these trends are many. Some students simply do not attend university; and yet others are increasingly turning to private lenders to afford college (Lochner 2015). Overall, it is likely that the current four-year public education system within New Jersey will not produce enough graduates to meet future labor market demands. An even more immediate risk is the potential for those who attend four-year public institutions within the state being unable to reach their true middle-class earnings potential and overall economic contribution due to increased student loan burden — through default, delinquency, poor credit, and the inability to invest in a home among other quality of life increasing items.

The Importance of a College Education

The benefits of a college degree, sometimes referred to as the "college premium" are well-documented. According to the Bureau of Labor Statistics data, the median annual earnings of the fully employed with college degrees was \$28,300 more than those with only a high school diploma in 2013 ("Taking Action" 2014, p. 5). Bachelor-degreebearing individuals also have lower rates of unemployment (4 percent) than those with a high school degree (8 percent) (Ibid.).The earnings boost is far less drastic for those who either drop out or earn two-year degrees, with an earning difference of only \$5,200 compared to those with only a high school education (Ibid.). Access to postsecondary education and its associated wage boost, correlates to an individual's movement into the middle class, so much so that "postsecondary education has become the threshold requirement for a middle-class family income" (Carnevale et al. 2010, p. 3-4). In addition, the Great Recession and its subsequent recovery accelerated the U.S. economy's shift into skilled jobs on the one hand and low-level service jobs on the other (Ibid., p. 6-7). In short, "the economy is demanding more and more workers with postsecondary education and employers are willing to pay more for them," while at the same time "the middle class is dispersing into two opposing streams of upwardly mobile college-haves and downwardly mobile college-have-nots" (Ibid., p. 3-4).

The economy has shifted and continues to shift towards a two-tier job market comprising of low-wage service industry work (which cannot be readily outsourced and is difficult to unionize) and an even greater increase in highly-skilled work (Carnevale et al. 2010). The latter indicates that the "college premium" associated with post-secondary educational levels remains and will be of increasing importance for maintaining a productive and competitive workforce into the future (lbid.; Brown et al. 2014).

Regarding New Jersey, the significant decrease in per pupil state appropriations and concurrent increase in tuition and fees have important implications for the economic health of the state as a whole. Specifically, an increasingly large proportion

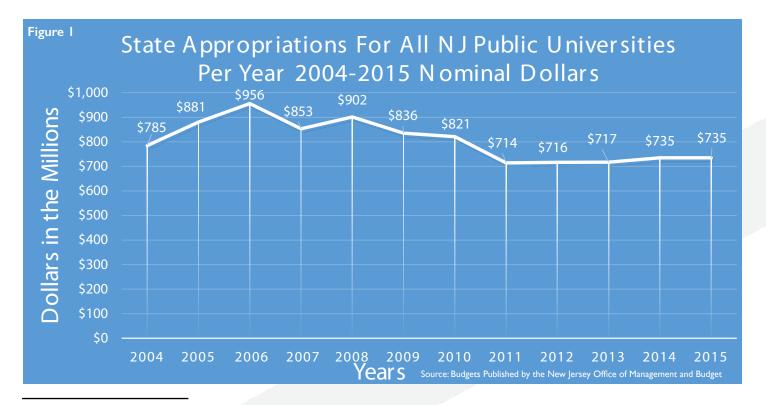
of individuals and families take on a similarly increasing amount of student loans and debt, restricting their ability to participate in the economy. At the same time, New Jersey increasingly requires a workforce with varying levels of post-secondary education in order to meet the economy's new forms of production. Faced with the prospect of a considerable debt burden, many may choose not to or even be unable to acquire a post-secondary education. Therefore, higher reliance on student loans may prevent New Jerseyans from entering into the job market at the levels demanded by the state's economy. Given predictions of a failure for higher education institutions to produce a large enough workforce for high-skilled jobs in the future (Carnevale et al. 2010), this means that New Jersey might miss a significant opportunity for its residents, families and economy to flourish.

Public Investment in Higher Education

Nationwide trends for state funding for public universities show that states are finally investing more toward higher education than in the immediate years following the Great Recession ("Shef:2014" 2014, p.9). A recent study finds a 4.1 percent increase in state funding from 2015 to 2016, a far cry from the overall 12 percent decrease that occurred from 2008 through 2013 ("Annual Grapevine compilation" 2016, p.1). These trends, however, are not applicable to the Garden State, as state funding since 2004 has trended downward with no real sign of change.

Our study of state funding examined 12 four-year public universities¹ within New Jersey from years 2004 through 2015. Funding was investigated through three dimensions: nominal dollars, dollars adjusted by the Higher Education Price Index (HEPI), and dollars adjusted by the Consumer Price Index for All Urban Consumers (CPI-U). Overall, the data shows a sharp decrease for higher education funding when adjusted for inflation.

Figure I illustrates the trend in state appropriations for all New Jersey public four-year institutions from 2004 to 2015. Nominal dollar values show a 6 percent drop in funding from 2004 to 2015, as funding decreased from \$785 to \$735 million.When adjusting by CPI-U, as shown in Figure 2, a 27 percent decrease is revealed, with CPI-U dollars dropping from \$1.01 billion to \$735 million. Figure 3, which contains HEPI-adjusted dollars, demonstrates 31 percent overall decrease, from \$1.077 billion to \$735 million.



¹ Schools included Kean University, Montclair State University, New Jersey City University, New Jersey Institute of Technology, Ramapo College, Rowan University, Rutgers University (Refers to all three campuses in the state), Stockton University, The College of New Jersey, Thomas Edison State University, William Paterson University, and University of Medicine and Dentistry of New Jersey.

To further understand changes in New Jersey's public investment in higher education, we analyzed funding in terms of full-time equivalent (FTE) students² and calculated higher education funding per full-time pupil (FPP) along our three levels of adjustment, as seen in Figures 4, 5, and 6. In terms of nominal dollars, Figure 4 shows FPP dropping from \$7,720 in the 2003-04 to \$5,653 dollars in 2013-14, a 27 percent decrease.

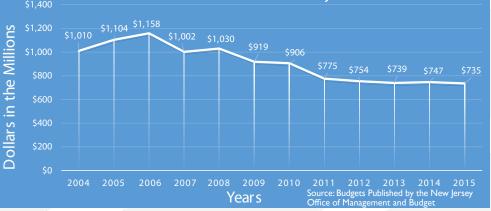
In contrast, Figure 5 indicates a 42 percent decrease during the same time span, with CPI-U adjusted numbers dropping \$9,935 to \$5,744. A similar downturn is seen through HEPI, with Figure 6 showing a 45 decrease from \$10,596 in 2003-04 to \$5,822 in 2013-14.

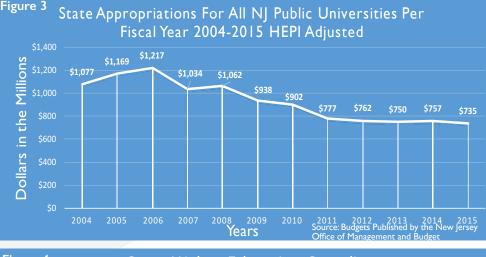
On the whole, both state total funding for public senior institutions and FPP spending data indicate notable declines in state support for public universities. One area of concern is that the data does not indicate a possible return to even pre-recession funding levels, illustrating how much more will need to be done to turn the corner on state cuts to public university funding.

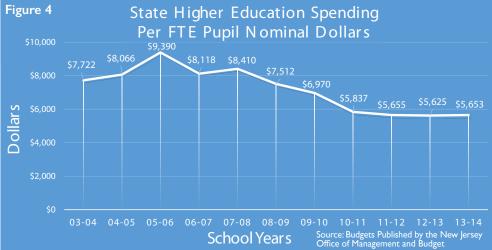
Comparison to Other States' Public Investment in Higher Education

To garner a more holistic understanding of the trends in New Jersey's annual state appropriations to four-year public institutions, we compared these values with those of other states in recent years. Data from the National Center for Educational Statistics shows that New Jersey is one of nation's leaders in brain drain, with 34,875, or 40 percent of first-time students in degree granting institutions leaving the state to attend university elsewhere and only 5,638 entering New Jersey for the same purpose in 2012 (NCES 2013).These figures include first-time students attending all four-year institutions, and therefore private institutions are a factor. Pennsylvania, Maryland and Virginia were chosen as comparison states based on the migration of these first-time undergraduates from New Jersey who choose to attend

Figure 2 State Appropriations For All NJ Public Universities Per Year 2004-2015 CPI-U Adjusted







 $^{^{2}}$ Full-Time Equivalent: FTE data is derived from IPEDS by NCES. FTE is calculated based on student headcounts for the fall as reported by the institution. The headcount for a university's part-time enrollment is multiplied by a factor of 0.403543 and the resulting number is counted as a number of full-time students. This number is then added to the amount of actual full-time students to create the FTE for all students enrolled in the fall.

university within these states. New York, Connecticut and Massachusetts are also used as comparison states due to their regional and economic similarity to New Jersey.

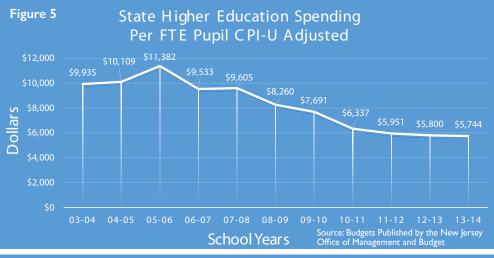
When it comes to recent trends in state appropriations for four-year public institutions, New Jersey and all comparison states fall above the national average when not considering funding per pupil. Figure seven depicts these trends for fiscal years 2003 through 2014. This is understandable considering that the region consists of states with higher income and education levels, larger budgets, and far greater numbers of public higher education institutions and students. However, the chart indicates that New Jersey's funding levels have fallen to a greater degree than all comparison states, with the possible exception of Virginia, which still funds at a than all but one comparison states when considered on a per pupil basis. This is of concern since lower public investment likely translates to a lack of support for middle class families and households as well as reduced economic growth overall, as compared to the Garden State's neighbors.

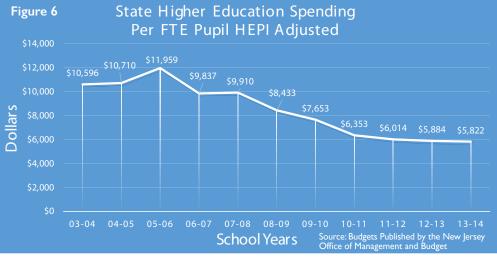
Tuition and Fees

Nationally, tuition has seen moderate increases within the last three decades, with recent years showing lessening increases. From 2005 to 2016, the national average annual percentage increase for tuition and fees reached 3.4 percent, lower than the 4.2 percent increase between 1985 and 1996 and the 4.3 percent increase between 1996 and 2005 ("Trends in College" 2015, 16). These trends suggest that the rise in tuition and fees has turned a corner and begun to slow down.

But a slowdown in cost alone should not be read as a game-changer in college affordability. Our research in tuition and fee trends in New Jersey public universities shows that even meaningful stabilization in tuition and fee costs still has significant negative consequences for students.

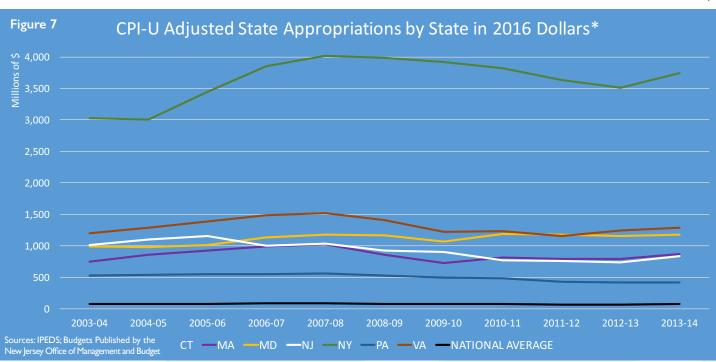
We explore tuition and fees in three phases: (1) tuition and fee trends in New Jersey public universities, (2) tuition and fees as a percentage of median family and household income and (3) comparison of New Jersey tuition and fee trends with neighboring states. This approach allows for putting trends in context in order to better understand the implications for college affordability in the state.





higher level than New Jersey. In fact, aside from Pennsylvania, New Jersey falls below every other comparison state.

Lastly, the difference between New Jersey and comparison states in Lastly, the difference between New Jersey state appropriations becomes even starker when the data are normalized by reported full-time equivalent students.² Here one can see that New Jersey went from above the national average in 2005-06, above three of the six comparison states, to consistently well below average, remaining second to last after 2006-07 except for a brief period in 2009-10. New Jersey's four-year public institutions receive lower institutional state appropriations

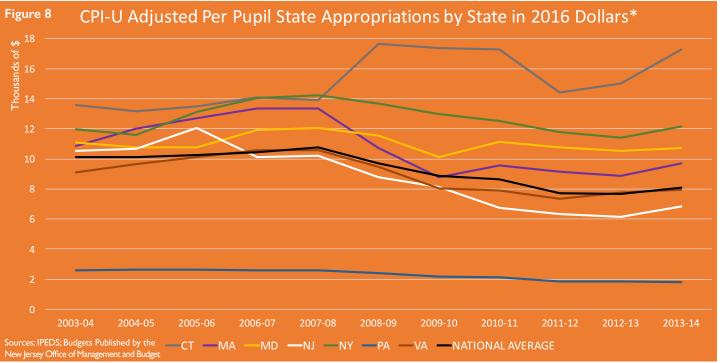


*Values for New Jersey's appropriations from published budgets differed from those within IPEDs.. Here values for NJ are from state budgets but the national average uses only IPEDs data.

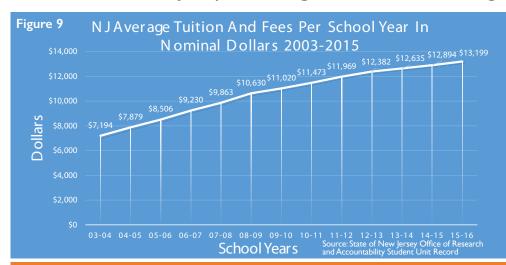
New Jersey Public University Tuition and Fee Trends

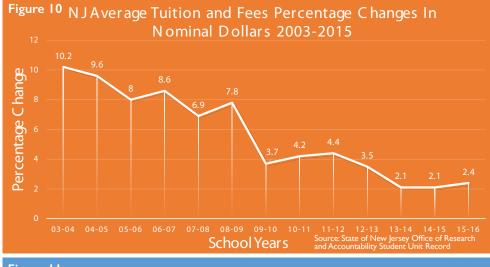
As with our analysis of state appropriations, this section examines the yearly average tuition and fees for New Jersey's fouryear public universities in three dimensions: nominal dollars, HEPI adjusted dollars, and CPI-U adjusted dollars. All adjusted figures show an upward increase in tuition, but like national trends, prices have been stabilizing over recent years. In terms of nominal dollars, as seen in Figure 9, tuition and fees underwent a steady increase over the years, with an average of \$7,194 in 2003-04 jumping to \$13,199 in 2014-15. Figure 10 shows major percentage increases occurred from 2003-04 through 2008-09 but since 2013-14, increases have averaged about 2 percent.

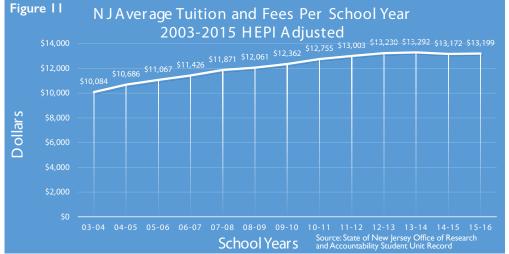
Adjusting for HEPI, as seen in Figures 11 and 12, shows the increases in tuition and fees decreasing to a greater extent, with costs going from \$10,084 to \$13,199 in



*Values for New Jersey's appropriations from published budgets differed from those within IPEDs.. Here values for NJ are from state budgets but the national average uses only IPEDs data.







our data's timespan. Percentage change data shows increases were significantly smaller than those seen through nominal data and even indicates a percentage decrease occurring in 2014-2015. Comparably, the CPI-U adjusted tuition and fees depicted in Figures 13 and 14 also indicate lessening percent increases. Under this adjustment, tuition and fees increased from \$9,266 to \$13,199. Percentage increases peaked in 2003-04, with a high of 7.8 percent, but since 2010-11, increases have stayed between 1 to 2 percent.

Tuition and fee trends show recent cost stabilization,³ marking a propitious time to enact legislation that pushes postsecondary affordability. With recent economic growth and stability, a swifter and more meaningful impact can be made today towards reducing the burden of the cost of college education for New Jerseyans, as compared to periods of sharply rising tuition rates.

Tuition and Fees and Family and Household Income

Though tuition increases have slowed since 2011, considering tuition and fees relative to family⁴ and household income provides a clearer understanding of the increased cost to New lersey's four-year university students and their families. As tuition and fees have increased, first sharply then gradually, at New Jersey's fouryear public universities, incomes for most individuals stagnated then declined, prior to and during the Great Recession, respectively. Rising costs and falling incomes have meant the burden of paying for college is increasing substantially for the Garden State's middle and lower income residents.

As seen in Figure 15, tuition as a percentage of median family income in New Jersey (for 4 person families) in 1995 was 6.6 percent. A decade later this figure was 10.3 percent, and in the depths of the Great Recession, this number continued to rise to nearly 12 percent. Even

³ Tuition and Fee stabilization alone may not illustrate an ideal scenario for students or improving college affordability as a whole, as stable or even lower tuition and fees in an era of decreasing state appropriations could mean fewer course offerings, larger class sizes, more adjunct teacher hires, and reduced student services ("Years of cuts" 2015).

⁴ The Census Bureau defines a "family" as 'two or more people related by birth, marriage or adoption residing in the same housing unit.' A "household" is defined as 'all people who occupy a housing unit regardless of relationship.' <u>https://www.census.gov/hhes/www/income/about/faqs.html</u>

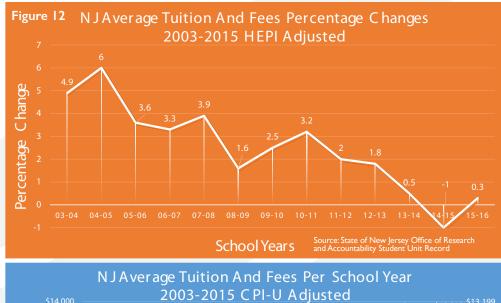
as the economy "recovered" post-recession, by 2013, tuition as a percentage of median family income hit 12.3 percent.

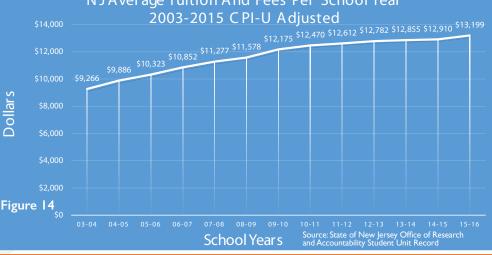
Figure 16 presents tuition as a percentage of household income, using five different income numbers: the median household income and the upper income limit for the first four income quintiles in New Jersey. Tuition as a percentage of household income for those at the upper limit of the lowest quintile was 34.6 percent in 2006, but 46.1 percent by 2014. Of course, individuals at that income bracket are much more likely to receive Pell Grants, Tuition Aid Grants, and other forms of federal and state need-based aid, but tuition as a percentage of household income has continued to increase for all income quintiles in New Jersey.

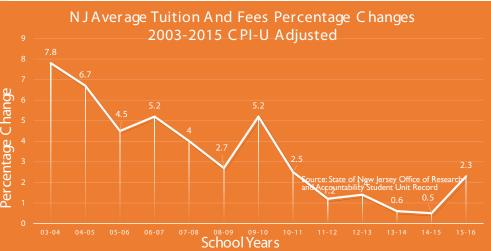
For those at the upper end of the second quintile, tuition was 18.1 percent of household income in 2006 and 23 percent in 2014. Wealthier families felt the impact of rising tuition, but to a slightly lesser extent. Those at the upper end of the third quintile saw tuition increase from 11.5 percent of household income in 2006 to 14.2 percent in 2014. Finally, tuition as a percentage of household income for those at the upper end of the fourth quintile increased only marginally, from 7.5 percent in 2006 to 8.9 percent in 2014.

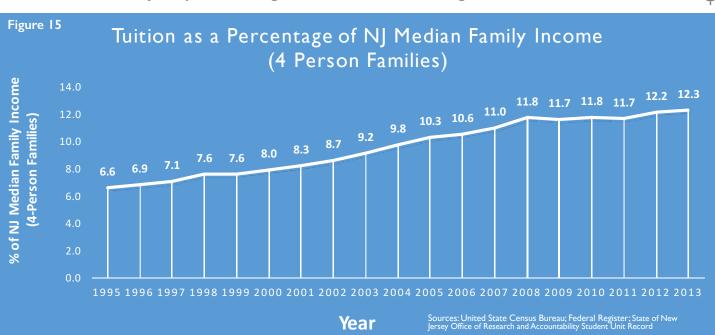
The trend for every income group and for both family and household income is clear: tuition as a percentage of income is rising, and this was true before, during, and after the Great Recession. Cost increases for the state's middle and lower income college students is a particular cause for concern. Comparison to Other States' In- and Out-of-State Tuition and Fees

As with our analysis of state appropriations, we compared New Jersey's tuition and fees with those of our comparison state set to understand the trends in a broader context. Figure 17 presents New Jersey in-state tuition and fees along with those of Connecticut, Massachusetts, Maryland, New York, Pennsylvania, Virginia and the National Average. Figure 18 provides the same comparisons for out-of-state tuition and fees. Regarding in-state tuition and fees, New Jersey clearly falls well above







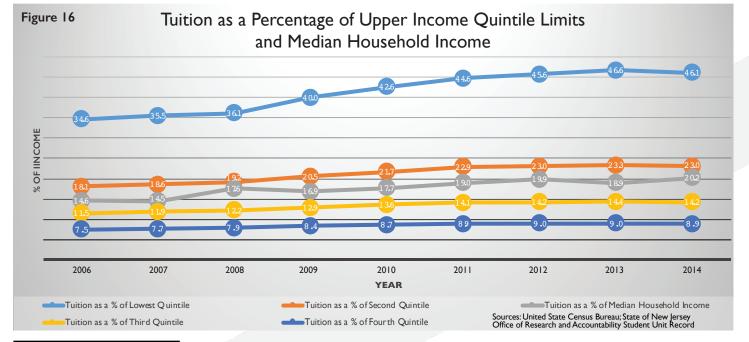


the national average and well above almost all other comparison states, with only Pennsylvania falling slightly higher. It is therefore more expensive for New Jerseyans to attend four-year public university within their home state than home-state residents within all but one of our comparison states.

Comparatively, outside the 2009-10 school year, out-of-state tuition and fees in New Jersey have remained above average. This is a possible reason that New Jersey does not attract enough students to make up for the loss of those migrating out (NCES 2013).⁵ Also of note is that in more recent years, tuition and fees in the state are increasing at a rate greater than

that of the national average and all comparison states, with Virginia being a possible exception.

Overall, in-state students at New Jersey's four-year public institutions are faced with higher tuition and fees than a great majority of students in comparison states. New Jersey is simultaneously less competitive in attracting out of state students due to above average out-of-state tuition and fees. It is of note that outside of Maryland, New York and Connecticut in-state tuition and fees are trending strongly upward across the board. These trends also cannot explain the attraction of Pennsylvania for New Jersey students — a possible indication that



⁵ We did not analyze the effects of private institutions in comparison states nor the recent membership within the Big Ten for Rutgers University—New Brunswick on out-of-state enrollment.

private and not public colleges serve as the main impetus for outmigration of students. Because private colleges are likely to be more expensive and more selective than instate public ones, it is possible that New Jersey is losing students from more privileged families.

Finally, combined with lower state appropriations, higher tuition and fees likely contribute to the expected workforce shortfall within New Jersey as students are pushed either not to attend, take on larger portions of debt or go out of state for college.

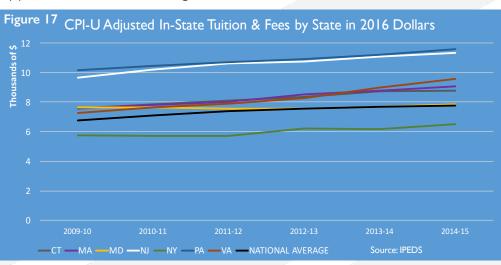
Parallel Trends within Universities

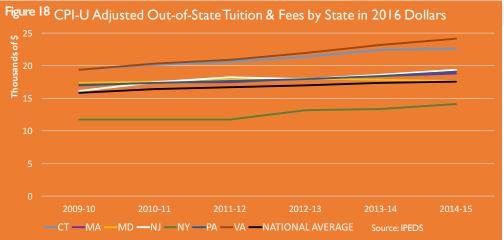
Little research has been done to establish causal links between the effect of increasing tuition, decreasing state appropriations, and increasing student loan debt on enrollment and degree completion rates. It is conceivable that faced with the stress and negative impacts of large amounts of student loan debt, students may be less inclined to enroll, or may cut the process short to avoid a larger burden. Though we cannot say with certainty that this is the case, we analyze concurrent enrollment and completion trends to understand the broader context.

In this section, enrollment and completion of degrees are examined on various levels within New Jersey public universities as a whole. First, enrollment is viewed as both a total of public university student attendance in the state and by race and ethnicity. Second, degree completion is examined at the individual university level, on the number of years needed to complete degrees and lastly through degree completion by race and ethnicity.

Enrollment

Our study of undergraduate enrollment was based on those matriculated within four-year public universities in New Jersey from 2003 to 2015. The analysis was conducted along two dimensions: (1) enrollment of all undergraduate students, and (2) enrollment by race and ethnicity. The first dimension refers to enrollment by any kind of degree-seeking undergraduate student. The second dimension, enrollment by race and ethnicity, provides a more detailed look at the demographics of enrolled students. The races and



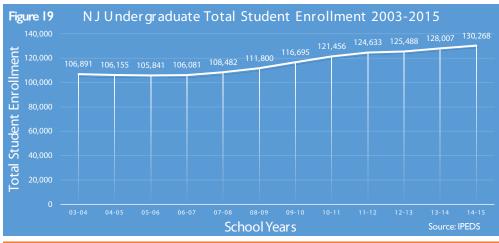


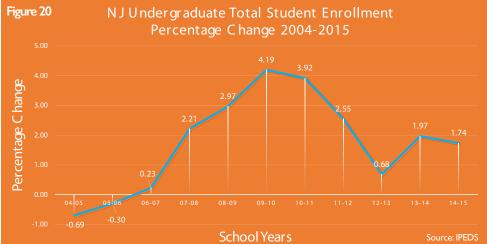
ethnicities examined in this section are Asians, Blacks, Hispanics and Whites.

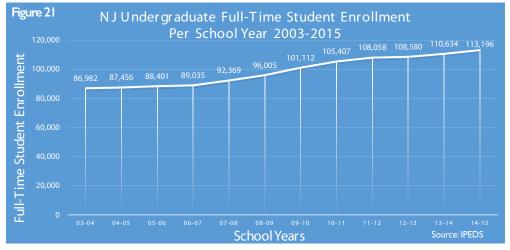
Within these two dimensions of analysis, the study further breaks down enrollment data, making a distinction between full- and part-time students. Subdividing data along these lines is relevant because full- and part-time students differ on important features which may impact tuition costs incurred, such as the length of time it takes to complete their respective degrees and the amount of federal aid awarded ("Four Financial Factors" 2014, p.1). These differences therefore speak to two distinguishable types of students facing diverging levels of tuition cost liability.

General Enrollment Analysis

As seen in Figure 19, undergraduate enrollment increased by 22 percent, from 106,891 in 2003 to 130,268 to 204. Figure 20 illustrates annual increases ranging from 1 to







4 percent. The data suggests that more students are choosing to attend New Jersey public universities.⁶ Students may be finding the Garden State more affordable due to being able to pay in-state tuition costs and live at home, two factors that may cut costs substantially and make attending out of state less financially attractive.

Viewing data through full- and parttime lenses, the analysis reveals notable differences. Figures 21 and 22 show full-time enrollment has generally increased slowly over the years, with a jump from 86,982 to 113,196 students and percentage increases ranging from I to 5 percent annually. In contrast, Figures 23 and 24 show part-time enrollment has decreased by 19 percent, as enrollment dropped from 19,909 to 17,072 students.

Overall, attendance has slowly increased since 2003, with more students paying the costs of higher education, more are also exposed to the risk of incurring debt. Another notable finding was that of part-time enrollment. The significant decrease in this enrollment may illustrate that New Jersey public universities are longer amenable for those 25 and older, who make up 48 percent of the part-time public university student population nationwide (Kena et al. 2015, p.194). This may be a result of their inability to finance the steadily rising costs of tuition. For example, a fundamental difference between full- and part-time students is that the latter are typically older, financially independent and employed on a full-time basis while the former are younger and are financially dependent of others (Pelletier 2010, p.3).

The loss of jobs and the high unemployment rates stemming from the Great Recession may have stripped part-time students of their full-time employment or decreased their wages enough to make tuition unaffordable. The data suggests that public universities are becoming increasingly accessible to only those who can enroll full-time, which tend to be financially dependent individuals like those straight out of high school or individuals

⁶ We hypothesized that perhaps those with higher SAT scores, because of finances, were now electing to attend NJ universities as opposed to those out of state. SAT scores from 2003 through 2015, however, have generally decreased according to College Board SAT data ("State Profile Report: New Jersey" 2014).

in their early twenties (Kena et al. 2015, p.193). Hence, the door to higher education in New Jersey may be closing for certain types of residents, limiting the economic potential of those who cannot attend in their younger years.

Enrollment by Race and Ethnicity

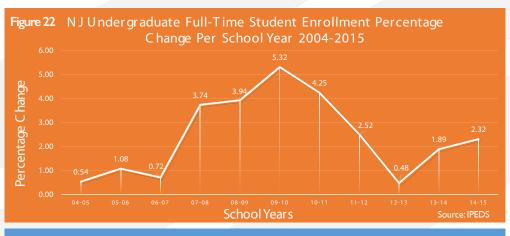
Enrollment data by race and ethnicity shows growing diversity within New lersey's four-year public universities, a testament to the burgeoning heterogeneity of the state. As Figure 25 indicates, Whites remain the majority group in student enrollment but has declined significantly since 2003: Whites made up 63.5 percent of all enrollees in 2003-04 and 53.1 percent in 2014-15. Hispanic enrollment, on the other hand, has increased tremendously, with its 13.3 percent in 2003-04 reaching 20 percent in 2014-15. Asians also saw increases in enrollment as their 12 percent enrollment in 2003-04 ascended to 14.8 percent in 2014-15. Meanwhile, Black enrollment remained at roughly 12 percent for the last 12 years.

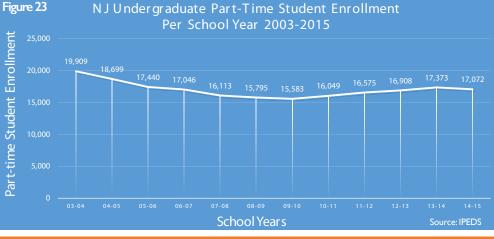
Lastly, enrollment by race was also examined by full- and part-time figures from 2003 through 2015. The trends for each group were consistent with the general enrollment data by race noted in the previous paragraph.

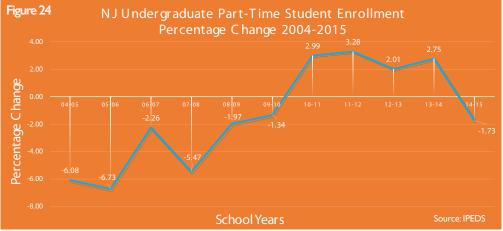
Completion of Degrees

The concept of what is "traditional" in college is obsolete. Conventions like the "four-year plan" to graduate college have become a modern day myth, as only 19 percent of full-time public university students graduate within this traditional time frame ("Four-year myth" 2014, p.4). The implication of this bygone assumption is simple: Time is money and students are bearing greater costs the longer college is attended. Attending into years five and six typically adds even greater debt than in earlier years, as tuition and fees generally increase yearly with financial aid staying the same (Ibid., p.4). In addition, time limitations on receiving a Pell Grant (6 years or 12 semesters) and a New Jersey Tuition Aid Grant (4 ¹/₂ years or 9 semesters) mean that Garden State students cannot count on financial aid to offset their university costs once their undergraduate studies extend beyond a certain amount of semesters.

Changes in student demographics further defy traditional concepts of college, as more minority groups attend universities (Snyder 2015, p.378). This demographic shift has its own financial significance, as minority groups, like Hispanics, face difficulties in financing college costs







due to coming from lower-income brackets (Astudillo 2015, p.1).

Overall, the financial ramifications of longer college attendance and a changing student body are enough to warrant study. In this section, we analyze the completion of degrees on two levels: length of time taken to complete bachelor degrees in NJ public universities and the race and ethnicity of those earning degrees.

Completion of Degree by Number of Years and Institution

One of the reasons for the growing debt burden among college students is that they are staying in school longer. Using data from the NCES, we analyzed degree completion by cohort years 2004 through 2007 for individual four-year public institutions in New Jersey (See Appendix).

At many New Jersey public institutions, only between one-fifth and one-third of students are earning bachelor's degrees in four years or less. Even at Rutgers-New Brunswick, the state's flagship public research institution, only slightly more than half of students walk away with a bachelor's degree in four years or less. The College of New Jersey (TCNJ) does the best of the institutions at which we looked, with more than seventy percent of their students earning a bachelor's degree in four years

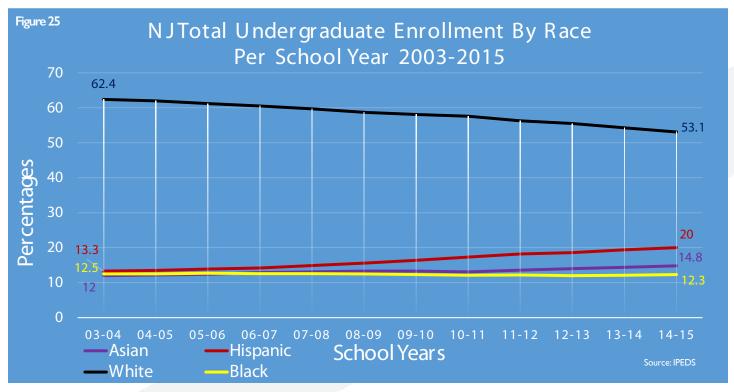
or less. Still, more than ten percent of TCNJ students take more than four and up to five years, with the remainder taking longer, if they earn their degree at all.

For most of the Garden State's four-year public institutions, somewhere between one-fifth and one-quarter of students are taking more than four and up to five years to earn their bachelor's. At Rutgers-New Brunswick, some three-quarters of students have their bachelor's within five years, but this means that a full one-quarter of students are taking longer than that. For Kean, NJIT, and William Patterson University, less than half of students have their bachelor's degree within years.

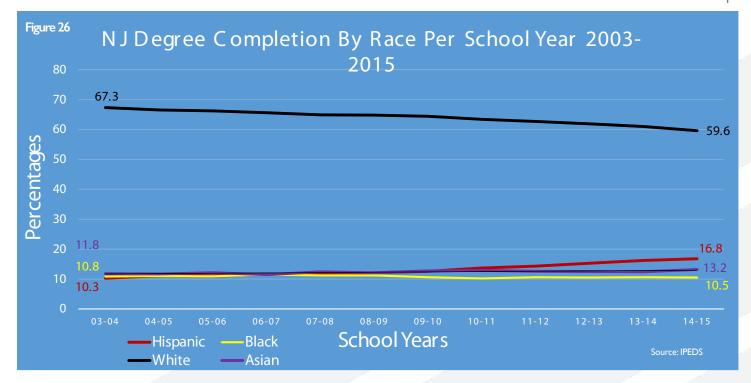
Overall, these numbers are cause for great concern and merit further discussion and research. Part of the answer to reducing the debt load for students may involve finding ways for them to graduate earlier rather than later.

Completion of Degree by Race and Ethnicity

The same trends revealed in our "enrollment by race and ethnicity" analysis are further seen in our examination of degree completion by race and ethnicity, but at a slightly lesser intensity. Figure 26 shows that since 2003, Whites have had the most degrees completed for any given year though their share has steadily dropped from 67.3 percent in 2003-04 to 59.6 percent in 2014-15.



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This proportional drop in degree completion among Whites is in concert with the proportional increases seen in completions by Hispanics, with their initial 10.3 percent share increasing to 16.8 percent. Asians exhibit stabilized trends, with their 11.8 percent completion rate increasing to 13.2 percent. Lastly, Blacks, as with their enrollment numbers, saw no change, as they roughly accounted for 10 percent of all degrees completed since 2003.

Overall, student enrollment and completion of degree by race shows a diversifying postsecondary student body, in which minority groups are steadily attending and completing degrees more each year. Hispanics are principally pushing this diversification trend. The significance of changing racial demographics is that now, more than ever and even more so in the future, the financial costs of attending public university are going to be increasingly incurred by groups typically in the lower ends of the income ladder (Astudillo 2015, p.1). Moreover, minority groups are likely to become responsible for a greater share of the state's economic activities, thus further highlighting the need to ensure university costs do not prevent individuals from reaching their earnings potential.

Debt and Its Effects

At a national level, rising tuition and fees and the abatement of state support for public universities have resulted in the ascent of student loans as an important tool for financing postsecondary education (Baum et al. 2013, p.4). Estimates as recent as 2011 found that roughly 66 percent of those graduating in that year had an average loan debt of over \$26,000, illustrating how common loan debt has become among new graduates today (TICAS). A testament to the prominence of loans is the near tripling of student loan debt, from \$364 billion in 2004 to \$1.1 trillion in 2014 (Brown et al. 2013, p.3-4). The rise in debt has led to roughly one-in-five households owing student loan debt (Fry 2012). This debt burden mostly falls on the young, with nearly two-thirds owed by those under 40 and one-third by those under 30, with those over 40 owing increasingly smaller percentages (Brown et al., 2013, p.3-4). When broken down by income, those in bottom fifth of the income spectrum owe most of the debt ("Taking Action" 2014, p.7). This growth in debt is largely due to a 70 percent increase in the number of borrowers and a 70 percent increase in the average debt per borrower (Fry 2012, p.5).

Cementing the pervasiveness of student loan debt is its resiliency despite economic downturns, with student debt being the only category of household debt to have increased after the Great Recession mortgages, auto loans and credit card debt all declined (Brown et al., p. 3-4). Given the ubiquitous state of student loan debt, it is perhaps unsurprising that, across the board, Americans bear loan debt from "young and old, white and nonwhite, men and women, low income

3

and high income, college educated and not" (Urban 2013, p. 11).

In this section, the study explores student loan debt and its ramifications. First, New Jersey student loan debt trends will be explored, providing an overview of what is happening in the state and how it fares against the condition of debt nationwide. Next, the relationship between student attendance and rising debt is examined to explore the impact debt has on accessibility to postsecondary education. Third, the consequences of failing to meet repayment obligations and the impact loans have on the economic potential of individuals are viewed. Lastly, the study evaluates how changes in once correlating forms of various debt impacts the ability of borrowers to make major life decisions.

Student Loan Debt in New Jersey

Approximately 1.1 million New Jersey students carried \$28.5 billion in student loan debt (Fry 2012, p. 18). This is perhaps unsurprising given that New Jersey dropped from second in the nation for per pupil state aid in 1996 (\$7,495 per student), to 10th in 2011, giving just \$7,155 per student — less than half of the \$14,837 given by the highest state and a marked decrease in real dollars from the 1996 level (NCHEMS).

A 2014 study by the Federal Reserve Bank of Philadelphia⁷ (FRBP) exclusively examined student loan trends from borrowers in its reserve district, which includes Pennsylvania, Delaware and Southern New Jersey. Debt in the local region saw major increases, with total aggregate debt rising from \$18 billion to \$46.5 billion, pushing the median debt from \$9,500 in 2003 to \$16,900 in 2013 (Hylands 2014, p.4). The study found that upper-income borrowers carry substantially higher debt than low-income borrowers; however, delinquency rates are highest for lower-income groups (Hylands 2014, p.5). An examination of borrowers by various age cohorts indicates similar numbers for all groups, with averages between \$14,000 and \$18,000 in 2013. The youngest cohort, 18- through 29-year olds, however, do carry the highest amount of loans (Hylands 2014, p.9). Lastly, borrowers 60 years and older hold the largest amount of co-signed loans (lbid.). This may be due to older generations having to co-sign loans to finance tuition and fees of younger family members (lbid.).

Another approach to understanding student loan debt is to consider the average debt level of those graduating from four-year institutions in New Jersey as compared to the national average. Figure 27 shows that a little over a decade ago, the national average student loan debt was greater than that of NJ students by some \$2,000 (TICAS). By the 2005-06 school year, graduating seniors in the state were faced with average loan debt that slightly outstripped the national average. The most recent year for which we have data, 2013-14, shows that graduating seniors in New Jersey have loan debt that exceeds the national average by nearly \$2,500 per student.

Figure 28 shows that the percentage of graduating seniors with debt is also higher in New Jersey than nationally. This means that we have more students graduating with debt and each of these students have a higher level of debt on average. Between the 2003-04 and 2013-14 school years, roughly 60 to 70 percent of graduates in New Jersey had loan debt (TICAS). During that same period, growth of loan debt on the national level was much slower. The percent of graduates with debt nationally stayed in the mid- to high-fifties before hitting 60 percent in 2012-13 and 2013-14.

Beyond the national averages, it is also worthwhile to compare New Jersey debt levels to those of our regional neighbors. Figures 29 and 30 present these trends. Based on regional similarity and the migration trends of first-time undergraduates from New Jersey to attend school out-of-state, Pennsylvania, Maryland, Virginia, New York, Connecticut and Massachusetts were chosen as comparison states. Of these, New Jersey compares favorably only to Pennsylvania, a state that largely continues to fund its universities at dollar amounts that have remained unchanged since the levels of the 1990s (Thompson 2014). Compared to Maryland and Virginia, however, New Jersey students are graduating with higher levels of debt. As for New York, Connecticut and Massachusetts, New Jersey students were graduating with similar levels of debt between 2007-08 and 2009-10. Since that time, New Jersey and Massachusetts have pulled away from Connecticut and New York. A possible reason for current discrepancies is the level of funding that each respective state dedicates to higher education.

⁷ Data for student loans are particularly difficult to come by because "there exist few central repositories of information on the characteristics and performance of all student loans" (Brown et al., 2013, p. 1). Thus, despite lacking complete New Jersey data, the study remains an invaluable source of information because it provides insight to a more localized story of student loan debt.

Attendance

The impact of loan burden on individual students is multifaceted. For some, increasing tuition and student loan burden may result in choosing not to attend college at all.A 2015 report by the National Bureau of Economic Research found that in recent years, credit restraints have become increasingly salient: "For example, private lenders typically require a cosigner for undergraduates, which leaves few alternatives for those whose parents have low income or a poor credit record" (Lochner 2015). There has been a drastic shift since the 1980s and 1990s with family income for the first time serving as an "important determinant of attendance at fouryear colleges" (Ibid.).

Just considering tuition, Researcher Donald E. Heller found that all other things being equal, a \$160 tuition increase for four-year institutions results in a -0.5 percent decrease in enrollment (Heller, 1999, p. 80). Excluding the shift in the state economy, and the increasing reliance on student loans, the "impact of state policy on enrollment in public higher education is critical" with enrollment for minority groups responding to greater degree than that of White students when state aid decreases (Ibid., p. 65, 83). Therefore, as an individual's earnings potential and ability to contribute to the economy is increasingly tied to their postsecondary education, many are prevented from attending college and reaching this potential because of increasing tuition and fees and student loan debt.

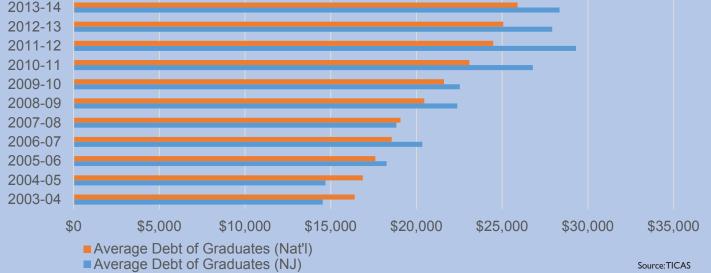
Debt, Delinquency and Default

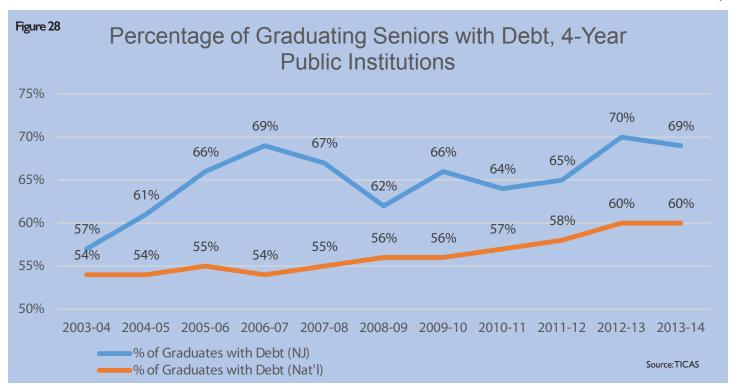
Though evidence suggests that a college education is the pathway to the middle class, financing that education simultaneously has negative effects. The repayment period for student loans occurs in the years immediately following graduation, despite the fact that graduates "experience the greatest earnings benefits later in their careers" ("Taking Action" 2014, p. 9). Given current job market uncertainty, repayment is often difficult and the situation is even worse for those who take on student loans but are unable to complete their education (lbid.). The combined effects of increasing loan burden and the delay in increased earnings have likely resulted in a rise in default and delinquency.

Delinquency is defined as failing to make a required payment (being delinquent) for 90 days or longer and delinquency rates drastically increased between 2004 and 2012 (Brown et al. 2014, p. 9-10). In 2014, the highest area of delinquency for all consumer debt products was student loan debt (Ibid.). As larger portions of the population take on increasing amounts of student debt, and in the face of unstable and weaker initial earnings following degree attainment, more people were delinquent or unable to pay their student loans than

Figure 27







any other debt product (e.g. a car or home).

However, delinquency is less severe than default. Default occurs when one is 270 days or more past due on federal student loans (lbid., p. 11). For the 2013-14 school year, public four-year institutions represented 35 percent of all enrollment and a full 21 percent of default nationally (Wright et al. 2015). Defaulting on student loan payments negatively affects credit rating, meaning it becomes difficult to borrow funds to buy a home or car, sign up for utilities, acquire a cell phone plan, or garner approval to rent an apartment (Federal Student Aid Office). Individuals with loans in default are unable to contribute to and expand the economy by buying homes and consuming other products. Researchers Houle and Berger found that "higher educational institution costs... [are] associated with a lower likelihood of owning a home and of having a mortgage" and the effect is larger for African Americans than Whites (2014, p. 13). In fact, 10 years after graduation, Black borrowers owe 22 percent more on their loans, are 9 percentage points more likely to be in nonpayment, and are in nonpayment on roughly 16 percent more of their undergraduate debt than White borrowers across the United States (Lochner 2015).

Perhaps ironically, "the near evaporation of private lending markets during the credit crisis likely generated substitution away from private sources of credit (including home equity) toward student borrowing" (Barr et al. 2013). This likely means that families who owned their

own homes were less able to borrow against this equity to pay for college as the value of their property dropped. As enrollments rose, students from such households also likely relied more on student loans to pay for their educations. On top of all this, the negative effects on credit scores exacerbate the uncertainty of an individual's earnings potential as "employers are increasingly relying on credit scores in the hiring process," further affecting the ability to repay the loans (Taking Action 2014, p. 11). In short, more and more people are forced to take on student loans, reducing more immediate investments in the economy in the hopes of greater future earnings potentials, and yet, after acquiring a degree, many of these same individuals are further prevented from contributing to the economy by those very same loans. The expected increased economic expansion (delayed higher earnings potential) at the cost of a smaller more immediate expansion does not occur, or at least not by as much as would be efficient.

Among students from the poorest families, a shift of just \$1,000 from scholarship aid to loans reduced the probability of graduation by 17 percent (Tsui 2007). This is significant as the effects of high student loan debt are worse for those who, for various reasons, do not complete their degrees. According to the Bureau of Labor Statistics, in 2014, median weekly earnings for those with a high school diploma were \$668, some college, but no degree \$741 and a bachelor's degree \$1,101 (BLS 2014). Additionally, the unemployment rate

for those with some college and no degree was 6 percent, nearly double that of individuals with a bachelor's degree (BLS 2015). It stands to reason then that those who drop out of college are at a much higher risk of delinquency and default, merely because they earn so much less than their degree earning counterparts. In fact, according to a report by the Federal Reserve on household well-being, 21 percent of borrowers who drop out without a degree are behind on their loan payments while only 6 percent of those completing an associate degree were behind (2015, p. 31).

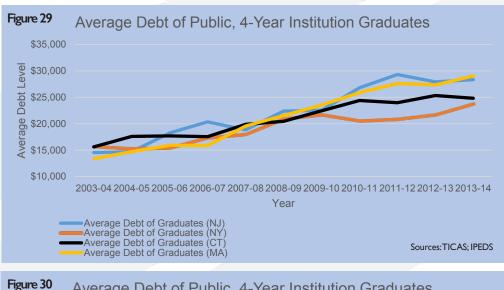
Lastly, student loans are the only form of debt that is not protected by bankruptcy law. Resultantly, those who fall into delinquency and default as a result of nonpayment for student loans, are faced with a much deeper financial hole than their counterparts who have no student debt.

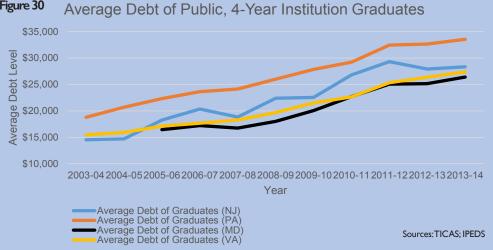
Debt and Family Formation

Research also indicates that student loan debt may negatively impact other personal decisions. A survey completed by Rutgers University found that 40 percent of college graduates directly linked their delay in major purchases like a home to their student loan debt (Stone et al. 2012). However, prior to 2005 student loan debt was positively correlated with other forms of household debt, such as mortgages and auto loans (Brown et al. 2014, p. 13). This is indicative of a historical association between student debt, a greater degree of post-secondary education and higher permanent income (lbid.). In other words, you were more likely to get a loan for a house and car — direct investments into the

economy that are associated with increased economic contributions via future family formation — if you had the higher levels of education and income associated with student debt. However, since the financial crisis, this trend has reversed, with those with higher amounts of debt increasingly less likely to have other forms of debt, with a particularly sharp decline in their likelihood of mortgage origination (lbid., p. 14).

Additionally, the "rise in unsubsidized borrowing is one indication that families are not able to cover these increased college costs from their savings" (Barr et al. 2013). Faced with rising tuition costs, more and more families rely on student loans to fund their children's postsecondary education. These families then invest





less directly into the economy as they pay down such debt. The children of these co-signing families, who also likely assume a significant portion of such debt, in turn face unstable and delayed earning potential combined with immediate loan repayment. They also do not invest directly into the economy, and in particular are less likely to buy homes and cars, all significant indicators for starting a family. David Dayen's analysis of the American Community Survey and the Cleveland Fed ties the large increase in student loan debt to first a dip and then a flattening of household formation, terming the effect the "Great Delay" (2014).

Recommendations

Our recommendations challenge the trend of declining public university appropriations. While an argument for greater spending rests at the core of the recommendations, each proposal directly addresses the more substantial issues stemming from abating public appropriations to higher education. Hence, recommendations for greater spending are not grounded on baseless arguments or arbitrary dollar amounts; proposals are linked to spending levels that establish meaningful change.

We present three recommendations: (1) a pre-recession spending level, (2) a 1990s spending level and (3) a spending level that returns tuition and fees back to 6.6 percent of family income. The pre-recession recommendation sets spending back to the amount before the Great Recession forced cuts in the state budget. The 1990s spending proposal sets state appropriations back to the average amount spent in the 1990s, during which time spending levels arguably helped push and maintain New Jersey's workforce among the top educated in the country. Lastly, our final spending level recommendation sets tuition and fees at 6.6 percent of family income, the proportion families paid in 1995.

Pre-recession Levels

Returning to pre-recession levels should be the starting point for any college affordability reform. The economy has bounced back tremendously since the Great Recession making today an opportune time to end the trend of decreasing state funding and increasing tuition and fees, and thus directly addressing the public problem of student loan burden and barriers to entry to the middle class and economic viability. Even if the state cannot meet our other recommendations, pre-recession funding levels represent a genuine route that should be considered given how much the economy has improved since 2008."Pre-recession" will refer to public education funding totals from 2008, the year in which the last budget commitments were made prior to the recession. We'll provide two recommended amounts: (1) Total public funding for higher education and (2) higher education funding per full-time pupil (FPP). Amounts will be provided in both unadjusted dollars and CPI-U dollars.

In terms of total public funding in unadjusted dollars, we propose spending at \$902 million, which is a 23 percent

increase from the \$735 million spent in 2015. This \$167 million increase represents just 0.05 percent of New Jersey's 2016 budget. As for FPP, we set a commitment of \$8,410 per FTE pupil, a 33 percent increase from the \$6,336 FPP spent in 2013-2014, the latest year with FTE data available.

CPI-U recommendations for total public funding stands at \$1.03 billion, a 40 percent increase from the \$735 million spent in 2015. An increase of \$295 million amounts to 0.08 percent of New Jersey's 2016 budget. FPP, on the other hand, should be set at \$9,605, which is a 49 percent increase from the \$6,439 spent in 2013-2014.

1990s Spending Levels

The 1990s is may be regarded as the "hey-day" of state funding in New Jersey because it represented an unprecedented amount of state support for public universities. Undoubtedly, the immense amount of state support in this era likely played a meaningful role in pushing New Jersey to develop among one of the nation's highly educated workforces.

Our 1990s level of spending is based on the average amount spent in the 1990s on public university funding. Because no FTE data exists for the 1990s, the only recommendation that can be made is a total funding amount. Adjusting the average amount of spending in the 1990s for CPI-U provides a recommendation figure of \$1.2 billion, a \$465 million increase from today's \$735 million spent. This (is a 63 percent increase from current spending) and it amounts to 1.3 percent of the 2015 state budget.

As opposed to the pre-recession recommendation, the shear amount of money provided by this recommendation would likely present an immediate impact to college affordability, going far beyond simply ending the trend of declining support. While this option is highly unlikely to be taken seriously due to political and financial restrains in the state, the recommendation also serves as a reminder of how far away the state has veered from supporting its public universities like it once had. The simple fact that 2015's funding amount of \$735 million would have to nearly double to reach the average amount spent in the 1990s shows how much more work needs to be done in better funding public universities.



A third way of examining increased state investment is to return to the level of funding necessary to get tuition and fees to 6.6 percent of family income, where they stood in 1995. This proposal is distinct from the 1990s spending level recommendation. The previous recommendation focused on the total public university aid average, while this one considers total aid based on income.

As of 2013, median family income for four person families in New Jersey was \$102,552 (Federal Register, 2012), and tuition as a percentage of income stood at 12.3 percent. Tuition and fees would have to be significantly reduced, to \$6,768 to reach 6.6 percent of family income. Because tuition costs are related to various factors beyond just state appropriations, it is impossible to calculate the exact amount of state aid that would be necessary to bring tuition and fees to this level. However, we recognize that it would be substantial. Policy conversations, nonetheless, should keep this recommended goal in the forefront of the debate.

Conclusion

As previously discussed, increasingly both in New Jersey and nationally, higher education serves as the pathway to the middle class. Simultaneously, New Jersey is predicted to be a leader in the post-secondary education job market, with its economic well-being dependent on the creation of a workforce that can meet this future labor demand. Despite this, the state has seen an escalation in tuition and fees at its senior public institutions with a simultaneous decline in public investment, and both to a greater extent than all but one of its regional competitor states. Though perhaps not causal, the correlated trends of enrollment and completion rates may provide insight into possible effects: with certain groups more likely to bear the increased cost of attendance and taking more than four years to complete their degrees. Increasingly, cost of attendance is being incurred by Hispanics, traditionally in the lower end of the income ladder, thus making New Jersey's public university body a less financially secure entity. The consequences of such a student body are obvious: a greater likelihood to incur debt, default on debt, and dropout. New Jerseyans' rising student loan debt and its erosive effects on the college premium and access to the middle class are distinctly borne out by the data and literature. Though data on these effects for those who are unable to complete their degrees is largely absent, given the lower earnings potential of dropouts, it is likely far worse for these individuals.

In order to support and grow the middle class, something must be done. We provide a series of recommendations to reverse these outcomes. The most appealing option from a public good standpoint is a return to public funding levels that would place tuition and fees to the more affordable 6.6 percent of family income seen in 1995. Because a calculation of proposed appropriations is impossible for this recommendation, we alternatively suggest a return to funding levels equivalent to the average 1990s state appropriation level, as this decade played a role in providing New Jersey with one of the most educated workforces within the United States. Finally and at minimum, we suggest a return to pre-recession levels of funding, as the Great Recession contributed to severe education budget cuts across the country.

Though each of our recommendations require further research, it is worth noting that recently the Garden State has considered two possible revenue sources that may be utilized to bolster state appropriations to four-year public institutions: in 2014 Democrats within the state house considered a millionaires tax⁸ and in 2015, legislators considered legalizing marijuana as another source of tax revenue.⁹ How each of these might work as well as their political viability must, however, be considered. Further investigation into our comparison states and the modes through which they have addressed investment and tuition and fees is also merited.

⁸ http://www.nj.com/politics/index.ssf/2014/06/nj_democrats_introduce_millionaires_tax_with_an_expiration_date.html
⁹ http://www.nj.com/mercer/index.ssf/2015/11/trenton_city_council_to_consider_support_of_pot_le.html

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Methods

This report was completed in partial fulfillment of the requirements of the Masters of Public Policy degree and as part of the capstone experience of the four authors. The capstone, or practicum, at the Edward J. Bloustein School is a group experience in which students complete a policy motivated project for a public or non-profit agency. For this project, the New Jersey Policy Perspective tasked graduate students within the practicum with researching and analyzing the true extent and effects of changes in tuition and fees, public investment (state appropriations) and student debt levels at the state's four-year public universities. They also asked the research team to offer policy suggestions to reverse the growing trend of increasing tuition and decreasing public investment.

To conduct this data analysis, New Jersey's annual appropriations for four-year public institutions were compiled directly from published budgets on the state's Office of Management and Budget website. Changes in tuition and fees were collected from the State of New Jersey Office of Research and Accountability Student Unit Record and verified by the Integrated Postsecondary Education Data System (IPEDS) created and managed by the National Center for Education Statistics (NCES). IPEDS is a widely used data source in the analysis of trends within higher education, including the Delta Cost Project. Comparison state data, including in-state and out-of-state tuition and fees, as well as non- New lersey state appropriation levels were all collected from IPEDS. Reported full-time equivalent (FTE) to determine per pupil funding values used to determine per pupil public investment, were also taken from the IPEDS. Data from the American Community Survey and The Institute for College Access and Success (TICAS) were used to analyze student loan debt. Information from the United States Census Bureau and the Federal Register was used to consider tuition and fees as a percentage of household and family income. All relevant data were considered in unadjusted dollars, Consumer Price Index (CPI-U) adjusted dollars, or Higher Education Price Index (HEPI) adjusted dollars.¹⁰

¹⁰ The Higher Education Price Index (HEPI) is an inflation index designed to adjust for the shifting costs within higher education, whereas the Consumer Price Index (CPI-U) is an inflation index used when adjusting prices for all consumer goods over time.

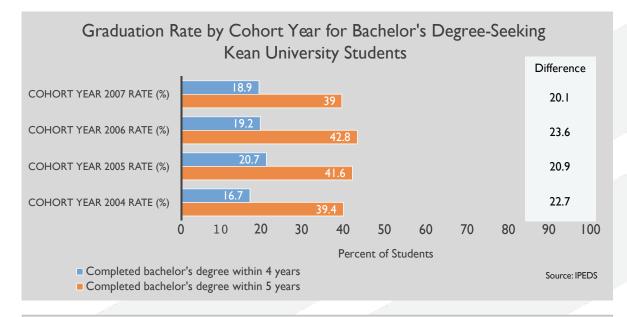
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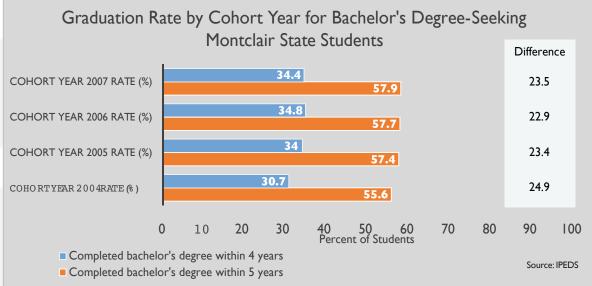
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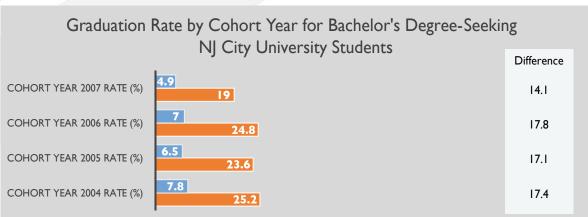


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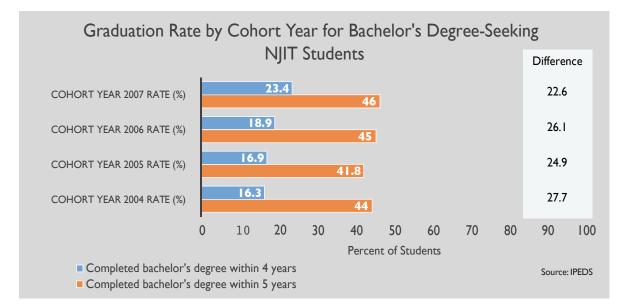
Percent of Students

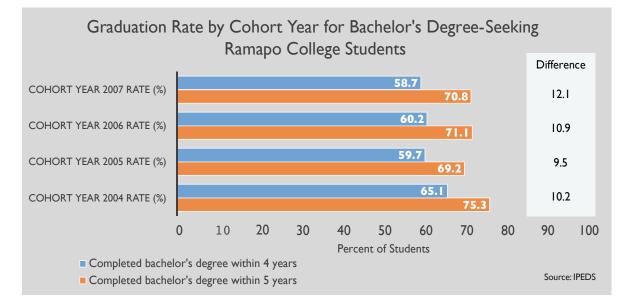
Source: IPEDS

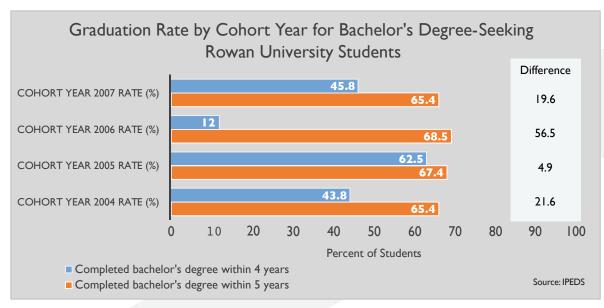
Rutgers Bloustein School of Planning & Public Policy Practicum for New Jersey Policy Perspective

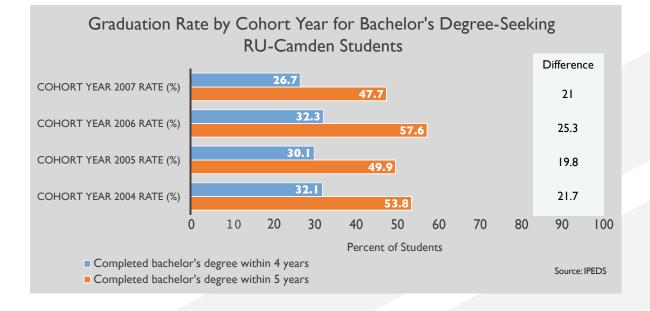
Completed bachelor's degree within 4 years

Completed bachelor's degree within 5 years

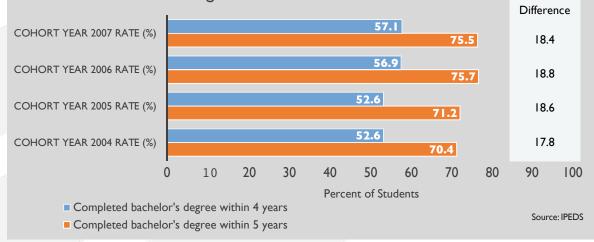


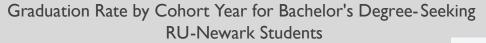


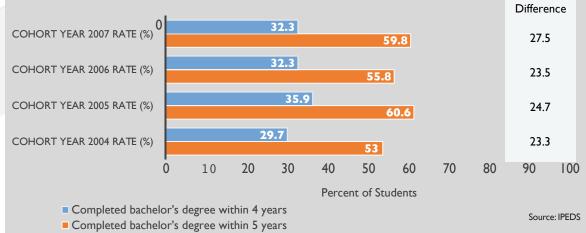


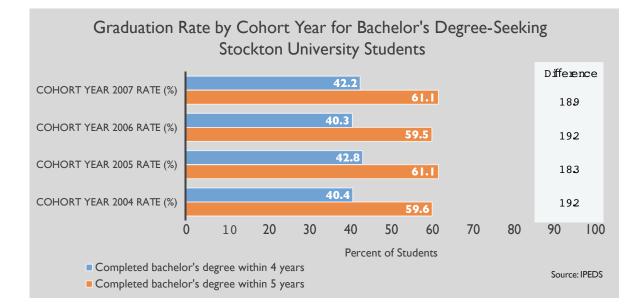


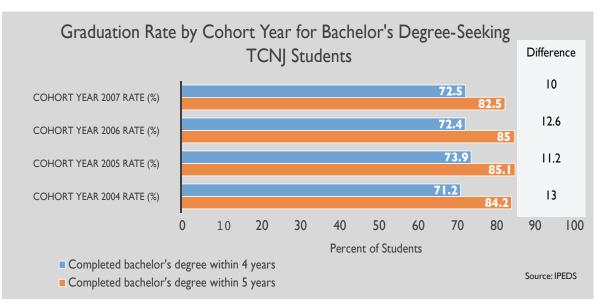
Graduation Rate by Cohort Year for Bachelor's Degree-Seeking Rutgers-New Brunswick Students

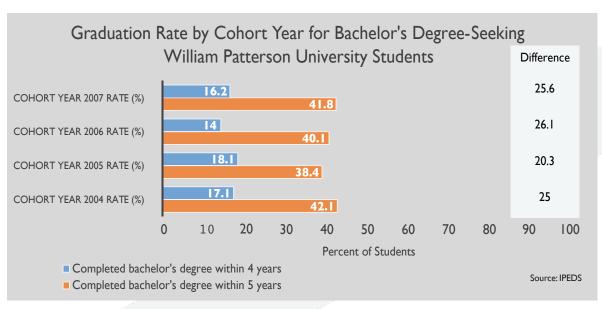












Debt Sentence

The Effects of New Jersey's Declining Public Investment in Higher Education

> James DiGenno Kevin Llangari

Michelle Mayer Adam Sherman

A report prepared by graduate students of Rutgers Edward J. Bloustein School of Planning and Public Policy for the New Jersey Policy Perspective