



# HIGHER EDUCATION IN PUERTO RICO:

CONDITIONS AND CONTEXT INFLUENCING  
INSTITUTIONAL RESILIENCE



# HIGHER EDUCATION IN PUERTO RICO: Conditions and Context Influencing Institutional Resilience

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# FOREWORD

There are more students enrolled in postsecondary education in Puerto Rico (almost 200,000 students) than 20 states in the U.S. And, over the last 10 years, Puerto Rico experienced several natural, economic, demographic, and governance challenges that have impacted day-to-day life for students, communities, and institutions of higher education. In fact, the condition and context of communities in Puerto Rico are similar to many rural communities in the U.S. mainland. Yet there is scant attention paid to the student experiences and the institutions that strive to provide a quality education for students in Puerto Rico.

*Excelencia* has always included Puerto Rico and data in our work to accelerate Latino student success. For example, in 2005 when we released “How Latinos Pay for College,” we made sure to include information about the students on the island to ensure a more complete picture of Latino students in the U.S. And we continue to do so. *Excelencia* includes Puerto Rico in national analysis, lists of top institutions enrolling and graduating Latinos, and recognition of evidence-based practices. In the process, we have found it necessary to be explicit in detailing the vast majority of students on the island are Latino and U.S. citizens (all Puerto Ricans are U.S. citizens at birth) because there is a continuing ignorance about Puerto Rico outside of the natural, economic, and governance challenges mentioned occasionally in media.

Among our continuing efforts to increase awareness and attention of students and institutions in Puerto Rico, *Excelencia* compiled a short summary of higher education on the island, hosted a session at our national Accelerating Latino Student Success Institute in 2018, one year after Hurricane Maria, and visited several institutions in Puerto Rico—in coordination with Margarita Benitez, a longtime partner and currently the Executive Director of the Puerto Rico Endowment for the Humanities—to get a better understanding of the institutional efforts and strategies. Our initial takeaways showed the work of the institutions was innovative, pragmatic, and intentional in serving their students and sustaining

their efforts. It was also clear that resilience has been an important characteristic for both students and institutions in Puerto Rico. We believe Puerto Rico and its leadership efforts can be a bellwether of what mainland institutions may also consider to more intentionally serve Latino and rural learners.

This brief, “Higher Education in Puerto Rico: Conditions and Context Influencing Institutional Resilience,” provides a broader awareness of the environment that students, institutions, and the community are addressing to provide access and opportunity for a quality education on the island. This brief is also the first of a two-part study on transformation by colleges and universities to better serve their Latino, and all, students in Puerto Rico. *Excelencia* worked in partnership with the Puerto Rico Endowment for the Humanities (La Fundación Puertorriqueña de las Humanidades). Their efforts to engage and support colleges and universities on the island are core to our partnership and the next phase of work developing case studies on institutional resilience efforts to address the demographic, economic, social, and leadership challenges of the island over the last five years.



Deborah Santiago  
co-founder and CEO

# EXECUTIVE SUMMARY

The Commonwealth of Puerto Rico is a small island in the Caribbean, only 100 miles long by 35 miles wide, and has been a part of the U.S. since 1898. The island is home to over 80 colleges and universities. Over the last 10 to 20 years, Puerto Rico has faced economic downturns, increasing out-migration of the younger population and adults without a postsecondary degree, an increasing elderly population, damaged infrastructure and loss of life due to natural phenomena such as hurricanes, earthquakes, and onset of the COVID-19 pandemic. This profile is similar to rural communities in the U.S. mainland.

*Excelencia* in Education conducted an environmental scan of the population, the K-12 educational pipeline, institutions of higher education, and the workforce in Puerto Rico.

This analysis provides data that helps understand the context in which institutions in Puerto Rico are in and informs areas for potential action.

Understanding the context of colleges and universities to enroll, retain, and graduate their Latino (and all) students can help to understand the institution's resilience during times of crises.

This can help inform efforts to support institutions and students on the island, as well as other institutions on the U.S. mainland, so they can better serve Latino and all students during times of economic, political and natural challenges. This

environmental scan is the first phase of two studies—the second of which includes case studies with a select group of institutions that have adapted to be resilient in Puerto Rico.

The environmental scan showed the following key findings:

## POPULATION DEMOGRAPHICS & K-12 PIPELINE IN PUERTO RICO

- The total population and K-12 educational pipeline has declined, potentially affecting the future college-going pool of applicants.
- While there has been a decline in the younger population, Puerto Rico's population is aging—the only group of the population that has increased are those 65 years and older.
- Over the last 10 years, the share of the population 25 years and older that has earned an associate's degree or higher has increased.
- Despite increasing educational attainment, over 40% of the population lives below the poverty level, and median household income has hovered between \$18,000 and \$21,000 over that last 10 years.



## HIGHER EDUCATION IN PUERTO RICO

- The majority of colleges and universities are 4-year institutions.
- Public 4-year universities are more selective than private not-for-profit, 4-year universities.
- In Fall 2018, the top 5 institutions in Puerto Rico enrolling Latino undergraduate students were all 4-years, including two Ana G. Mendez campuses and two University of Puerto Rico campuses.
- Full-time retention rates in Puerto Rico have increased in the last 15 years, despite drops in enrollment, and are higher than the national retention rate for Latinos.
- The majority of grant aid that students receive are federal Pell Grants and the amount of the Pell Grant award students receive has increased in the last 10 years.
- The cost of attendance across all sectors has been increasing over the last 20 years and there is a significant gap between students' cost of attendance and the grant aid they receive.
- Private institutions have relied on tuition and fees as their main source of revenue, while public institutions have mainly relied on state and local funding. Public institutions' expenditures are significantly higher than expenditures at private institutions.
- In the last 20 years, there has been a 40% increase in total certificates and degrees awarded (from 31,469 to 44,137).
- Graduation rates have been on the rise at private 4-year institutions but have remained relatively stagnant at public 4-year institutions.

## WORKFORCE IN PUERTO RICO

- Despite an increasing share of the population attaining a postsecondary degree, Puerto Rico's unemployment rate is high.
- The top 10 occupations by share of the population employed are low-paying jobs, with annual wages ranging between \$19,000 and \$40,000, that do not necessarily require a postsecondary degree.
- In contrast, the top 10 highest paying occupations represent less than 1% of the working age population in Puerto Rico with annual salaries higher than \$90,000.

## FUTURE RESEARCH ON INSTITUTIONAL RESILIENCY IN PUERTO RICO

These major findings have raised the following questions for consideration and future research, which will be explored further in phase two with the case studies.

1. What can explain the increase in the population that has earned an associate's degree or higher despite a decline in the total population over the last 10 years?
2. How does the decline of the younger population, which are the potential current and future pool of applicants for higher education, affect institutions of higher education in Puerto Rico and their recruitment efforts?
3. How have private 4-year institutions increased their students' graduation rates while their expenditures have decreased?
4. Considering the significant gap that exists between grant aid and students' cost of attendance, how can institutions better support their students financially?
5. What could explain the disconnect between an increase in the population that have earned a postsecondary degree and high unemployment?

# OVERVIEW

Over the last 20 years, Puerto Rico has faced economic downturns as well as political and natural crises. There has been an increasing out-migration of the younger population, resulting in a greater representation of an increasingly elderly population, damaged infrastructure and loss of life due to natural phenomena such as hurricanes, earthquakes, and the COVID-19 pandemic. Given these compounding challenges institutions of higher education face, the following environmental scan provides a summary of longitudinal data to better understand what influences the resiliency of these institutions and the condition of higher education in Puerto Rico. This will cover the current context of the population, K-12 educational pipeline, higher education, the economy and workforce.



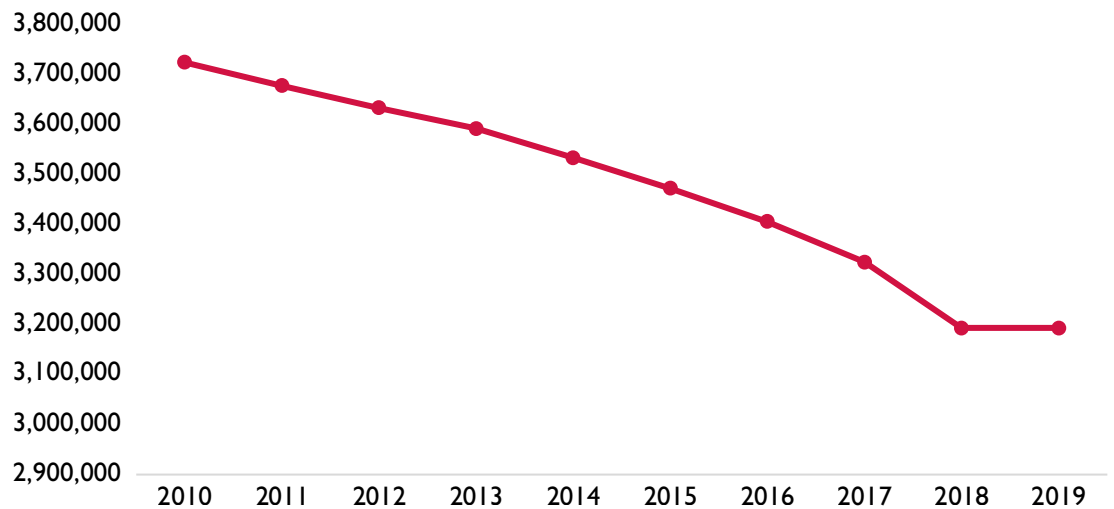
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# POPULATION DEMOGRAPHICS

The total and younger population have been declining while the overall average population is getting older.

While the majority of the population in Puerto Rico is Latino compared to the U.S. (98% and 18% respectively), the total population in Puerto Rico has decreased.<sup>1</sup> Over the last 10 years, the population has decreased from 3.7 million to just under 3.2 million people in 2019 (see Figure 1). Specifically, in the years following Hurricane Irma and Maria, there has been a mass exodus of Puerto Ricans to the U.S. mainland. In 2018, one year after the hurricanes, there was a net migration (defined as the difference between people coming into and leaving an area) of 112,551 Puerto Rican residents. In 2019, there was a net migration decrease of 34,877 Puerto Rican residents relocating to the U.S. mainland.<sup>2</sup>

**Figure 1. Total Population in Puerto Rico**



**Source:** *Excelencia* in Education analysis of U.S. Census Bureau, Annual Estimates of the Resident Population for Selected Age Groups by Sex for Puerto Rico Commonwealth: April 1, 2010 to July 1, 2019.



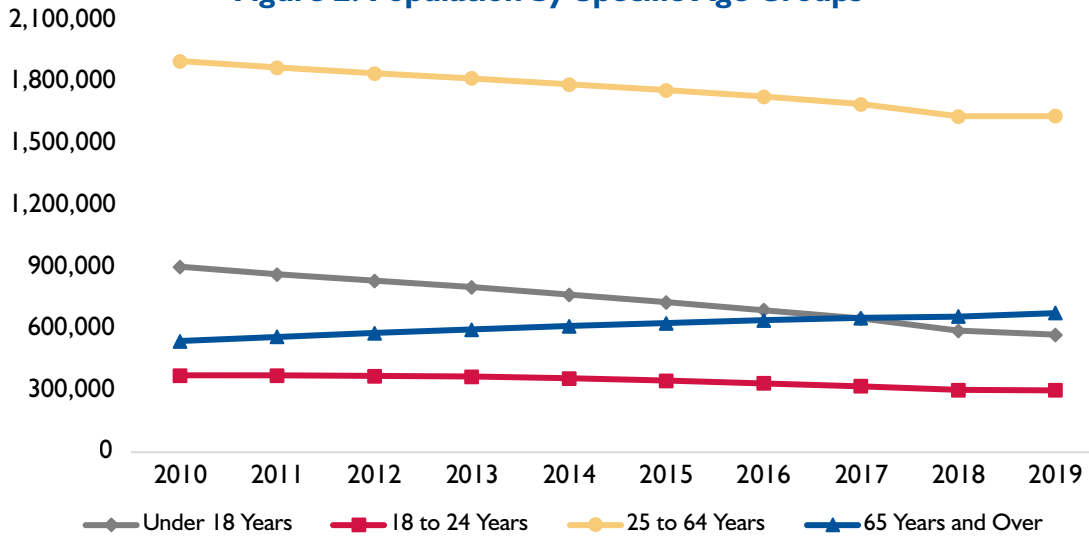
<sup>1</sup> U.S. Census Bureau, American Community Survey 1-Year Estimates, Sex by Age (Hispanic or Latino), 2019.

<sup>2</sup> Center for Puerto Rican Studies at Hunter College CUNY. (September 2020). *Enduring Disasters: Puerto Rico, Three Years After Hurricane Maria*.



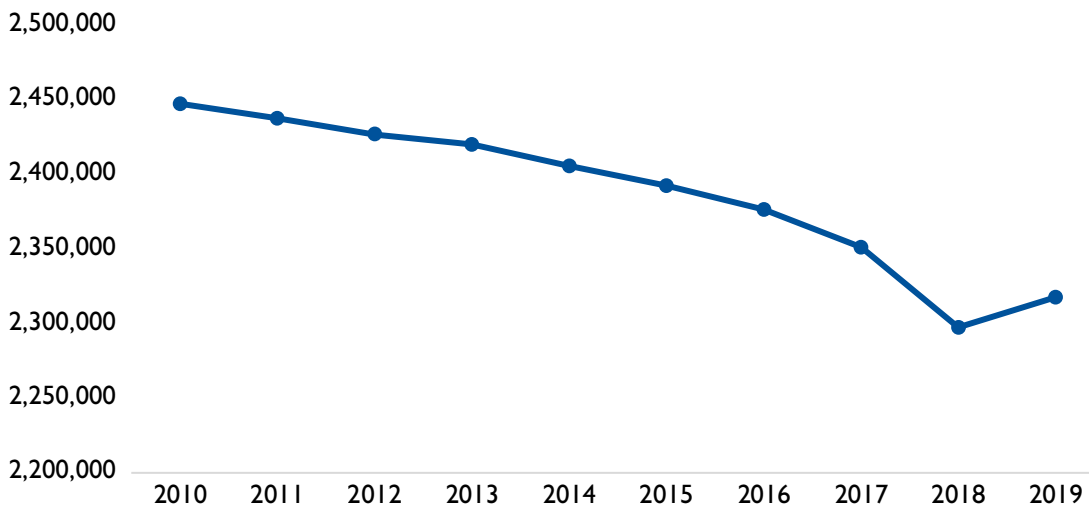
Additionally, the growth population in Puerto Rico is skewing older. While the younger and traditional working-age population have decreased in the last 10 years, the population that is 65 years and over has increased (see Figure 2). In fact, since 2018, the increase in the population aged 25 and older can be attributed to the increase of those 65 years and older (see Figure 2 and 3). A large decline in the population younger than 18 and aged 18-24 negatively impacts the traditional pool of eligible college applicants and how institutions recruit and target students. With a declining traditional college-going population, institutional resiliency may need to focus on adapting overall enrollment and recruitment strategies to diversify enrollment and retention of the students they do enroll.

**Figure 2. Population by Specific Age Groups**



**Source:** *Excelencia* in Education analysis of U.S. Census Bureau, Annual Estimates of the Resident Population for Selected Age Groups by Sex for Puerto Rico Commonwealth: April 1, 2010 to July 1, 2019.

**Figure 3. Population 25 Years and Older**

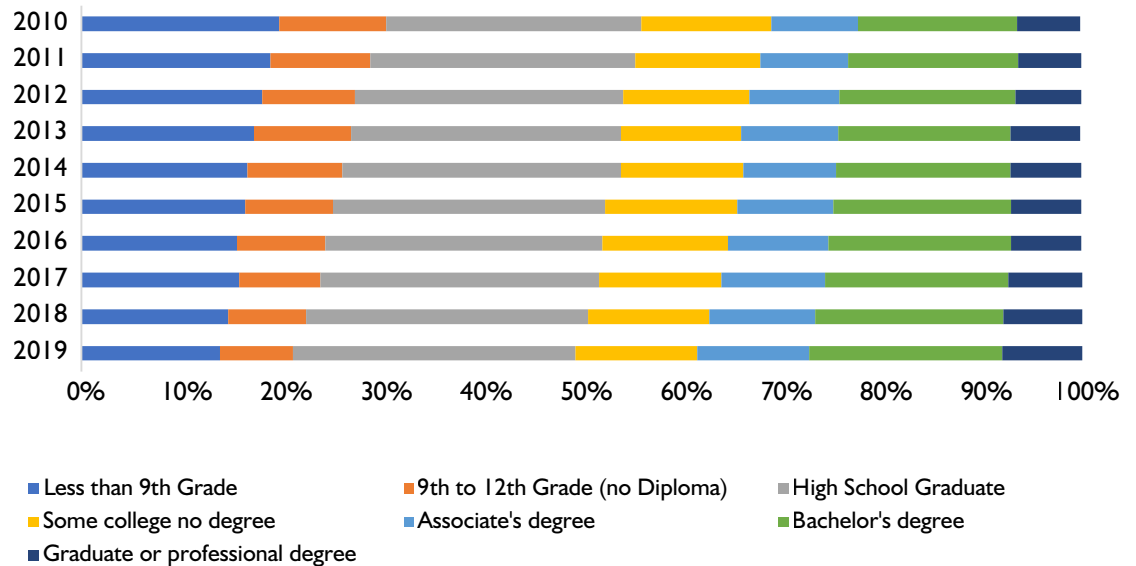


**Source:** *Excelencia* in Education analysis of U.S. Census Bureau, Annual Estimates of the Resident Population for Selected Age Groups by Sex for Puerto Rico Commonwealth: April 1, 2010 to July 1, 2019.

## Educational attainment has grown over the last 10 years.

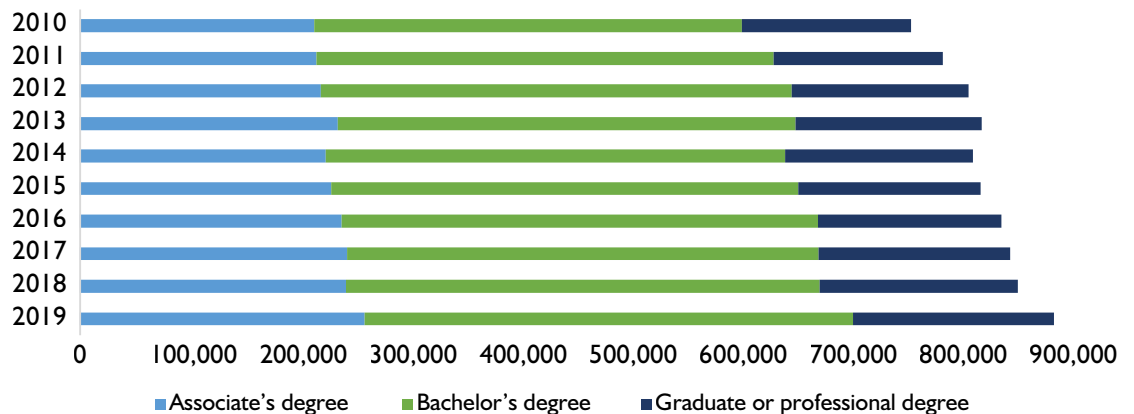
Over the last ten years, the total population in Puerto Rico has steadily declined, from 3.7 million in 2010 to 3.2 million in 2019. Yet, the share of the population aged 25 and older with an associate's degree or higher has increased, from about 31% to 39% (see Figure 4) represent 755,000 to over 885,000 people (see Figure 5). While more analysis is required, this may be explained by significant out-migration of adults without a postsecondary degree who have emigrated with their children as well as institutional efforts to educate more residents.

**Figure 4. Share of Educational Attainment of the Population in Puerto Rico (25 years and older)**



**Source:** *Excelencia in Education* analysis of U.S. Census Bureau, American Community Survey Educational Attainment 1-Year Estimates, Puerto Rico, 2010-2019.

**Figure 5. Educational Attainment of Population in Puerto Rico by Type of Postsecondary Degree (25 years and older)**



**Source:** *Excelencia in Education* analysis of U.S. Census Bureau, American Community Survey Educational Attainment 1-Year Estimates, Puerto Rico, 2010-2019.

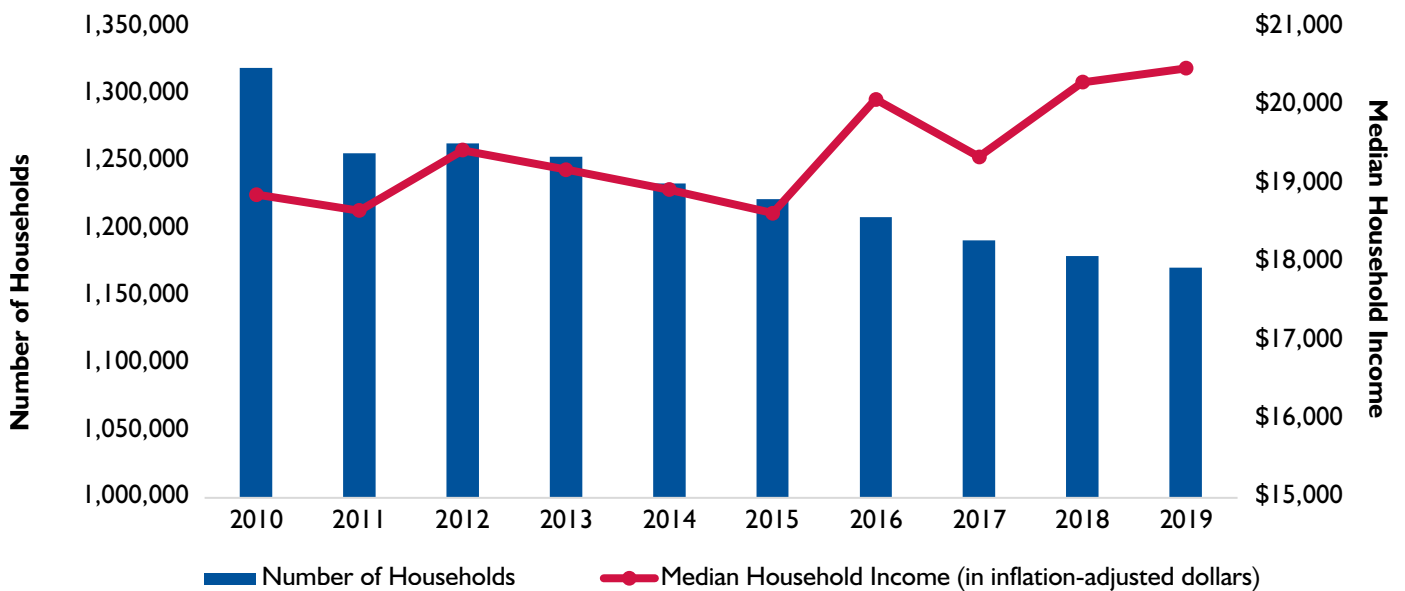


## Median household income has increased while the number of households have decreased in the last 10 years.

Over the past decade, the number of households in Puerto Rico has decreased while medium household income has increased. The median household income in Puerto Rico has increased from \$18,862 to \$20,474 in the last ten years (see Figure 6). However, this is about a third (35%) of what the

average household income is for Latino students' families on the mainland (\$58,923).<sup>3</sup> For students and their families with low incomes, the context of college affordability is at the forefront. How institutions target and pivot to enroll and retain students from lower-income backgrounds is key to institutional resiliency.

**Figure 6. Median Household Income by Number of Households in Puerto Rico**



**Source:** *Excelencia in Education* analysis of U.S. Census Bureau, 2010-2019 American Community Survey, 1-Year Estimates, Table: S1903.

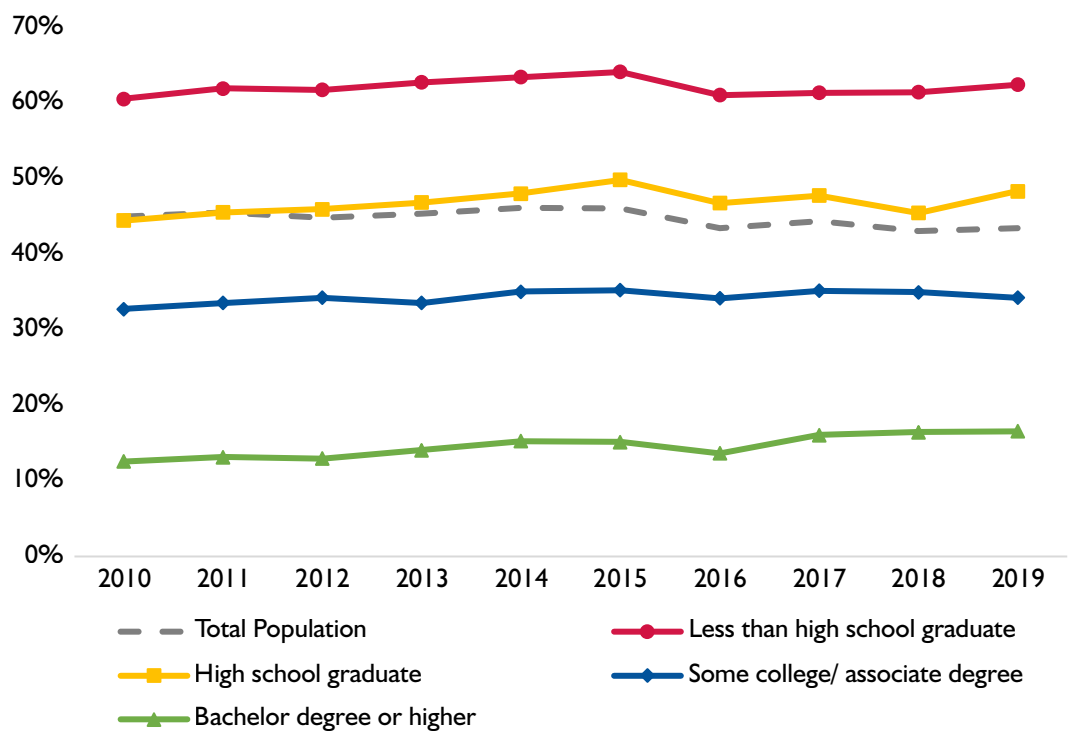
<sup>3</sup> *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics, 2015-16 National Postsecondary Student Aid Study.

## The higher the educational attainment, the lower the share of the population that is living below the poverty threshold.

In the last 10 years, over 40% of the total population in Puerto Rico has lived below the poverty level (see Figure 7). However, the poverty rate has been highest for the population with less than a high school degree (more than 60%), and lowest for those with a bachelor's degree or higher (below 18%). The higher the educational attainment of the population, the lower the level of poverty.

This level of poverty limits college affordability for many potential students and the reliance of increasing tuition or fees for many resilient institutions on the island.

**Figure 7. Share of Population Below Poverty Level by Educational Attainment**



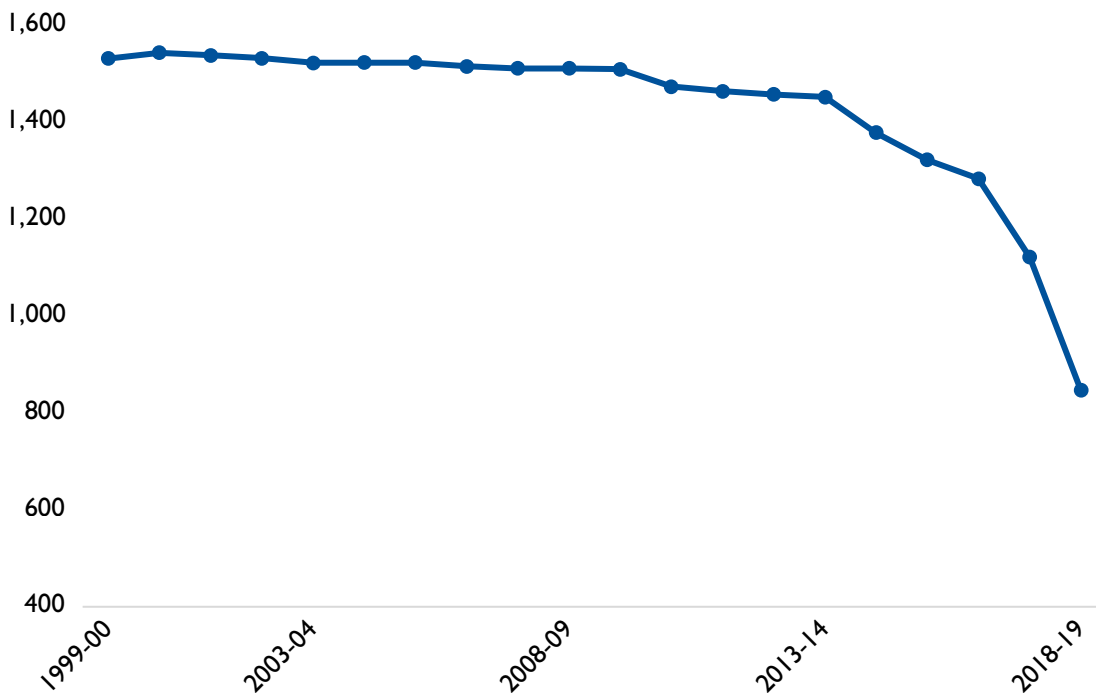
**Source:** *Excelencia in Education* analysis of U.S. Census Bureau, 2010-2019 American Community Surveys 1-Year Estimates, Table S1701.

# K-12 PIPELINE

The K-12 educational pipeline is shrinking, as the number of students, teachers and schools decrease.

The pool of traditional college-age students that institutions of higher education can draw from continues to shrink. There has been a sharp decline in K-12 schools, teachers, and students in Puerto Rico in the past 20 years, which limits the size of the future college-going population. For example, the total number of K-12 public schools in Puerto Rico has decreased from 1,531 in 1999-00 to 847 in 2018-19, with the greatest decline in the last three years, 2016-17 through 2018-19 (see Figure 8). Additionally, the student population in grades K-12 has decreased, with students in grades K-8 specifically showing the largest drop (to just under 200,000 students in 2018-19) (see Figure 9). In tandem, the number of teachers in K-12 has dropped significantly, with the number of secondary school teachers decreasing the most from almost 16,000 in 1999-00 to 6,021 in 2018-19 (see Figure 10). However, there is some significant growth. The number of students in Pre-K in Puerto Rico has increased significantly from 619 students in 1999-00 to 2,656 students in 2018-19.

**Figure 8. Total Number of Public K-12 Schools in Puerto Rico**

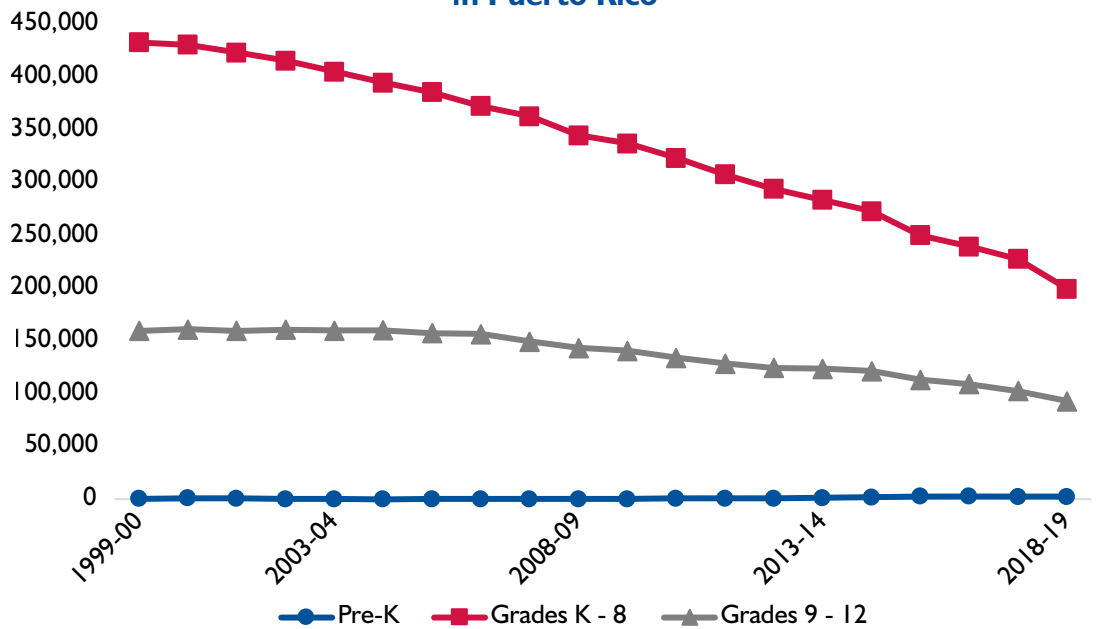


**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “Local Education Agency (School District) Universe Survey”, 1999-00 – 2018-19; “Local Education Agency (School District) Universe Survey Membership Data”, 2014-15 v.1a, 2015-16 v.1a; “Public Elementary/Secondary School Universe Survey”, 1999-00 – 2018-19; “Public Elementary/Secondary School Universe Survey Directory Data”, 2014-15 v.1a, 2015-16 v.2a; “State Nonfiscal Public Elementary/Secondary Education Survey”, 1999-00 – 2018-19; “State Nonfiscal Public Elementary/Secondary Education Survey Directory Data”, 2014-15 v.1a, 2015-16 v.1a; “State Nonfiscal Public Elementary/Secondary Education Survey Membership Data”, 2014-15 v.1a, 2015-16 v.1a.



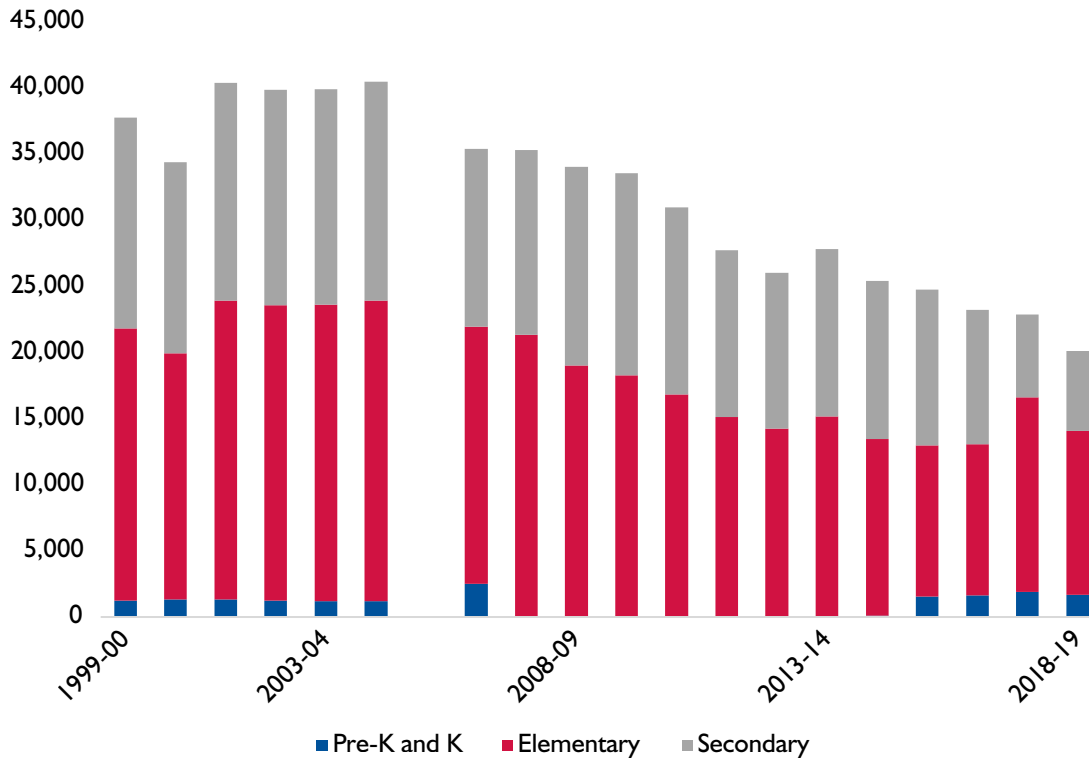
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**Figure 9. Number of Students in Pre-K through 12th Grade in Puerto Rico**



**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “Local Education Agency (School District) Universe Survey”, 1999-00 – 2018-19; “Local Education Agency (School District) Universe Survey Membership Data”, 2014-15 v.1a, 2015-16 v.1a; “Public Elementary/Secondary School Universe Survey”, 1999-00 – 2018-19; “Public Elementary/Secondary School Universe Survey Directory Data”, 2014-15 v.1a, 2015-16 v.2a; “State Nonfiscal Public Elementary/Secondary Education Survey”, 1999-00 – 2018-19; “State Nonfiscal Public Elementary/Secondary Education Survey Directory Data”, 2014-15 v.1a, 2015-16 v.1a; “State Nonfiscal Public Elementary/Secondary Education Survey Membership Data”, 2014-15 v.1a, 2015-16 v.1a.

**Figure 10. Number of Teachers in Puerto Rico, by Grade Level**



**NOTE:** Data were not applicable for school year 2005-06.

**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “Local Education Agency (School District) Universe Survey”, 1999-00 – 2018-19; “Local Education Agency (School District) Universe Survey Membership Data”, 2014-15 v.1a, 2015-16 v.1a; “Public Elementary/Secondary School Universe Survey”, 1999-00 – 2018-19; “Public Elementary/Secondary School Universe Survey Directory Data”, 2014-15 v.1a, 2015-16 v.2a; “State Nonfiscal Public Elementary/Secondary Education Survey”, 1999-00 – 2018-19; “State Nonfiscal Public Elementary/Secondary Education Survey Directory Data”, 2014-15 v.1a, 2015-16 v.1a; “State Nonfiscal Public Elementary/Secondary Education Survey Membership Data”, 2014-15 v.1a, 2015-16 v.1a.

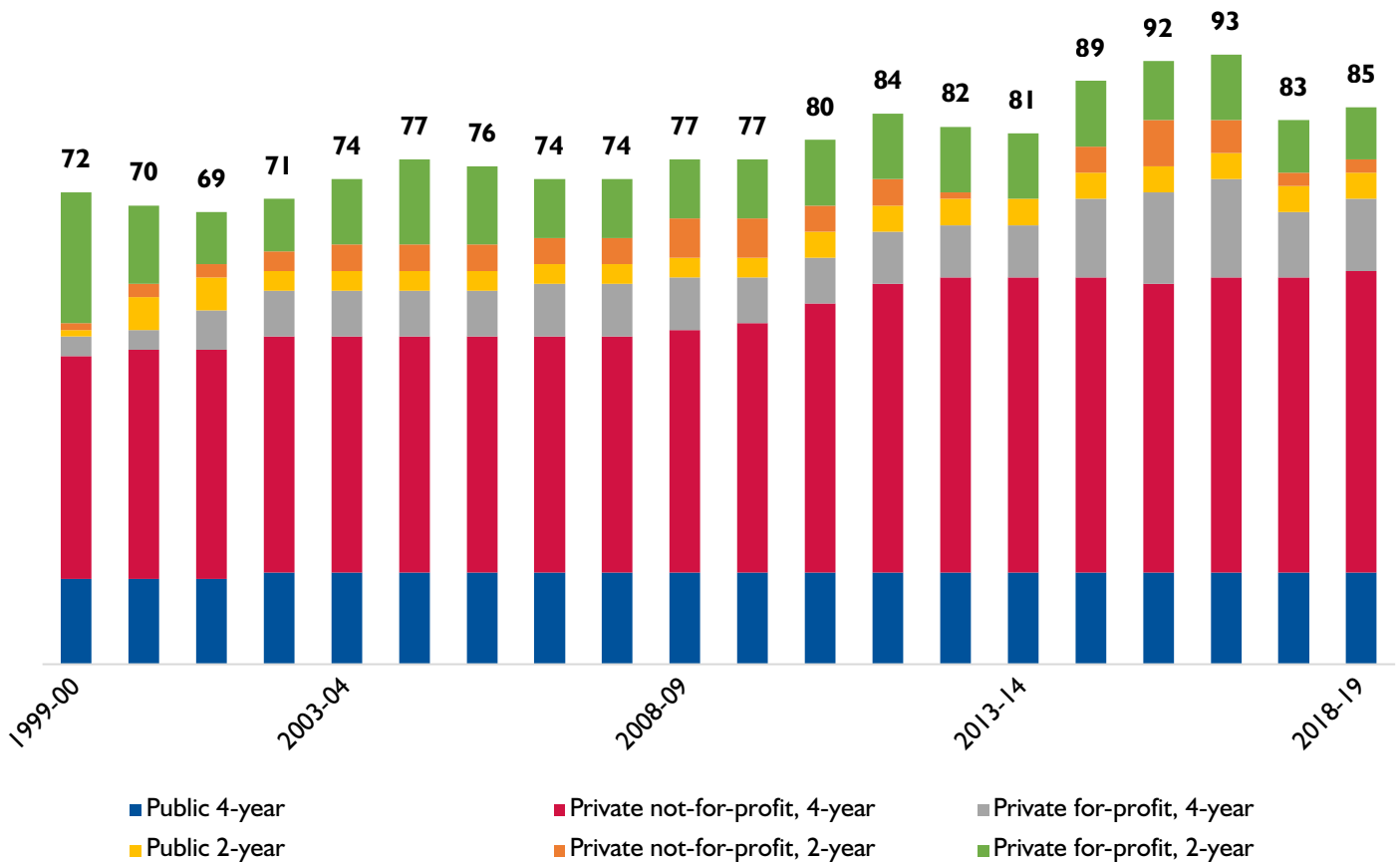
# HIGHER EDUCATION

The total number of postsecondary institutions has increased over the last 20 years, with some variance.

The number of institutions in Puerto Rico has fluctuated in the last 20 years. This variance is mainly due to changes in the number of for-profit institutions, both 2- and 4-year. Institutions that rely on tuition and fees as their largest source of revenue are vulnerable in times of economic or natural uncertainty and lower student enrollment. In comparison, the number of private not-for-profit, 4-year institutions (which are

the largest share) and public 4-year institutions have remained relatively consistent (see Figure 11). The number of public 2-year institutions in Puerto Rico has remained relatively small. In 2018-19, there were 85 degree-granting institutions of higher education, up from 72 in 1999-00. For a complete list of institutions in 2018-19, see Appendix A: Colleges/Universities in Puerto Rico.

**Figure 11. Number of Institutions in Puerto Rico by Sector**



**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Institutional Characteristics Survey, 1999 through 2018.



## Private institutions are more accessible than public institutions.

Public 4-year institutions in Puerto Rico are more selective compared to private 4-year institutions. Private colleges and universities, both not-for and for-profits, are more likely to have open admissions than public colleges and universities (see Table 1). Of public institutions in Puerto Rico, both 2- and 4-year, less than 10% have open admissions policies, compared to the United States mainland, where over 20% of public 4-year, and 95% of public 2-year institutions have open admissions (see Table 2).

An institution with an open admission policy will accept any student who applies regardless of admission test scores, high school GPA, high school rank, and/or recommendation letters. A selective institution requires one or more of these aforementioned criteria for admission.

**Source:** U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS).

**TABLE 1. PERCENT OF INSTITUTIONS IN PUERTO RICO WITH OPEN ADMISSIONS POLICY, BY SECTOR**

| Year    | Private for-profit 2-year | Private for-profit 4-year | Private not-for-profit 4-year | Private not-for-profit 2-year | Public 4-year | Public 2-year | All Institutions |
|---------|---------------------------|---------------------------|-------------------------------|-------------------------------|---------------|---------------|------------------|
| 2003-04 | 80%                       | 43%                       | 45%                           | 50%                           | 7%            | 0%            | 42%              |
| 2008-09 | 89%                       | 50%                       | 49%                           | 50%                           | 7%            | 0%            | 46%              |
| 2013-14 | 90%                       | 38%                       | 62%                           | –                             | 7%            | 0%            | 52%              |
| 2018-19 | 100%                      | 75%                       | 55%                           | 50%                           | 7%            | 0%            | 54%              |

**Note:** 2013-14 data for private not-for-profit 2-year institutions were not available.

**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Institutional Characteristics Survey, 2003 through 2018.

**TABLE 2. PERCENT OF INSTITUTIONS IN U.S. MAINLAND WITH OPEN ADMISSIONS POLICY, BY SECTOR**

| Year    | Private for-profit 2-year | Private for-profit 4-year | Private not-for-profit 4-year | Private not-for-profit 2-year | Public 4-year | Public 2-year | All Institutions |
|---------|---------------------------|---------------------------|-------------------------------|-------------------------------|---------------|---------------|------------------|
| 2003-04 | 47%                       | 50%                       | 45%                           | 43%                           | 43%           | 51%           | 47%              |
| 2008-09 | 60%                       | 41%                       | 11%                           | 46%                           | 14%           | 96%           | 42%              |
| 2013-14 | 79%                       | 55%                       | 12%                           | 50%                           | 17%           | 97%           | 46%              |
| 2018-19 | 72%                       | 51%                       | 12%                           | 54%                           | 24%           | 98%           | 43%              |

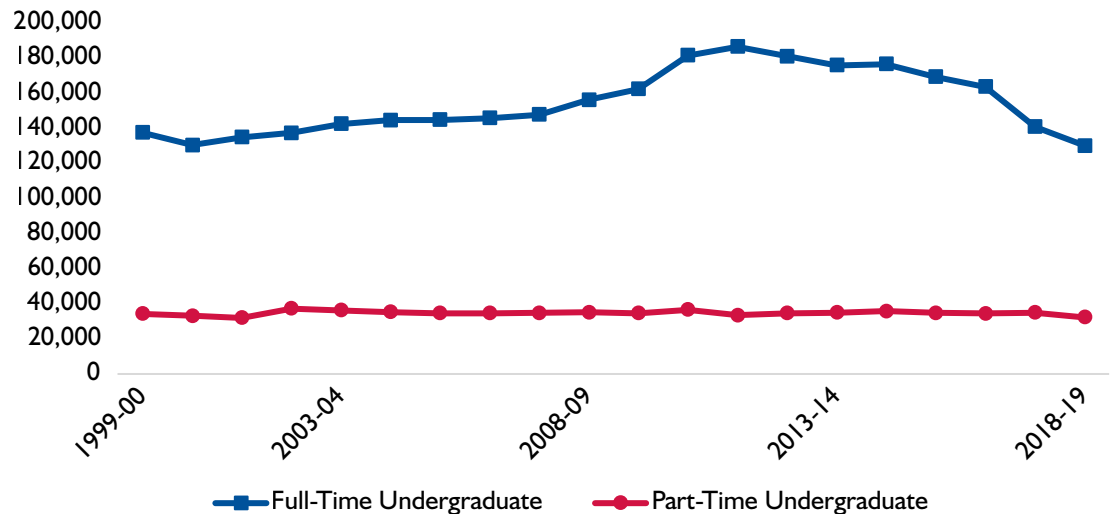
**Note:** For this table, included only 50 U.S. states.

**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Institutional Characteristics Survey, 2003 through 2018.

## Enrollment has been declining in the last 10 years.

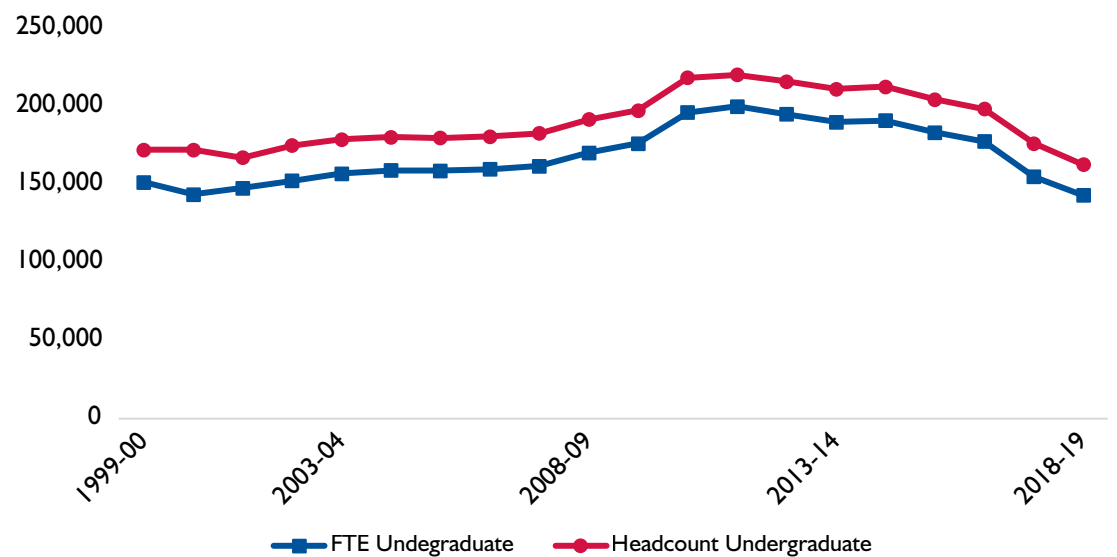
There are significantly more students enrolled full-time than part-time (see Figure 12). However, since 2010 enrollment overall has been on a decline predominantly due to full-time enrollment decline. Full-time equivalent (FTE) enrollment (calculated by adding full-time students with 3 to 1 part-time students) and headcount enrollment follow the same pattern over 20 years (see Figure 13). This drop in enrollment intensity may have implications for institutional resiliency strategies.

**Figure 12. Full-Time and Part-Time Undergraduate Enrollment**



**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Survey, 1999 through 2018.

**Figure 13. Fall Undergraduate Enrollment by FTE and Headcount**



**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Survey, 1999 through 2018.

As of Fall 2018, the top 5 institutions in Puerto Rico enrolling Latino undergraduate students were 4-year universities in systems. This included two Ana G. Mendez campuses and two University of Puerto Rico campuses (see Table 3). Collectively, these 5 institutions enrolled over 50,000 students.

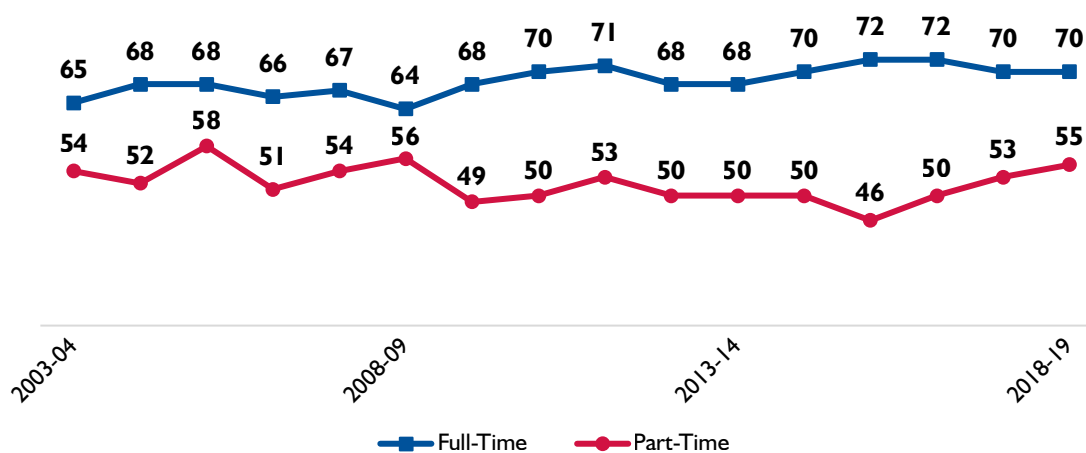
|   | Institution                           | Sector                         | Grand Total | Hispanic Total | % Hispanic |
|---|---------------------------------------|--------------------------------|-------------|----------------|------------|
| 1 | Universidad Ana G. Mendez-Gurabo      | Private not-for-profit, 4-year | 12,734      | 12,734         | 100%       |
| 2 | University of Puerto Rico-Mayaguez    | Public, 4-year                 | 12,321      | 11,556         | 94%        |
| 3 | National University College           | Private for-profit, 4-year     | 10,212      | 10,212         | 100%       |
| 4 | University of Puerto Rico-Rio Piedras | Public, 4-year                 | 11,657      | 9,676          | 83%        |
| 5 | Universidad Ana G. Mendez-Cupey       | Private not-for-profit, 4-year | 9,331       | 9,331          | 100%       |

**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), 2018 Fall Enrollment Survey.

## Retention rates have increased over the last 15 years.

At institutions in Puerto Rico, the first-time full-time retention rate of students (70%) was higher than Latino students’ national retention rate for the Fall 2018 cohort (64%)<sup>4</sup> (see Figure 14). Additionally, first-time full-time retention rates have increased in Puerto Rico during the last 15 years, from 65% to 70%. However, retention rates for part-time students fluctuated over this period. With a declining total population and declining enrollment, retention may be key for institutional resiliency.

**Figure 14. Full -time and Part -time Retention Rates (%)**



**Note:** First-year retention rates shown are for first-time full-time and first-time part-time students who returned to their starting institution the next fall.

**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Survey and Institutional Characteristics Survey, 1999 through 2018.

4 National Student Clearinghouse, *Persistence and Retention 2020 Report*.

## Cost of attendance has been on the rise and students' reliance on federal financial aid, specifically Pell Grants, is high.

The cost of attendance at public and private institutions has been on the rise in the last 10 years, and significantly more so at public 4-year institutions (see Figures 15 through 17). Most institutions of higher education in Puerto Rico do not offer on-campus housing, however, living arrangements are factored into the calculation of cost of attendance as follows: 1) living off-campus with family, or 2) living off-campus without family.

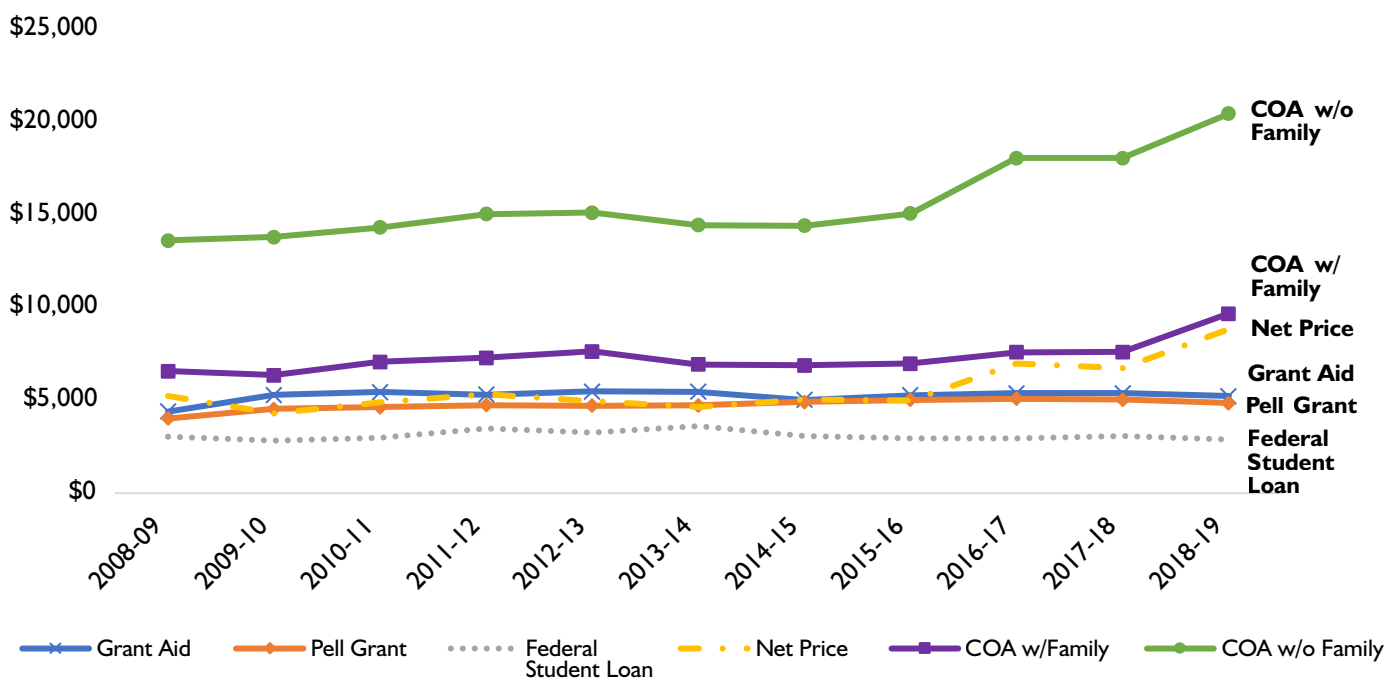
With the high poverty rate in Puerto Rico (more than 40% of the population lives below the poverty threshold) and lower median income in comparison to the U.S. mainland, college-going students in Puerto Rico experience exceptional financial need. Yet, there is still a significant gap, or net price, between students' cost of attendance and the grant aid they receive (see Equation 1). That gap is larger for students who do not live with family.

### EQUATION 1. COST OF ATTENDANCE – GRANT AID = NET PRICE

Across all colleges and universities in Puerto Rico, Pell Grants make up the majority (more than 80%) of all grant aid awarded and the average Pell Grant award supports a large portion of the cost of attendance.

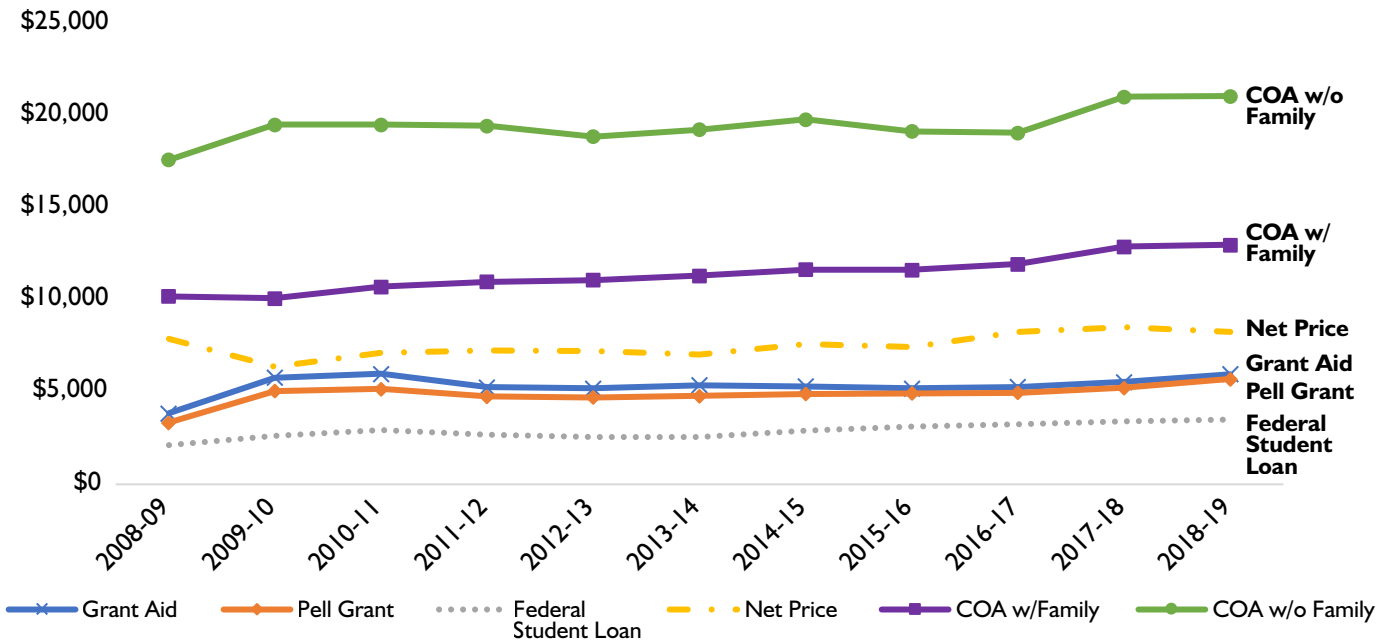
At private 4-year institutions, there has been an increase in the amount of federal student loans borrowed over the last 10 years (see Figures 16 and 17). While the amount borrowed at private for-profits has fluctuated during this time period, the total amount borrowed per academic year has increased over this period (see Figure 17). Ultimately, across all sectors, students are facing a significant gap of unmet need, especially for those students that do not live with family while enrolled in college.

**Figure 15. Cost of Attendance (COA) and Student Financial Aid at Public 4-year Institutions in Puerto Rico**



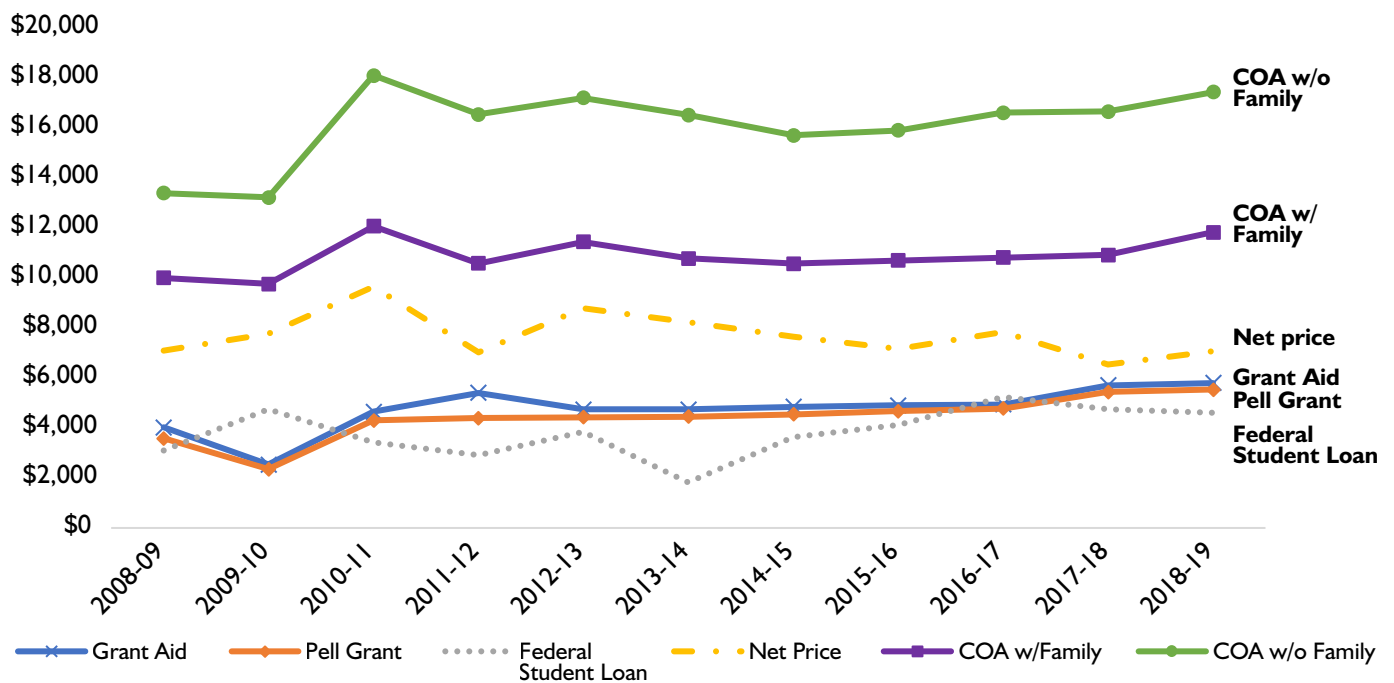
**Source:** Excelencia in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid Survey and Institutional Characteristics Survey, 2008 through 2018.

**Figure 16. Cost of Attendance (COA) and Student Financial Aid at Private Not-For-Profit, 4-year Institutions in Puerto Rico**



**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid Survey and Institutional Characteristics Survey, 2008 through 2018.

**Figure 17. Cost of Attendance (COA) and Student Financial Aid at Private For-Profit, 4-year Institutions in Puerto Rico**

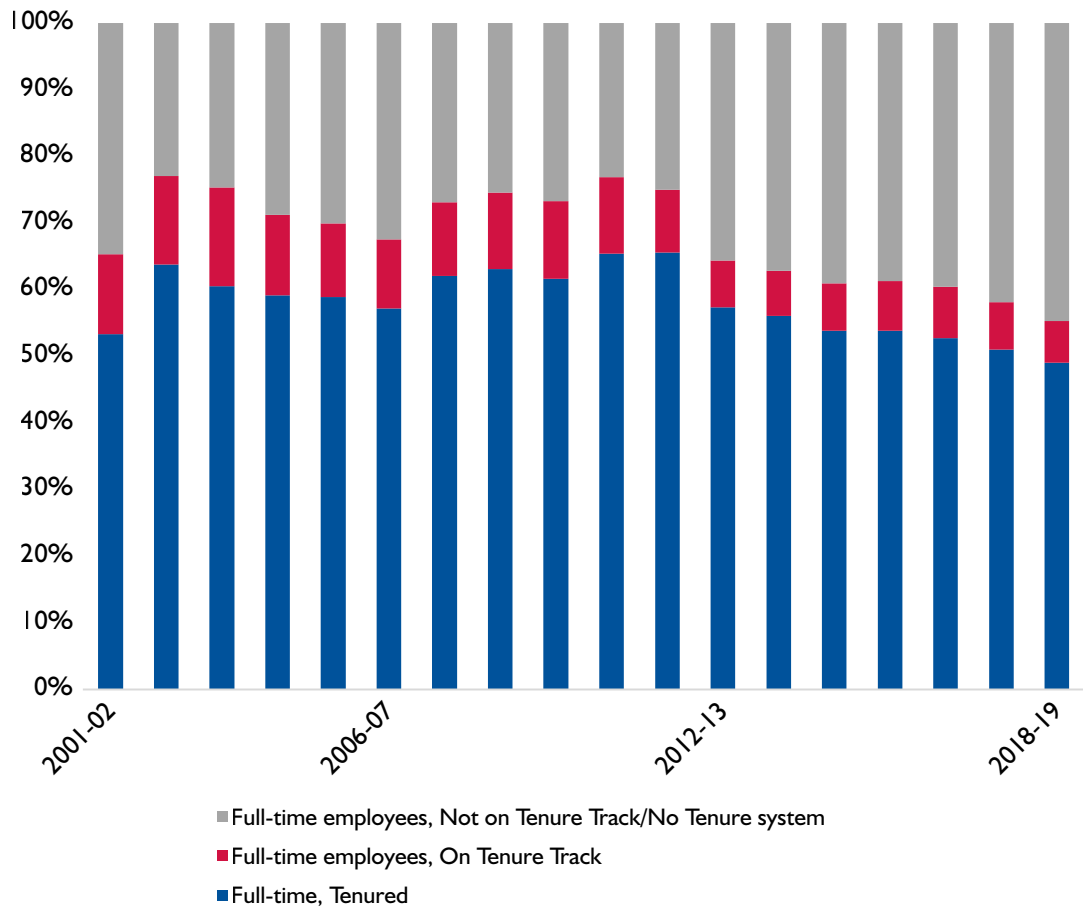


**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid Survey and Institutional Characteristics Survey, 2008 through 2018.

## The share of tenured faculty has decreased since 2012.

Starting in the Fall of 2012, the share of full-time faculty that are tenured (hold a permanent position at an institution) has decreased, while the share of faculty on tenure track has remained the same and faculty not on tenure track has increased (see Figure 18). Additional analysis is needed to understand this trend given the population out-migration and institutional resilience efforts.

**Figure 18. Full-time Faculty in Postsecondary Institutions in Puerto Rico, by Rank**



**NOTE:** IPEDS definitions of faculty rank are as follows. Tenure: status of a personnel position with respect to permanence of position. On Tenure Track: Personnel positions that lead to consideration for tenure. Not on tenure track: personnel positions that are considered non-tenure earning positions.

**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Human Resources Survey and Institutional Characteristics Survey, 2001 through 2018.

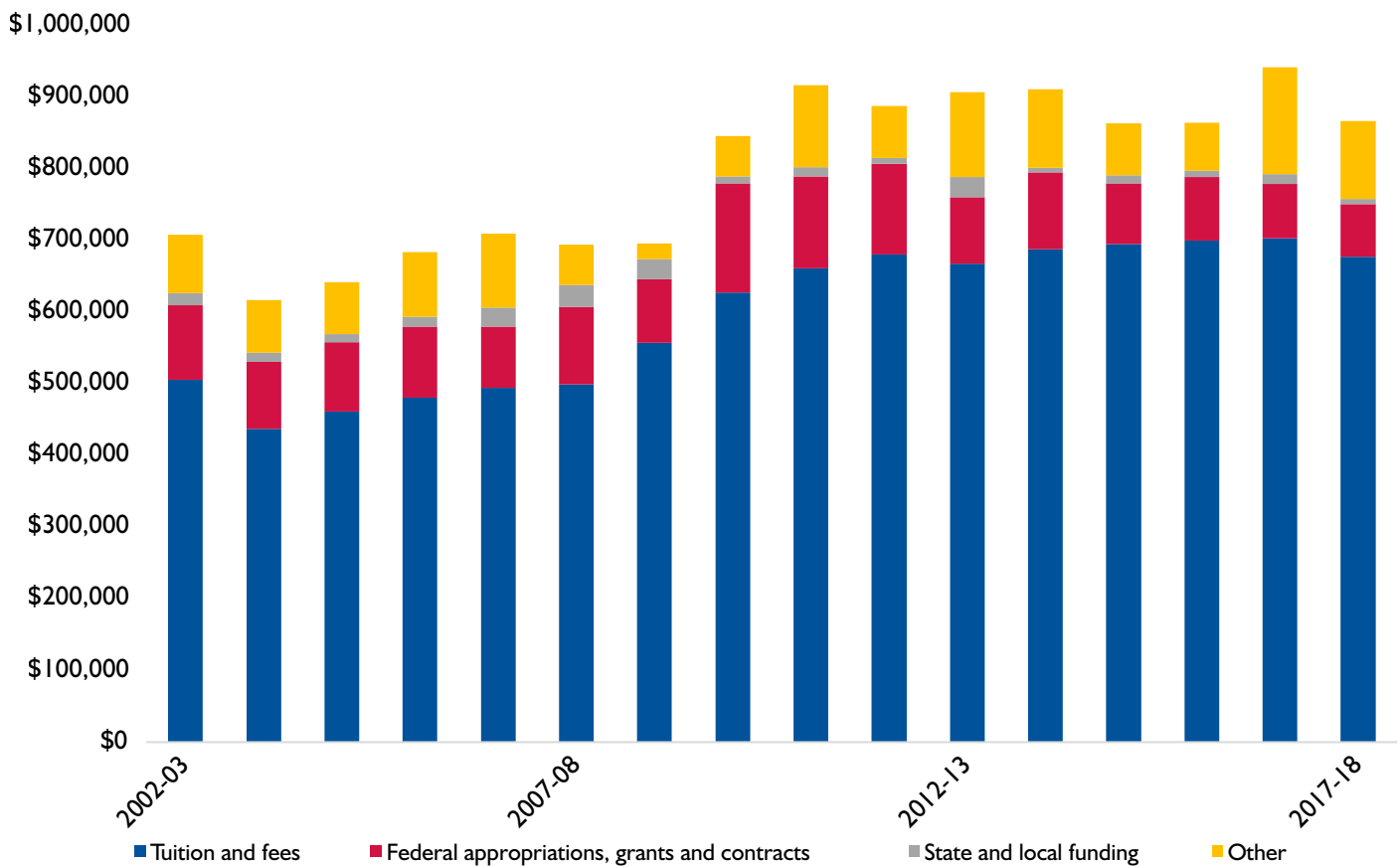
## The main source of revenue varies by institutional sector.

Revenue sources for institutions of higher education come from four primary sources: 1) federal appropriations, 2) state and local funding, 3) tuition and fees, and, 4) other (including private grants and contracts). However, the concentration of these four revenue sources varies by sector.

For example, the private not-for-profit sector relies significantly on tuition and fees as their main source of revenue, and their revenues overall have increased significantly over the last 15 years, totaling over \$866 million in 2017-18 (see Figure 19). Until 2016, private for-profit institutions in Puerto Rico relied on

both federal appropriations and tuition and fees as their main source of revenue. However, after 2017, their main source of revenue has been tuition and fees. By 2017-18, total revenues at private for-profit institutions in Puerto Rico were just over \$263 million (see Figure 20). In contrast, the public institutions in Puerto Rico rely significantly and consistently on state and local funding as their largest source of revenue, and their revenues have been slightly declining in recent years. As of 2017-18, Puerto Rico's public institutions' revenues totaled \$1.2 billion, down from \$1.4 billion in prior years (see Figure 21).

**Figure 19. Revenues of Private Not-For-Profit Institutions in Puerto Rico, by Source of Revenue (in thousands)**

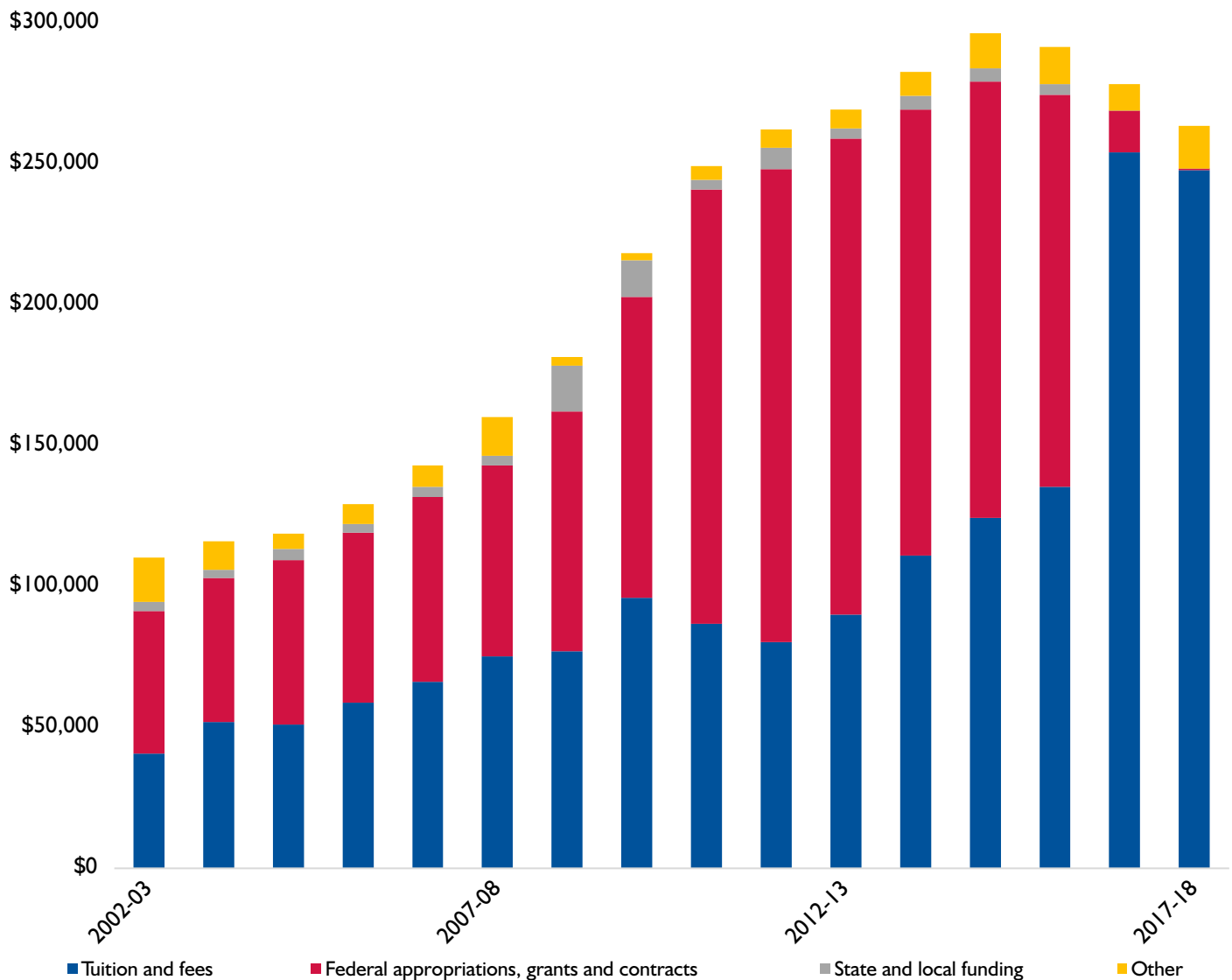


**Other:** includes sales and services of auxiliary enterprises, sales and services of hospitals, independent operations and other, private gifts includes grants and contracts, contributions from affiliated entities.

**Note:** Private institutions typically report Pell Grants as revenues from tuition and fees rather than as revenues from federal grants.

**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Finance Survey and Institutional Characteristics Survey, 2002 through 2017.

**Figure 20. Revenues of Private For-Profit Institutions in Puerto Rico, by Source of Revenue (in thousands)**



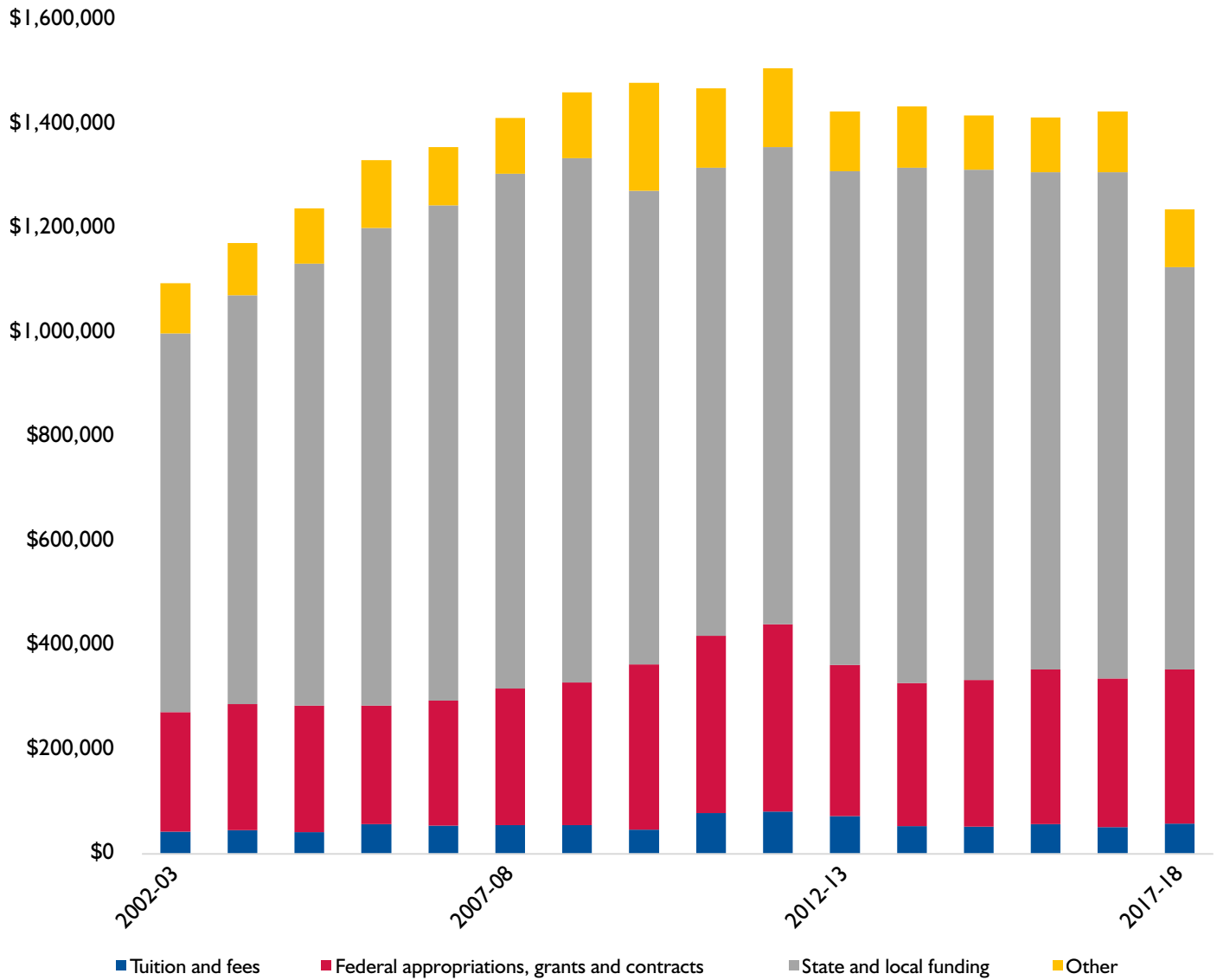
**Other:** includes Investment income (gains and losses), sales and services of hospitals, sales and services of educational activities, independent operations, gifts including contributions from affiliated organizations, other non-operating revenues, capital appropriations and capital grants and gifts, private grants and contracts.

**Note:** Private institutions typically report Pell Grants as revenues from tuition and fees rather than as revenues from federal grants.

**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Finance Survey and Institutional Characteristics Survey, 2002 through 2017.



**Figure 21. Revenues of Public Institutions in Puerto Rico, by Source of Revenue (in thousands)**



**Other:** includes state and local appropriations and state, local and private grants and contracts.

**Note:** Public institutions typically report Pell Grants as revenues from federal grants and as allowances that reduce revenues from tuition and fees.

**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Finance Survey and Institutional Characteristics Survey, 2002 through 2017.

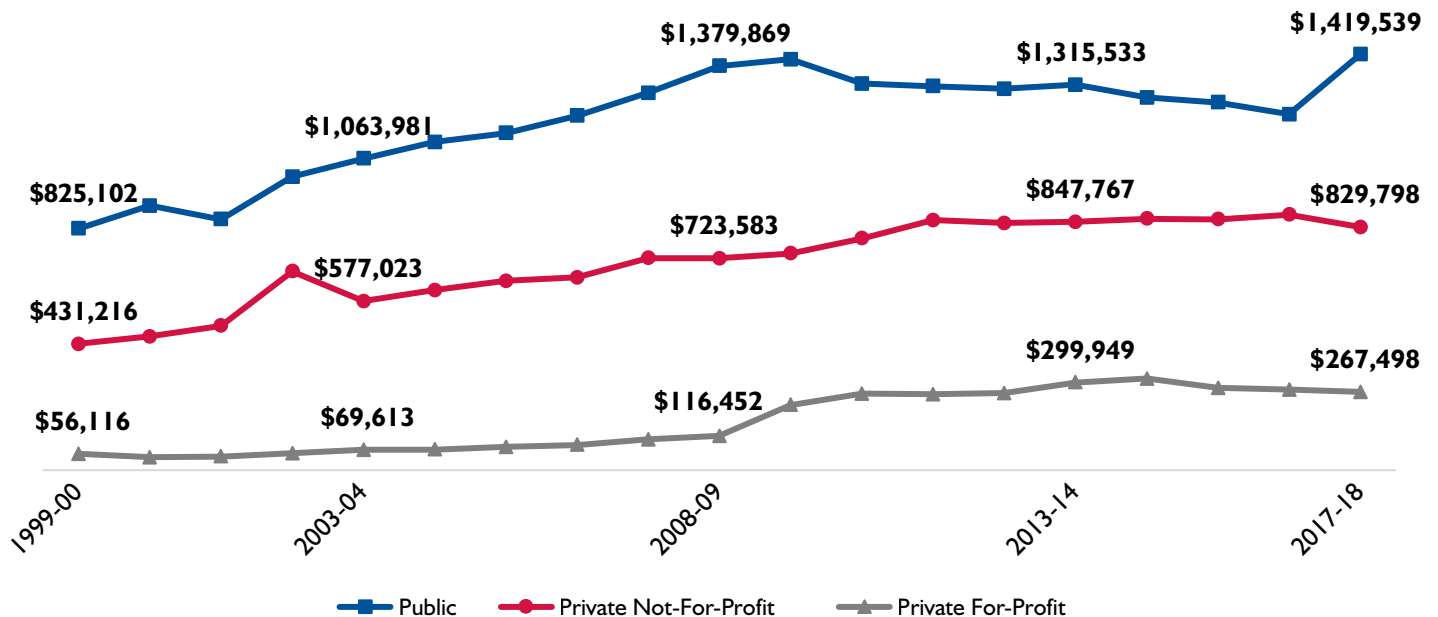
## Expenditures have increased across all sectors.

Within the last 20 years, institutions across all sectors in Puerto Rico have increased expenditures. While all institutions have increased their expenditures during this period, public institutions have spent significantly more compared to private institutions. Spending reached \$1.4 billion at public institutions compared to \$830 million at private not-for-profits, and less than \$268 million at private for-profit institutions (see Figure 22). However, public 2-year institutions only account for 1% of all expenditures at public institutions, and their expenditures have fluctuated over this period (see Figure 23).

Private not-for-profit institutions' expenditures increased from \$431 million to just under \$830 million, a 92% increase. The largest growth in expenditures occurred at private for-profits, a 377% increase (see Figure 22). However, private institutions (both not-for-profits and for-profits) have seen a deceleration in their expenditures in the last 5 years.

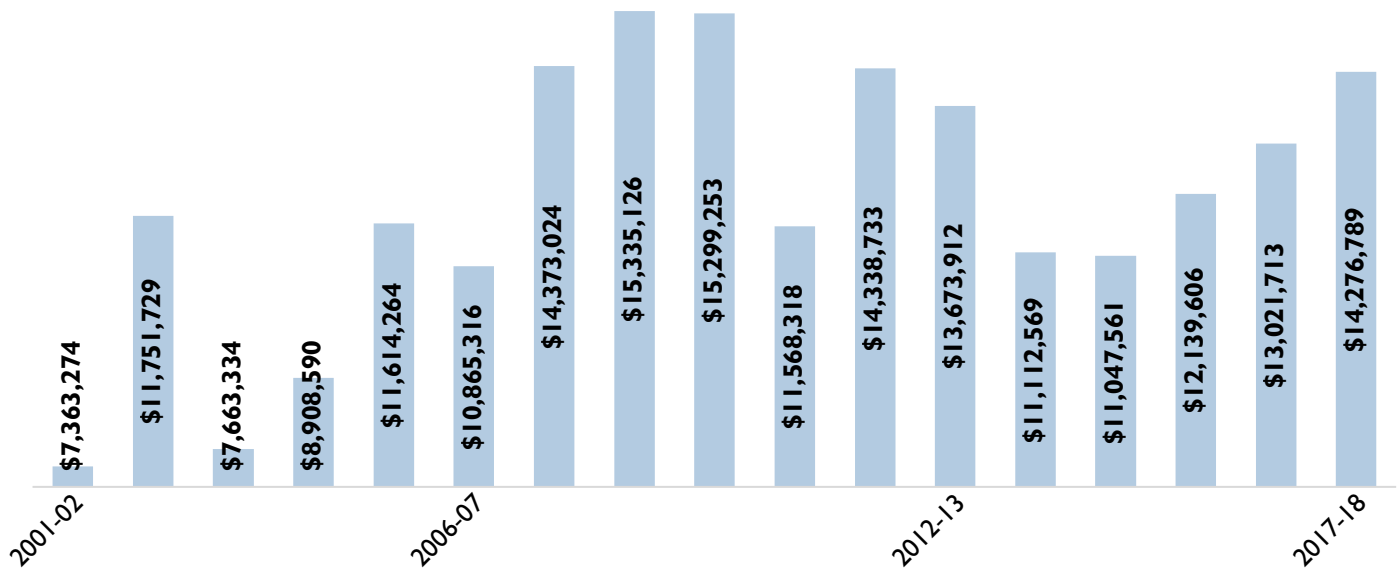
Comparing revenues with expenditures shows that in the last 20 years, public institutions in Puerto Rico were operating with higher revenues than expenditures. However, this reversed in 2017-18, where total expenditures were higher than total revenues (see Figure 23 and 24). Since 1999-00, private not-for-profit institutions had been operating with a similar amount of revenues and expenditures, until 2010-11 when total revenues were higher than their total expenditures. Private for-profit institutions were operating with higher revenues compared to their total expenditures from 1999-00 through 2008-09. In the aftermath of the Great Recession, from 2009-10 through 2014-15, the private for-profits had higher expenditures than their total revenues.

**Figure 22. Expenditures for All Sectors (in thousands)**



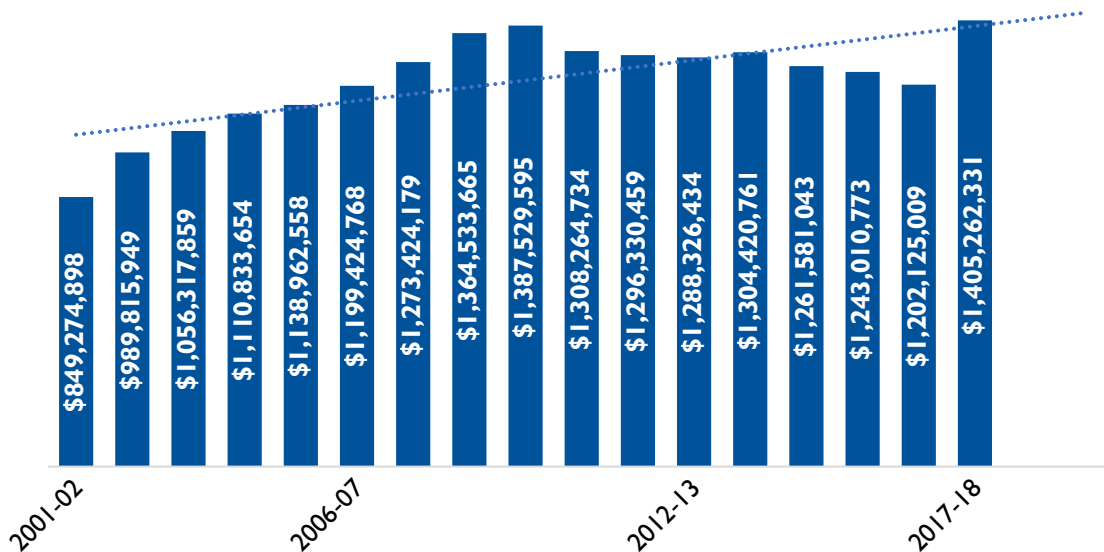
**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Finance Survey and Institutional Characteristics Survey, 2001 through 2018. For years 1999 and 2000: *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), “Financial Statistics of Institutions of Higher Education” surveys, 1980-81 and 1985-86; and Integrated Postsecondary Education Data System (IPEDS), “Finance” surveys, 1990-91 through 1999-2000, and Spring 2002 survey.

**Figure 23. Total Expenditures for Public 2-year Institutions in Puerto Rico**



**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Finance Survey and Institutional Characteristics Survey, 2001 through 2017.

**Figure 24. Total Expenditures for Public 4-year Institutions in Puerto Rico**



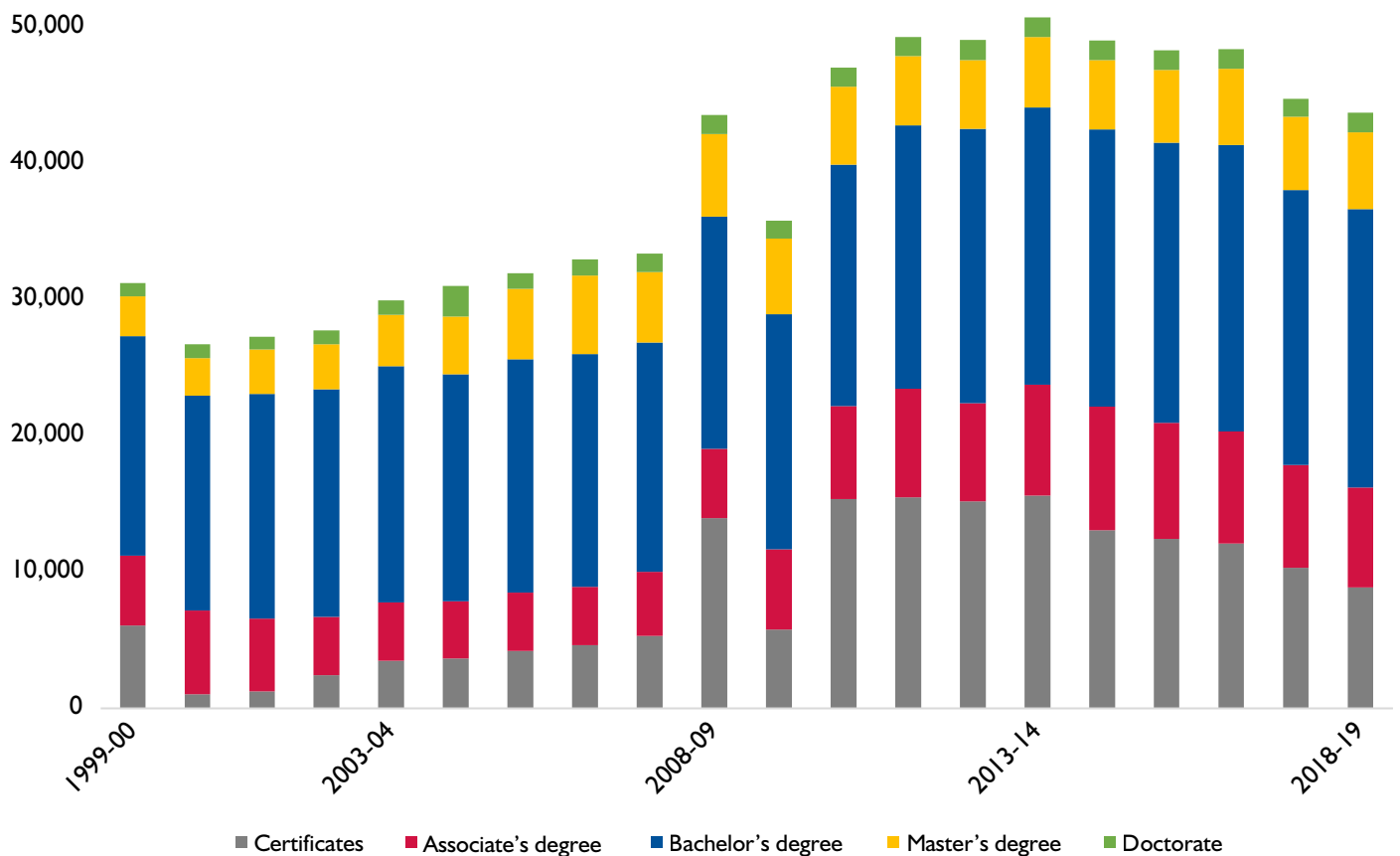
**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Finance Survey and Institutional Characteristics Survey, 2001 through 2018.

## Total degrees and certificates awarded to students in Puerto Rico have increased over the last 20 years.

While the grand total of degrees awarded to students in postsecondary institutions in Puerto Rico has fluctuated over the last 20 years, there has been an increase overall in degrees awarded during this time (see Figure 25). The largest total number of degrees awarded in Puerto Rico is at the baccalaureate level, increasing from 16,000 degrees in 1999-00 to over 20,000 degrees awarded in 2018-19. During this

time frame, master's degrees awarded almost doubled, an increase from 2,955 to 5,661. Overall, between 1999-00 and 2018-19, there was a 40% increase in total certificates and degrees awarded (from 31,469 to 44,137). For the total number of certificates and degrees awarded each academic year from 1999-00 through 2018-19, see Appendix B: Certificates/Degrees Awarded in Puerto Rico.

**Figure 25. Degrees Awarded in Puerto Rico by Type of Degree**



**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Completions Survey and Institutional Characteristics Survey, 1999 through 2018.

In 2017-18, the top 5 institutions in Puerto Rico awarding associate degrees to Latinos were all private 4-year institutions (see Table 4). The top 5 institutions awarding bachelor degrees included two University of Puerto Rico campuses which are public 4-year institutions, and two Universidad Ana G. Mendez campuses (see Table 5).

**Table 4. Top 5 Institutions Awarding Associate Degrees in Puerto Rico, 2017-18**

|   | Institution                                | Sector                         | Grand Total | Hispanic Total | % Hispanic |
|---|--|--------------------------------|-------------|----------------|------------|
| 1 | National University College                | Private for-profit, 4-year     | 1,122       | 1,122          | 100%       |
| 2 | Universidad Ana G. Mendez-Gurabo Campus    | Private not-for-profit, 4-year | 552         | 552            | 100%       |
| 3 | Universidad Ana G. Mendez-Carolina Campus  | Private not-for-profit, 4-year | 384         | 384            | 100%       |
| 4 | EDP University of Puerto Rico Inc-San Juan | Private not-for-profit, 4-year | 362         | 359            | 99%        |
| 5 | EDIC College                               | Private for-profit, 4-year     | 276         | 276            | 100%       |

**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), 2018 Graduation Rates Survey and Institutional Characteristics Survey.

**Table 5. Top 5 Institutions Awarding Bachelor Degrees in Puerto Rico, 2017-18**

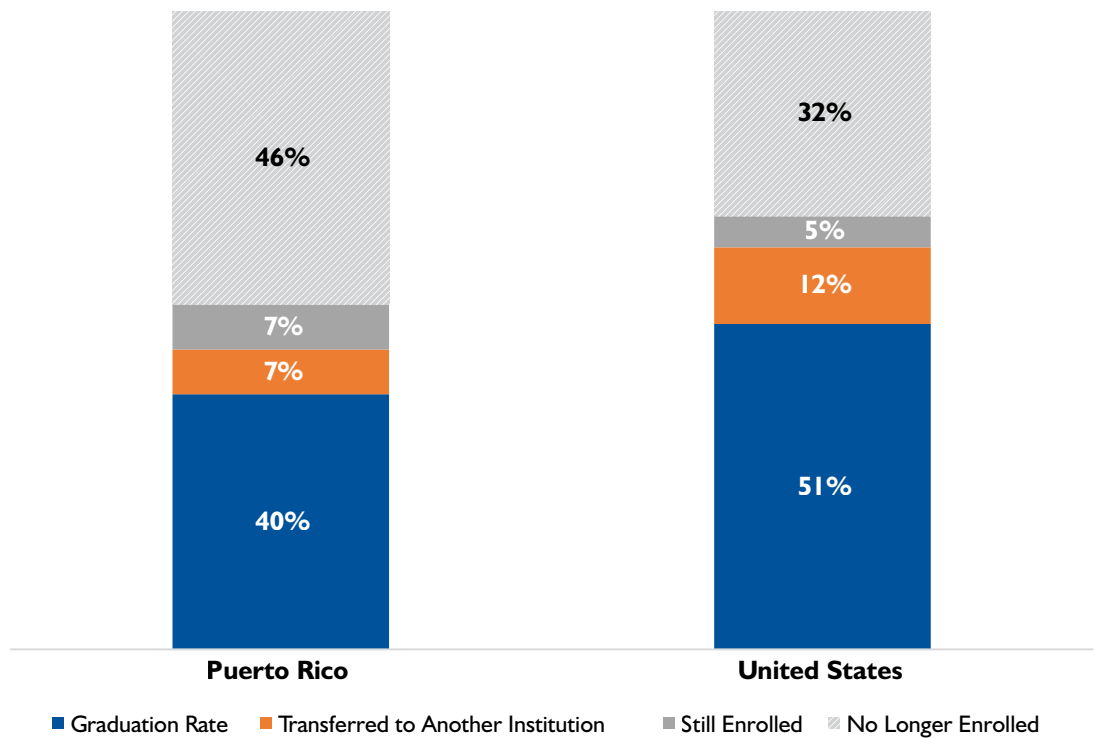
|   | Institution                             | Sector                         | Grand Total | Hispanic Total | % Hispanic |
|---|---|--------------------------------|-------------|----------------|------------|
| 1 | University of Puerto Rico-Rio Piedras   | Public, 4-year                 | 1,817       | 1,641          | 90%        |
| 2 | University of Puerto Rico-Mayaguez      | Public, 4-year                 | 1,537       | 1,438          | 94%        |
| 3 | National University College             | Private for-profit, 4-year     | 1,411       | 1,411          | 100%       |
| 4 | Universidad Ana G. Mendez-Gurabo Campus | Private not-for-profit, 4-year | 1,378       | 1,378          | 100%       |
| 5 | Universidad Ana G. Mendez-Cupey Campus  | Private not-for-profit, 4-year | 1,242       | 1,242          | 100%       |

**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), 2018 Graduation Rates Survey and Institutional Characteristics Survey.

## Private 4-year institutions have increased graduation rates significantly compared to public 4-years over the last 20 years.

While enrollment in higher education is important, the main goal is degree completion, which can be tracked with four measures: graduation rate, transfer rate, still enrolled, and no longer enrolled. At 4-year institutions in Puerto Rico, Latino students in the Fall 2012 cohort graduated at a lower rate than their peers in the United States—40% and 51%, respectively (see Figure 26). About 14% of Latino students at 4-year institutions were still persisting after six years—7% had transferred to another institution and 7% were still enrolled at the institution they started at. However, it is important to note that 46% of Latino students in the Fall 2012 cohort were no longer enrolled six years after starting at a 4-year in Puerto Rico.

**Figure 26. Degree Outcomes for Hispanics at Four-Year Institutions**



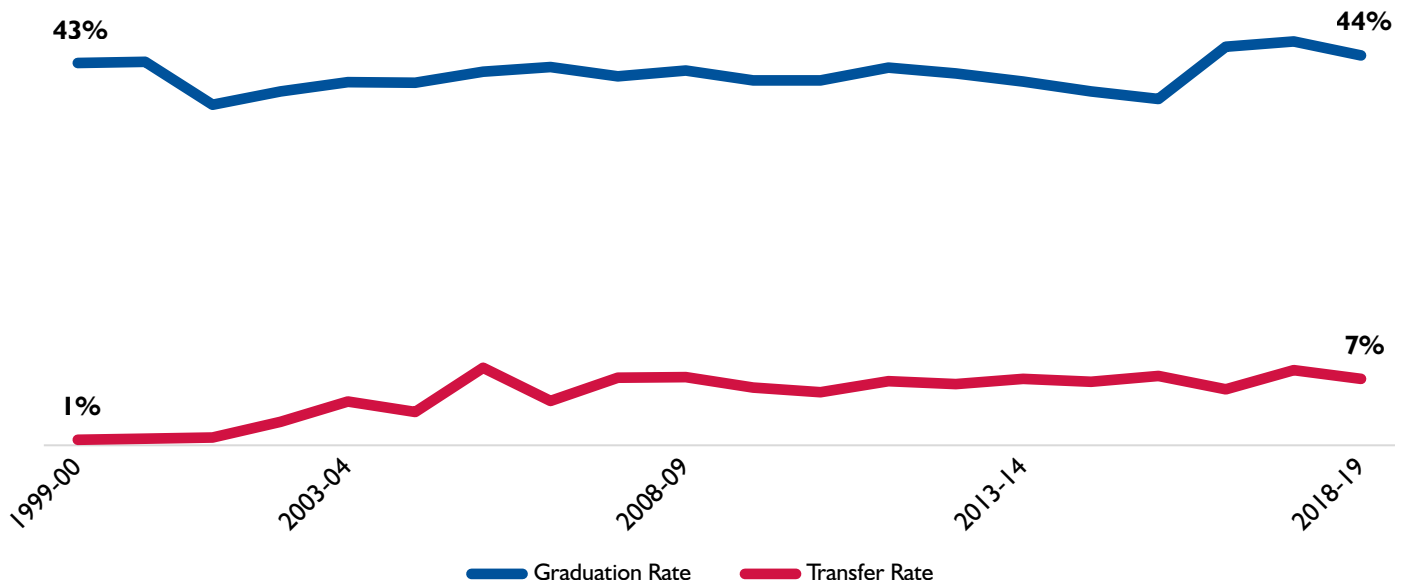
**Note:** Outcomes shown are for 150% normal time to completion for students at 4-year institutions who started in Fall 2012.

**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), 2018 Graduation Rates Survey and Institutional Characteristics Survey.

At public 4-year institutions in Puerto Rico the six-year graduation rates have remained relatively stagnant, between 40% and 44%, over the last 20 years (see Figure 27). The highest graduation rates have occurred in the last three years with modest increases

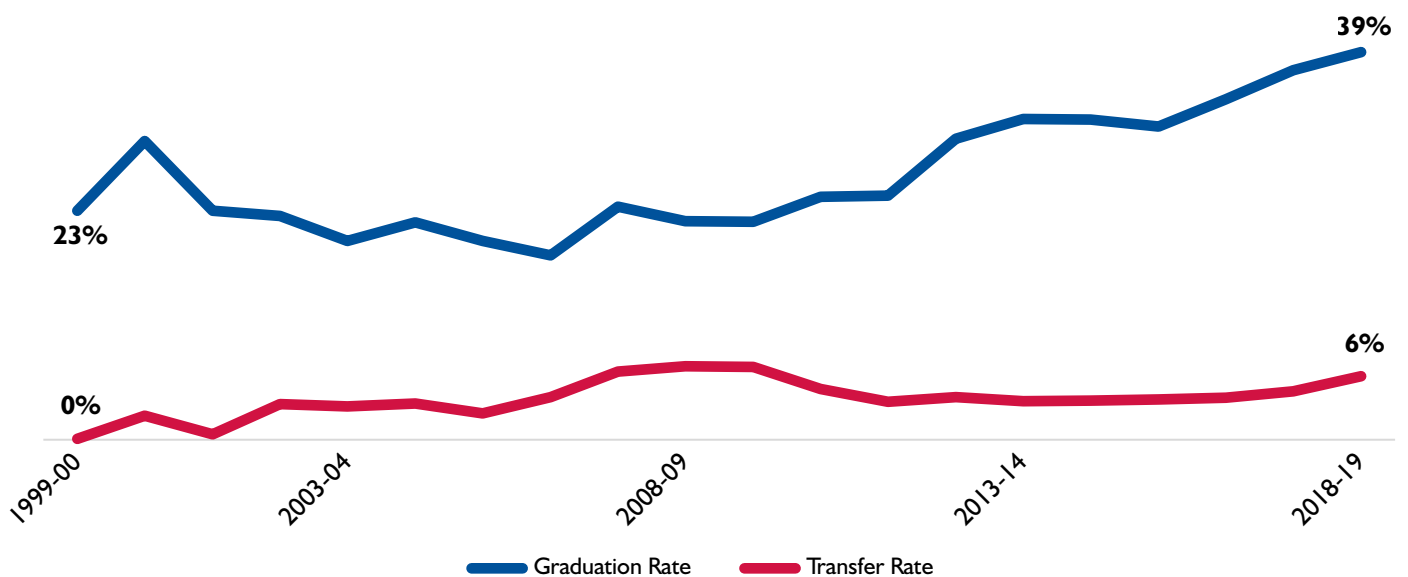
and the largest increase occurred between 2015-16 (39%) and 2016-17 (45%). However, at private 4-year institutions, the graduation rates have increased significantly from 23% to 39% in 2018-19, a 16%-point increase (see Figure 28).

**Figure 27. Graduation and Transfer Rates at Public 4-Year Institutions in Puerto Rico**



**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Graduation Rates Survey and Institutional Characteristics Survey, 1999 through 2018.

**Figure 28. Graduation and Transfer Rates at Private 4-Year Institutions in Puerto Rico**



**Note:** Here private 4-year institutions include both not-for-profits and for-profits.

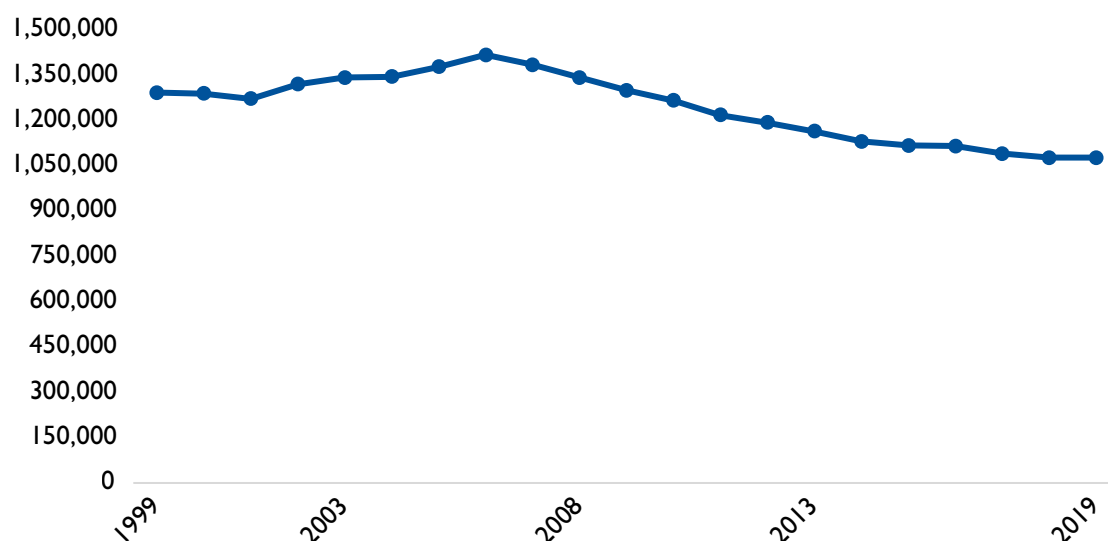
**Source:** *Excelencia in Education* analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Graduation Rates Survey and Institutional Characteristics Survey, 1999 through 2018.

# WORKFORCE

Unemployment rate remains higher in Puerto Rico than in the U.S. mainland, and the top occupations are low-paying that do not require a postsecondary degree.

The labor force includes both employed and unemployed persons. The labor force has been declining in Puerto Rico since 2006 (see Figure 29). The unemployment rate in Puerto Rico has been declining since 2010 and in 2019 was its lowest point in 20 years. As of 2019, the annual unemployment rate in Puerto Rico was 8.2%, compared to its peak in 2010 (16.4%). However, compared to the U.S. mainland, Puerto Rico's unemployment rate is significantly higher over this period—at times two to three times greater than in the U.S. mainland (see Figure 30). For average annual unemployment and employment in Puerto Rico, see Appendix C: Unemployment/Employment in Puerto Rico.

**Figure 29. Average Annual Labor Force in Puerto Rico**

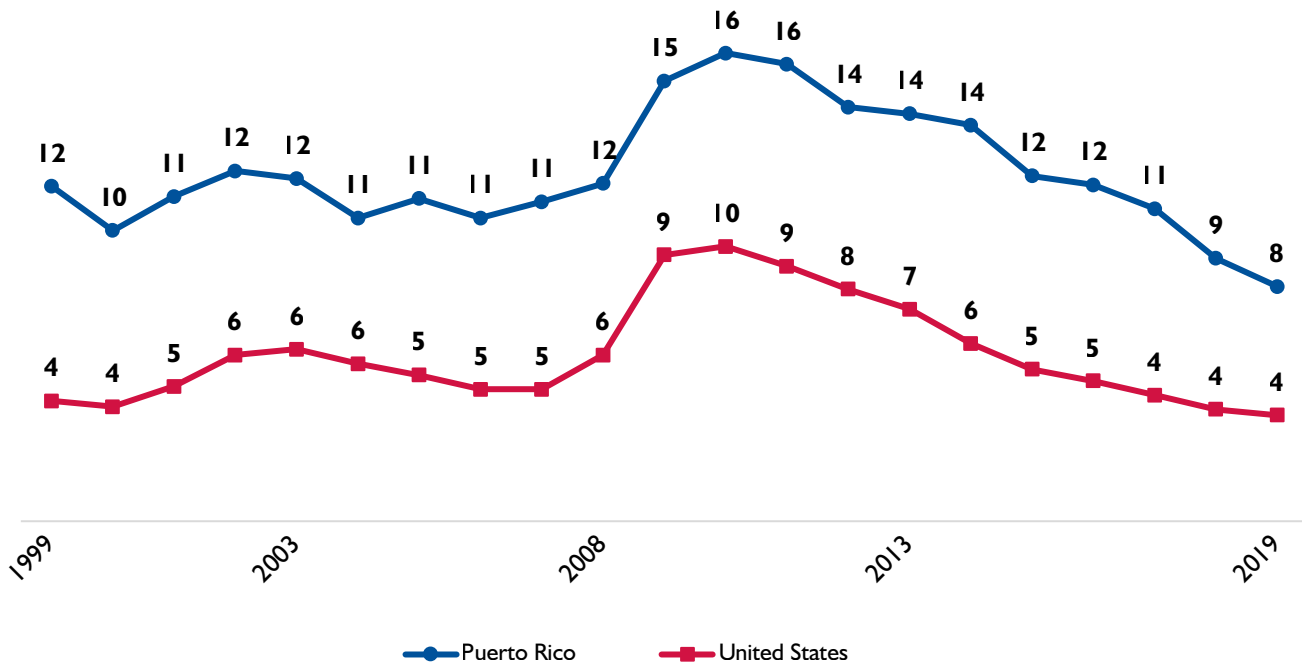


**Note:** The labor force is the sum of employed and unemployed persons. The labor force participation rate is the labor force as a percent of the civilian noninstitutional population.

**Source:** *Excelencia in Education* analysis of *Excelencia in Education* analysis of U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Survey.



**Figure 30. Annual Unemployment Rate (%)**



**Note:** The unemployment rate represents the number unemployed as a percent of the labor force in Puerto Rico.

**Source:** *Excelencia in Education* analysis of *Excelencia in Education* analysis of U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Survey.



The top occupations in Puerto Rico are mainly blue-collar and support services as opposed to managerial positions. The top 10 occupations in Puerto Rico in 2019 by the total number of persons employed show that the largest share of the population is mainly in low-paying jobs and those that do not necessarily require a postsecondary degree. In 2019, the annual average salary for these ranged between \$19,000 to \$40,000 (see Table 6 and Figure 31). The higher end of this salary range captures those occupations that may require a postsecondary degree (Business and Financial Operations, Healthcare Practitioners,

Educational Instruction, etc.). The 682,560 employees in these lower-paying jobs make up 42% of the total working age population, aged 25 to 64 years old, in Puerto Rico.

In sharp contrast to the top 10 occupations in Puerto Rico in 2019 by the total number of persons employed, the population in the top 10 highest paying occupations (9,070) represent less than 1% of the working age population, aged 25 to 64 years old. These top 10 paying occupations range in annual salary from \$92,000 to \$122,000 (see Table 7 and Figure 32).

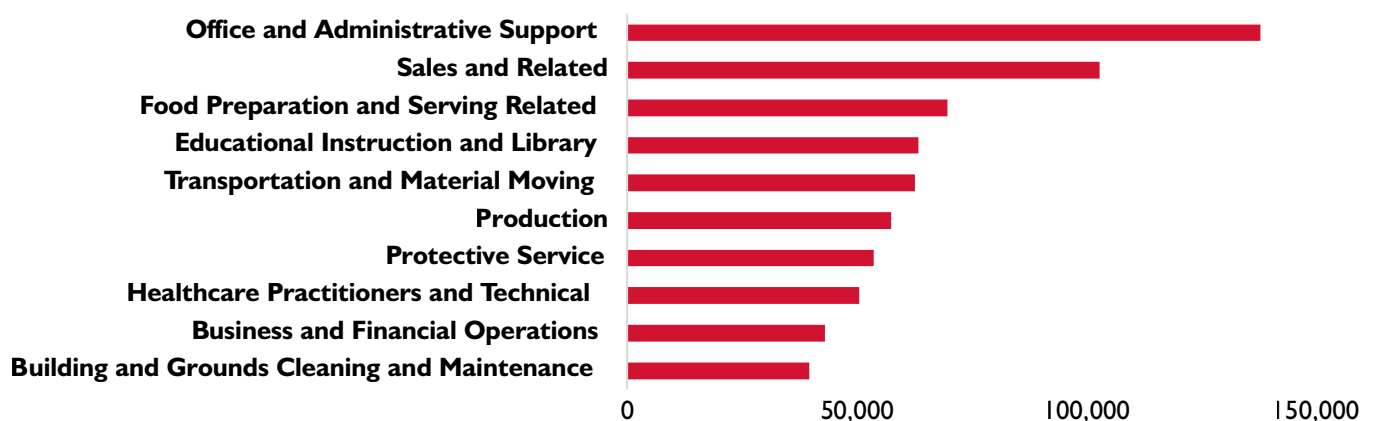
**Table 6. Top 10 Occupations in Puerto Rico by Total Employment in 2019**

|    | Top 10 Occupations in 2019                    | Total Employment | Mean Hourly Wage | Mean Annual Salary |
|----|---|------------------|------------------|--------------------|
| 1  | Office and Administrative Support             | 138,140          | \$12             | \$25,750           |
| 2  | Sales and Related                             | 103,140          | \$11             | \$23,210           |
| 3  | Food Preparation and Serving Related          | 69,940           | \$9              | \$19,180           |
| 4  | Educational Instruction and Library           | 63,560           | \$17             | \$35,330           |
| 5  | Transportation and Material Moving            | 62,810           | \$11             | \$22,430           |
| 6  | Production                                    | 57,630           | \$12             | \$24,330           |
| 7  | Protective Service                            | 53,830           | \$12             | \$25,460           |
| 8  | Healthcare Practitioners and Technical        | 50,620           | \$17             | \$36,280           |
| 9  | Business and Financial Operations             | 43,170           | \$20             | \$40,770           |
| 10 | Building and Grounds Cleaning and Maintenance | 39,720           | \$10             | \$20,330           |
|    | <b>Total:</b>                                 | <b>682,560</b>   |                  |                    |

**Note:** These occupational employment and wage estimates are calculated with data collected from employers in all industry sectors in metropolitan and nonmetropolitan areas in Puerto Rico.

**Source:** *Excelencia* in Education analysis of U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics Survey, May 2019 Occupational Employment Statistics Estimates.

**Figure 31. Top 10 Occupations by Total Employment in Puerto Rico in 2019**



**Note:** These occupational employment and wage estimates are calculated with data collected from employers in all industry sectors in metropolitan and nonmetropolitan areas in Puerto Rico.

**Source:** *Excelencia* in Education analysis of U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics Survey, May 2019 Occupational Employment Statistics Estimates.

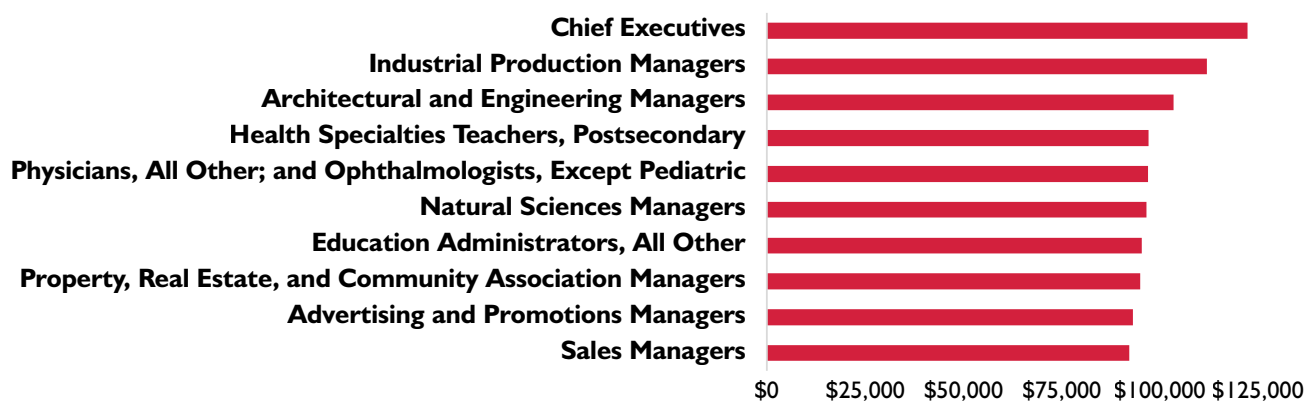
**Table 7. Top 10 Highest Paying Occupations in Puerto Rico in 2019**

|           | <b>Top 10 Occupations in 2019</b>                             | <b>Total Employment</b> | <b>Mean Hourly Wage</b> | <b>Mean Annual Salary</b> |
|-----------|---|-------------------------|-------------------------|---------------------------|
| <b>1</b>  | Chief Executives  | 2,710                   | \$59                    | \$122,340                 |
| <b>2</b>  | Industrial Production Managers                                | 1,080                   | \$54                    | \$111,970                 |
| <b>3</b>  | Architectural and Engineering Managers                        | 950                     | \$50                    | \$103,480                 |
| <b>4</b>  | Health Specialties Teachers, Postsecondary                    | 1,320                   | *                       | \$97,170                  |
| <b>5</b>  | Physicians, All Other; and Ophthalmologists, Except Pediatric | 1,120                   | \$47                    | \$96,980                  |
| <b>6</b>  | Natural Sciences Managers                                     | 40                      | \$46                    | \$96,620                  |
| <b>7</b>  | Education Administrators, All Other                           | 230                     | \$46                    | \$95,380                  |
| <b>8</b>  | Property, Real Estate, and Community Association Managers     | 30                      | \$46                    | \$95,060                  |
| <b>9</b>  | Advertising and Promotions Managers                           | 80                      | \$45                    | \$93,230                  |
| <b>10</b> | Sales Managers  | 1,510                   | \$44                    | \$92,190                  |
|           | <b>Total:</b>   | <b>9,070</b>            |                         |                           |

**Note:** These occupational employment and wage estimates are calculated with data collected from employers in all industry sectors in metropolitan and nonmetropolitan areas in Puerto Rico.

**Source:** *Excelencia* in Education analysis of U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics Survey, May 2019 Occupational Employment Statistics Estimates.

**Figure 32. Top 10 Highest Paying Occupations in Puerto Rico 2019**



**Note:** These occupational employment and wage estimates are calculated with data collected from employers in all industry sectors in metropolitan and nonmetropolitan areas in Puerto Rico.

**Source:** *Excelencia* in Education analysis of U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics Survey, May 2019 Occupational Employment Statistics Estimates.

# QUESTIONS FOR FUTURE RESEARCH

As a result of our data collection and longitudinal analysis of: the population by certain key demographics, the K-12 educational pipeline, the state of institutions of higher education, and the workforce in Puerto Rico, the following questions arose for further consideration and future research.

1. Puerto Rico has seen a mass exodus and decline in its total population in the last 20 years, especially emphasized in the last decade. Yet, despite this loss in population, the population aged 25 years and older that has attained an associate's degree or higher has increased over the last 10 years. What explains this? Is it that those that have emigrated are those without a postsecondary degree?
2. With this mass exodus occurring in prior years, as well as the total population and population by age groups that has declined, particularly the 18–24-year-olds, and those younger than 18 years, which are the potential current and future pool of applicants for higher education, how does this affect institutions of higher education in Puerto Rico and their recruitment efforts? How can institutions rethink and target their potential student body?
3. Graduation rates at private institutions in Puerto Rico have increased over the last 20 years. Yet, during this time, and especially in the last 7 years, expenditures have decreased at private institutions. How have these institutions increased their students' graduation rates at the same time they have spent less?
4. Cost of attendance across all sectors has been on the rise in the last 10 years in Puerto Rico. The poverty level and median household income during this time shows exceptional financial need for families, as well as their reliance on federal grant aid. There remains a significant gap between the cost of attendance and grant aid awarded for students. How can institutions financially support their students?
5. While in the last 10 years the population in Puerto Rico aged 25 years and older that have earned an associate's degree or higher has increased, the poverty and unemployment rate remain high, especially when compared to the U.S. mainland, and a greater share of the population are employed in lower-paying jobs that do not require postsecondary degree or credential. What could explain this disconnect between attainment of a postsecondary degree and the workforce?

# GLOSSARY

**Cost of Attendance (COA):** Sum of published tuition and required fees (lower of in-district or in-state for public institutions), books and supplies, and the weighted average for room and board and other expenses. Incorporates whether a student lives off-campus with family or off-campus without family. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid Survey Glossary and U.S. Department of Education, Federal Student Aid.

**Employed persons:** persons who did any work for pay or profit during the survey reference week; persons who did at least 15 hours of unpaid work in a family-operated enterprise; and persons who were temporarily absent from their regular jobs because of illness, vacation, bad weather, industrial dispute, or various personal reasons. Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Survey.

**Expenditures:** Expenditures include the expenses carried out from delivering goods and/or educational and other services and other activities involved in the institutions' major or central operations. Generally, private institutions use standards established by the Financial Accounting Standards Board (FASB) and public institutions use standards established by the Governmental Accounting Standards Board (GASB). Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Finance Survey Glossary.

**Federal student loans:** loans, or monies, funded by the federal government that must be repaid. Federal student loans include: Direct Subsidized loans and Direct Unsubsidized loans, and Direct PLUS loans (for graduate and professional students). Source: U.S. Department of Education, Federal Student Aid.

**Financial Aid:** Financial aid includes Federal Work Study, grants, loans to students (government and/or private), assistantships, scholarships, fellowships, tuition waivers, tuition discounts, employer aid (tuition reimbursement) and other monies (other than from relatives/friends) provided to students to meet expenses, excluding loans to parents. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid Survey Glossary.

**Full-time equivalent (FTE):** full-time equivalent enrollment of students is a single value providing a meaningful combination of full-time and part-time students. The number of FTE students is calculated based on fall student headcounts as reported by the institution on the IPEDS Enrollment (EF) component (Part A). The full-time equivalent (headcount) of the institution's part-time enrollment is estimated by multiplying the part-time headcount by a multiplier. These are then added to the full-time enrollment headcounts to obtain an FTE for all students enrolled in the fall. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Survey Glossary.

**Graduation rate:** Total percentage of students who graduated within 150% of normal time for first-time full-time freshmen. This includes students that graduated in 6 years at four-year institutions. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Graduation Rates Survey.

**Grant Aid:** Grant or scholarship aid includes aid received, from the federal government, state or local government, the institution, and other sources known by the institution. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid Survey Glossary and U.S. Department of Education Student Financial Aid.

**Labor force:** The labor force is the sum of employed and unemployed persons. The labor force participation rate is the labor force as a percent of the civilian noninstitutional population. Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Survey.

**On Tenure Track:** Personnel positions that lead to consideration for tenure. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Human Resources Survey.

**Open Admissions Policy:** An institution with an open admission policy is one whereby the school will accept any student who applies regardless of admission test scores, high school GPA, high school rank, and recommendation letters. A selective institution requires one or more of these aforementioned criteria for admission. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS).

**Net Price:** Generated by subtracting the average amount of federal, state/local government, or institutional grant and scholarship aid from the total cost of attendance. Is the estimated out-of-pocket cost of students and their families to attend college, after accounting for financial aid that does not need to be repaid. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid Survey Glossary and U.S. Department of Education Student Financial Aid.

**No longer enrolled:** percentage of students that are no longer enrolled at the point of 150% normal time to completion. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Graduation Rates Survey.

**Not on tenure track:** personnel positions that are considered non-tenure earning positions. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Human Resources Survey.

**Pell Grant:** Federal Pell Grants are awarded to undergraduate students who display exceptional financial need who have not yet earned a bachelor's, graduate, or professional degree, and do not have to be repaid. Source: U.S. Department of Education, Federal Student Aid.

**Retention:** A measure of the rate at which students persist in their educational program at an institution, expressed as a percentage. For four-year institutions, this is the percentage of first-time bachelors (or equivalent) degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. For all other institutions this is the percentage of first-time degree/certificate-seeking students from the previous fall who either re-enrolled or successfully completed their program by the current fall, as defined by IPEDS. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Survey Glossary.

**Revenues:** The inflow of resources or other enhancement of net assets of an institution or settlements of its liabilities from delivering or producing goods, rendering services, or other activities that constitute the institution's ongoing major or central operations. Includes revenues from fees and charges, appropriations, auxiliary enterprises, and contributions and other nonexchange transactions. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Finance Survey Glossary.

**Still enrolled:** percentage of students that are still enrolled at the point of 150% normal time to completion. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Graduation Rates Survey.

**Tenure:** status of a personnel position with respect to permanence of position. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Human Resources Survey.

**Transferred to another institution:** percentage of students that transferred to another institution and only includes students who have transferred out from an institution and did not complete a degree. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Graduation Rates Survey.

**Tuition and fees:** the amount of tuition and required fees covering a full academic year most frequently charged to students. These values represent what a typical student would be charged and may not be the same for all students at an institution. If tuition is charged on a per-credit-hour basis, the average full-time credit hour load for an entire academic year is used to estimate average tuition. Required fees include all fixed sum charges that are required of such a large proportion of all students that the student who does not pay the charges is an exception. Source: U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Finance Survey Glossary.

**Unemployed persons:** are classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work. Persons who were not working and were waiting to be recalled to a job from which they had been temporarily laid off are also included as unemployed. Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Survey.

**Unemployment rate:** The unemployment rate represents the number of persons unemployed as a percent of the labor force. Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Survey.

# APPENDIX A: Colleges/Universities in Puerto Rico

**Table 8. Institutions of Higher Education in Puerto Rico, 2018-19**

|    | <b>Institution Name</b>                                      | <b>City location</b> | <b>Sector</b>                  |
|----|--|----------------------|--------------------------------|
| 1  | American University of Puerto Rico                           | Bayamon              | Private not-for-profit, 4-year |
| 2  | American University of Puerto Rico                           | Manati               | Private not-for-profit, 4-year |
| 3  | Atenas College   | Manati               | Private not-for-profit, 4-year |
| 4  | Atlantic University College                                  | Guaynabo             | Private not-for-profit, 4-year |
| 5  | Caribbean University-Bayamon                                 | Bayamon              | Private not-for-profit, 4-year |
| 6  | Caribbean University-Carolina                                | Carolina             | Private not-for-profit, 4-year |
| 7  | Caribbean University-Ponce                                   | Ponce                | Private not-for-profit, 4-year |
| 8  | Caribbean University-Vega Baja                               | Vega Baja            | Private not-for-profit, 4-year |
| 9  | Carlos Albizu University-San Juan                            | San Juan             | Private not-for-profit, 4-year |
| 10 | CEM College-Bayamon  | Bayamon              | Private for-profit, 4-year     |
| 11 | CEM College-Humacao  | Humacao              | Private for-profit, 4-year     |
| 12 | CEM College-Mayaguez   | Mayaguez             | Private for-profit, 4-year     |
| 13 | CEM College-San Juan   | San Juan             | Private for-profit, 4-year     |
| 14 | Center for Advanced Studies On Puerto Rico and the Caribbean | San Juan             | Private not-for-profit, 4-year |
| 15 | Colegio de Cinematografia Artes y Television                 | Bayamon              | Private for-profit, 2-year     |
| 16 | Colegio Universitario de San Juan                            | San Juan             | Public 4-year                  |
| 17 | Columbia Central University-Caguas                           | Caguas               | Private for-profit, 4-year     |
| 18 | Columbia Central University-Yauco                            | Yauco                | Private for-profit, 4-year     |
| 19 | Conservatory of Music of Puerto Rico                         | San Juan             | Public 4-year                  |
| 20 | Dewey University-Carolina                                    | Carolina             | Private not-for-profit, 4-year |
| 21 | Dewey University-Hato Rey                                    | Hato Rey             | Private not-for-profit, 4-year |
| 22 | Dewey University-Juana Diaz                                  | Juana Diaz           | Private not-for-profit, 4-year |
| 23 | Dewey University-Manati                                      | Manati               | Private not-for-profit, 4-year |
| 24 | EDIC College   | Caguas               | Private for-profit, 4-year     |
| 25 | EDP University of Puerto Rico Inc-San Juan                   | San Juan             | Private not-for-profit, 4-year |
| 26 | EDP University of Puerto Rico Inc-San Sebastian              | San Sebastian        | Private not-for-profit, 4-year |
| 27 | EDP University of Puerto Rico-Villalba                       | Villalba             | Private not-for-profit, 4-year |
| 28 | Educational Technical College-Recinto de Bayamon             | Bayamon              | Private for-profit, 2-year     |
| 29 | Escuela de Artes Plasticas y Diseno de Puerto Rico           | San Juan             | Public 4-year                  |
| 30 | Huertas College  | Caguas               | Private for-profit, 4-year     |
| 31 | Humacao Community College                                    | Humacao              | Private not-for-profit, 4-year |
| 32 | ICPR Junior College-Arecibo                                  | Arecibo              | Private for-profit, 2-year     |
| 33 | ICPR Junior College-General Institutional                    | Hato Rey             | Private for-profit, 2-year     |
| 34 | ICPR Junior College-Manati                                   | Manati               | Private for-profit, 2-year     |
| 35 | ICPR Junior College-Mayaguez                                 | Mayaguez             | Private for-profit, 2-year     |
| 36 | Instituto Tecnologico de Puerto Rico-Recinto de Guayama      | Guayama              | Public 2-year                  |
| 37 | Instituto Tecnologico de Puerto Rico-Recinto de Manati       | Manati               | Public 2-year                  |
| 38 | Instituto Tecnologico de Puerto Rico-Recinto de Ponce        | Ponce                | Public 2-year                  |
| 39 | Instituto Tecnologico de Puerto Rico-Recinto de San Juan     | San Juan             | Public 2-year                  |
| 40 | Inter American University of Puerto Rico-Aguadilla           | Aguadilla            | Private not-for-profit, 4-year |
| 41 | Inter American University of Puerto Rico-Arecibo             | Arecibo              | Private not-for-profit, 4-year |
| 42 | Inter American University of Puerto Rico-Barranquitas        | Barranquitas         | Private not-for-profit, 4-year |



**Table 8. Institutions of Higher Education in Puerto Rico, 2018-19**

|    | <b>Institution Name</b>   | <b>City location</b> | <b>Sector</b>                  |
|----|---|----------------------|--------------------------------|
| 43 | Inter American University of Puerto Rico-Bayamon                  | Bayamon              | Private not-for-profit, 4-year |
| 44 | Inter American University of Puerto Rico-Fajardo                  | Fajardo              | Private not-for-profit, 4-year |
| 45 | Inter American University of Puerto Rico-Guayama                  | Guayama              | Private not-for-profit, 4-year |
| 46 | Inter American University of Puerto Rico-Metro                    | San Juan             | Private not-for-profit, 4-year |
| 47 | Inter American University of Puerto Rico-Ponce                    | Mercedita            | Private not-for-profit, 4-year |
| 48 | Inter American University of Puerto Rico-San German               | San German           | Private not-for-profit, 4-year |
| 49 | Inter American University of Puerto Rico-School of Law            | San Juan             | Private not-for-profit, 4-year |
| 50 | Inter American University of Puerto Rico-School of Optometry      | Bayamon              | Private not-for-profit, 4-year |
| 51 | Liberty Junior College  | Cayey                | Private for-profit, 2-year     |
| 52 | Mech-Tech College   | Caguas               | Private for-profit, 2-year     |
| 53 | Monteclaro Escuela de Hoteleria y Artes Culinarias                | Rio Grande           | Private not-for-profit, 2-year |
| 54 | National University College                                       | Bayamon              | Private for-profit, 4-year     |
| 55 | Ponce Health Sciences University                                  | Ponce                | Private for-profit, 4-year     |
| 56 | Ponce Health Sciences University-Centro Universitario de San Juan | Santurce             | Private for-profit, 4-year     |
| 57 | Pontifical Catholic University of Puerto Rico-Arecibo             | Arecibo              | Private not-for-profit, 4-year |
| 58 | Pontifical Catholic University of Puerto Rico-Mayaguez            | Mayaguez             | Private not-for-profit, 4-year |
| 59 | Pontifical Catholic University of Puerto Rico-Ponce               | Ponce                | Private not-for-profit, 4-year |
| 60 | San Juan Bautista School of Medicine                              | Caguas               | Private not-for-profit, 4-year |
| 61 | Seminario Evangelico de Puerto Rico                               | San Juan             | Private not-for-profit, 4-year |
| 62 | Trinity College of Puerto Rico                                    | Ponce                | Private not-for-profit, 2-year |
| 63 | Universal Technology College of Puerto Rico                       | Aguadilla            | Private not-for-profit, 4-year |
| 64 | Universidad Adventista de las Antillas                            | Mayaguez             | Private not-for-profit, 4-year |
| 65 | Universidad Ana G. Mendez-Carolina Campus                         | Carolina             | Private not-for-profit, 4-year |
| 66 | Universidad Ana G. Mendez-Cupey Campus                            | San Juan             | Private not-for-profit, 4-year |
| 67 | Universidad Ana G. Mendez-Gurabo Campus                           | Gurabo               | Private not-for-profit, 4-year |
| 68 | Universidad Ana G. Mendez-Online Campus                           | San Juan             | Private not-for-profit, 4-year |
| 69 | Universidad Central de Bayamon                                    | Bayamon              | Private not-for-profit, 4-year |
| 70 | Universidad Central Del Caribe                                    | Bayamon              | Private not-for-profit, 4-year |
| 71 | Universidad del Sagrado Corazon                                   | Santurce             | Private not-for-profit, 4-year |
| 72 | Universidad Pentecostal Mizpa                                     | Rio Piedras          | Private not-for-profit, 4-year |
| 73 | Universidad Politecnica de Puerto Rico                            | Hato Rey             | Private not-for-profit, 4-year |
| 74 | Universidad Teologica del Caribe                                  | Trujillo Alto        | Private not-for-profit, 4-year |
| 75 | University of Puerto Rico-Aguadilla                               | Aguadilla            | Public 4-year                  |
| 76 | University of Puerto Rico-Arecibo                                 | Arecibo              | Public 4-year                  |
| 77 | University of Puerto Rico-Bayamon                                 | Bayamon              | Public 4-year                  |
| 78 | University of Puerto Rico-Carolina                                | Carolina             | Public 4-year                  |
| 79 | University of Puerto Rico-Cayey                                   | Cayey                | Public 4-year                  |
| 80 | University of Puerto Rico-Humacao                                 | Humacao              | Public 4-year                  |
| 81 | University of Puerto Rico-Mayaguez                                | Mayaguez             | Public 4-year                  |
| 82 | University of Puerto Rico-Medical Sciences                        | San Juan             | Public 4-year                  |
| 83 | University of Puerto Rico-Ponce                                   | Ponce                | Public 4-year                  |
| 84 | University of Puerto Rico-Rio Piedras                             | San Juan             | Public 4-year                  |
| 85 | University of Puerto Rico-Utuado                                  | Utuado               | Public 4-year                  |

# APPENDIX B: Certificates/Degrees Awarded in Puerto Rico

**Table 9. Total Certificates/Degrees Awarded in Puerto Rico**

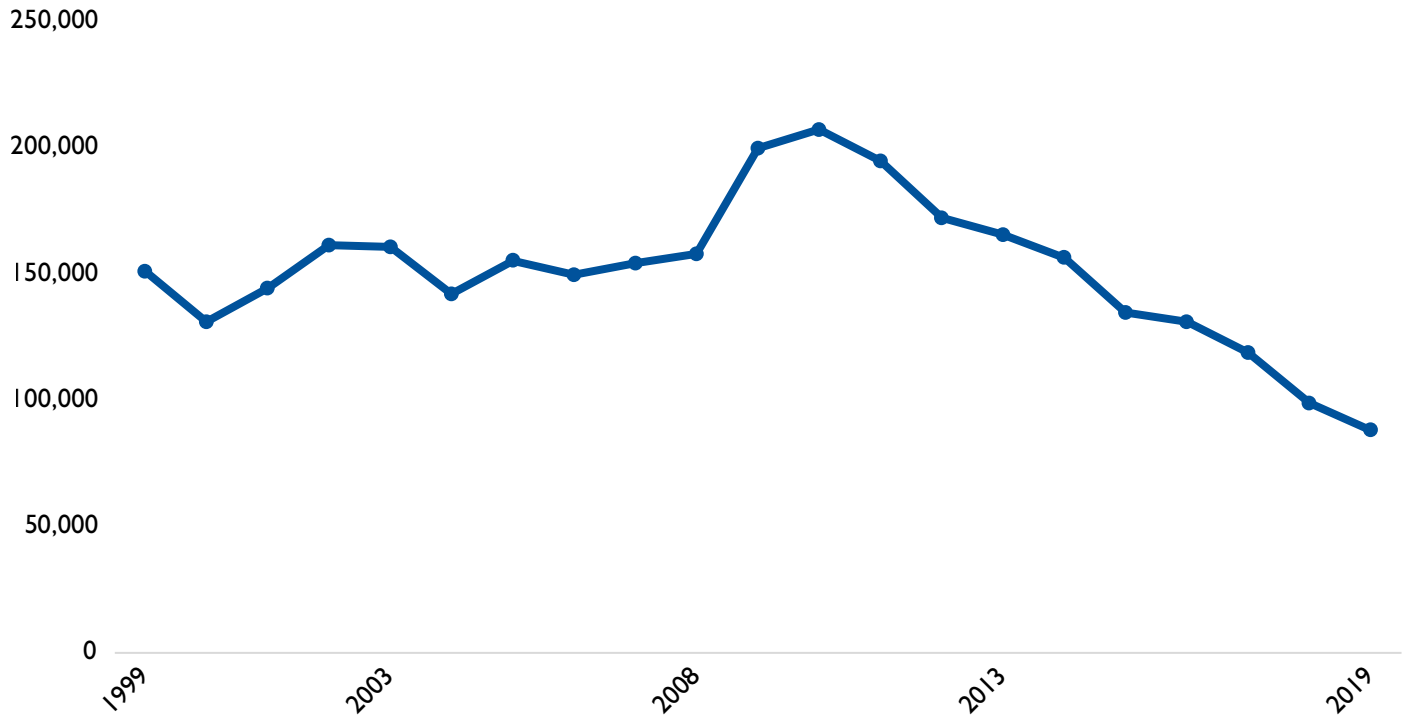
| Year    | Certificates | Associate's degree | Bachelor's degree | Master's degree | Post-Baccalaureate Certificates | Doctorate | Grand Total |
|---------|--------------|--------------------|-------------------|-----------------|---------------------------------|-----------|-------------|
| 1999-00 | 6,077        | 5,113              | 16,106            | 2,955           | 272                             | 946       | 31,469      |
| 2000-01 | 1,050        | 6,130              | 15,758            | 2,756           | 299                             | 1,029     | 27,022      |
| 2001-02 | 1,252        | 5,346              | 16,474            | 3,257           | 247                             | 944       | 27,520      |
| 2002-03 | 2,438        | 4,264              | 16,724            | 3,276           | 259                             | 1,009     | 27,970      |
| 2003-04 | 3,508        | 4,245              | 17,370            | 3,750           | 242                             | 1,056     | 30,171      |
| 2004-05 | 3,655        | 4,217              | 16,646            | 4,241           | 274                             | 2,214     | 31,247      |
| 2005-06 | 4,204        | 4,284              | 17,129            | 5,180           | 288                             | 1,114     | 32,199      |
| 2006-07 | 4,633        | 4,268              | 17,109            | 5,754           | 270                             | 1,173     | 33,207      |
| 2007-08 | 5,314        | 4,718              | 16,800            | 5,194           | 261                             | 1,351     | 33,638      |
| 2008-09 | 13,941       | 5,093              | 17,052            | 6,065           | 157                             | 1,372     | 43,680      |
| 2009-10 | 5,765        | 5,923              | 17,226            | 5,551           | 220                             | 1,335     | 36,020      |
| 2010-11 | 15,375       | 6,814              | 17,714            | 5,703           | 293                             | 1,421     | 47,320      |
| 2011-12 | 15,488       | 7,957              | 19,350            | 5,051           | 235                             | 1,405     | 49,486      |
| 2012-13 | 15,207       | 7,175              | 20,122            | 5,055           | 271                             | 1,471     | 49,301      |
| 2013-14 | 15,603       | 8,134              | 20,357            | 5,161           | 250                             | 1,462     | 50,967      |
| 2014-15 | 13,076       | 9,057              | 20,348            | 5,100           | 232                             | 1,419     | 49,232      |
| 2015-16 | 12,424       | 8,528              | 20,549            | 5,335           | 259                             | 1,464     | 48,559      |
| 2016-17 | 12,093       | 8,226              | 20,996            | 5,603           | 261                             | 1,445     | 48,792      |
| 2017-18 | 10,294       | 7,559              | 20,183            | 5,361           | 303                             | 1,333     | 45,033      |
| 2018-19 | 8,868        | 7,348              | 20,397            | 5,661           | 417                             | 1,446     | 44,137      |

**Note:** The number of certificates awarded fluctuate significantly in this 20-year period primarily due to the volatility of private 2-year institutions.

**Source:** *Excelencia* in Education analysis of U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Completions Survey and Institutional Characteristics Survey, 1999 through 2018.

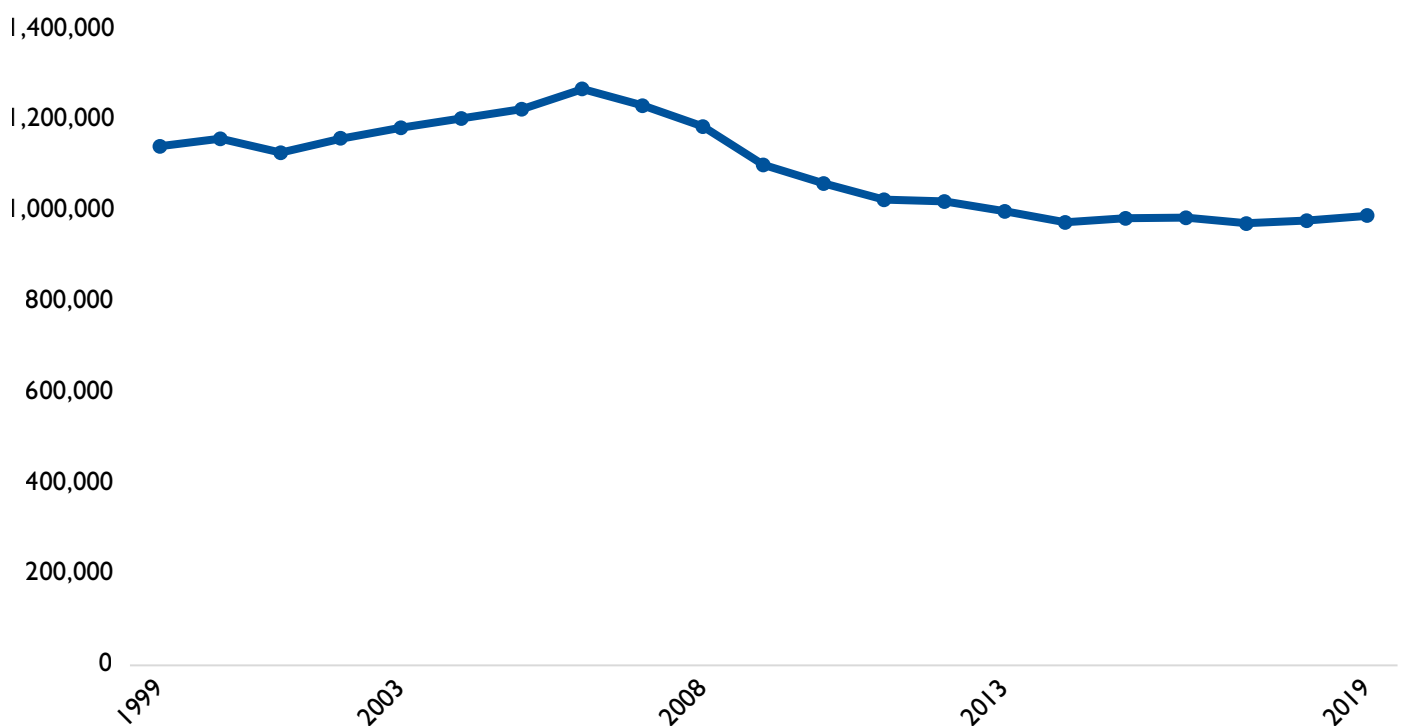
# APPENDIX C: Unemployment/Employment in Puerto Rico

**Figure 33. Average Annual Unemployment in Puerto Rico**

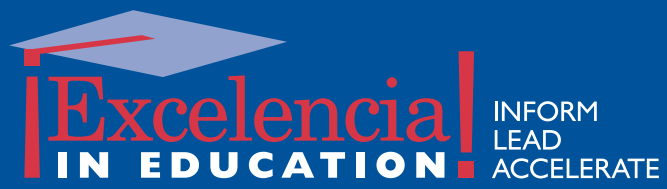


Source: *Excelencia in Education* analysis of U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Survey

**Figure 34. Average Annual Employment in Puerto Rico**



Source: *Excelencia in Education* analysis of U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Survey



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