Fiscal Plan for the University of Puerto Rico

Enhancing Public Higher Education

Fiscal Years 2021 to 2025

As certified by the Financial Oversight and Management Board for Puerto Rico

June 12, 2020

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DISCLAIMER

The Financial Oversight and Management Board for Puerto Rico (the "FOMB," or "Oversight Board") has formulated the 2020 UPR Fiscal Plan based on, among other things, information obtained from the Puerto Rico Fiscal Agency and Financial Advisory Authority ("AAFAF") and the University of Puerto Rico ("UPR" and together with AAFAF, the "Government").

This document does not constitute an audit conducted in accordance with generally accepted auditing standards, an examination of internal controls or other attestation or review services in accordance with standards established by the American Institute of Certified Public Accountants or any other organization. Accordingly, the Oversight Board cannot express an opinion or any other form of assurance on the financial statements or any financial or other information or the internal controls of the Government and the information contained herein.

The 2020 UPR Fiscal Plan is not a Title III plan of adjustment. The 2020 UPR Fiscal Plan does not specify classes of claims and treatments, does not discharge debts, and does not extinguish liens.

The 2020 UPR Fiscal Plan is based on what the Oversight Board believes is the best information currently available to it. To the extent the Oversight Board becomes aware of additional information after it certifies the 2020 UPR Fiscal Plan that the Oversight Board determines warrants a revision of the 2020 UPR Fiscal Plan, the Oversight Board will so revise it.

For the avoidance of doubt, the Oversight Board does not consider and has not considered anything in the 2020 UPR Fiscal Plan as a "recommendation" pursuant to Section 205(a). Nevertheless, to the extent that anything in the 2020 UPR Fiscal Plan is ever deemed by a court to be a "recommendation" pursuant to Section 205(a), the Oversight Board hereby adopts it in the 2020 UPR Fiscal Plan pursuant to various provisions of Section 201(b).

Any statements and assumptions¹ contained in this document, whether forward-looking or historical, are not guarantees of future performance and involve certain risks, uncertainties, estimates and other assumptions made in this document. The economic and financial condition of the Government and its instrumentalities is affected by various legal, financial, social, economic, environmental, governmental and political factors. These factors can be very complex, may vary from one fiscal year to the next and are frequently the result of actions taken or not taken, not only by the Government, the Oversight Board, and other third-party entities such as the Government of the United States.

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The projections presented herein take into account estimates due to the COVID-19 crisis and its impact on UPR as an institution, its students, faculty employees, non-faculty employees, and community in general. Due to the inherent uncertainty of these estimates, the cash flow budget is subject to material change

you should refer questions to the Oversight Board at comments@promesa.gov should clarification be required.

Executive Summary

For the past century, the University of Puerto Rico ("UPR" or the "University") has built a rich legacy of education, research, and cultural contributions while serving as the Island's chief source of socioeconomic mobility. UPR strives to provide high-quality education and create new knowledge in the Arts, Sciences and Technology. However, serious financial and management challenges threaten to put this vital mission at risk: For decades, UPR has struggled to address academic curriculum optimization, declining enrollment, keep up with infrastructure and maintenance needs, correct operational inefficiencies, and manage its liabilities. Instead of making the difficult choices required to adapt to Puerto Rico's evolving context, UPR's leaders have chosen to underfund its pension plan, continue to rely on unsustainable government subsidies, and enter into unaffordable and unsustainable debt.

Today, the Island's lifeblood of economic growth hangs by a thread. To lower the financial burden on the Commonwealth and encourage sound fiscal self-management, the central Government has started to reduce appropriations to UPR. This "new normal" means UPR cannot expect appropriations to remain at the same level they used to be (nearly 70% of operating expenditures compared to a US mainland average of 20-30% for public universities)². If UPR fails to diversify its sources of revenue and maintains unsustainable costs, the institution will be at risk of being unable to withstand the perils of the Island's expected negative demographic trajectory.

Expenditure and revenue forecasts indicate that in the absence of fiscal measures and reforms, UPR will operate at a significant operating (pre-debt service) deficit, which is expected to reach \$390 million by FY2025. Even after fiscal measures, UPR will not be able to pay its contractually obligated accrued debt of ~\$600 million and will need to pursue debt restructuring. Moreover, the latest actuarial studies - performed by UPR and Oversight Board actuaries - suggest that UPR has accrued pension liabilities worth ~\$3.2B, of which \$1.8B is unfunded³. If UPR makes no changes to its funding policy, its pension plan could be insolvent by 2031.

The goal for UPR is not only one of fiscal sustainability. While UPR remains the top university in Puerto Rico across a variety of metrics, its global positioning has fallen in recent years. The average 8-year graduation rate for 4-year campuses hovers just above 50%4. Puerto Rico has also missed out on the substantial growth of patents among national research universities that has occurred over the past five decades⁵. UPR should redouble efforts to even further strengthen its academic mission; for instance, the University should implement proposed plans for academic curriculum optimization, building on a framework including graduation and retention rates. Doing so will also allow UPR to accelerate its ability to address the demands imposed by the 21st century labor market.

To address this critical situation, the Financial Oversight and Management Board ("Oversight Board") has certified four fiscal plans for the University of Puerto Rico since 2017. In light of the many variables in the forecasts, the Oversight Board has chosen to annually update and certify a Fiscal Plan for accuracy and to serve as the most updated information for the purposes of certifying an annual budget. These various UPR Fiscal Plans, in accordance with PROMESA, have outlined a path to achieve fiscal responsibility, maintain access to capital markets, and provide adequate funding for UPR's pension system. The 2020 UPR Fiscal Plan, continuing with the priorities outlined in the 2019 UPR Fiscal Plan, includes four core elements centered

² All General Fund Appropriations in FY2018 (\$879M in TSA General Fund Appropriation + \$39M in other General Fund Appropriations) are 69% of total FY2018 baseline revenues. This does not include other sources of state funding such as PR Slot Machine Receipts. Data on US public university average from National Center for Education Statistics

³As per Cavanaugh MacDonald's latest actuarial valuation study of the UPR Retirement system draft (February 14, 2020 for FY2019)

⁴ US Dept of Education, National Center for Education Statistics, FY2019

⁵ USTPO PatentsView database

largely around improving operations and increasing revenues, while maintaining the ability of *all* students to access and benefit from the improved university system:

- **Operational efficiencies:** UPR's existing operational model, with eleven semiautonomous campuses, creates unnecessary complexity and drives higher costs. The 2020 UPR Fiscal Plan identifies personnel and non-personnel efficiencies, prioritizing the latter, to make sure all campuses remain operational while reinvesting in core faculty.
- **Revenue enhancement:** The 2020 UPR Fiscal Plan maximizes opportunities to increase revenue from non-tuition sources: federal grants and awards, IP and patent monetization, and ancillary service fees for providing training to external institutions. Given the unprecedented reality Puerto Rico currently faces with COVID-19, it defers the increase in undergraduate and graduate tuition, and fees previously scheduled for FY2021.
- **Pension reform:** As a result of historical decisions by the University to contribute insufficient amounts to the UPR pension fund, the latter faces significant challenges, with 57% of liabilities unfunded⁶. The 2020 UPR Fiscal Plan outlines options to ensure pension obligations can be paid without requiring significantly higher revenues or lower expenses.
- **Fiscal governance and controls:** UPR has long struggled with maintaining an adequate central control of and transparency into campus finances. The 2020 UPR Fiscal Plan includes fiscal governance reforms such as cross-campus and component unit controls on how revenues are collected, and expenditures reported.

Unique to the 2020 UPR Fiscal Plan is the context of COVID-19 – an evolving epidemic that has radically reshaped the operations of the University. As discussed in Chapter 1, even in the most optimistic scenario, COVID-19 will present unprecedented humanitarian and fiscal setbacks that challenge UPR's administration to rethink its operating model in ways it has never had to consider before. For example, UPR is looking to expand its distance learning capabilities for at least a portion of the student population, rethinking residences and discovering how to provide the full student experience under the "new normal." The relief from the Federal CARES Act and the decision from the Commonwealth and Oversight Board to delay subsidy reductions for FY2021 will provide some assistance in making these adaptations. However, now more than ever, UPR will need to demonstrate a new level of leadership and management discipline in preforming the measures and controls outlined in this plan. With crisis comes great opportunity. As always, the Oversight Board stands ready to partner with the Governing Board, the UPR Administration, and the Government of Puerto Rico to ensure this crisis does not go to waste and that the UPR emerging from COVID-19 is even more resilient and impactful in its contributions.

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⁶ As per Cavanaugh MacDonald's latest actuarial valuation study of the UPR Retirement system draft (February 14, 2020 for FY2019)

Chapter 1. UPR current context & baseline spend

1.1 Background on UPR and its importance to the Commonwealth

The University of Puerto Rico ("UPR"), founded in 1903, is Puerto Rico's largest university system. UPR's current structure was created by Law No. 1 of January 20, 1966, "Law of the University of Puerto Rico" ("Act No. 1"), as amended, with the mission (committed to the ideals of a democratic society) to serve the people of the Commonwealth of Puerto Rico (the "Commonwealth") and contribute to the development and enjoyment of the fundamental, ethical and aesthetic values of the Puerto Rican culture.

To advance on its mission, UPR strives to provide high quality education and further knowledge in the Arts, Sciences and Technology. UPR is the oldest institution of higher education in the Commonwealth: a history of academic excellence, with 694 degree granting academic and professional certification programs -including 6 first level professional degree programs and 34 PhD programs. UPR also plays a critical role in providing avenues for social and economic advancement, with 68% of students receiving Pell grants.

The University is also an important center of research: The Rio Piedras campus is classified as a high research activity university by the Carnegie Foundation (one of only 335 U.S. universities to receive such a designation), and there are 79 separate research centers across the university system.⁷ These contributions to education, research, and socioeconomic mobility make UPR a critical factor in maintaining the health of Puerto Rico's economy and communities.

1.2 Challenges facing UPR

UPR faces several trends that will make it more challenging to continue to fulfill its critical mission. The 2020 UPR Fiscal Plan addresses such trends directly and is designed to ensure UPR can continue to achieve fiscal balance while serving the students and residents of Puerto Rico despite of them:

- Emergency situation due to COVID-19 pandemic
- Decline in enrollment, in line with the overall demographic shifts on the Island
- Decrease in Commonwealth appropriations to support UPR operations in light of its own fiscal challenges
- Expansion of an operationally inefficient footprint (and related challenges with centralized controls)
- Inability to keep pace with critical infrastructure and maintenance investment
- Risk of insolvency in UPR Retirement System
- Longstanding challenges centralizing financial controls and implementing fiscal governance

1.2.1 COVID-19 Emergency situation

The COVID-19 epidemic threw a curveball to higher education institutions across the country. UPR was no exception, as it had to make the decision to shift nearly 100% of its courses online

⁷ UPR 2012-2017 Strategic Plan. For further context on each individual campus and component units please refer to Annex 1.

for Spring 2020 semester and halt much of its research activity to safeguard its community of students, faculty and staff. While first and foremost a humanitarian crisis, the fiscal impacts of COVID-19 on the University have also been substantial. Much of the self-generated revenue the University relies on to cover operating expenditures will no longer be available. At the same time, the University faces new costs related to Personal Protective Equipment ("PPE") and IT-related remote instruction.

Exactly how COVID-19 will evolve to affect operations going forward remains unknown. The 2020 UPR Fiscal Plan assumes a limited reopening for Fall 2020. Under this scenario, the 2020 UPR Fiscal Plan expects the shutdown to continue during the summer, with a limited campus reopening in the fall, but not for all students – as a portion will be facing restrictions to return (e.g., family economic impact), and meaningful public health measures will still remain in place (e.g., event and class size caps). Additionally, further declines are expected in enrollment and items proportionally affected by enrollment, payroll, and necessary materials, supplies, and utilities. Due to a lower enrollment, major campus generated inflows will be affected and major adjustments to campus operations will have to be put in place as life on campus adapts to a new normal.

The 2020 UPR Fiscal Plan does not consider an extended shutdown scenario but anticipates the possibility of further adjustments. Under extended shutdown, a viral resurgence would result in extension of social distancing measures through Spring 2021. The revenue and expenditure shocks of such a scenario will vary according to student, faculty and staff needs during this period of virtual operation, as well as likely impacts on enrollment and other self-generated revenues.

Given the unprecedented challenge unraveled by the COVID-19 global pandemic, UPR's beginning of FY2021 will be strongly marked by the actions it takes to ensure the continuity of the university services and the wellbeing of its broader community through turbulent times. As higher education leaders across the US (and the world) work tirelessly to understand the depth and breadth of the impact of the pandemic, they must prepare for multiple scenarios. Therefore, the most immediate priority for UPR is to develop a phased reopening plan for students, faculty and staff with 'trigger points' for each phase corresponding to specific public health indicators (e.g., number of confirmed cases within system).

Among the critical questions UPR will need to quickly resolve for ease phase:

- Who will be on campus (e.g., all students or certain segments, what types of workforce)?
- What activities will resume (e.g., in-person instruction, research, dining, residence facilities, athletics, student activities?)
- *How* will UPR keep their people safe in each phase, including UPR's strategy for testing and containment across campuses (and medical center)?

UPR reopening planning must combine local and federal public health guidance, stakeholder input, and a clear policy decision making framework in order to develop the right plan for Puerto Rico. In addition to CDC guidance for higher education institutions⁸, there are numerous public plans from large university systems that UPR can look to as a guide for best practices⁹. Furthermore, UPR will have to equip itself with the tools and resources necessary to effectively implement its plan: new safety measures will be required, on top of scheduling modifications, appropriate technology and infrastructure to deliver the curriculum online, and greater support – especially mental health – for students, faculty and staff. For this, UPR should leverage the different sources of funding made available to the University to weather the pandemic, such as CARES Act-related funds.

A thorough response will include relatively straightforward elements (like procuring additional cleaning supplies and better protective equipment for staff) as well as others that may require more careful preparation and coordination (like ensuring lower-income students can succeed in an online-learning environment despite more limited resources or setting up the necessary IT infrastructure for sustained online operations). The University should set up a centralized task force to solve challenges and oversee initiatives like those mentioned above, with the broader mission of leading UPR's response to COVID-19.

What UPR must do in response to the pandemic

As the current scenario continues to rapidly evolve and more information is gathered, UPR must take some steps towards ensuring the operations of the institution and the safety of its community:

- Set up an integrated task force to manage the COVID-19 response and coordinate action across campuses: This team must be divided in working groups with specific areas of responsibility, and must be in charge of (1) assessing the current situation (e.g., on campus, in virtual classrooms), (2) surfacing and prioritizing all gaps, (3) aligning on the actions that will be taken to address those gaps, and (4) following the implementation in an efficient and flexible manner to factor in the continuously changing scenario.
- Focus on students, financial resilience, and support of faculty and staff: UPR has to protect its community as it weathers the crisis as safely as possible, while ensuring that it can meet its mission in the mid and long-term. This means providing all necessary assistance (including mental health services) to its members, supporting faculty as they continue their research and learn how to teach effectively in an online environment, or evaluating the financial health of the University in light of the different potential scenarios.

Please visit the official CDC website for detailed information: https://www.cdc.gov/coronavirus/2019ncov/community/colleges-universities/index.html

⁹ For instance, Vanderbilt University has created a Return to Campus Plan available through their website: https://www.vanderbilt.edu/coronavirus/campus-return/

■ Monitor enrollment, persistence, and operations to manage potential shortfalls: The University must establish a command center to manage yield actively, particularly regarding students at higher risk of not enrolling, such as out-of-state (primarily graduate students for UPR) and lower-income students. Moreover, UPR should assess changes to current teaching models, making them more scalable, more flexible, lower cost, and, more engaging ,while planning for appropriate remediation for the disruptions to teaching and learning in the past (and coming) months.

1.2.2 Decline in enrollment

Even before consideration of COVID-19, enrollment decline had been a norm for UPR. Puerto Rico has been mired in an economic and demographic downward spiral for over a decade—and UPR has not adapted to this reality. As of April 2018, the economy was \$16 billion smaller in real terms, and the population was nearly half a million smaller (primarily due to outmigration) than in 2005—trends that, even before Hurricane Maria, were projected to continue¹⁰. Since Hurricanes Irma and Maria, 5% of the population has left the Island, with another 1.2% projected to leave annually on average from FY2021 to FY2025. Demographics are also shifting, with the median age on the Island projected to rise from 42 in FY2018 to 53 by FY2049.

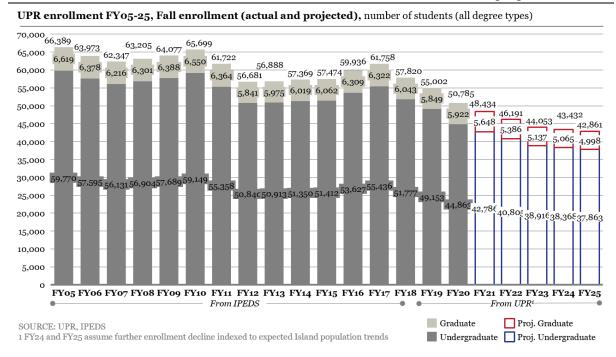
As a result, UPR has seen substantial enrollment decline over the past decade across both graduate and undergraduate populations (Exhibit 1). Outside of Commonwealth subsidy, tuition is the primary source of operating revenue for UPR (36% in FY2018). This enrollment drop must be accounted for in designing the future operating model of the University.

The UPR Governing Board projects a drop of 4.6% through FY2023 driven largely by demographic shifts on the Island that have reduced the number of likely enrollees. Given the importance of tuition revenue in financing UPR's operations — made even more crucial through the revenue reforms outlined in the 2020 UPR Fiscal Plan — this enrollment drop must be accounted for when designing operational measures to meet structural balance. Specifically, the 2020 UPR Fiscal Plan takes declining student population into account when setting non-faculty attrition ratios that drive a large share of the expenditure reduction across the system. These targets will be achieved in part through service level optimization and administrative consolidations that will be increasingly necessary as individual campuses further decline in scale and are no longer able to efficiently support independent administrative functions.

 $^{10} \quad \text{As per World Bank Group data: https://data.worldbank.org/indicator/SP.POP.TOTL?locations=PR} \\$

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EXHIBIT 1: HISTORICAL AND PROJECTED UPR ENROLLMENT FY2005-25



1.2.3 Decrease in Commonwealth appropriation

Among the expenditure measures included in the 2020 Commonwealth Fiscal Plan there is a reduction in the level of appropriations directed to finance UPR operations. Historically, the Commonwealth appropriated ~\$879M in formula appropriations annually to support UPR's general operating expenses.¹¹ This revenue plus other central Government funds covered roughly 70% of UPR's annual expenditures.¹² By comparison, most mainland state university systems receive 20-30% of their funding from states, with the remainder coming primarily from tuition, federal funds, and self-generated revenues to support operations. To meet its goal of achieving structural balance, the Commonwealth can no longer afford to provide UPR with this level of appropriation. As a result, the 2020 Commonwealth Fiscal Plan continues to reduce the general appropriation to UPR over a five-year period with the expectation that UPR will become more self-sufficient and develop more diverse and resilient revenue streams through the measures outlined in the 2020 UPR Fiscal Plan. After these reductions take place, state funding as a share of overall operating revenues will still be ~10% higher than the mainland average (with 38% of revenues coming from state appropriations).¹³

In light of the COVID-19 pandemic, the Oversight Board has agreed to provide a one-year delay in the reduction of UPR's annual appropriation from the Commonwealth to allow UPR to focus all efforts on implementing the transformation required to preserve for the Island's critical engine of economic and social mobility through these turbulent and unprecedented times (see Exhibit 2). The year's delay granted by the Oversight Board affords the UPR an opportunity to review carefully its finances and operations, engage trustees, alumni, administrators, faculty, students and staff on its campuses in extensive discussions about the future of the University, and finally put into the motion the major operating model changes that will allow it to achieve the financial targets set for the period from 2020 to 2025.

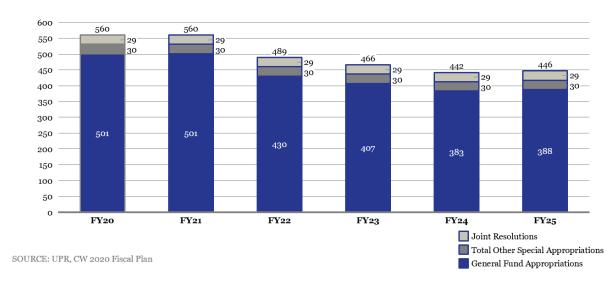
^{\$879}M represents only TSA General Fund Formula Appropriation. It does not include other General Fund appropriations (e.g. Joint Resolutions, training and tutoring revenues, legislative scholarships)

All the General Fund Appropriations (i.e., \$879M of TSA General Fund Appropriation, as well as \$39M in other General Fund Appropriations) were 69% of the total FY2018 baseline revenues. It does not include other sources of state funding such as PR Slot Machine Receipts

¹³ Includes all General Fund revenues. It does not include other sources of state funding such as PR Slot Machine Receipts

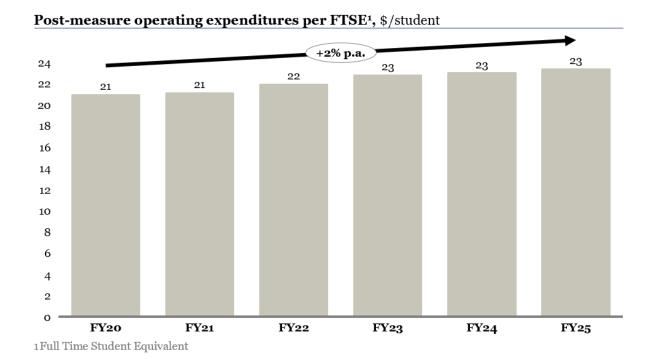
EXHIBIT 2: COMMONWEALTH APPROPRIATION TO UPR FY2018-25

Subsidy levels provided by the Commonwealth, \$000s, TSA General Formula Fund Appropriation



Finally, it is also worth noting that, although measures do reduce operating expenditures $\sim 13\%$ versus the baseline scenario by FY2025¹⁴, these expenditures per full-time student equivalent do not decrease (see Exhibit 3). This aligns with the Oversight Board's commitment to ensuring that UPR stays aligned to its mission, and all its students receive adequate funding to achieve academic success.

EXHIBIT 3: UPR OPEX PER STUDENT, FY2020-25



1.2.4 Inefficient footprint

UPR's disconnected footprint of eleven campuses has left the system with an operating model that is both expensive to maintain and more vulnerable to revenue fluctuations. Initially,

¹⁴ When comparing pre-measure baseline operating expenditures and expected operating expenditures in FY2025

decades of demographic and economic growth fueled this expansion, as demand for higher education and research grew with economic output. With expansion, higher education coverage improved, and the University emerged as a key player in transforming the Island into an attractive destination for manufacturers. New campuses also injected financial stimulus and created jobs in lesser developed regions.

However, the creation of these campuses also gave rise to a complex and disconnected administrative structure that even the previous highly-subsidized university model could not support. The aforementioned decline in enrollment only added to this stress. Today, the redundant and overly complex bureaucracy diverts critical resources from UPR's academic-core. Equally important, the lack of central controls, data systems, and management functions has served to reduce visibility over the different campus' finances and overall academic performance, which ultimately culminated in missing several critical reporting deadlines to the U.S. Department of Education.

UPR faces significant and longstanding challenges in monitoring and controlling financial activity across its eleven campuses and component units. This has resulted in an inability to submit timely financial reporting as required by accrediting and government entities. It also prevents the University from operating as efficiently and effectively as possible. The 2020 UPR Fiscal Plan outlines measures to continue to address these issues (See Chapter 4).

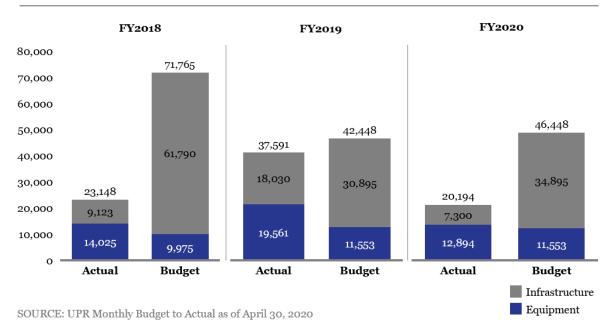
1.2.5 Neglect of critical infrastructure investment

Part of UPR's strategy for managing its growing operating expenditures has been reducing investment in capital assets. In FY17, just before the arrival of Hurricanes Irma and Maria, UPR's capital expenditure budget hit a 10-year low (roughly one-fourth FY10 levels in *nominal* terms). By the time the hurricanes hit, many campuses were already suffering significant deterioration. With the arrival of the two hurricanes came \$132M in estimated, incremental capital and maintenance need.

The insolvency of UPR's primary insurer left a large portion of campus damage unrecovered. More problematic, however, has been the University's slow progress in putting to use the private insurance receipts and federal disaster relief funds that are available. To-date, over \$118M in federal disaster relief funds have been obligated to UPR (of which UPR expects to receive and use \$~81M); however, based on the latest reporting, just \$4.8M of these funds have been disbursed. Similar delays are seen in UPR's spend of its own, self-funded capital program. According to UPR's budget-to-actuals reporting, only one-third of total capital budget for FY2018 was spent. For FY2020, UPR is again on track to spend less than half (\$20M) of its \$46M allocated funds across capital and equipment 15 (see Exhibit 4).

¹⁵ As per the April 2020 Budget to Actuals report submitted by UPR





While UPR was able to withstand the recent earthquakes with minimal structural damage, this level of deferred maintenance presents another form of liability contributing to the systems overall fiscal peril in the years to come.

Over two years without addressing the damage to UPR by Hurricane Maria – Centro de Periodismo Investigativo (Dec 2018)¹⁶

A visit around the eleven enclosures of the University of Puerto Rico (UPR) results with an inventory of classrooms closed by mold, loose zinc plates, half-functioning libraries, elevators out of service and leaking ceilings, damage that 30 months later from Hurricane Maria, the university community still faces.

In addition to the precariousness of the infrastructure, [UPR faces] a lack of materials, cleaning equipment, and a list of jobs that private contractors have not finished...

"The infrastructure is getting worse. The libraries are damaged. Labs don't work and classrooms have mold. Where does tuition and FEMA money go? Because there are more funds in those line items, but the campuses keep deteriorating," said Marina Rodríguez, president of the General Student Council (CGE) of the Río Piedras Campus.

1.2.6 Growing pension plan liabilities

The state of the UPR Retirement System ("UPRRS") poses a particularly acute risk. The latest UPRRS actuarial valuation report¹⁷ reveals that 57% of the plan is unfunded. Because the university has failed to meet the required contribution to the plan, the total amount necessary

¹⁶ Víctor Rodríguez Velázquez "Más de dos años sin que atiendan el deterioro de la UPR por María" Translated by the Oversight Board. Original article (in Spanish) available at http://periodismoinvestigativo.com/2019/12/mas-de-dos-anos-sin-queatiendan-el-deterioro-de-la-upr-por-el-huracan-maria/

¹⁷ Published by Cavanaugh MacDonald, UPR's actuaries

to fully fund it reached \$1.8B in FY18 (\$400M above previous estimates¹⁸). If UPR makes no changes to its funding policy, its pension plan could be insolvent by 2031 (see Chapter 3).

Despite the crisis, UPR has made a contribution ~66% lower¹⁹ than what its own actuaries have deemed to be financially necessary²⁰ and what is required in the FY2020 Certified Budget for UPR. Continuing to underfund the pension plan means UPR will be forced to make higher future contributions to service retirees as unfunded liabilities keep growing. Such contributions, combined with accumulated \$600M in debt, will come at the expense of student services and other academic responsibilities of the University if no action remains the status quo.

1.2.7 Longstanding challenges centralizing financial controls and implementing fiscal governance

As discussed further in Chapter 4, UPR has faced significant challenges meeting basic financial and performance reporting requirements of the Oversight Board, the US Department of Education and various accrediting bodies:

- UPR complied with the majority (12 of 13) of Oversight Board reporting requirements, except for the Consolidation and operating model update as of May 15, 2020. However, delays in the submission were noted, especially in the PROMESA 203 Report and Monthly Budget to Actuals. Also, we noted noncompliance in submitted reports concerning the Implementation Monthly Status Reporting.
- UPR has stated publicly their intent to properly fund the pension plan as per the required contribution for FY2020. As of May 15, 2020, however, UPR has not made the expected contribution and has not made changes in the plan to safeguard its assets
- UPR lacked central accountability over self-generated revenues and related expenditures
- UPR maintained different operational controls and allocation of resources that are not consistent among campuses. Changes in administration and turnover continuously affect the service and prompt response to regulators, financial institutions and other third-party that requires accurate financial data to regulate and oversee.

1.3 UPR's financial position in the absence of fiscal plan measures

1.3.1 Note on baseline presentation

The baseline revenues and expenditures in the 2020 UPR Fiscal Plan are presented in a manner consistent with and comparable to the 2019 UPR Fiscal Plan and FY2020 Certified Budget. As such, they **reflect the path of the University prior to the implementation of any measures achieved since the beginning of FY2019 and through FY2020.**²¹

¹⁸ As per the latest actuarial valuation study of the UPR Retirement system draft as of February 14, 2020 for FY2019 (Cavanaugh MacDonald, UPR's actuaries)

¹⁹ As per UPR monthly Budget to Actuals report submitted June 1,2020. As of April 2020, only \$54.6M of the \$160.9M expected were contributed

²⁰ As per Foster & Foster (FOMB's actuaries) report in which it was estimated that a \$160.9M contribution was required for FY2020

²¹ The baseline approach taken here creates presentational differences when compared to the March 30th, 2020 baseline submitted by the UPR Governing Board, which incorporates the impact of achieved measures into the FY2020 baseline. This approach provides a more accurate picture of the University's pre-measure financial trajectory and differentiates the impact of measures achieved in Fiscal Year 2020 from baseline trends. The post-measure financial position of the University is not impacted by this approach

As further discussed in Section 1.3.3, the baseline presented also assumes necessary funding of UPR's existing, defined benefit pension plan.

1.3.2 Baseline revenues

Baseline revenues are projected to decrease by 4% per year between FY2019 and FY2024 before beginning to increase again slightly in FY2025, as seen in EXHIBIT 5. This is driven by the following trends:

- Tuition revenues decline: baseline tuition revenues are projected to decline proportionally to enrollment from FY2020-2025. Tuition forecast assumes that cost per credit (premeasures) will remain at School Year 2017-2018 levels for all programs, but that the volume of enrolled students will decline as the Island population declines. Estimates of year-by-year magnitude of enrollment decline are based on spring 2020 enrollment projections. Additionally, the baseline projects a one-year additional drop in enrollment of 5% for FY2021 due to COVID-19, as a portion of students may not able to come back to campus, due to economic or other contingencies.
- Central Government appropriations decrease: As stated in section 1.2.3, appropriations will not be reduced during FY2021. According to the reductions outlined in the 2020 Commonwealth Fiscal Plan and the one-year reduction delay, appropriations from the Commonwealth will decrease by 9% per year from FY2022-2024 No further cuts were expected after FY2024 and appropriations are indexed to inflation in FY2024 and beyond.²²
- Some campus-generated inflows (e.g., dues and charges revenue) are also expected to decline proportionally to enrollment. Additionally, due to COVID-19, it is expected that other revenues, such as medical services, will sustain a negative impact.
- Federal receipts are expected to remain stable from FY2020-2025. Federal receipts include pass throughs for Pell grants and loans for medical students. Pell grants are expected to behave proportionally to enrollment.
- CARES Act revenues: UPR will receive from several sources of funding for higher education institutions ~\$81M from Higher Education Emergency Relief Fund (of which 50% have to be redistributed among students and flows through the Fiscal Plan model during 2020) as well as ~\$5M from additional funding directed towards Minority Serving Institutions ("MSIs"), and ~\$3M from EDA and COVID-19 research disbursements.
- Other components of baseline revenue are expected to remain relatively stable premeasures over the period of the 2020 UPR Fiscal Plan.

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Baseline central government appropriations do not include \$20 million in revenue per year from the provisioning of training and tutoring services to government agencies. UPR expects to receive these each year, but given that these funds are conditional upon the delivery of the contracted services that were not provided prior the 2020 UPR Fiscal Plan, they have been considered in the measures section (chapter 2) and not included in the baseline

EXHIBIT 5: PRE-MEASURE BASELINE REVENUES

	FY2020	FY2021	FY2022	FY2023	FY2024	FY202
COVID-19 emergency funds¹	\$89,180	_	_	_	_	-
FEMA funds	\$80,995	_	_	_	_	-
Insurance Proceeds	_	_	_	_	_	-
Disaster-relief receipts						
Total federal Receipts	\$267,905	\$277,647	\$269,155	\$266,228	\$269,063	\$272,114
Total Operating Receipts	\$298,948	\$289,522	\$301,882	\$301,068	\$300,357	\$299,478
Total Central Government Appropriations	\$539,875	\$539,875	\$445,861	\$421,861	\$426,198	\$430,881
Total Receipts	\$1,276,903	\$1,107,044	\$1,016,898	\$989,157	\$995,618	\$1,002,473

1 Includes CARES act (higher education fund and HBCUs/MSIs), EDA and COVID-19 research disbursements

1.3.3 Baseline expenditures

Baseline expenditures and disbursements are expected to remain relatively stable between FY2021 and FY2025 (see Exhibit 6). This stability reflects the prior implementation of a freeze on all operating and payroll expenses starting in FY2019. Baseline payroll (pre-attrition and pre-measures) is assumed to remain constant at \$706 million, and non-payroll operating expenditure categories also remain constant with the exception of scholarships and donations, which decline slightly to reflect decreases in disbursements of university-sponsored financial aid as enrollment declines.²³

Other expenditures vary according to individual assumptions. Two line items of note:

- **Pensions.** Baseline pension expenditures assume to maintain defined benefit plan where UPR continues making the full required contribution (~\$208 million in FY2021²⁴), with no cuts to accrued benefits or freeze. In doing so, the baseline assumes a significant uptick in UPR's current policy of underfunding its pension system to pay for operating expenditures.
- **Disaster-related disbursements.** These assumptions represent the latest information on federal and private-insurance relief funding related to the various natural disasters that have hit the Island in past years. For fiscal planning purposes, expenditures are assumed to occur within the fiscal year disaster-related funding is received. Section 1.2.5 discusses further the imperative that UPR accelerate its spend of disaster-related relief funds, particularly as it relates to facility maintenance, to help campuses return stronger.

23 UPR's 2019 audited financial statements report significant accounts payable (over \$88.2million) in previous fiscal years. Any of those outstanding amounts carried over to the period of the 2020 Fiscal Plan will require additional savings or revenues to offset them

²⁴ As per Foster & Foster's latest actuarial analysis where UPR is assumed to continue the pension plan without any changes to the benefits

UPR financial baseline (pre-measures), \$000s

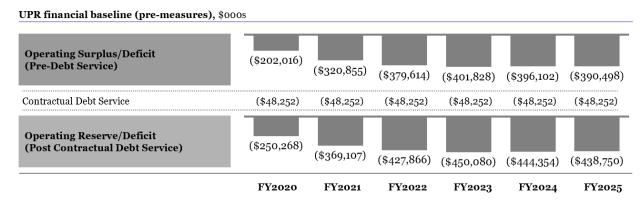
Total Disbursements	(\$1,478,918)	(\$1,427,899)	(\$1,396,512)	(\$1,390,985)	(\$1,391,720)	(\$1,392,970)
Total Operating Disbursements	(\$1,166,260)	(\$1,152,636)	(\$1,148,864)	(\$1,145,937)	(\$1,148,772)	(\$1,151,822)
Total Disaster-related Disbursements	(80,995)	_	_	-	_	-
Capital Expenditures	(34,895)			(30,895)		(30,895)
Equipment	(11,553)	(11,553)	(11,553)	(11,553)	(11,553)	(11,553)
CARES Act required disbursements	(24,315)	(24,315)	_	_	_	_
Required Pensions Contribution (for DB plan) ¹				(\$202,600)		
	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025

¹ Pensions baseline cost estimate reflects UPR continuing its current defined benefit policy and making the full actuarially required contribution. This assumes a 30-year amortization period and a 4.5% rate of return. Estimates were constructed by the Oversight Board's actuary using latest census data provided by UPR

1.3.4 Baseline operating deficit/surplus and cash position

Before calculating the baseline primary deficit, it is important to note that none of these calculations account for fiscal measures (e.g., attrition, procurement savings) undertaken by UPR in prior fiscal years under direction of the UPR Fiscal Plan or otherwise. With that in mind, the above expenditure and revenue forecasts indicate UPR – in its baseline scenario – will operate at a significant operating deficit pre-debt service (see EXHIBIT 7). A large portion of this deficit is driven by the assumption that UPR will properly fund its pension system within the current plan design. With the addition of debt service UPR's operating deficit will approach \$430 million by FY2022.

EXHIBIT 7: PRE-MEASURE FINANCIAL BASELINE



Chapter 2. Measures to improve fiscal & operational situation

2.1 Introduction to fiscal and operational measures

The primary objective of the 2020 UPR Fiscal Plan is to move the University to a more sustainable financial position while preserving, and wherever possible, improving its ability to deliver on its mission. All measures were designed in the best interest of preserving the institution, with a deep focus on added transparency in both financials and operations. Given the scale of the challenges facing UPR, significant expenditure reductions and some tuition increases are required; however, these measures have been carefully designed to safeguard the institution and its most vulnerable students from adverse effects on instruction, research, and affordability.

Per the Puerto Rico Oversight, Management, and Economic Stability Act ("PROMESA"), the fiscal plan must cover a period of at least five years and provide a method to achieve fiscal responsibility and access to the capital markets. The COVID-19 pandemic, while first and foremost a humanitarian tragedy, gives UPR another chance to reimagine nearly all aspects of its operating model, a portion of which will be supported by ~\$89M²⁵ in Federal CARES Act funding and other COVID-19 pandemic-related disbursements. Never has it been more imperative that the University seize this opportunity to make the required reforms.

The 2020 UPR Fiscal Plan includes prudent efforts to supplement revenues through non-tuition measures (e.g., monetizing intellectual property, increasing revenue from services), which serve to limit the need to increase tuition. The 2020 UPR Fiscal Plan also includes considerations to limit the impact of tuition increases on students with demonstrated financial need (e.g., increasing scholarship expenditures, capping tuition below the maximum Pell Grant). Finally, expenditure reductions are calibrated to prevent the loss of teaching staff and researchers; savings are achieved through non-personnel cuts as much as possible and faculty are not subject to the same benefit reductions and attrition as non-faculty personnel.

Measures included in this plan were developed through consultation with a wide variety of UPR stakeholders including current administration, faculty, and students, as well as third parties with experience in higher education administration and other matters.

2.2 Summary and impact of fiscal plan measures

The 2020 UPR Fiscal Plan contemplates eleven measures (Exhibit 8): seven revenue enhancing measures that, if properly executed, can collectively increase UPR receipts by approximately \$160 million per year by FY2025 and four expenditure reducing measures, including pension system reforms, that can drive savings of approximately \$225 million dollars per year by FY2025. After accounting for implementation costs, these measures can drive a net improvement in UPR's pre-debt service operating surplus by over \$300M by FY2025. These measures are detailed in Section 2.3-2.5 of the 2020 UPR Fiscal Plan and have been adjusted to reflect the Oversight Board's understanding of the realities around COVID-19.

The CARES Act includes several sources of funding for higher education institutions. UPR will receive from these funds (as of May 25, 2020) ~\$81M from Higher Education Emergency Relief Fund as well as ~\$5M from additional funding directed towards Minority Serving Institutions (MSIs) and ~\$3M from EDA and COVID-19 research disbursements

EXHIBIT 8: SUMMARY OF FISCAL PLAN MEASURES

Fiscal Plan measures	&	imp	lementation	costs.	\$000s
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Туре	Measure	FY201	FY21	FY22	FY23	FY24	FY25
	Adjustment to Undergraduate Student Tuition	61,935	54,813	68,660	74,411	76,933	79,555
	2. Reduction in Tuition Exemptions	13,134	18,789	27,035	27,496	27,793	28,125
	3. Adjustment to Dues & Charges	8,657	7,881	12,026	11,469	11,308	11,401
Revenue Enhancement Measures	4. Adjustment to Graduate Student Tuition	17,534	15,961	17,902	17,776	18,634	19,517
	5 Federal Grants & Contracts	5,000	10,000	15,000	20,000	20,000	20,000
	6. Revenue from training & tutoring services provided to government	20,000	20,000	20,000	20,000	20,000	20,000
	7. S&T patent revenue	1,000	1,500	2,000	2,000	2,000	2,000
	8. Benefits adjustments (e.g., medical benefit reduction, Christmas Bonus elimination)	29,051	23,405	23,105	22,857	22,627	22,475
Expense Measures	9. Centralized Procurement & Contract Renegotiation	19,806	19,858	19,910	19,963	20,015	20,068
nzeus uz es	10. Attrition	24,494	22.875	6.723	4.836	4.389	4.069
	11. Pension plan reforms ²	-	87,100	83,600	82,400	80,500	78,800
	Transformation PMO expense	(10,016)	(5,016)	(5,016)	(3,346)	-	-
Implementation costs	Implementation cost for training & tutoring	(8,000)	(8,000)	(8,000)	(8,000)	(8,000)	(8,000)
Total impact		182,596	269.167	282.945	291.862	296.200	298.010

¹ Expected amount as per June 2019 Certified UPR Fiscal Plan, does not consider COVID-19 impact

UPR has made progress on implementing some measures for FY2020 (see Chapter 6). For example, UPR increased undergraduate tuition to \$124 per credit hour over the past academic year. However, on other measures implementation has not met previous UPR Fiscal Plan requirements. For example, UPR has publicly refused to follow UPR Fiscal Plan measures for reforming tuition exemptions and the implementation reports suggest that UPR is behind schedule on capturing the necessary procurement savings.

The execution of all the above measures will place UPR on a path to fiscal balance. UPR currently has ~\$434 million in cash of which ~\$272 million is unrestricted.²⁶ The 2020 UPR Fiscal Plan assumes unrestricted cash may be used to cover modest operating deficits, including those created by fulfilling increases in pension liability obligations in the early years of the Plan. Given UPR's limited sources of revenue and the need to remain investing that revenue in core academic functions, achievement of all measures is required to put UPR on a path to operating balance (see Exhibit 9).

² May require Title III to execute. If Pension reforms not enacted UPR will need to find similar savings through other measures

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²⁶ Under Oversight Board's definition of restricted and unrestricted cash for the Commonwealth, as per UPR Minimum Cash Analysis submitted on May 15, 2020

EXHIBIT 9: FINANCIAL POSITION POST IMPLEMENTATION OF ALL MEASURES

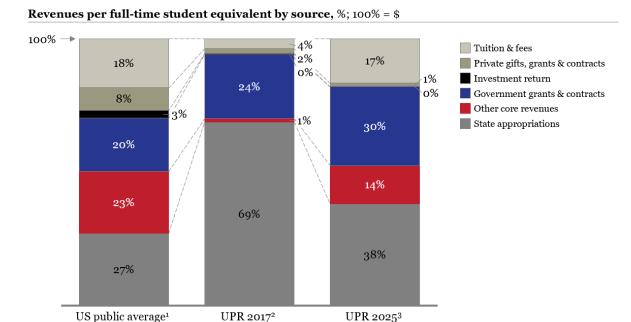
8000s	FY20201	FY2021	FY2022	FY2023	FY2024	FY2025
Baseline revenues	\$1,180,636	\$1,107,044	\$1,016,898	\$989,157	\$995,618	\$1,002,473
+Revenue measures	\$127,261	\$ 128,945	\$ 162,623	\$ 173,151	\$ 176,669	\$ 180,599
Post measure revenues	\$1,307,896	\$1,235,989	\$1,179,521	\$1,162,308	\$1,172,287	\$1,183,072
Baseline expenditures	(\$1,444,130)	(\$1,427,899)	(\$1,396,512)	(\$1,390,985)	(\$1,391,720)	(\$1,392,970)
+Expenditure measures (incl. implement. cost)	\$95,599	\$ 218,229	\$ 221,204	\$ 226,315	\$ 231,972	\$ 234,241
Post-measure expenditures	(\$1,348,531)	(\$1,209,670)	(\$1,175,308)	(\$1,164,670)	(\$1,159,748)	(\$1,158,729)
Operating Surplus/Deficit		\$26,319	\$4,213		\$12,539	\$24,342
(Pre-Debt Service)				(\$2,361)		
	(\$40,635)					
	FY20201	FY2021	FY2022	FY2023	FY2024	FY2025

¹ Expected amount as per June 2019 Certified UPR Fiscal Plan, does not consider COVID-19 impact

The 2020 UPR Fiscal Plan forms the basis of the corresponding Certified Budget, including the full implementation of all revenue and expenditure measures described for that fiscal year, and any investments described in the 2020 UPR Fiscal Plan. The Certified Budget must include the same level of specificity as outlined by the Oversight Board in the budgetary process by budget line-item on sources and uses of funds by fiscal year. The Certified Budget must also provide additional detail on the types of funds used to cover expense categories (e.g., general fund, federal funds, special revenues, own revenues). Finally, the Certified Budget must include additional detail to track the impact of fiscal measure implementation (e.g., pensions, health benefits and Christmas bonus separated from salary and related benefits, professional services fees, etc.).

2.3 Tuition revenue enhancing measures

UPR has historically depended on Commonwealth appropriations as a chief source of operating revenue at rates unprecedented among peers on the mainland. Whereas most mainland universities rely on state revenues to cover 20-30% of operating expenditures, for UPR, this ratio was nearly 70% as recently as FY2018 (Exhibit 10).



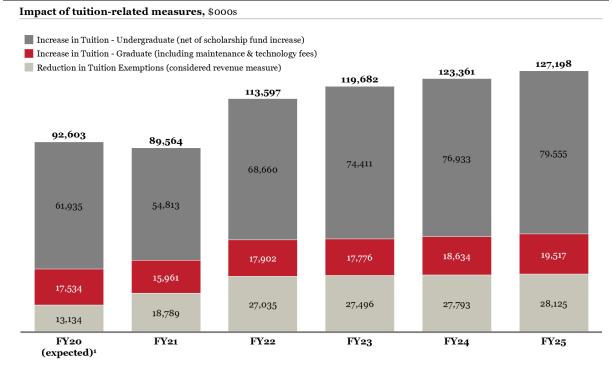
- 1 IPEDs 2017 data
- 2 Revenues shown previous to the certification of the first UPR Fiscal Plan in April 2018

3 Projected

While the 2020 UPR Fiscal Plan makes every effort to reasonably add additional revenues from other sources, some tuition increases are necessary given the magnitude of the challenges that UPR faces. The principle of rebalancing revenues is first and foremost an opportunity to make sure that those who can afford to contribute to the cost of their education do so while those who cannot are protected. Furthermore, UPR has historically generated far less of its income from tuition than comparable mainland universities (Exhibit 10). The 2020 UPR Fiscal Plan makes reasonable increases in both undergraduate and graduate tuition to move UPR more in line with the tuition receipts generated by its mainland peers without putting accessibility for low-income students at risk. The plan also makes changes to the university's tuition exemption policy. These initiatives are expected to ramp from \$90 to \$127 million in additional revenue a year between FY2020 and FY2025, as seen in Exhibit 11. Concurrently, offsets, such as increasing the University's needs-based scholarship expenditures, are put in place to ensure tuition-related measures do not impact the ability of students with demonstrated financial need to afford a UPR education. Even after implementation of these measures UPR will still be the most affordable higher education option on the Island and among the most affordable universities in the United States (See section 2.7 for greater detail on efforts to maintain affordability).

Given the unprecedented reality Puerto Rico currently faces with COVID-19, the 2020 UPR Fiscal Plan defers the increase in undergraduate and graduate tuition, and fees previously scheduled for FY2021. Tuition increases will return to the schedule detailed under previous Fiscal Plans one year later.

EXHIBIT 11: ADDITIONAL REVENUE FROM TUITION-RELATED MEASURES



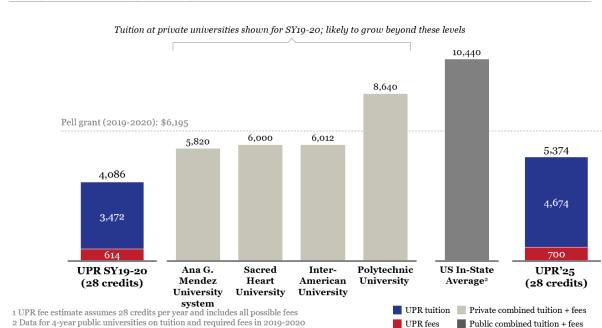
1 As per June 2019 Certified UPR Fiscal Plan, does not consider COVID-19 impact

2.3.1 Undergraduate tuition adjustment

Over the past several decades, during a period of heavy Commonwealth subsidization, UPR chose not to increase tuition at the same rate as have either major public institutions in other US states²⁷ or private higher education institutions on the Island. For most of the last half-decade, annual undergraduate tuition and fees hovered around \$2,000, 35% less expensive than comparable universities in Puerto Rico and 57% lower than the average in-state annual cost at US public 4-year universities (Exhibit 12).²⁸

The average public, four-year university in mainland US derives ~18% of its revenues from tuition and fees, compared to only 4% in the case of UPR (prior to the implementation of tuition measures). Data on US public universities from the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS)

Not adjusted for PPP. Comparison made before applying Fiscal Plan measures. UPR annual tuition assumes 28 credits per semester on average (per 2020 UPR Proposed Fiscal Plan). Average annual tuition and fees on peer mainland US institutions is \$5,000 (see IPEDS)



Average Tuition & Fees1 per Undergraduate Students, \$

To bring UPR undergraduate tuition costs more in line with that of its peers while also noting the unique demographics of the island, undergraduate cost per credit hour will be increased to \$157 by FY2023, phased in over four years according to the following schedule (adjusted based on FY2021 measure delay), as shown in Exhibit 13. UPR has implemented these undergraduate tuition adjustments through FY2020. Increased undergraduate tuition will enable UPR to augment the share of revenue it receives from tuition to be more in line with mainland peers.

This increase will only be applied to the population of non-exempt students, and UPR will increase its own needs-based scholarship expenditures year-on-year concurrent with this rate growth to preserve affordability and access. Due to the COVID-19 pandemic, and as stated above, the expected FY2021 adjustment will not take place (see Exhibit 13). Post FY2024, tuition will be indexed to public 4-year tuition inflation (estimated to be 3.1%).²⁹

EXHIBIT 13: SCHEDULE OF UNDERGRADUATE TUITION INCREASES (COST PER CREDIT)

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024 and beyond
\$124	\$124	\$145	\$157	Indexed to
				tuition inflation

Tuition exemptions

While UPR has made the required adjustments to undergraduate tuition, it has not fulfilled its goals with regards to moving towards a more transparent and need-based system for tuition exemptions. The University has allowed campuses to execute ad hoc financial and non-

²⁹ Uses public 4 year 2009-2019 tuition inflation from College Board.

transparent aid programs, many only partially focused on supporting families of students without means to pay. According to UPR, full tuition exemptions were awarded to \sim 15% of the student body³⁰. Furthermore, in FY2019, 39% of exempt students had already received a full Pell grant covering all tuition costs plus a significant portion of non-tuition costs of attendance. The implied lost revenue from UPR's FY2020 exemption policy was \$24M.³¹

The 2020 UPR Fiscal Plan expands UPR's ability to provide aid to students with financial need in order to make education accessible. However, it also aims to make financial aid processes more transparent and focused – ensuring UPR receives the most value for its money by prioritizing the students with the greatest objective need. Accordingly, UPR shall make three changes to its non-need-based exemptions policy:

- Eliminate 13 of 16 exemption categories (keeping only teaching assistants, honor students, and veterans)
- Limit veterans' exemptions to veterans only (not spouses) and restrict eligibility to 4 years
- Adjust value of exemptions provided to TAs and honor students (will now pay up to \$100/credit and be exempt from any additional cost)

All students who were enrolled in school year 2017-2018 and currently receive exemptions must continue to receive these exemptions for the full course of study. Students enrolled after school year 2017-2018 — the point at which the Fiscal Plan called for the removal of most exemption categories — will not benefit from this grandfathering.

Exemptions award values will now be determined after accounting for federal financial aid awards. Students will be required to fill out the FAFSA to be eligible for exemptions. All exemptions will be administered through the financial aid office with the oversight of the central administration, and UPR will not allow the total value of future non-need-based exemptions to exceed the threshold of 5% of potential tuition receipts.³²

These policy changes on exemption eligibility are set to reduce the total volume of exemptions from FY2021 to FY2025 and will drastically reduce the cost of exemptions, allowing UPR to earn back over \$24 million annually in foregone revenue.

Contrary to the 2019 UPR Fiscal Plan, the University has chosen to implement a new financial aid grant system ("ayudas económicas") that maintained most of the original exemption categories and did not keep pre-measure exemptions for students who were enrolled in school year 2017-2018.

For a detailed list of required action items regarding undergraduate tuition adjustment, please see Exhibit 14.

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^{30 6,877} students in FY2020 including Employees, Spouses/Children of Employees, Student Representatives to the University Board/ Governing Board, Athletes, Musical and Theatre Groups, among others

 $^{3^1}$ Considering FY20 tuition levels. The opportunity cost of exemptions increases as tuition increases

³² Based on sustaining FY2025 ratio

EXHIBIT 14: REQUIRED ACTION ITEMS FOR UNDERGRADUATE TUITION ADJUSTMENT

action item	Deadline
To be completed in FY2021	
Reform the exemption policy to (1) eliminate 13 of the 16 exemption categories, (2) limit veterans' exemptions to veterans only, up to 4 years, and (3) adjust value of exemptions provided to TAs and honor students	July 1, 2020
To be completed in FY2022 and beyond	
Raise tuition for undergraduate degrees according to tuition increase schedule (see Exhibit 12)	Annually, in July, before the beginning of the respective school year

2.3.2 Adjustment to graduate student tuition

The 2019 UPR Fiscal Plan required UPR to adjust the cost per credit for graduate programs to be more in line with Island and mainland benchmarks, indexing the increase first to the average public higher education tuition growth over the past decade³³ (3.1%), then to the Island inflation (1.0%). However, given COVID-19, increases are delayed for a year and the 2020 UPR Fiscal Plan for FY2021 maintains graduate student tuition targets at FY2020 levels. The decision to delay the measure mainly responds to the Oversight Board's decision to protect students who might have been more severely impacted by the pandemic.

Therefore, the 2020 UPR Fiscal Plan does not mandate further increases to expected FY2020 tuition costs for FY2021. Even with the implementation of all these changes, UPR will remain an affordable and competitive option for graduate studies, compared to other mainland public universities³⁴:

- **For masters programs**, cost per credit will be increased so that total tuition is slightly below the average of graduate programs offered on the Island. This will allow UPR to remain competitive against other programs on the Island while raising more revenue.
- **For doctoral programs**, cost per credit will be increased so that annual tuition is roughly half of the average tuition at mainland public university peers
- For all advanced degree programs within the Medical School, tuition will be increased to roughly half of average in-state tuition for mainland public universities³⁵

In parallel, UPR must explore other sources of revenue, and must commit itself to the implementation of this measure (see Exhibit 15): In June 2018³⁶, UPR implemented a partial increase in graduate tuition but, as shown in Exhibit 16, it did not fully reach the required graduate tuition adjustments. The partial increase implemented until FY2020 allowed the University to increase tuition revenues but fell short of the 2019 UPR Fiscal Plan target: Exhibit 16 shows that the missing increase could have reached ~\$12M in foregone revenues in FY2020.

Uses public 4-year 2009-2019 tuition inflation from College Board.

³⁴ Compendio Estadístico de la Educación Superior en Puerto Rico 2018-2019 Databook. Instituto de Estadísticas de Puerto Rico (estadisticas.pr)

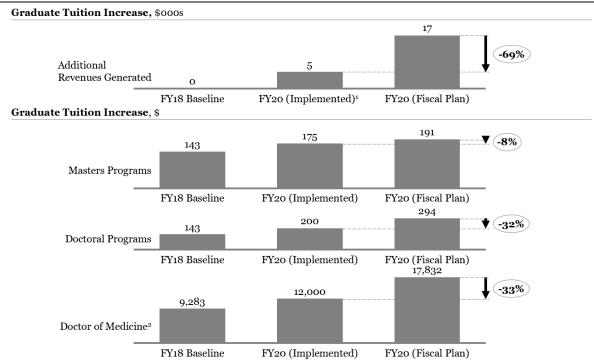
³⁵ Physicians will also benefit from Act 14-2017 and Act 60-2019, which provide additional tax and loan repayment incentives to study and stay in Puerto Rico

³⁶ UPR Governing Board Certification No. 11 from FY18

EXHIBIT 15: REQUIRED ACTION ITEMS FOR ADJUSTMENT TO GRADUATE TUITION



EXHIBIT 16: GRADUATE TUITION MEASURE IMPLEMENTATION



1 Net of exempted students

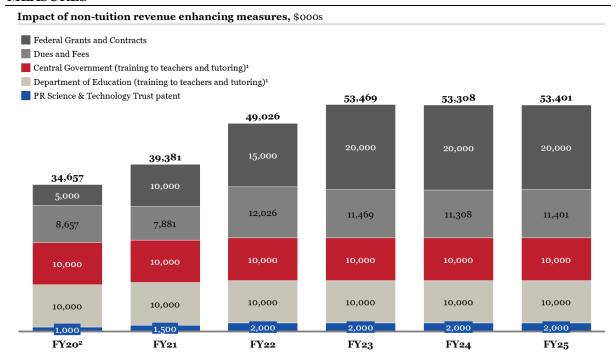
2 Doctor of Dental Medicine and Medicine programs are 1 credit programs and the tuition is presented as an annual number

2.4 Non-tuition revenue enhancing measures

Both a contributor and outcome of this reliance on Commonwealth funding is an underdeveloped strategy for attracting alternate sources of revenue (e.g., federal grants, self-generated revenues, IP commercialization).³⁷ UPR also derives a much smaller share of its income from tuition and private donations than its mainland peers. Therefore, one of the first options the 2020 UPR Fiscal Plan looks to is to increase revenue from sources other than state appropriations and tuition (Exhibit 17).

³⁷ Based on comparison of 2017 UPR vs. mainland average revenue per FTE by category. Data from National Center for Education Statistics

EXHIBIT 17: ADDITIONAL REVENUE FROM NON-TUITION REVENUE ENHANCING MEASURES



¹ Gross revenue - does not include implementation costs

2.4.1 Adjustment to dues & charges

Following a UPR Governing Board resolution, dues and charges will continue to be gradually increased from FY2019 to FY2022. In FY2021, alongside tuition measures, increases to dues and charges will be delayed one year in an effort to take into account the incremental financial stress to students during the COVID-19 pandemic. Like tuition increases, increases to dues and charges will resume in FY2022 as included in the 2019 UPR Fiscal Plan (see Exhibit 18 and Exhibit 19). The measure has three components:

- The total cost of the existing 14 categories of dues is increased by \$346 by FY2022
- Additional 4 fees added in the 2019 UPR Fiscal Plan are maintained summer maintenance fee, partial drop in courses charge, full drop in courses charge, repetition of courses charge) totaling \$95
- Post FY2022 fees are held stable until FY2024, at which point they will grow at inflation

² Expected amount as per June 2019 Certified UPR Fiscal Plan, does not consider COVID-19 impact

EXHIBIT 18: DUES & CHARGES CHANGES OVER TIME

Cost per transaction & Fee ch	anges over ti	me, \$						
Existing fees:	FY16-18	FY'19	FY'20	FY'21	FY'22	FY'23	FY'24	FY'25
Maintenance Fee	47.00	47.00	75.00	75.00	100.00	100.00	100.00	101.21
Technology Maintenance Fee	25.00	25.00	25.00	25.00	50.00	50.00	50.00	50.60
Laboratory Rights	33.00	100.00	100.00	100.00	100.00	100.00	100.00	101.21
Graduation Rights	27.00	80.00	80.00	80.00	80.00	80.00	80.00	80.97
Other Maintenance Rights	67.00	67.00	67.00	67.00	67.00	67.00	67.00	67.81
Admission Application	20.00	30.00	30.00	30.00	30.00	30.00	30.00	30.36
Re-Admission	33.00	35.00	35.00	35.00	35.00	35.00	35.00	35.42
Transfer to other Institutions	33.00	50.00	50.00	50.00	50.00	50.00	50.00	50.60
Transfer within the UPR System	20.00	25.00	25.00	25.00	25.00	25.00	25.00	25.30
Transcripts & Certificates	1.35	5.00	5.00	5.00	5.00	5.00	5.00	5.06
Document Duplicates	1.35	5.00	5.00	5.00	5.00	5.00	5.00	5.06
Change in Faculty	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.24
ID Card	5.00	10.00	10.00	10.00	10.00	10.00	10.00	10.12
Fees for late tuition	13.00	20.00	20.00	20.00	20.00	20.00	20.00	20.24
New fees:	FY16-18	FY'19	FY'20	FY'21	FY'22	FY'23	FY'24	FY'25
Summer Maintenance Fee	-	50.00	50.00	50.00	50.00	50.00	50.00	50.60
Fees for partial drop in courses	-	10.00	10.00	10.00	10.00	10.00	10.00	10.12
Fees for full drop in courses	-	15.00	15.00	15.00	15.00	15.00	15.00	15.18
Repetition of courses	-	20.00	20.00	20.00	20.00	20.00	20.00	20.24

EXHIBIT 19: REQUIRED ACTION ITEMS FOR ADJUSTMENT TO DUES & CHARGES

Action item	Deadline
 Raise dues & charges as per increase schedule 	Annually, in July, before the beginning o the respective school year

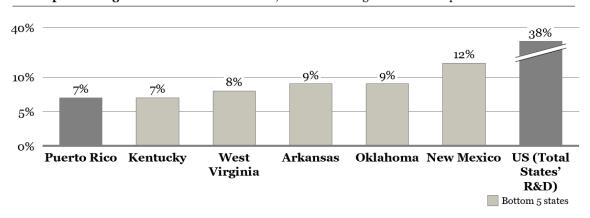
2.4.2 Increasing federal grants and contracts

University driven research and development ("R&D") plays a significant role in Puerto Rico's economic growth and innovation. However, financial and management decisions in the past decade—both in the Puerto Rican Government and at the University—have constrained the Island's and University's research potential. Notably, in 2012 the National Science Foundation put the Rio Piedras and Mayaguez campuses in suspended status due to non-compliance in the management of funds. The University has carried out corrective actions in response, but it should continue to ramp up R&D activities to remain competitive academically. As a next step, UPR must focus on opportunities to further streamline its supports for technology transfer, and realign incentives embedded in its commercialization and patent ownership policies.

At the Commonwealth level, R&D expenditures as a share of government higher education spending are the lowest in the entire United States and fell from 9% to 7% from FY2009 to FY2018, as shown in Exhibit 20. Puerto Rico's level and trends of R&D expenditures as a share of higher education spending are alarming, considering the national share grew from 35% to 38% during the same period.

EXHIBIT 20: R&D EXPENDITURES IN HIGHER EDUCATION BY STATE

R&D spend in higher education institutions, % total State Higher Education spend

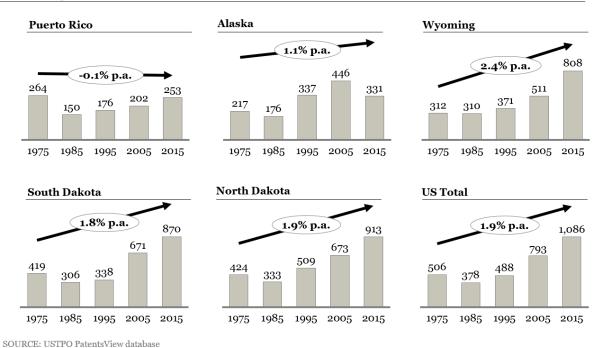


SOURCE: NASBO State Expenditure Report, Higher Education Research and Development Survey (HERD), Commonwealth of Puerto Rico & UPR Certified Budgets

Productivity of R&D expenditure is also a growing concern. As Exhibit 21 shows, Puerto Rico has missed out on the substantial growth of patents in the past five decades that has occurred at a national level. This while Puerto Rico's higher education R&D spend per patent awarded is roughly four times higher than the national average³⁸- suggesting a low productivity in research investments. Lower innovation expenditure and output is a key driver of talent loss. Fiscally, lower productive research activity reduces the ability of Puerto Rico to commercialize research and generate self-sufficiency in research centers.

EXHIBIT 21: GROWTH OF PATENT AWARDS

 $\textbf{Utility patents awarded by origin,} \# of \ utility \ patents \ approved \ by \ USPTO \ per \ decade \ by \ awardee \ origin \ for \ PR \ and \ lowest \ ranking \ states$

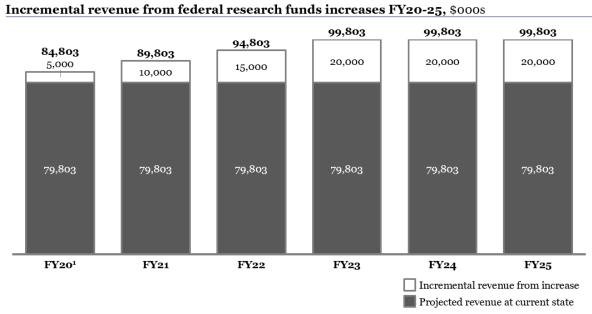


UPR has historically received ~\$80M per year in federal funding for research purposes. As shown in Exhibit 22, the 2020 UPR Fiscal Plan targets increasing annual funds received by

³⁸ Data from the National Science Foundation's Higher Education Research and Development Survey and USTPO

\$20M by FY2023 through the provision of additional resources for grant applications and other support efforts. To achieve such goal, Exhibit 23 lists some actions that UPR should implement.

EXHIBIT 22: INCREMENTAL REVENUE FROM FEDERAL FUNDS



¹ Expected amount as per June 2019 Certified UPR Fiscal Plan, does not consider COVID-19 impact

EXHIBIT 23: REQUIRED ACTION ITEMS FOR INCREASING FEDERAL GRANTS AND CONTRACTS

action item	Deadline
Identify priority research areas and targets to increase sponsored research/partnerships; process should be consultative with both leading research units and tracking external trends and opportunities	October 1, 2020
Develop a series of initiatives to support and incentivize faculty in meeting the federal grant and contract measure targets	October 1, 2020
Review progress against targets and adapt initiatives as needed in anticipation of the upcoming FY	April 1, 2021, ther annually

2.4.3 Providing services to the Central Government

Training & tutoring services to the PRDE and the Central Government

UPR will receive ~20M in gross additional revenue (~\$12M in net additional revenue) per year between FY2021-2025 for tutoring and training services to both governmental entities:

- UPR will provide \$10M worth of tutoring and training services to PRDE staff per year. In order to implement this UPR will incur a \$4M implementation cost.
- UPR will also provide \$10M worth of training to other government staff per year. This will also require a \$4M implementation cost.

Revenues will be tied to actual services delivered. Over the initial 2-3 years of this program, UPR has struggled to realize nearly \$45M in revenue (see EXHIBIT 24) due to slow implementation in operationalizing these programs.

	FY2018			FY2019			FY2020		
Entity	Received	Unearned	Earned	Received	Unearned	Earned	Received	Unearned	Earned
Central Government	10,000	6,463	3,537	10,000	10,000	-	10,000	10,000	-
PRDE ¹	NA	NA	NA	10,000	7,135	2,865	10,000	10,000	-
Total	10,000	6,463	3,537	20,000	17,135	2,865	20,000	20,000	-

¹ Trainings and Seminars funding for PRDE did not start until FY2019

During FY2020, the following are approved services UPR can provide for realizing revenues. UPR must manage the costs of delivering these services to ensure incremental revenue is available for use against other operating expenses:

- Training and Seminars to non-teaching staff (impacting all PRDE employees)³⁹.
- Tutoring services for students.
- Conferring academic credits and covering the costs of University courses for students in 11th and 12th grade.
- Conferring academic credits and covering the costs of University courses for employees identified in areas of difficult recruitment, completing requirements to obtain other certifications or re-certifications, and areas of innovation, for example STEM, Spanish as a second language, Montessori method of education, and others.

The rendering of services under the Training and Seminars Program will enable UPR to contribute to the growth and recovery of Puerto Rico's economy by expanding the capability of current employees and positively impacting student outcomes, ultimately improving the quality of education on the island.

Additionally, the Board has historically allowed other ad hoc partnerships with the central Government to qualify under this program. Examples of these are the partnership with the Property Registry, where students and DOJ-PR registrars had the objective of eliminating all backlogged documents in the San Juan area while exposing student participants to the intricacies of the legal processes surrounding property registration, or that with the Department of Corrections & Rehabilitation ("DCR") and the Administration of Mental Health and Anti-Addiction Services ("ASSMCA", for its Spanish acronym), who requested technical assistance from UPR in a variety of matters. UPR will continue to explore similar partnership opportunities to realize unused training and seminar funds. These additional programs must be approved by the Oversight Board before revenues can be recognized, and have to abide by any existing agreements³⁹ between UPR and the government agencies.

Exhibit 25 contains some actions that should be undertaken in order to pursue the implementation of this measure.

³⁹ Of the amounted funds dedicated to PRDE Trainings and Seminars a maximum of 30% can be used for non-teaching staff

EXHIBIT 25: REQUIRED ACTION ITEMS FOR THE PROVISIONING OF SERVICES TO THE CENTRAL GOVERNMENT

To be completed in FY2021					
Action item	Deadline				
 Create a list of the government training and seminar programs (both scoped and new), that will be implemented during the Fiscal Year, together with their corresponding implementation calendars 	August 31, 2020				
Resume work of the Property Registry backlog reduction taskforce	September 30, 2020 (or as COVID-19 permits)				
 Review effectiveness and demand against current offerings to adapt as needed in anticipation of the upcoming Fiscal Year; partnerships not explicitly related to training government employees must be submitted to Oversight Board for approval for Commonwealth funds to be recognized 	March 5, 2021, then annually				

2.4.4 Puerto Rico Science & Technology Trust Partnership

UPR signed a Memorandum Of Understanding ("MOU") with the Puerto Rico Science & Technology Trust for support in drafting patent applications and other IP processes. This effort was set to begin generating revenue in FY2019. However since the teams are still working on the research underlying these patents and the patents have not yet been filed, the measure is delayed: UPR will receive \$1.5M starting in FY2021, eventually reaching a target of \$2M in additional revenue per year from intellectual property by FY2022. In order to ensure the success of this initiative, UPR should follow the action items listed in Exhibit 26.

EXHIBIT 26: REQUIRED ACTION ITEMS FOR THE IMPLEMENTATION OF THE PUERTO RICO SCIENCE & TECHNOLOGY TRUST PARTNERSHIP

ction item	Deadline	
Establish a commercialization and tech transfer working group that includes the dean and faculty to benchmark performance to peer institutions, identify assets within the system to build upon, and send forward policy recommendations to the UPR Governing Board. This working group will also review current procedures and suggest how these could be improved	August 1, 2020	
Approve revised commercialization and tech transfer strategy; strategy should include specific initiatives to be taken centrally to support and incentivize faculty research, suggested revisions to MOU with the Puerto Rico Science & Technology Trust, and more granular commercialization targets (i.e., at campus and department level)	September 30, 2020	
Review tech transfer strategy and adapt as needed in anticipation of the upcoming FY	March 15, 2021, ther	

2.4.5 Additional opportunities for auxiliary revenue

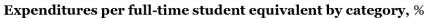
Over time, and without distracting from implementation of core operating reforms, UPR should evaluate other additional sources of revenue that would enable it to diversify its sources of income and self-generated funding (e.g., space rentals, concessions) in case there is a steeper than expected decline in enrollment or other measures take additional time to implement. This area represents a significant opportunity for growth; other core revenues have historically comprised as little as 1% of UPR's total revenues (Exhibit 10). When pursuing additional sources of revenue, UPR must ensure transparency and controls, making sure that all self-generated revenues are recorded and properly reported as part of the consolidated financials.

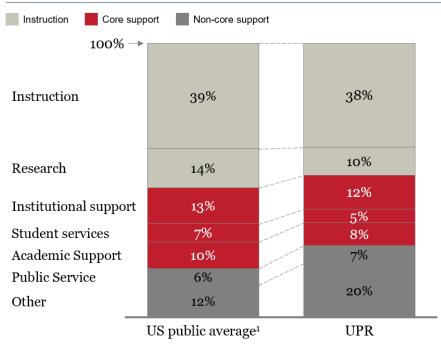
2.5 Expenditure reducing measures

The 2020 UPR Fiscal Plan calls for a ~5% decrease in total operating disbursements between FY2021 and FY2025. These reductions will significantly improve UPR's operating position, but they are also linked to operating improvements that will enable UPR to better focus its resources in areas closest to its core mission. Historically, UPR has spent more on non-core

functions and less on key areas (e.g., student services and academic support) than mainland peers, as seen in EXHIBIT 27⁴⁰. The following measures aim to correct this imbalance.

EXHIBIT 27: COMPARISON OF EXPENDITURES PER CATEGORY FOR UPR AND OTHER US PUBLIC UNIVERSITIES





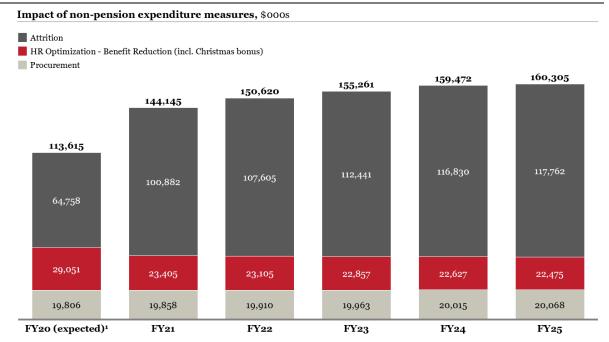
1 IPEDs 2017 data

Ultimately, these expenditure reductions will drive over \$150 million in savings per year in addition to improving the operational performance of the University (Exhibit 28).

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⁴⁰ Data from IPEDs, 2017

EXHIBIT 28: IMPACT OF NON-PENSION EXPENDITURE MEASURES



1 As per June 2019 Certified UPR Fiscal Plan, does not consider COVID impact

2.5.1 Administrative transformation

As with other university systems around the country, COVID-19 will present unprecedented humanitarian and fiscal setbacks that will challenge the administration to rethink its operating model in ways it has never had to consider before. However, in these challenging times, there is also opportunity. In 'reimagining' its future operations, UPR can also build a system that is more resilient, transparent, and higher performing.

A wholescale transformation of UPR's operating model is more important now than ever. UPR's current model of 11 different campuses is not only too expensive, it has also led to unstandardized levels of administrative support and academic program quality that critically detract from student, faculty, and staff experience. Administratively, UPR's existing system structure has led to:

- High levels of duplication in administrative and academic leadership with redundant management structures (e.g., 11 separate chancellors, multiple academic department leaders per specialty) across the UPR system
- Redundant and over-staffed support functions due to existence of separate offices for administrative functions on each campus (e.g., finance, HR)
- Difficulty in enforcing and monitoring consistent financial procedures and policies across the system, resulting in delays in implementation of fiscal reforms and issuance of financial reporting to comply with deadlines set by Middle States ("MSCHE") accreditation standards
- Poor coordination among campuses; making it challenging for students and staff to navigate the distinct campus bureaucracies

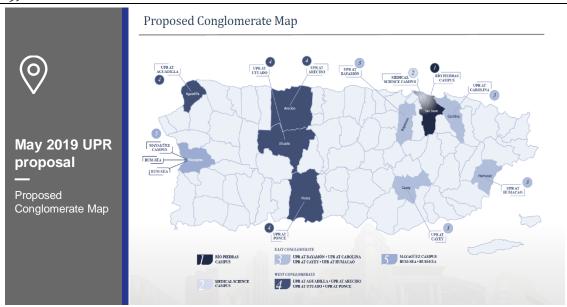
The transformation outlined in this section should be seen as exactly this type of opportunity for UPR to 'reimagine' what it could become over the next coming years. It must seek to concentrate resources on the academic and research core that is at the heart of UPR's mission, while enabling the savings targets outlined in other parts of the 2020 UPR Fiscal Plan. For example, while attrition is a powerful lever to right-size payroll, it cannot be sustained —

without harm to service delivery – unless the underlying services those positions were fulfilling are performed more efficiently.

A hub-based 'conglomeration' model

While service efficiency and efficacy opportunities exist within all UPR campuses, the greatest opportunity emerges when looking across the system. To that end, UPR administrations dating back to 2014 have explored various models to achieve cross-campus synergies, though none has materialized. These models, including the May 2019 UPR "conglomeration" proposal shown in Exhibit 29, have generally focused on some combination of administrative consolidation and academic program optimization. Plans for administrative consolidation have most recently taken the form of a "hub" model, designed to accelerate use of shared services among campuses. The June 2019 UPR Fiscal Plan explicitly encouraged scaling preexisting pilot initiatives -- such as the shared category purchasing programs across the Arecibo and Aguadilla campuses -- while also granting the UPR Administration time for internal management consideration to identify redundancies and create efficiency plans.

EXHIBIT 29: UPR'S PROPOSED CONSOLIDATION STRUCTURE FOR CAMPUSES (MAY 2019)



The push for cross-campus synergy goes beyond operational excellence and financial health; it is also an opportunity to significantly improve student (and research) outcomes. A compliance scan of UPR's academic programs included in April 2018 UPR Proposed Fiscal Plan submission found that 35% of the system's academic programs were totally or partially "non-compliant" based on retention and graduation outcomes. Following through on its self-imposed program criteria, the University must now act quickly to address academic shortfalls as part of this transformation. Specifically, in conducting its analysis on program optimization, UPR identified a number of specific organizational implications under consideration: relocation of the faculty according to preparation and discipline of specialty; consolidation of faculties and academic departments within an enclosure; and relocation of faculties or schools and programs from one enclosure to another. Wholescale transformation of the system operating model also brings opportunity to expand and enrich the University's nascent research areas and build upon high-perform lifelong learning and distance education models.

Unfortunately, UPR has repeatedly denied the Oversight Board's requests to review any concrete plans for executing substantive administrative consolidation or program optimization reforms. As per the letter sent by UPR to the Oversight Board on October 21, 2019, the University is still undergoing analyses "aimed at creating operational efficiencies as

the latest effort to implement efficiencies in the administrative area" that are "expected to be completed by June 2020."

The 2020 UPR Fiscal Plan approach

It is imperative that UPR makes the administrative transformation a priority of the 2020 UPR Fiscal Plan. UPR Administration must urgently implement three phases:

- Diagnostic phase: The University must map thoroughly the current state of its operations and identify objective, fact-based perspective on areas selected (e.g., IT, HR, Finance, Enrollment Services) for efficiency/efficacy greatest improvement.
- Process redesign phase: diagnostic With the completed, UPR must build out the future state operating model focusing on the areas with greatest opportunity, while also applying a lens of feasibility with regard to capability and timeline. This does not mean shving away bold initiatives, from especially in light of the current COVID-19 operating but challenges, developing a portfolio initiatives that balance the need for near-term improvement with the University's ambitious longterm fiscal priorities.
- Initiative
 implementation phase:
 With a clear set of defined
 initiatives, UPR must move
 towards their
 implementation. Initiatives
 should have clear owners and
 a system of accountability

Case study – University of Missouri System⁴¹

The University of Missouri ("UM") system, faced with a dire financial picture, decided in 2017 to embark itself into an administrative performance and process improvement journey. Its four campuses had to address a budget shortfall of ~\$62M in FY2018, as their two primary traditional sources of revenue came under severe strain. State appropriations had fallen from 62% of total university revenues in 2000 to a mere 35% in 2016, while student enrollment was decreasing across many public higher education institutions in the Midwest.

System administrators used the crisis to look at the crosscampus administrative footprint, including the role of the System's central office. The effort had both an opportunity identification phase, where System leaders engaged campuses in developing an end-state vision, and a multi-year transformation phase to execute on their new operating model.

UM's scope was ambitious, targeting an annual operating reduction of ~\$600M (20% of the system's total operating budget). For eight-week diagnostic phase, the System set up four teams to collect data across campuses, conduct 70+stakeholder interviews, and prioritize insights for the System's administration. A 7% net financial impact was identified out of the total addressable spend, and 12% in non-benefits spend, totaling ~\$70M.

The data gathering process provided particular importance in providing a level of transparency that was necessary to building appetite for difficult change, particularly among campus leaders and faculty that were initially resistant to the center-lead transformation effort. Through careful communication and genuine engagement across institution stakeholders, the System was able to present a plan that focused not only on reducing costly inefficiencies but also demonstrate how the transformation would meaningfully reduce administrative work and remove cumbersome bureaucracy for faculty, students, and staff.

through centralized management, or 'transformation office.'

This section will illustrate the potential of the administrative transformation by focusing on potential processes and initiatives that could be redefined in the Finance department. The

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⁴¹ University of Missouri Administrative Service Success Stories: https://www.umsystem.edu/ums/fa/transformation/admin re success

Oversight Board encourages UPR to take these as an inspiration for the redesign of all the different areas in the scope of the Administrative transformation.

Diagnostic phase

Successful higher education operational transformations begin with a function-by-function understanding of current state performance. For UPR, this means:

- Establishing a financial baseline, including mapping FTEs and costs to a standard taxonomy of sub-functions or activities (e.g., treasury, financial aid, bursar function) across the 11 campuses and the UPR central office
- Establishing a performance baseline, including critical KPIs for function performance (e.g., average time to close open IT tickets)
- Applying available benchmarks to both baselines to get directional insight into performance compared to other multi-campus, public higher education systems
- Using other data analytic tools (e.g., central office spans-and-layers analysis, cross-campus procurement spend cube analysis) that can also inform opportunity identification
- Conducting interviews and focus groups with diverse stakeholders (including "customers" of administrative services such as students and faculty) to augment quantitative insights
- Identifying and sizing (both in terms of budget impact and efficacy improvement) an initial list of opportunities to explore in the process redesign phase

By the end of the Diagnostic phase UPR should be able to deliver the list of processes that will set the scope of the transformation and the teams assigned to tackle each process. As part of the transformation, UPR's leadership must generate specific headcount and operating expense targets at a campus level. It should also list the expected improvements in academic and/or administrative outcomes for each functional area. UPR leaders must also use this phase as an opportunity to communicate the aspirations that the institution is striving to solve by the end of the transformation as a critical first step in change leadership that will be required to execute the end-state vision down the road.

Process redesign phase

The results of the diagnostic phase should enable UPR teams (central administration as well as campus-based functions) to focus on tackling the processes in scope; teams will identify priority areas for improvement as well as specific initiatives to improve them, design an end state, and define initiatives that will build towards the end state while fixing the highlighted pain points. Teams will also have to assess which capabilities and investments are needed to reach the desired outcome.

In order to determine the applicability of the diagnostic findings and relevance of potential opportunities, UPR must provide a list of initiatives by process (tied to the savings targets identified in the diagnostic phase). Each process should include relevant KPIs, have a process owner, and detail the required investment to enable the initiatives under the process redesign.

Using the finance function as an example, UPR has substantive opportunity to address the decentralized and fragmented network of finance professionals across campuses. Centralizing the fragmented structure is also a critical step for the University to reduce delays and inconsistencies in financial planning and reporting and to remove barriers to academic performance, particularly with regards to UPR's aspirations to improve sponsored research.

Centralization, therefore, is an outcome not the end objective, of the newly envisioned function. Specific opportunities for streamlining, digitization, and customer experience

improvement should ultimately occur across the broad range of transaction processes (e.g., billing,), decision support processes (e.g., budgeting and forecasting) and specialty services (e.g., treasury). The future vision must also be paired with a pragmatic human capital and technology gap assessment to inform the implementation plan to achieve this end vision. In that vein, finance function transformation is not a cost-cutting exercise – UPR should understand where opportunity exists to reallocate resources to highest value-add activities, such as financial planning and analysis, accounting, group purchasing / category management.

UPR must carry out the same process redesign exercise across all processes and areas in the scope of the transformation. Importantly, the process of engaging campus leaders in the redesign is another way to build support for the transformation and ensure that the outcomes are genuinely reflecting the most important needs of UPR's faculty, staff, and students. As shown in Exhibit 30, UPR must pursue the consolidation of (including, but not limited to) services in enrollment, finance, HR, IT, and facilities. Exhibit 30 lists some categories tackled during a higher education administrative transformation, as well as some common subfunctions (or areas of activity) for the different categories.

EXHIBIT 30: COMMON LEVERS AND EXPECTED SAVINGS RANGE

Category	Typical impact % of base spend	Activity				
Enrollment management	4-8%	RegisterAdmissions processingFinancial aid processing				
Finance	15-30%	 Audit Budgeting and planning (system-level) Capital planning Treasury General and grant accounting (including campus-level) Accounts payable Strategic procurement Procurement administration 				
HR	10-30%	 Benefits administration Labor relations Learning and development Payroll administration Strategy and policy Record keeping and reporting 				
IT	TBD	 Network & infrastructure Application development Application maintenance Helpdesk 				
Facilities	3-8%	 Capital planning & budgeting Capital project management Maintenance and operations 				

Initiative implementation phase

Once the initiatives to be implemented have been defined and socialized with all relevant stakeholders, UPR must develop a consolidated implementation plan while noting the need to continuously adapt the plan and incorporate feedback from the UPR community as initiatives scale. By taking a phased approach to implementation, UPR will focus on achieving escalating measures targets on a function-by-function basis (e.g., Finance, HR, IT) across campus hubs.

To keep pace with the implementation need, UPR must begin planning and prioritization for new functional transformations while beginning execution of prior phases. This overlapping sequencing of initiative execution will also accelerate UPR stakeholders' ability to see the benefits that will emerge out of the disruption. As part of its implementation plan, UPR must include KPIs, milestones, and clear owners for each initiative, as well as clear efficiency targets with timing for when budget impacts are expected to be realized. UPR must also designate a Chief Transformation Officer, or similar officer, who will be the accountable for reporting on the progress of the rollout across campuses and functions.

UPR must share with the Oversight Board the results of the implementation upon its completion in a presentation. This step will be an essential part of the 2021 UPR Fiscal Plan certification process: UPR must be able to connect the initial transformation goals with the outcomes of the different initiatives, demonstrating administrative efficiencies and category-level savings across campuses during the elapsed time. UPR must report to the Oversight Board on a monthly basis their ongoing efforts and results, and should discuss updates with the Oversight Board as initiatives are implemented and savings are recorded. As shown in Exhibit 31 below, in order for the Oversight Board to conduct a transformation review in March 2021 as part of the 2021 UPR Fiscal Plan certification process, UPR should complete intermediate steps.

EXHIBIT 31: ACTION ITEMS FOR UPR TO COMPLETE THROUGH ADMINISTRATIVE TRANSFORMATION

To be completed in FY2021	
Action item	Deadline
Establish a financial baseline	August 3, 2020
Carry out interviews with administrative positions across campuses on potential value creation opportunities	September 1, 2020
Perform deep dive analyses on available metrics (e.g., top-down functional headcount, position review, cost/KPI benchmarking)	November 5, 2020
Develop list of processes and team assigned to redesign each process	December 2, 2020
Develop an implementation plan for each shared service change	January 11, 2021
Kick-off roll-out of implementation plan	January 29, 2021
Prepare performance report of transformation	March 30, 2020, then annually
Present progress to Oversight Board	November 5, 2020
Review transformation processes and baseline based on progress and feedback from the Oversight Board	April 16, 2020, the annually

2.5.2 Attrition

Largely enabled by a successful administrative transformation, UPR must reduce its overall headcount to \sim 10,300 in FY2025 by:

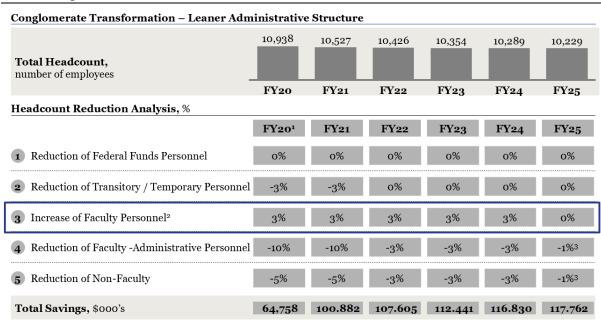
- Reducing non-faculty personnel through attrition, enabled by combination of administrative consolidation across campuses, other process efficiencies
- Reducing the number of trust and senior administrative positions by ~300

In order to maintain the highest level of instructional quality UPR may increase faculty annually by up to 3% per year throughout the Fiscal Plan period (Exhibit 32). Trust positions that are converted to faculty positions will count against this increase. The goal is to keep student-to-faculty ratios at roughly 18:1. These changes and expected enrollment declines will

actually enable UPR to slightly improve on its average historical student-faculty ratio of 18.9:1.⁴²

Most of this attrition must be driven through the establishment of administrative shared service hubs across the university system and overall service optimization, and any attrition updates should be included in the administrative transformation reports that will be shared with the Oversight Board (see Exhibit 41 and Exhibit 31). The reduction in trust and senior administrative positions at campus-level similarly reflects a centralization of overall governance for the University's executive functions, reducing the need for campus-level overhead.

EXHIBIT 32: EXPECTED HEADCOUNT CHANGES BY TYPE



¹ Expected as per June 2019 Certified UPR Fiscal Plan, does not consider COVID impact

2.5.3 Benefit adjustments

To-date, the University not complied with UPR Fiscal Plan's measures to adjust benefits to sustainable levels. The 2020 UPR Fiscal Plan requires the University to: (1) reduce medical insurance employer contribution for faculty to \$390 per month, \$125 per month for non-faculty starting in FY2020, and keeping baseline contributions to employees with preexisting conditions; (2) reduce prospective pay out of non-payroll compensation (e.g., sick days, union charges⁴³); and (3) eliminate the payment of Christmas Bonus⁴⁴. On medical insurance, the University has refused to normalize the benefits of its non-faculty employees to the ones adopted by the Commonwealth. Instead of reducing its contribution it has recently extended the existing contract and obligated \$63.5M—\$3.5M above the authorized amount and \$13.5M above UPR June 2019 budget proposal. On reducing pay out of non-payroll compensation, UPR has not reported any progress. In an agreement with the Governor and Governing Board of UPR, the FOMB decided in 2019 to allow UPR to continue to pay out the Christmas bonus

² Growth may include conversion of trust personnel into faculty and any conversions not covered by 3% allowed growth must be offset through other attrition

³ Indexed to expected population decline

Historical ratios from IPEDS, current ratio per UPR April 2019 roster and enrollment data. Ratio calculated as total enrollment divided by non-administrative faculty

⁴³ Per the 2020 UPR Fiscal Plan, other non-payroll compensations such as PTO accruals and liquidations will be maintained at current levels

⁴⁴ In an agreement with the Governor and Governing Board of UPR, the Oversight Board decided to allow UPR to continue to pay out the Christmas bonus for one year in 2019.

as a one-time exemption during FY2020. However, the measure will be implemented from FY2021 onwards. Exhibit 33 contains a detail list of actions that UPR should take to adjust benefits

EXHIBIT 33: ACTION ITEMS FOR UPR TO COMPLETE THROUGH BENEFIT ADJUSTMENTS

action item	Deadline
$\label{lem:Reducemedical} \textbf{Reduce medical insurance employer contribution for employees according to employee category}$	July 1, 2020
Reduce prospective pay out of non-payroll compensation	July 1, 2020
Eliminate the payment of Christmas Bonus	July 1, 2020

2.5.4 Centralized procurement efforts & contract renegotiations

From FY2021-2025 UPR must achieve ~\$20M in run-rate savings on non-payroll, direct operating expenses. These efforts will include a combination of supply (e.g., consolidated purchasing) and demand-side reforms (e.g., optimizing IT refresh cycles).

This savings target represents a ~12% reduction in addressable procurement spend. The targets are based upon the breakdown of specific categories of addressable spend in the UPR's operating budget today as well as category-level benchmarks for potential savings targets best on procurement efficiency initiatives in similar institutions. Due to the COVID-19 pandemic, for FY2021 the baseline for materials and supplies assumes a slight increase due to Personal Protective Equipment and Work From Home expected stipends, while it also reflects savings due to reduced demand in-campus through early FY2021. Exhibit 34 lists some actions that UPR should take in order to continue with the implementation of this initiative.

EXHIBIT 34: ACTION ITEMS FOR UPR TO PURSUE CENTRALIZED PROCUREMENT EFFORTS & CONTRACT RENEGOTIATIONS

action item	Deadline
Identify category specific savings targets across campuses	August 31, 2020
Identify the top 5-10 contracts for re-procurement based on size and potential savings opportunity	August 31, 2020
Fill out revised centralized procurement protocols including demand controls (e.g., refresh rates) as part of the larger procurement function transformation	January 25, 202

2.6 Safeguards to ensure continued affordability

One of the main missions of the 2020 UPR Fiscal Plan is to ensure that UPR continues to be an engine of social and economic mobility. As such, numerous measures in the 2020 UPR Fiscal Plan aim at maintaining affordability and access to UPR:

■ Keeping overall undergraduate tuition under the maximum Pell Grant award (\$6,345 for FY2021), ensuring that the majority of students who receive financial aid

(~70% of undergraduates⁴⁵) will retain ~\$1,000+ of Pell funding to cover non-tuition costs of attendance.

- Maintaining total undergraduate tuition and fees below the cost of private universities in Puerto Rico and below the average in-state tuition for U.S. public universities (See Exhibit 12)
- Increasing UPR's own annual scholarship expenditures for students with financial need. Using revenue generated by exemption reductions, students that currently receive federal aid will see their scholarship award increase the allocation of these funds.
- Creating an independently-managed needs-based UPR scholarship fund to be funded over 5 years through reductions in the budgets of the Oversight Board, Legislature, and AAFAF (in progress; RFP awarded in May 2020)

2.6.1 Additional detail on UPR scholarship funds

To ensure UPR continues to fulfill its role as an important driver of socioeconomic mobility, the 2020 UPR Fiscal Plan and the Commonwealth Fiscal Plan outline measures related to scholarship programs designed to ensure all students, regardless of their income level, have access to UPR's undergraduate and graduate programs.

UPR internal scholarship fund

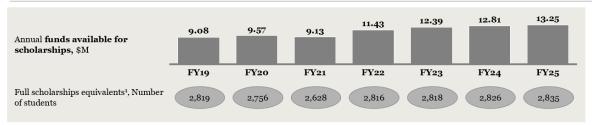
UPR expects the internal scholarship fund to provide \$9 million in financial aid during FY2021, as Exhibit 35 shows. The internal fund will cover Undergraduate students who have any residual amount not covered by Pell Grants, and Graduate students by \$1,000 per year based on economic need according to Expected Family Contribution ("EFC") as determined by the Free Application for Federal Student Aid ("FAFSA"):

- Students with EFC of \$0 to \$499: Pell Grant covers full cost of tuition and fees, with remaining balance available for other costs of attendance
- *Students with EFC of \$500 to \$2,999*: UPR scholarship will cover full cost of tuition plus contribution of >\$1,000 towards costs of attendance
- Students with EFC of \$3,000 up to cost of tuition: UPR scholarship will cover full cost of tuition and contribute \$1,000 or less towards costs of attendance
- *EFC greater than cost of tuition*: no incremental need-based aid awarded; however, other affordability mechanisms and exemptions may apply

-

⁴⁵ As per UPR scholarship distributions for FY2020

UPR Internal Scholarship Fund Impact



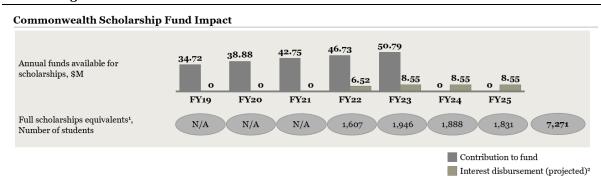
¹ These reflect the amount outlaid towards the equivalent of a full-ride need-based scholarship. In reality, these amounts would vary as not all every student would receive a 100% of scholarship due to variations in students' expected family contribution (EFC)

Independently managed Commonwealth-funded scholarship fund

The May 2018 Commonwealth Fiscal Plan established an independently-managed scholarship fund, for which the Commonwealth would contribute \$35 to \$50 million per year for external scholarships (see Exhibit 36) to be managed by an independent third party. The RFP process in order to provide Fund Administration Services and Trust Services to AAFAF with respect to the scholarship endowment trust fund was awarded in May 2020 to *Fundación Comunitaria*. The fund is expected to award the first scholarships in August 2021, as the application process will be conducted between March and June of the same year. In FY2021, \$43 million will be added to the fund, and will be used to provide need-based scholarships to UPR students.

The funds to be disbursed each year could **provide the equivalent of over 7,200 undergraduate scholarships (covering tuition) during FY2022 – FY2025**.

EXHIBIT 36: COMMONWEALTH SCHOLARSHIP FUND POTENTIAL IMPACT



¹ Only the interest disbursements will be allocated towards scholarships. These reflect the amount outlaid towards the equivalent of a full-ride need-based scholarship. In reality, these amounts would vary as not all every student would receive a 100% of scholarship due to variations in students' expected family contribution (EFC) 2 Assumes a 4% annual interest over the endowment

Independently managed Commonwealth-funded scholarship program for medical students who commit to practice in underserved areas

The 2020 Commonwealth Fiscal Plan creates a new, incremental scholarship program to incentivize doctors to practice in underserved areas in Puerto Rico. Many rural areas in Puerto Rico are underserved by physicians, due to the lack of training opportunities, low salaries for medical residents, and difficulty in becoming certified to contract with health insurance plans. This has resulted in a shortage of ~500 primary care, mental health, and dental providers (according to HHS). Accordingly, the Oversight Board has allocated funding for a loan forgiveness offered to medical residents or students. Each student or resident would be eligible for \$25,000 of loan forgiveness per year of service (up to four years) in underserved areas. The program would be administered by an independent party chosen in a competitive process managed by AAFAF. The Commonwealth will fund the program with a \$30M endowment, investing \$10M in FY2020 and \$20M in FY2021. This program directly responds to the increased need for healthcare providers in rural areas following the COVID-19 pandemic and is representative of the 2020 Commonwealth Fiscal Plan's commitment to protecting the

health of the people of Puerto Rico. To ensure timely implementation of the program, AAFAF, who will administer the new medical/health professional scholarship program, must:

- By June 30, 2020: Transfer \$10M into a custody account to fund the endowment
- By September 2020: Finalize the program's design, including the terms of the agreement between the program and its beneficiaries, and launch an RFP to identify a third party provider
- By December 2020: Select a third party provider and finalize contracts
- By March 2021: Finalize application / selection process and launch awareness campaign
- By June 2021: Launch application and selection process

Other financial supports include:

- Legislative Fund: Total funds available of \$9.5M allocated directly from Puerto Rico's legislature.
- Law 44 (2018): Covers undergraduate and graduate students with an available of \$1.4M from the Lottery funds.

2.7 Implementation resources and costs

The measures included in the 2020 UPR Fiscal Plan require a project management organization ("PMO") with dedicated staff and the authority and capabilities to ensure successful execution across the university system. UPR set up a PMO under the University Governing Board in FY2019. The University must further resource and empower this entity-integrating its work with the efforts of UPR's central administration-, and empower it to compel the implementation of the 2020 UPR Fiscal Plan. The University must also orient its PMO towards the objectives of the 2020 UPR Fiscal Plan. Exhibit 37 provides a detailed projection of the 2020 UPR Fiscal Plan implementation costs.

Some measures may require contracting external advisors to provide technical and other assistance, particularly when it comes to improving fiscal governance and reporting. UPR estimates the total cost of implementation to be roughly \$5M for FY2021, including professional services associated with the 2020 UPR Fiscal Plan measures for \$3M. The total cost is expected to ramp down to ~\$3M in FY2023, subject to change depending on the contracts UPR enters into with various advisors and any updates to the PMO structure. UPR must explore opportunities to engage students and faculty in the design and implementation towards execution of strategic transformation initiatives. Exhibit 38 lists some actions that UPR should follow to operationalize the PMO.

EXHIBIT 37: PROJECTED FISCAL PLAN IMPLEMENTATION COSTS

Item	FY'20	FY'21	FY'22	FY'23	FY'24	FY'25
PMO staffing	963	963	963	963	-	-
Office & IT	2.043	933	933	933	-	-
Professional services	7.010	3.120	3.120	1.450	-	-
Total	10.016	5.016	5.016	3.346	-	-

EXHIBIT 38: REQUIRED ACTION ITEMS TO ENSURE THE IMPLEMENTATION OF THE PROJECT MANAGEMENT OFFICE ("PMO")

Action item	Deadline
Fully staff team to manage PMO Office program	July 15, 2020
Prepare the UPR Measures' Implementation Plan; the plan should include a clear scope in conformance with both the 2020 UPR Fiscal Plan and PROMESA	August 28, 2020
Identify provider and award relevant professional services support contract through competitive RFP	August 31, 2020
Present measures' implementation progress to the Oversight Board	March 31, 2021, the
Review implementation plan based on achieved progress and feedback from the Oversight Board	April 15, 2021, then annually

Chapter 3. Pension reform

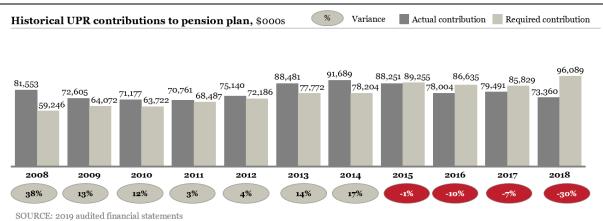
3.1 Reforms to UPR Retirement System

PROMESA Section 201(b)(1)(F) requires the 2020 UPR Fiscal Plan to improve fiscal governance, accountability, and internal controls. As part of proper governance and accountability, the 2020 UPR Fiscal Plan requires UPR to correct the fiduciary responsibility failure and align the employer contribution of the current defined benefit plan as required by the actuary using a 30-year amortization.

Since 2017, the different UPR Fiscal Plans certified by the Oversight Board have consistently reiterated the necessity of implementing Pension Reform and provided the UPRRS the actuarial required contribution (see Exhibit 39). The latest studies suggest that the UPR has an unfunded pension liabilities worth ~\$3B, which is \$1B above previous estimates. Some of the risks that arise from the underfunding status include possible disqualification from federal agencies that offer funds for research and student assistance, endangering their accreditation as Higher Education Institution, specialized accreditations of academic programs, and jeopardizing the UPR's livelihood. This inaction and short-termism in the pension funding approach puts UPRRS at significant risk because the employer contribution is drastically lower than the actuarial required contribution.

Actuaries estimate that if UPR does not make significant changes in its pension policies and contributions, the pension system could be insolvent by 2031.

EXHIBIT 39: ACTUAL VS. REQUIRED HISTORICAL UPR CONTRIBUTIONS TO PENSION PLAN



According to the UPRRS commissioned actuarial report⁴⁶, annual pension expenditure must be significantly revised to account for the following changes in actuarial assumptions:

- Updated census information to reflect shifting UPR demographics (retirees and current employees)
- Shift to 30-year amortization period from a 40-year amortization period based on Government Accounting Standards Board ("GASB") best practices
- Shift to assumed rate of return of 4.50% from 6.75%²
- Moved to level dollar funding since total payroll has been declining

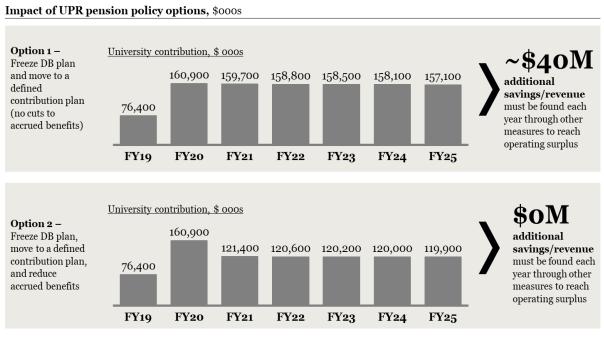
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⁴⁶ Cavanaugh Macdonald Consulting

Meeting this pension obligation at a time when UPR is also facing severe operating deficits creates a challenge. UPR can achieve these dual objectives by instituting pension reforms, and thus reducing the annual university contribution, or by leaving the pension system unchanged and finding additional savings or revenues to offset this increase through other means (likely additional tuition increases, reductions in faculty, or campus closures). This Fiscal Plan simplifies the three policy options in the 2019 Fiscal Plan to provide greater focus on the most feasible and sustainable alternatives, as shown in Exhibit 40.

- Option 1 Freeze and move to DC plan; do not cut benefits: Freeze UPR's current defined benefit plan and move to a defined contribution ("DC") plan. Make no other changes to the pension plan (e.g., do not cut accrued benefits). To make this option sustainable and achieve primary operating surplus (pre-debt service), UPR will need to find additional savings above what is presented in the 2020 UPR Fiscal Plan of approximately \$40 million per year, again requiring faculty and staff reduction, significant consolidation, or tuition increases.
- Option 2 Freeze and move to DC plan; cut accrued benefits⁴⁷: Freeze UPR's current defined benefit plan and move to a defined contribution ("DC") plan. Progressively reduce accrued benefits in a manner similar to the Employee Retirement System ("ERS") and Teacher Retirement System ("TRS") while accounting for the higher funding ratio of the UPR plan⁴⁸. This alternative eliminates the \$250 minimum benefit and \$400 holiday bonus. Executing this will reduce pension contributions to a level that allows UPR to achieve primary balance by FY2024 by implementing the 2020 UPR Fiscal Plan, i.e., without additional savings or revenue measures not included in the 2020 UPR Fiscal Plan.

EXHIBIT 40: ACTUAL VS. REQUIRED HISTORICAL UPR CONTRIBUTIONS TO PENSION PLAN



SOURCE: 05-18-20, Potential Benefit Changes Under Fiscal Plan by Foster & Foster (Oversight Board Actuaries)

For each of these scenarios, actuarial estimates assume that UPR contributes the full required contribution. This is a significant change to UPR's funding policy and greatly increases the

⁴⁷ May require Title III to execute. If pension reforms are not enacted UPR will need to find similar savings through other measures.

This would entail progressively reducing the unfunded portion of accrued benefits for recipients above a certain income threshold (set at \$1,000; total income is calculated as the sum of Social Security and pension monthly benefits)

likelihood that the pension plan will not run out of money. If UPR fails to make these required contributions, the plan will run out of money before the members receive all their earned benefit payments.

The Oversight Board strongly believes that Option 2 is the most responsible course of action for UPR in that it limits any need to move budget from areas critical to its core mission (e.g., further tuition increases, campus closures, faculty reduction) in order to avoid operating at a deficit and maintain the solvency of its retirement system. The 2020 UPR Fiscal Plan requires UPR to make this decision immediately post certification, as failure to implement a sustainable option would entail an annual deficit impact of ~\$90M.

The Oversight Board has been receptive to evaluate and consider different scenarios and options as provided by the UPR Governing Board. But after examining all alternatives, including hybrid pension plans, the Oversight Board understands that a defined contribution benefit is the only approach that will meet their risk objectives due to its stable and predictable contribution requirements. Ultimately, the Oversight Board seeks a decision from UPR on implementation on reform options. The UPR pension liability needs to be currently funded and continue to be in order to avoid the high risk of unaffordability and insolvency.

Chapter 4. Financial reporting & governance improvements

The fiscal reforms described in the 2020 UPR Fiscal Plan represent a significant and transformative effort across the eleven UPR campuses and its component units. As such, strict reporting requirements are needed to ensure savings and revenue targets are achieved on time, and to identify any major risks to reform in order to course correct at an early stage.

The various reporting requirements detailed below are based on best practices of comparable systems and are designed to enable both the UPR project management organization and the Oversight Board to monitor progress and react to roadblocks proactively as well as to enable the University to meet its reporting responsibilities to the U.S. Department of Education and to the various accreditation agencies. The Oversight Board believes them to be implementable within the coming Fiscal Year, and UPR is required by PROMESA to comply with them fully and on time. While the Oversight Board recognizes improvements in UPR's compliance with the 2019 UPR Fiscal Plan and PROMESA Reporting Requirements, UPR still has to work harder to submit on time these reports, including the budget to actuals, the Pension plan status, and the Capital Project Reporting. UPR should continue meeting PROMESA's requirements and providing the required information for the Oversight Board to achieve its mandate of guiding UPR towards financial sustainability.

These are the 2020 UPR Fiscal Plan reporting requirements (Exhibit 41) and do not limit FOMB's discretion to require other information under PROMESA. Reporting cadence to the Oversight Board: (i) Weekly: Every Wednesday, (ii) Monthly: 15th day after the end of the month; if not a business day, then the previous business day and, Quarterly: (iii) 15th day after the end of the quarter.

EXHIBIT 41: UPR REPORTING REQUIREMENTS

Source of requirement	Item	Components	Cadence		
Enrollment and tuition reporting		 Number of applicants, enrolled students, as well as tuition exemptions by- type (e.g., Honor student, Veteran, etc.) Detail on scholarship and aid disbursernents (Federal, Commonwealth, and UPR-funded) 	Within one month of start of each new academic period (i.e., semester)		
	Administrative Transformation	 Progress against implementation plan for program consolidation (including programs eliminated or consolidated at a campus level), shared-services progress, and specific workforce reductions and positions eliminated 	 Monthly 		
	Implementation plan and monthly status report	Milestones and KPIs for all measures Progress against all measures included in certified fiscal plan (e.g., federal funding, IP monetization) and status of associated KPIs and milestones	 Implementation Plan: One time post – certification Report Status: Monthly 		
FOMB- certified fiscal plan Capital project reporting Balance Sheet Income statement Monthly budget to actuals		 List of active projects across all program types (i.e., Federal, Appropriations, Other) and progress completed during the month (e.g., Student Facilities, % of work certified) with key project information 	 Monthly 		
		Include only consolidated balance sheet & Income Statement	• Quarterly		
		 Tracking of budgeted to actual cash flow budget certification agreements with FOMB Explanation for material variances (>5% or \$5 million) 	■ Monthly after budget is certified for headline I/S numbers including A/R & A/		
	Liquidity	13-week cash flow report; including accounts payable and accounts receivable roll-forwards as well as 12 common weeks analysis to track material changes	• Monthly		
	Auxiliary	Detailed report of all auxiliary revenue streams generated by UPR that includes a comprehensive list for all campuses and component units of UPR	Quarterly		
	Pension Status	 Detailed report of Pension Contribution Expense and payment information Actual transformation based on a project plan with a monthly update 	 Monthly 		
	Minimum Cash Analysis	 Monthly Minimum cash balance kept on hand as a cash reserve to offset any unplanned cash outflows. 	• Monthly		
PROMESA	Quarterly budget to actuals	Quarterly budget to actuals as required by section 203 of PROMESA	• Quarterly		

Chapter 5. Debt Sustainability Analysis

Historically, UPR has shown no independent and sustainable capacity to generate the funds to pay UPR bond debt service on a net revenue basis. Instead, UPR has borrowed using "gross pledges" of tuition revenues in which tuition revenues are paid directly to a Bond Trustee and applied to pay debt service without regard to whether UPR is generating net revenues or is running at a deficit.

In the face of declining Commonwealth appropriations and the need for UPR's own sources of revenues to support more of its operations, this structure is inherently unsustainable from the University's perspective. The FY2020-25 UPR Fiscal Plan contains measures that, if timely and fully implemented by UPR, are projected to generate positive net revenues, with such primary surplus available for payment of some restructured debt service. These figures take into account the reduced level of Commonwealth appropriation payments to UPR contained in both the Commonwealth and the UPR fiscal plans.

EXHIBIT 42 represents the contractual debt payment for the following years, composed of two long-term debt obligations: the University's revenue bonds and the Desarrollos Universitarios, Inc's AFICA bonds (the AFICA bonds). These debt obligations amount to \$511.2M and \$79.8M, respectively. Both bonds are currently rated "C" by Moody's Investors Service (Moody's) and "CC" by Standard & Poor's Ratings Services (S&P).

University's bonds payable required payments of principal and interest, \$000s

	Revenue Bonds			AFICA Bonds			Aggregate		
Year	Principal	Interest	Debt Service	Principal	Interest	Debt Service	Principal	Interest	Debt Service
2020	24,270	18,290	42,560	2,880	2,820	5,700	27,150	21,110	48,260
2021	25,480	17,070	42,550	3,020	2,680	5,700	28,500	19,750	48,250
2022	26,760	15,800	42,560	3,180	2,530	5,710	29,940	18,330	48,270
2023	28,100	14,460	42,560	3,330	2,370	5,700	31,430	16,830	48,260
2024	29,510	13,050	42,560	3,500	2,200	5,700	33,010	15,250	48,260
2025	30,980	11,580	42,560	3,680	2,030	5,710	34,660	13,610	48,270
Remaining years ¹	200,650	55,190	255,840	36,860	8,760	45,620	237,510	63,950	301,460
Total	365,750	145,440	511,190	56,450	23,390	79,840	422,200	168,830	591,030

12026-2036 for Revenue Bonds and 2026-2033 for AFICA Bonds

Other Liabilities

In addition to the pension obligations, and the aforementioned long-term debt obligations, the University has two other liabilities worth highlighting: the Other Post-Employment Benefits ("OPEB") liability, and the University's accrual for compensated absences. Both liabilities together add up to a total of \sim \$358 million: the total OPEB liability is \$226.8 million, whereas compensated absences related to accrual of vacation and sick leave by employees to be liquidated upon employee retirement or termination totaled \$132.0 million.

Chapter 6. Implementation progress

To-date, UPR has made meaningful progress on some measures (e.g., undergraduate tuition increases, attrition) but less on others (e.g., administrative shared service implementation, bonus reductions) (See Exhibit 43 for status of measures). The full impact of all of the 2020 UPR Fiscal Plan measures is required to achieve fiscal balance, and these are highly dependent on timing. Indeed, some savings have already been forfeited due to slow implementation (e.g., slow ramp up in graduate tuition increases, pension reform delays). Others will see challenges in implementation due to recent events (e.g., January earthquakes, COVID-19 pandemic). However, in order to achieve the much-needed savings and revenues outlined in this plan UPR must adhere to the timing of the activities and milestones mentioned in each of the measures. The Oversight Board will actively monitor progress against these targets and requires that UPR submits regular reports on its achievement of this plan.

EXHIBIT 43: IMPLEMENTATION STATUS OF MEASURES

Гуре	Measure	Expected ¹	Realized	Status	Description
урс	Adjustment to Undergraduate Student Tuition	61,935	53,917	•	Per credit tuition increase met; however, variance remains due to unexpected enrollment decline and non-compliant exemption policies (see item 2)
	2. Reduction in Tuition Exemptions	13,134	-		FY2019 categories were maintained
Revenue	3. Adjustment to Dues & Charges	8,657	8,263		Required FY2020 Fiscal Plan increase met, variance given unexpected enrollment decline
Enhancement Measures	4. Adjustment to Graduate Student Tuition	17,534	5,361		Partial increases, not the levels required by the Fisca Plan for FY2020
	5 Federal Grants & Contracts	5,000	-		No increase as required as the Fiscal Plan for FY202
	6. Revenue from training & tutoring services provided to government	20,000	-		Unable to realize revenues through confirmed delivery of services (see section XX)
	7. S&T patent revenue	1,000	-		MOU signed, no revenues realized
	8. Benefits adjustments (e.g., medical benefit reduction, Christmas Bonus elimination)	29,051	-	•	No adjustments made
Expense	9. Centralized Procurement & Contract Renegotiation	19,806	0,594	•	Small pilots launched but no initiatives to capture opportunity at scale
Measures	10. Attrition	24,494	17,556	•	Partial decrease, particularly in XX category, and no evidence of transformation efforts to sustain role reductions without compromised service levels
	11. Pension plan reforms	-	-	\circ	Public statement on intent of paying full expected contribution
Implementation costs	Transformation PMO expense	(10,016)	(6,002)	•	PMO office understaffed

¹ Expected amount as per June 2019 Certified UPR Fiscal Plan, does not consider COVID-19 impact

CONCLUSION

The COVID-19 pandemic is the latest challenge that UPR has had to face. It has forced the institution to solve a set of unprecedented issues, requiring its leaders to rethink its operating model in ways it has never had to consider before. It is time for UPR's administration to lead through the crisis and guide the University's community through such difficult times. Bold leadership, accountability, and transparency are a must if UPR wishes to remain the preeminent engine of economic development on the Island that it has been since its early origins. The Oversight Board is ready to support UPR as it weathers the storm, ensuring that the University -and the Island as a whole- emerges stronger than ever, a solid beacon of continuous pride for Puerto Ricans given its role as both the primary vehicle for social mobility on the Island as well as a hub for cultural and research advancement.

The challenges posed by the pandemic are not the only ones UPR has to wrestle with: poor management decisions from past administrations coupled with existing downward demographic and revenue trends have compounded to place UPR in a perilous fiscal and academic situation. The measures put forth in the 2020 UPR Fiscal Plan provide the "life raft" UPR urgently needs. This path includes diversifying revenues from sources like rationalization of tuition and exemptions, intellectual property and new external partnerships. It means applying operational model improvements that have proved successful in other universities to not just reduce expenditures but, more importantly, deliver better outcomes for students, faculty, staff, and the broader Puerto Rican community.

These turbulent times demand bold leadership, accountability, and transparency. The 2020 UPR Fiscal Plan does not suggest that taking this path will be easy. It is complex, requiring focus and attention to goals and targets, but it will definitely yield valuable results. This window of opportunity will not stay open forever. On pension reform alone, many of the levers presented to improve governance and fully fund future benefits will soon be unactionable, as each year that passes without making the adequate contribution to the plan inexorably leads to insolvency by 2031. Similarly, for each year that the Administration puts aside the difficult work of streamlining cross-campus service coordination, the harder it will be to achieve a balanced budget within the confines of a declining Commonwealth subsidy.

UPR must remain the preeminent engine of economic development on the Island and transform itself into a 21st century education institution. Puerto Ricans deserve no less.

Annex 1: Institutional Background

The University of Puerto Rico (the "UPR", or the "University"), founded in 1903, is a state supported university system created by Act No. 1 of January 20, 1966, "Law of the University of Puerto Rico" ("Act No. 1"), as amended, with the mission to serve the people of Puerto Rico and contribute to the development and enjoyment of the fundamental, ethical, and esthetic values of Puerto Rican culture, committed to the ideals of a democratic society. To advance its mission, the University strives to provide high quality education and create new knowledge in the Arts, Sciences, and Technology. The University is a public corporation of the Government of Puerto Rico (the "Government", or the "Commonwealth").

UPR currently offers 31 associate degrees, 236 bachelor's degrees, 114 master's degrees, 12 graduate certificates, 6 professional level degrees, 34 doctoral degrees and many continuing education courses and programs. The organizational structure includes a Governing Board, a University Board, a President, a Vice President of Academic Affairs, a Vice President of Student Affairs and a Vice President of Research. Each campus has a Chancellor, a Dean of Academic Affairs, a Dean of Students, a Dean of Administration, a Dean or Director for each college or school, and, in the case of the Río Piedras Campus, a Dean of Graduate Studies and Research.

Since its formation, the University has educated much of the top leadership of Puerto Rico's academic, business and government sectors and confers more than 9,000 degrees per year. During the FY'18, some 14,194 potential first-year students applied to the UPR, representing over 50% of all high school seniors on the Island. Of approximately 34,000 high school students that take the College Board Exam in Puerto Rico, 51% apply for admission to the UPR; 26% of the Island's university students attend the UPR; and the UPR grants 17% of the University degrees on the Island.

The UPR is the premier Hispanic serving institution in the United States with over 90% of its student body being of Hispanic origin. The UPR has the highest selectivity of all colleges and universities on the Island. During the academic year 2018-19, the average GPA of the new coming class, which comprised about 8,906 students, was 3.60. For the academic year 2019-20, some 33,117 undergraduates or 65% of the total student population received Federal Pell Grants.

The University of Puerto Rico Campuses

The **Río Piedras Campus** (the "UPR-RP") was established in 1903. It is a doctoral institution and the oldest campus in the UPR system. Its academic offerings include 65 undergraduate programs. The graduate offering includes 41 master's degrees, 15 PhDs, three Ed.D., and international programs in Law, at both Master of Laws ("LLM") and Juris Doctor ("JD") levels.

The UPR-RP serves over 13,944 students, of whom 2,980 are graduate students; comprises a faculty of 772 members, of which 75% hold the highest degrees conferred by universities all over the world and employs 1,315 non-faculty workers. It houses research centers on Material Sciences, Environmental Sciences, Nanotechnology, the Caribbean, HIV/AIDS Education and Prevention, History, Hispanic Studies, Social Sciences, Labor Relations, Cooperativism, Psychology, Math and Sciences, Business and Law, among others.

The **Mayagüez Campus** (the "UPRM") was established in 1911 as a land-grant institution committed to teach agriculture, military tactics and mechanic arts, as well as classical studies. The UPRM offers 104 academic programs: 54 bachelor's degrees, 42 master's degrees and 8 PhDs. It serves 12,665 students, of which 11,691 are enrolled in undergraduate programs; comprises a faculty of 765 professors and employs 1,562 non-faculty workers.

All six of its engineering bachelor's degree programs are accredited by the Accreditation Board for Engineering and Technology ("ABET"). In addition, the UPRM offers a Teacher Preparation Program, accredited by The National Council for Accreditation of Teacher Education ("NCATE"), now known as the Council for the Accreditation of Educator Preparation ("CAEP"). Students of this program consistently score among the highest grades in the teacher certification exams.

The **Medical Sciences Campus** (the "UPR-MSC") was established in 1924 as the School of Tropical Medicine affiliated with Columbia University. It comprises the Schools of Medicine, Dental Medicine, Public Health, Pharmacy, Nursing, and Health Professions, and has 61 academic offerings, including 9 associate and bachelor's degrees, 5 professional doctoral degrees, 31 masters, 5 postgraduate certificates, and 11 doctoral programs. It serves 2,565 students.

The campus operates as a health sciences center with close ties to the community through an extensive network of public and private practice sites. It operates the University of Puerto Rico Hospital in Carolina and has numerous teaching and practice arrangements with hospitals in the Puerto Rico Medical Center and the nearby Veterans Administration Hospital, among others. It houses the School of Dental Medicine's main practice site and sponsors several community-based service projects in low-income areas in which students participate. The Schools of Pharmacy, Public Health, Nursing, and Health Professions have extensive networks of sites that guarantee the quality of student practice experiences. The School of Medicine oversees a successful faculty practice plan that supplements faculty income, generates resources for the institution, and offers students and residents a wealth of clinical experiences under faculty supervision. Besides teaching and service, the UPR-MSC is also engaged in numerous research projects

The **Aguadilla Campus** (the "UPRAg") was founded in 1972 and offers 12 bachelor's degrees, 2 associate degrees, and 26 articulated transfer programs to other UPR campuses. In 2010, the Elementary and English Education programs earned its certification by the Council for Accreditation of Educator Preparation ("CAEP").

The **Arecibo Campus** (the "UPRA") was established in 1967 and it offers 17 programs conducive to a degree, 14 bachelor's degrees, three associate degrees, a post-baccalaureate degree and seven articulated transfer programs. Courses are offered in several traditional and non-traditional modalities such as: experiential learning, learning communities, and distance education. Academic excellence is evidenced by thirteen programs accredited by specialized accreditations. Through its Division of Continuing Education and Professional Studies (DCEPS), it also offers professional development opportunities to the internal and external communities. A 92% of the graduates reported being employed in graduate school or engaged in long-term service within six months of graduation (Alumni Survey 2014-2016). Student enrollment at UPR-Arecibo for the spring semester of academic year 2019-2020 is 3,338 students.

The **Bayamón Campus** (the "UPRB") was established in August 1971 as a community college and was part of the Regional Colleges Administration. In 1998, the UPRB became an autonomous campus within the UPR System. It is focused on the fulfillment of the growing academic needs of North-Central part of the island. The institution offers academic programs in technology, business, science, and education.

Enrollment at the UPRB for Fall 2019 was 3,937 students (3,703 Full-Time Equivalency): 2,008 females and 1,929 males. All were Hispanic, with 31% of first-generation college students. The fact that 70% of UPRB students receive Pell Grants reflects a mostly low-income status population. The 2019 graduating class had 501 graduates. Applications and admissions for 2019-20 reflect a behavior similar to recent years, with 3,753 applications received, 1,096 admitted students, and 893 enrolled students, amounting to an enrollment conversion of over 81.5%. For the second semester 2019-20, the total enrollment is 3,536 students with the same characteristics observed in the first semester.

The **Carolina Campus** (the "UPRCA") was founded in 1974. It serves 3,014 students with 2,231 full time students from different geographical areas of the Island and a small group of students from the Caribbean. 80 % of students received financial aid. It offers 13 undergraduate majors, five associate degrees, as well as 19 transfer programs. Three Professional Accredited programs in Office Systems, Business Administration, and Hotel and Restaurant Administration.

The UPRCA is the only campus within the UPR System that operates under a quarter term calendar system. Typically, students obtain their bachelor or associate degrees in a shorter period. The student body is served by a faculty of 107 professors and 193 non-faculty employees.

The **Cayey Campus** (the "UPR-Cayey") was established in 1967 and offers 24 bachelor's degrees in five academic areas: Teacher Preparation (11), the Natural Sciences (4), Social Sciences (4), Humanities (4), and Business Administration (4). It serves 2,787 undergraduate students with 149 faculty members and 271 non-faculty employees. UPR-Cayey provides an affordable and quality undergraduate education to the southeastern region of Puerto Rico and has one of the highest percentages of female enrollment, as well as a high number of PELL recipient students. Due to the high number of degrees awarded in science and social sciences by this campus, the Carnegie classification for UPR-Cayey switched from 'Diverse Field institution' to 'Arts and Science institution' in 2015.

UPR-Cayey's academic reputation appeals to many high school students with a high GPA, and the campus is one of the highest ranked in the UPR system. In addition, UPR-Cayey is the third institution with the highest number of applicants to medical schools in Puerto Rico, and a large number of its students complete their PhDs in Science, Technology, Engineering, and Mathematics ("STEM") programs. Moreover, UPR-Cayey is the third UPR institution with the highest amount of NIH funds, which provides students with a competitive advantage when filing their graduate school applications.

The **Humacao Campus** (the "UPRH"), founded in 1962, received its MSCHE accreditation in 1965 and has maintained it ever since. 88% of the total enrollment comes from 16 adjacent municipalities that constitute one of the most economically

impoverished areas of PR according to the 2010 Federal Census. UPRH is the only UPR campus on the East side of the Island. In 2018, UPRH extended its reach beyond the mentioned area, and reached to new areas such as the islands of Vieques and Culebra. 48% of UPRH students are below the poverty line, making this campus a vital component in the economic and social development of the eastern region. 73% of new student graduate from public schools, showcasing the need for a public institution of higher education in the area where students can pursue their academic aspirations.

The UPRH offers 24 academic programs: 20 bachelor's degrees and four associate degrees. In addition, there are 12 articulated transfer programs that allow students to transfer to four other UPR campuses. UPRH offers six bachelor's degrees that are unique in Puerto Rico: Wildlife Management, Coastal Marine Biology, Physics Applied to Electronics, Computational Mathematics, Social Sciences with Social Action Research, and Studies of Puerto Rico and the Caribbean. In addition, three programs are unique to the UPR system: International Commerce, Industrial Chemistry, and Occupational Therapy. The UPRH serves 3,093 students with 176 faculty members and 292 non-faculty employees.

The **Ponce Campus** (the "UPRP") was established as Ponce Regional College in 1969, and was first accredited by Middle States in 1970. UPR-Ponce was originally authorized to offer associate degrees and transfer programs but in the 1980s added several baccalaureate degree programs as well. At present, the institution offers 12 bachelor's degrees, four associate degrees (technical programs), and 46 articulated transfer programs to other UPR campuses. Among its academic offering, UPRP offers five that no other institution in the Island does: Athletic Therapy Sciences, Psychology and Mental Health, Forensic Psychology, Biomedicine, and Civil Engineering Technology in Architectural Delineation.

Total headcount enrollment for academic year 2019-2020 was 2,540. 94% of the student population is full time, with 91% of students receiving financial aid. UPRP also boasts a 58%-female student body. 81% of the student body is enrolled in bachelor's degree programs, 6% in technical programs, and 11% in transfer programs.

The student body is served by 204 faculty and 215 non-faculty staff members. On average, the student/faculty ratio is 12:1. The 2019-2020 faculty profile revealed that 74 of the 98 full-time faculty is tenured, and 53% of them have a doctoral degree. 19% of its faculty are full professors, 13% associate professors, 35% assistant professors, and 33% instructors.

The **Utuado Campus** was created in 1978 and offers two-year agricultural programs across four bachelor's degrees and six associate degrees. UPR-Utuado holds specialized accreditations by the National Council for Accreditation of Teacher Education (NCATE) and the Council for Business School and Programs (ACBSP). Additionally, sine 2008, the campus also has a Learning Resource Center certified by the Association of College Research Libraries (ACRL). Aligned with the institution's mission, UPR-Utuado has academic programs dedicated to the economic and cultural needs of the region, serving a high percentage of first-generation college students from low-income families.

UPR-Utuado serves 615 students: 35% of them are first-generation freshmen students, 72% have families with an annual income of \$30,000 or less, and 92% of

them receive financial aid. Furthermore, 92% of the student population are studying full time and 51% are female. 38% of the student body are enrolled in bachelor's degree programs, 56% in associate degree programs, 3% in transfer programs, and 3% in professional development and special permission. The student body is served by 71 faculty members (56% have a doctoral degree) and 129 non-faculty members.

The campus milieu comprises 118 adjoining acres, the largest campus extension in the UPR system, and is a location valued for its Taíno Indian heritage.

UNIVERSITY COMPONENT UNITS

The University of Puerto Rico has several component units which are separate legal entities from the University and a nonstock corporations governed by separate boards. For each entity, the University appoints a majority of its organization's board members, and can impose its will on those entities. The active Component Units are:

Desarrollos Universitarios, Inc. ("DUI") was organized on January 22, 1997, under the laws of the Commonwealth of Puerto Rico as a not-for-profit organization. DUI was organized to develop, construct, and operate academic, residential, administrative, office, commercial, and maintenance facilities to be used by students and other entities conducting business with the University. DUI developed the 'Plaza Universitaria Project', which consists of a student housing facility, a multi-story parking building and an institution building mostly for administrative, student service and support functions. It was finances through the issuance of \$86,735,000 in Educational Facilities Revenue Bonds through the Puerto Rico Industrial, Tourist, Educational, Medical and Environmental Control Facilities Financing Authority ("AFICA") on December 20, 2000. In 2008, the University entered into a capital lease agreement with DUI for the Plaza Universitaria Project. DUI is fiscally dependent on the University and its debt is expected to be repaid entirely or almost entirely with resources of the University.

Servicios Médicos Universitarios, Inc. (the "Hospital" or "SMU") is a not-for-profit acute care corporation, organized under the Laws of the Commonwealth of Puerto Rico, on February 11, 1998, to operate and administer healthcare units. The principal objectives of the Hospital are to constitute it as the principal medical education institution of the University and to offer healthcare services to the residents of Puerto Rico. The University appoints a voting majority to the Hospital board and is also financially accountable for the Hospital.

University of Puerto Rico Parking System, Inc. ("UPRPS") was organized on May 5, 2000, under the laws of the Commonwealth of Puerto Rico, as a not-for-profit organization. UPRPS was organized to operate the parking facilities of the University system. UPRPS operates the parking facilities of the Medical Sciences and Rio Piedras campuses. The University appoints a voting majority of UPRPS board and is also financially accountable for UPRPS.

Materials Characterization Center, Inc. ("MCC") was organized on April 15, 1999, under the laws of the Commonwealth of Puerto Rico, as a not-for-profit organization. MCC was organized to provide a much-needed accessible and reliable center to chemically and physically characterize materials used in pharmaceutical manufacturing as well as other manufacturing endeavors. MCC is administrated in conjunction with the College of Natural Sciences of the Río Piedras Campus. The University appoints a voting majority of MCC board and is also financially accountable for MCC.

Molecular Sciences Research Center, Inc. ("MSRC"), is a not-for-profit corporation organized under the Laws of the Commonwealth of Puerto Rico to operate and administer the University's Molecular Science Building ("MSB"). MSB is an advanced research facility of the University with laboratories conducting basic and translational biomedical research in topics such as protein structure and dynamics, molecular biology, genomics, proteomics, bio-imaging, pharmacogenetics, and neurosciences. The primary goal of the MSRC is to increase competitively funded forefront scientific research by scientists at the University. The MSRC is the University System's first multidisciplinary environment, designed to meet Puerto Rico's needs of cutting-edge research.