

REVISED FISCAL PLAN FOR PUERTO RICO

AS SUBMITTED TO THE FINANCIAL OVERSIGHT
AND MANAGEMENT BOARD FOR PUERTO RICO

MARCH 27, 2019



RICARDO ROSSELLÓ NEVARES
GOVERNOR OF PUERTO RICO

DISCLAIMER

The Puerto Rico Fiscal Agency and Financial Advisory Authority (“AAFAF”), the Government of Puerto Rico, its instrumentalities and agencies (the “Government”), and each of their respective officers, directors, employees, agents, attorneys, advisors, members, partners or affiliates (collectively, with AAFAF and the Government, the “Parties”) make no representation or warranty, express or implied, to any third party with respect to the information contained herein and all Parties expressly disclaim any such representations or warranties. The Government has had to rely upon preliminary information and unaudited financials for 2016 and 2017 in addition to the inherent complexities resulting from a prolonged period of lack of financial transparency. As such, AAFAF and the Government have made certain assumptions that may materially change once those financial statements are fully audited.

The Parties do not owe or accept any duty or responsibility to any reader or recipient of this presentation, whether in contract or tort, and shall not be liable for or in respect of any loss, damage (including without limitation consequential damages or lost profits) or expense of whatsoever nature of such third party that may be caused by, or alleged to be caused by, the use of this presentation or that is otherwise consequent upon the gaining of access to this document by such third party. The Parties do not undertake any duty to update the information contained herein.

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 Parties do not 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.

Any statements and assumptions 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, but also by Financial Oversight and Management Board for Puerto Rico and other third-party entities such as the government of the United States. Examples of these factors include, but are not limited to:

- Any future actions taken or not taken by the United States government related to Medicaid or the Affordable Care Act;
- The amount and timing of receipt of any distributions from the Federal Emergency Management Agency and private insurance companies to repair damage caused by Hurricanes María and Irma;
- The amount and timing of receipt of any amounts allocated to Puerto Rico and provided under the Community Disaster Loans Program;
- The amount and timing of receipt of any additional amounts appropriated by the United States government to address the funding gap described herein;
- The timeline for completion of the work being done by the Puerto Rico Electric Power Authority (“PREPA”) to repair PREPA’s electric system and infrastructure and the impact of any future developments or issues related to PREPA’s electric system and infrastructure on Puerto Rico’s economic growth;
- The impact of the measures described herein on outmigration; and
- The impact of the resolution of any pending litigation in the Title III cases

Because of the uncertainty and unpredictability of these factors, their impact cannot be included in the assumptions contained in this document. Future events and actual results may differ materially from any estimates, projections, or statements contained herein. Nothing in this document should be considered as an express or implied commitment to do or take, or to refrain from taking, any action by AAFAF, the Government, or any government instrumentality in the Government or an admission of any fact or future event. Nothing in this document shall be considered a solicitation, recommendation or advice to any person to participate, pursue or support a particular course of action or transaction, to purchase or sell any security, or to make any investment decision.

By receiving this document, the recipient shall be deemed to have acknowledged and agreed to the terms of these limitations. This document may contain capitalized terms that are not defined herein, or may contain terms that are discussed in other documents or that are commonly understood. You should make no assumptions about the meaning of capitalized terms that are not defined, and you should refer questions to AAFAF (Fiscalplanforpuertorico@aafaf.pr.gov) should clarification be required.

List of Acronyms and Key Terms

| | |
|--------------------|---|
| AAFAF | Puerto Rico Fiscal Agency and Financial Advisory Authority (Spanish acronym) |
| ACA | Affordable Care Act |
| Administration | Administration of Governor Ricardo Rosselló |
| AMT | Alternative Minimum Tax |
| ASES | Puerto Rico Health Insurance Administration (Spanish acronym) |
| ASPE | Office of the Assistant Secretary for Planning and Evaluation |
| BBA | Bipartisan Act of 2018 |
| BLS | Bureau of Labor Statistics |
| BRFSS | Behavioral Risk Factor Surveillance System |
| CAFR | Comprehensive Annual Financial Report |
| CBA | Collective Bargaining Agreement |
| CBO | Congressional Budget Office |
| CDBG | Community Development Block Grant |
| CDC | Center of Disease Control and Prevention |
| CHIP | Children's Health Insurance Program (CHIP) |
| CIT | Corporate Income Tax |
| COFINA | Puerto Rico Sales Tax Financing Corporation (Spanish acronym) |
| COR3 | Central Office of Recovery, Reconstruction, and Resiliency |
| CPA | Certified Public Accountant |
| CPI-U | Consumer Price Index for all Urban Consumers |
| CRIM | Municipal Revenues Collection Center |
| CU | Component Unit |
| CW | Commonwealth of Puerto Rico |
| DCR | Department of Corrections and Rehabilitation |
| DDD | Damage, Description, and Dimension |
| DDEC | Puerto Rico Department of Economic Development Commerce (Spanish acronym) |
| DHS | Department of Homeland Security |
| DMO | Destination Marketing Organization |
| DOH | Department of Health |
| DOL | Department of Labor |
| DSA | Debt Sustainability Analysis |
| EDB-EAI | Economic Development Bank's Economic Activity Index |
| EITC | Earned Income Tax Credit |
| ERS | Employee Retirement System |
| FCE | Fixed Cost Estimate |
| FDI | Foreign Direct Investment |
| Federal Government | The U.S. Federal Government |
| FEMA | Federal Emergency Management Agency |
| FMAP | Federal Medical Assistance Percentage (FMAP) |
| FOMB | Financial Oversight and Management Board for Puerto Rico |
| FQHC | Federally Qualified Health Center |
| GDB | Government Development Bank for Puerto Rico |
| GDP | Gross Domestic Product |
| GNP | Gross National Product |
| Government | Government of Puerto Rico |
| Governor | Governor Ricardo Rosselló |
| GSA | General Services Administration |
| Hacienda | Puerto Rico Department of Treasury |
| HSOAC | Homeland Security Operational Analysis Center |
| HUD | U.S. Department of Housing and Urban Development |
| Hurricanes | Hurricane Irma and Hurricane María |
| IA | Individual Assistance |
| INFRA | Infrastructure for Rebuilding America |
| IPEDs | Integrated Postsecondary Education Data System |
| IFCU | Independently Forecasted Component Units |
| IMF | International Monetary Fund |
| IPR | Invest Puerto Rico |
| IRS | Internal Revenue Service |
| Island | Puerto Rico |
| JRS | Judicial Retirement System |
| KPIs | Key Performance Indicators |
| LCU | Local Currency Units |

| | |
|------------------------|--|
| LEA | Local Education Agency |
| LMM | Luis Muñoz Marín |
| MADs | Maximum Annual Debt Service |
| March 2017 Fiscal Plan | Fiscal Plan certified by the Financial Oversight and Management Board in March 2017, before Hurricanes Maria and Irma hit the Island |
| MCOs | Managed Care Organizations |
| MFCU | Medicaid Fraud Control Units |
| Mi Salud | Medicaid program in Puerto Rico |
| MMIS | Medicaid Management Information System |
| NAP | Nutrition Assistance Program (Spanish: Programa de Asistencia Nutricional, PAN) |
| NCHRP | National Cooperative Highway Research Program |
| NOAA | North Oceanic and Atmospheric Administration |
| NRW | Non-Resident Withholdings |
| OCFO | Office of the CFO |
| OATRHR | Office of the Administration and Transformation of Human Resources |
| OMB | Office of Management and Budget |
| OPEB | Other Post-Employment Benefits |
| P3 | Public Private Partnerships |
| P3 Authority | Public Private Partnership Authority |
| PA | Public Assistance |
| PAN | Nutritional Assistance Program |
| Parties | AAFAF and the Government |
| PayGo | New pensions program by which agencies and instrumentalities are responsible for paying their pensions obligations on an annual basis via a "PayGo Charge" |
| PBA | Public Building Administration |
| PFC | Public Finance Corporation |
| PIT | Personal Income Tax |
| Platino | Medicare Advantage program that also provides Medicaid wraparound services equivalent to Mi Salud program |
| PMPM | Per Member Per Month |
| PSTBA | Pledged Sales Tax Base Amount |
| PRASA | Puerto Rico Aqueduct and Sewer Authority |
| PRCCDA (CCDA) | Puerto Rico Convention Center District Authority |
| PRDE | Puerto Rico Department of Education |
| PREPA | Puerto Rico Electric and Power Authority |
| PRHTA (or HTA) | Puerto Rico Highway and Transportation Authority |
| PRIFA | Puerto Rico Infrastructure Financing Authority |
| PRITS | Puerto Rico Information Technology Service |
| PROMESA | Puerto Rico Oversight, Management and Economic Stability Act |
| RAND | Research and Development nonprofit think tank |
| SEA | State Educational Agencies |
| SNAP | Supplemental Nutrition Assistance Program |
| SRF | Special Revenue Fund |
| SR | Structural Reform |
| SUI | Digitize Unified Information System |
| SURI | Internal Revenue Unified System |
| SUT | Sales and Use Tax |
| STEM | Science, Technology, Engineering and Math |
| TANF | Temporary Assistance for Needy Families |
| TIFIA | Transportation Infrastructure Finance and Innovation Act |
| TIGTA | The Treasury Inspector General for Tax Administration |
| TRS | Teachers' Retirement System |
| UPR | University of Puerto Rico |
| WIOA | Workforce Innovation and Opportunity Act |
| V2A | Vision to Action |

Table of Contents

| | |
|---|-----------|
| <i>Executive Summary</i> | 6 |
| PART I: Context for Puerto Rico’s current economic and fiscal challenges | 11 |
| <i>Chapter 1. Long-term Economic Trends</i> | 11 |
| <i>Chapter 2. Enactment of Promesa and Fiscal Plan Process</i> | 12 |
| <i>Chapter 3. Impact of Hurricanes Maria and Irma</i> | 13 |
| PART II. Puerto Rico’s path to fiscal and economic sustainability | 14 |
| <i>Chapter 4. Macroeconomic and demographic trajectory post-Maria</i> | 14 |
| 4.1 Disaster Relief Funding | 17 |
| 4.2 Economic Outlook..... | 22 |
| <i>Chapter 5. Fiscal Plan Financial Projections</i> | 24 |
| 5.1 Baseline revenue forecast | 25 |
| 5.2 Baseline expenditure forecast..... | 30 |
| <i>Chapter 6. Long-term Financial Projections (DSA)</i> | 34 |
| 6.1 COFINA Settlement | 39 |
| <i>Chapter 7. Fiscal Risks</i> | 40 |
| PART III: Restoring growth to the Island | 42 |
| <i>Chapter 8. Structural Reforms</i> | 42 |
| PART IV: Transforming the Government to better serve the Island | 45 |
| <i>Chapter 9. New Government Model</i> | 45 |
| 9.1 Office of the CFO | 46 |
| 9.2 Agency Efficiencies..... | 50 |
| 9.3 Healthcare Reform | 64 |
| 9.4 Tax Reform | 67 |
| 9.5 Tax Compliance and Fees Enhancements | 68 |
| 9.6 Reduction of Appropriations | 72 |
| 9.7 Social Security | 75 |
| 9.8 Direct New Investment Towards Economic Development and Implementation Priorities | 75 |
| 9.9 Baby bonds | 77 |
| <i>Chapter 10. Capital Improvement Plan</i> | 78 |
| 10.1 Current state of infrastructure and capital investment | 78 |
| 10.2 Organizational structures and capabilities | 79 |
| 10.3 Prioritization and delivery | 79 |
| <i>Chapter 11. Conclusion</i> | 81 |

EXECUTIVE SUMMARY

The people of Puerto Rico need and deserve plentiful good jobs, a dynamic and prosperous economy, affordable and reliable electricity, and an efficient and responsive public sector. Since 2005, the number of people living under the poverty level has increased, the economy has shrunk, electricity has remained expensive and unreliable and the public sector has provided declining levels of service at a high cost. These problems predate Hurricanes Maria and Irma and will continue to plague Puerto Rico long after it recovers from the storms unless the necessary actions are taken.

The Revised Fiscal Plan provides a blueprint of the reforms and fiscal measures that will give the U.S. citizens living in Puerto Rico an effective and efficient public sector and will put Puerto Rico on the path to meeting the objectives laid out in the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA): achieving fiscal responsibility and regaining access to the capital markets.

* * *

For over a decade, Puerto Rico has experienced a severe fiscal and economic crisis. Since 2006, Puerto Rico's real gross national product (GNP) has shrunk by more than 22% as of 2018.¹ Over 44% of Puerto Rico residents live in poverty, more than double the highest poverty rate of any U.S. state.² Puerto Rico's 8.5% unemployment rate is over two times the national average.³ Concerns about quality of life, poor delivery of public services and high unemployment have led to a historic population outmigration. In the past decade, more than 300,000 people have left Puerto Rico for the mainland United States. The impact of Hurricanes Irma and Maria accelerated this trend with an additional 226,000 people (or about 7.7% of the population) expected to leave Puerto Rico by fiscal year 2024.

Puerto Rico's unfair and inequitable treatment as a territory has been a driving factor causing the Island's precipitous economic decline. Puerto Rico is treated unequally under key federal programs such as Medicaid compared to U.S. states. For example, the Census Bureau reported in 2014 that Oregon—a relatively prosperous state with a population size similar to Puerto Rico—received over \$29 billion from the federal government, whereas Puerto Rico received only \$19 billion for the same year. Puerto Rico's unequal treatment under federal economic assistance programs is also one of the primary causes of the severe income disparity between Puerto Rico and U.S. mainland residents. In 2016, the median household income of Puerto Rico residents was \$20,078, which was approximately 63% less than the U.S. median income of \$54,617. As a result of this disparate treatment, Puerto Rico residents have migrated to the U.S. mainland in unprecedented numbers, leaving Puerto Rico with a diminished workforce.

Indeed, the most important and critical structural reform for Puerto Rico is a permanent solution to its territorial status.

The solution to these inequalities is statehood for Puerto Rico. Although it is the 30th most populated region of the United States, Puerto Rico has no voting representation in Congress. If admitted as a U.S. state, Puerto Rico likely would have two Senators and four Representatives in Congress, similar to states such as Connecticut and Iowa that have comparable populations. As a result, Puerto Rico residents could shape federal legislation and receive equal treatment under

¹ 2018 GNP is a preliminary estimate.

² US Census Bureau.

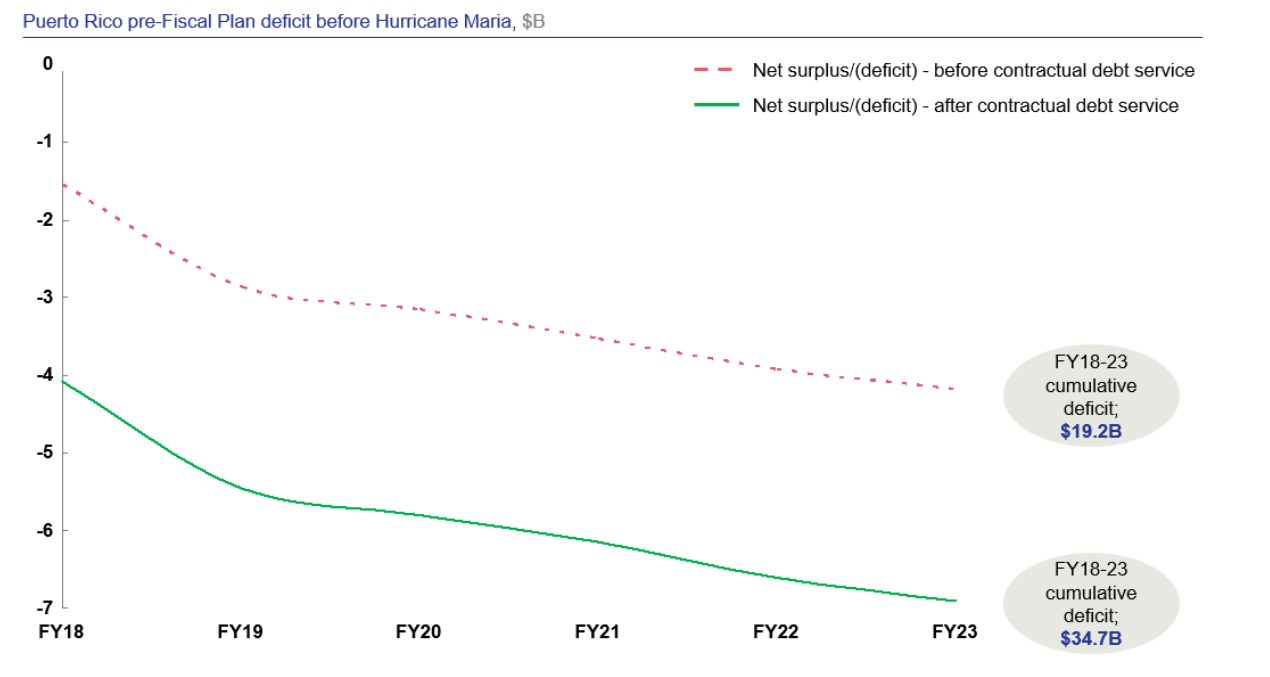
³ US DOL Bureau Labor of Statistics.

federal laws, thereby eliminating the primary benefits of moving to the U.S. mainland. Statehood, therefore, is the best way for Puerto Rico to stop outmigration, increase the on-island workforce, and grow Puerto Rico’s economy.

These pre-Maria problems are not new and temporary – they are long-standing and structural. For decades, the private sector was overly reliant on now expired Federal tax advantages while having to operate in a difficult business climate with poor infrastructure, especially expensive and unreliable electricity and transit systems, a public sector that is significantly larger than the size of the typical U.S. state yet often has provided poor service.

Puerto Rico has also had structural and fiscal imbalances for years, with actual revenues lower and actual expenses higher than projected, creating a growing general fund deficit (**Exhibit 1**). This general fund deficit is difficult to forecast with certainty, because of the accumulated delays in issuing annual audited financial statements that came to a head in 2016. Puerto Rico has also been in an economic structural decline for over a decade, which has meant an eroding tax base. Therefore, even before Maria, the primary deficit was growing consistently and considerably. To finance these primary deficits, Puerto Rico resorted to issuing debt which steadily became unsustainable.

EXHIBIT 1: PROJECTED PRE-MARIA DEFICIT BEFORE MEASURES AND STRUCTURAL REFORMS (PRE- AND POST- CONTRACTUAL DEBT SERVICE)



It was amidst the protracted demographic, fiscal, and debt crises that Hurricanes Maria and Irma hit the Island. Hurricane Maria has caused unprecedented and catastrophic damage to Puerto Rico, its people, and its businesses. According to current estimates, Hurricane Maria has created over \$80 billion in damages, and is projected to cause a real decline to GNP of 6.0% in FY2018. On the other hand, approximately \$78 billion in Federal dollars and \$8 billion in private insurance proceeds are estimated to be invested to help helping Puerto Rico recover and rebuild from Hurricane Maria. The Revised Fiscal Plan is prepared assuming this support from the Federal Government. This aid is projected to create temporary fiscal surpluses over the next several years but will not change the underlying structural problems Puerto Rico faces. Puerto

Rico will benefit from a temporary reprieve from debt service due to PROMESA and Title III, but the Government must change the underlying economic foundations to prevent fiscal imbalances from inevitably returning.

The Government is committed to executing a series of bold actions to improve its fiscal and economic trajectory. These reforms and measures are essential to making the Government more efficient and responsive.

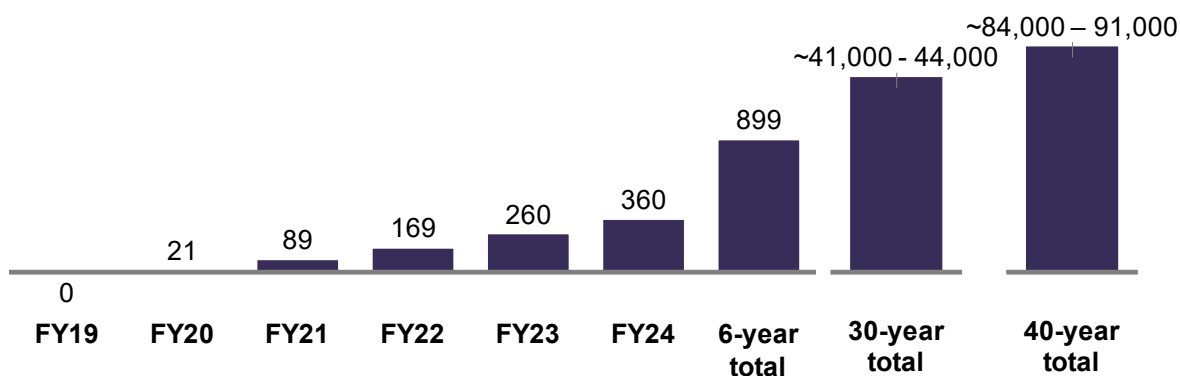
Structural reforms

The Revised Fiscal Plan maintains the following reforms (“structural reforms”) that will improve the economy and drive growth (**Exhibit 2**):

- *Human capital and welfare reform*: promoting participation in the formal labor force by creating incentives to work through Earned Income Tax Credit (EITC) benefits and welfare reform and providing comprehensive workforce development opportunities. These measures are projected to increase economic growth by 0.15% by FY2024.
- *Ease of doing business reform*: promoting economic activity and reducing the obstacles to starting and sustaining a business in Puerto Rico through comprehensive reform to improve ease of paying taxes, importing and transporting goods, registering property, and obtaining permits. These reforms are projected to drive a 0.50% uptick in overall growth by FY2024.
- *Power sector reform*: providing low-cost and reliable energy through the transformation of PREPA and establishment of an independent, expert, and well-funded energy regulator. This is projected to increase growth by 0.30% by FY2024 with incremental annual upticks of .10% from FY2021 to FY2023.
- *Infrastructure reform*: prioritizing economically transformative capital investments with Federal funds and launching maintenance and infrastructure investment policies.

EXHIBIT 2: IMPACT OF STRUCTURAL REFORMS

Impact of structural reforms, \$M



Fiscal measures

The Revised Fiscal Plan includes a set of fiscal measures to reduce expenditures and optimize Government revenues (**Exhibit 3**):

Office of the CFO: Instituting fiscal controls and accountability, reducing special revenue fund deficits, and improving governance, accountability, and transparency.

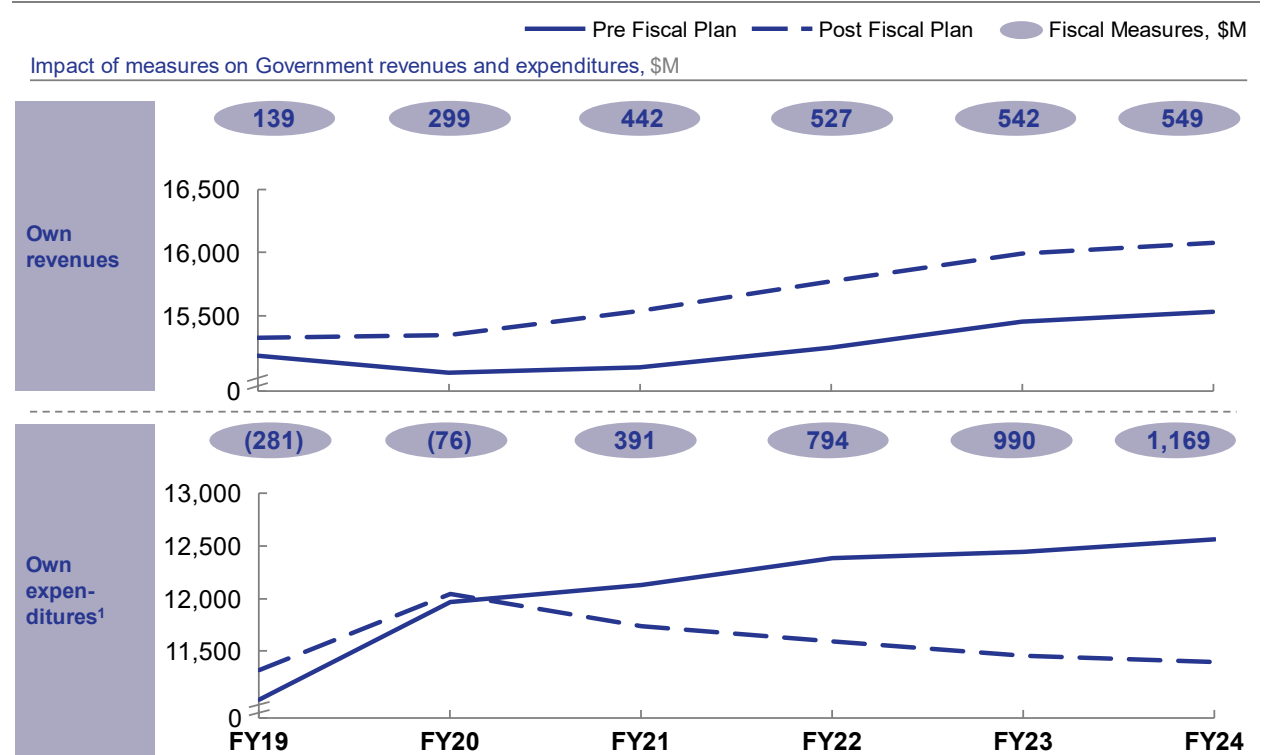
Agency efficiencies: Consolidating agencies, instituting shared services programs and incorporating best practices to deliver better government services at lower costs including increased buying power through centralization of procurement function across government agencies.

Reduction of appropriations: Lowering the fiscal burden on the General Fund by slowly reducing appropriations to municipalities and the University of Puerto Rico.

Healthcare reform: Reducing healthcare cost inflation through a comprehensive new healthcare model that prioritizes quality and cost-effective care while prioritizing the stability of the health system versus pursuing unsustainable reductions in healthcare expenses.

Enhancing tax compliance: Employing new technology and other innovative practices to broaden the tax base, reduce fraud, and improve fairness to boost overall tax revenues.

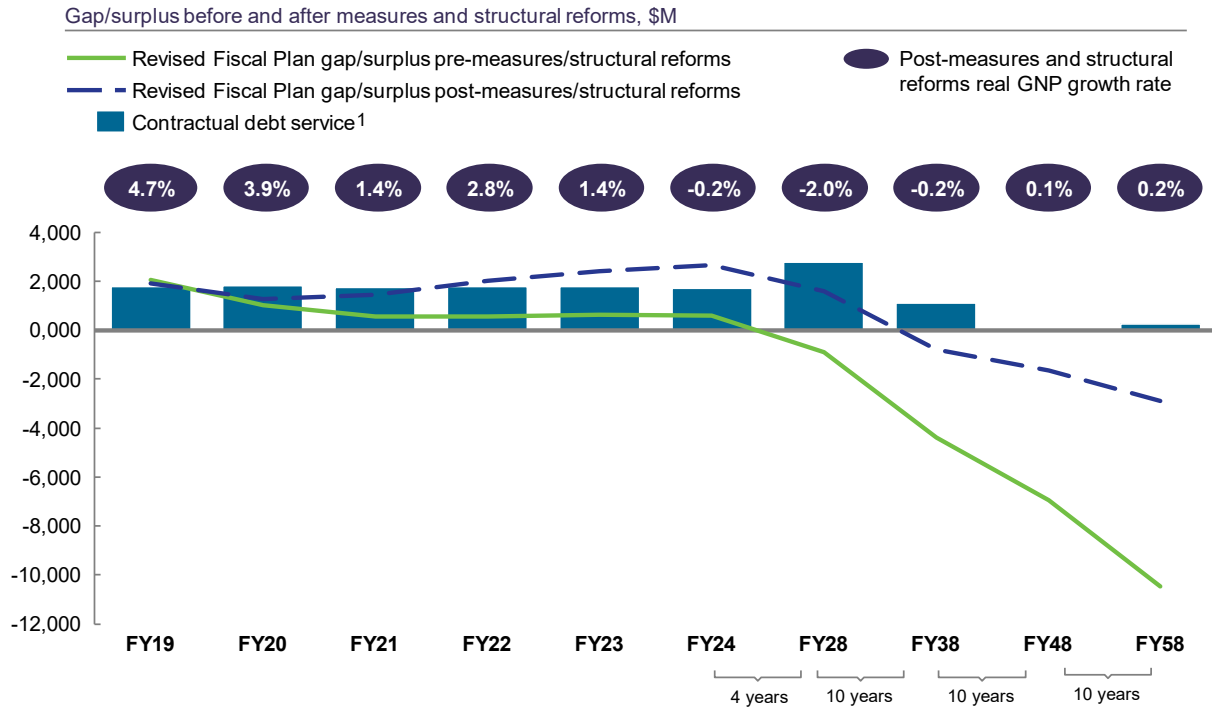
EXHIBIT 3: IMPACT OF REVENUE AND EXPENSE MEASURES ON OWN REVENUES AND EXPENDITURES



¹ Own expenditures include all Commonwealth funded expenditures and exclude all other federally funded expenditures.

Implementing these structural reforms and fiscal measures effectively and efficiently will enable companies to grow and prosper, leading to more and better jobs for residents, and a stronger tax base for the Government.

EXHIBIT 4: REVISED FISCAL PLAN PROJECTED SURPLUS BEFORE AND AFTER MEASURES AND STRUCTURAL REFORMS MACROECONOMIC AND DEMOGRAPHIC TRAJECTORY POST-MARIA



Puerto Rico cannot afford to meet all its contractual debt obligations, even with the aggressive implementation of these reforms and measures. Puerto Rico is committed to repaying an affordable and sustainable amount of its outstanding debt and to treating its creditors equitably; however, it needs a comprehensive restructuring of its debt to have renewed access to the capital markets and to create the basis for a sustainable economy. The Government has shown its willingness and ability to reach consensual deals evidenced by the GDB and COFINA restructurings closed as of November 29, 2018 and February 12, 2019, respectively.

PART I: Context for Puerto Rico's current economic and fiscal challenges

Chapter 1. LONG-TERM ECONOMIC TRENDS

Before being battered by the most powerful hurricane to strike the Island in almost a century, Puerto Rico's economy had been in an acute structural decline for over a decade, the Government had defaulted on debt exceeding the size of Puerto Rico's annual GNP, and nearly half of Puerto Rican residents lived below the national poverty line. The reasons for these problems are multiple, but the root causes stretch back decades.

On June 25, 1938, Congress legislated to authorize the Puerto Rico Legislature "to create public corporate authorities to undertake slum clearance and projects, to provide dwelling accommodations for families of low income, and to issue bonds therefore."⁴ Bonds issued by public corporations did not constitute debt of the Puerto Rican insular government. This federal legislation permitted Puerto Rico to dramatically increase its debt capacity. By 1947, the Puerto Rico Water Resources Authority (today PREPA) placed the largest debt issuance of any agency or public corporation in the U.S. while Puerto Rico was dramatically poorer than mainland jurisdictions.

In the 1940s and 1950s, led by Operation Bootstrap, Puerto Rico's economy grew rapidly, and productivity increased by 5% per annum as it transitioned from an agricultural-led to a manufacturing-led economy. This transition was anchored to the institutionalist economic policy adopted in Puerto Rico during the governorship of Rexford G. Tugwell. However, as economic performance began to decline in the 1970s, the Federal Government adopted two significant policies to help Puerto Rico shore up its economy.

First, transfer programs increased dramatically, particularly as Puerto Rico started receiving Nutritional Assistance Program (PAN) funding, eventually providing, in aggregate, a portion of residents' personal income that was twice the U.S. mainland average.

Second, in 1976, Section 936 of the Federal tax code was introduced to promote investments by companies that could transfer their "intangible assets" to Puerto Rico, and thereby shift profits to the Island. These Section 936 companies, which were mostly in the pharmaceuticals and life sciences industries, became a pillar of Puerto Rico's economy, creating valuable local supply chains, increasing local banking deposits, and contributing substantial tax revenue.

In 1996, Congress decided to end Section 936, gradually phasing it out by 2006. In the face of an anemic local private sector, the Government also expanded its employment to the point that by 2000, 30% of Puerto Rico's jobs were in Government. Large sectors like water, electricity and ports are still run by public corporations, and have consistently crowded out private investment. This crowding out is partly the result of the institutionalist policies instituted long ago. There is also pervasive cross-subsidization between the Government and public corporations and other parts of the public sector that obfuscates financial management and accountability. As a result, today Puerto Rico underperforms on all important measures of a modern economy, including

⁴ U.S. Statute at Large, 75th Cong. 3rd Session, Ch. 703, June 25, 1938, 52 Stat., p. 1203.

educational attainment, cost of electricity, quality of water, tax compliance, and labor market participation.

To promote the private sector, the Government undertook a broad tax incentives policy that led to a highly complex web of subsidies and special tax arrangements.

Government revenues suffered and became increasingly hard to forecast. To make up for this recurring and growing budgetary shortfall, Puerto Rico turned to debt markets. As investor appetite began to wane, the Government turned to securing new debt by pledging various revenue streams. The result was a highly complex financial structure that limited transparency and financial accountability and management.

When the Great Recession hit in 2008, Puerto Rico's economy was already in a fragile fiscal and financial position. Since then, the economy has continued to worsen – Puerto Rico has seen its GNP shrink by 20%, and the Island's population has fallen by 10%. As a result, Puerto Rico is much poorer today relative to the U.S. than it was in 1970.

Chapter 2. ENACTMENT OF PROMESA AND FISCAL PLAN PROCESS

By 2016, Puerto Rico was facing an imminent default. Because Puerto Rico and its public corporations cannot take advantage of Chapter 9 of the U.S. Bankruptcy Code, and an attempt to create a territorial bankruptcy law was struck down by the U.S. Supreme Court, Congress stepped in to head off Puerto Rico's financial crisis by passing the Puerto Rico Oversight, Management, and Economic Stability Act ("PROMESA"). PROMESA imposed an automatic stay on Puerto Rico's debt obligations and created the Financial Oversight and Management Board for Puerto Rico (the "FOMB" or "Oversight Board").

As required by PROMESA, the Government of Puerto began drafting a fiscal plan that would help the Government achieve fiscal responsibility and regain access to the capital markets. The outcome of this work was the Commonwealth Fiscal Plan that the Oversight Board certified on March 13, 2017 (the "March 2017 Certified Fiscal Plan"). A few months later, the Oversight Board filed for Title III for the Commonwealth, COFINA, HTA, ERS, and PREPA.

The damage inflicted on Puerto Rico by Hurricane Maria required that the March 2017 Certified Fiscal Plan be revised. On October 31, 2017, in light of the devastating effects of these historic storms, the Oversight Board requested the Government to submit a fiscal plan to replace the March 2017 Certified Fiscal Plan. After several months of intense negotiations between the Governor and Oversight Board, the Government submitted revised Commonwealth fiscal plans to the Oversight Board on January 24, 2018, February 12, 2018, March 23, 2018, and April 5, 2018. On April 19, 2018, the Oversight Board instead certified its own fiscal plan, which was subsequently amended and recertified on May 30, 2018 and June 29, 2018 (the "June 29, 2018 Certified Fiscal Plan").

On August 1, 2018, the Oversight Board requested the Government to submit a revised fiscal plan to replace the June 29, 2018 Certified Fiscal Plan in light of new information including, among other things, fiscal year 2018 financial information, revised federal disaster spending estimates, and updated demographic projections.

On August 20, 2018 the Government submitted a revised fiscal plan. On August 30, 2018 the Oversight Board issued a Notice of Violation. On September 7, 2018 the Government resubmitted the Fiscal Plan. On October 23, 2018 the Oversight Board certified its own plan (the “Currently Effective Fiscal Plan”). On January 18, the Oversight Board requested the Government to submit another revised fiscal plan. This fiscal plan (the “Revised Fiscal Plan”) is submitted in response to the Oversight Board’s request and continues the iterative process with the Oversight Board to certify a fiscal plan under PROMESA section 201.

Chapter 3. IMPACT OF HURRICANES MARIA AND IRMA

On September 6, 2017 and September 20, 2017, Hurricanes Irma and Maria struck Puerto Rico, causing unprecedented humanitarian, economic, and infrastructure-related damages and upending the daily lives of Puerto Rico’s over 3 million residents. Thousands of residents were left homeless, basic utilities were completely shut down, and schools, hospitals, and businesses were destroyed. Tens of thousands of Puerto Ricans fled the Island. The Federal Government’s response has become one of the largest and most complex disaster recovery efforts in U.S. history.

PART II. Puerto Rico's path to fiscal and economic sustainability

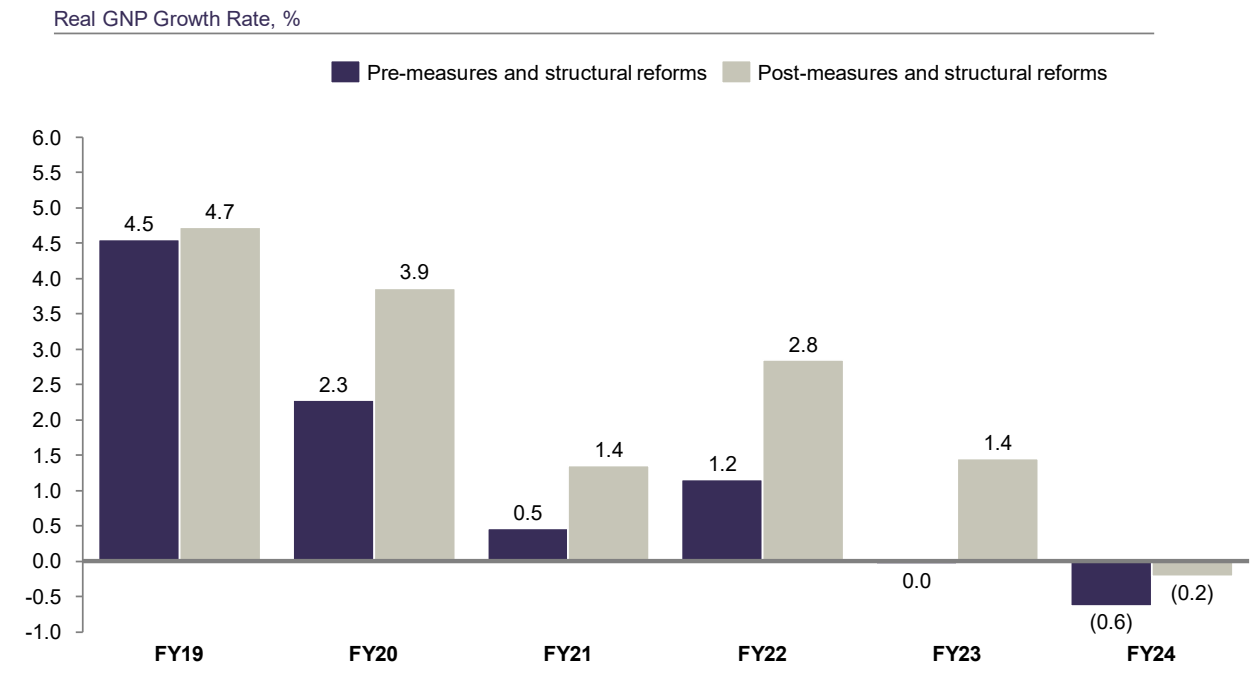
Chapter 4. MACROECONOMIC AND DEMOGRAPHIC TRAJECTORY POST-MARIA

Hurricanes Irma and Maria have created a new economic reality for Puerto Rico, drastically impacting the years to come. Given this context, the Revised Fiscal Plan projects there will be macroeconomic volatility in the wake of the storms. In FY2018, there was a significant decline in GNP growth, followed by a bounce-back in FY2019 due to disaster relief funding, then a return to slightly above the trendline by FY2024 due to the impact of structural reforms.

Macroeconomic conditions are of fundamental importance to Puerto Rico's future prosperity. In the year following Hurricanes Irma and Maria, the Commonwealth experienced a steep decline in economy activity, followed by the start of recovery. The hurricanes caused an immediate decline in economic activity due to the interruption of routine business during the storms and their immediate aftermath, as well as causing damage to the Island's productive capital that will require years to rebuild.

Although official GNP figures for FY2018 are not yet available, the Economic Development Bank's Economic Activity Index (EDB-EAI), a monthly coincident indicator of economic activity based on indicators including payroll employment and electricity generation and which is strongly correlated with real GNP, declined 6.8% in FY2018, consistent with the Revised Fiscal Plan projection of a 6.0% decline in real GNP growth. Economic activity began to recover in late 2018, but the pace of recovery as measured by the EDB-EAI and its component indicators has slowed, and activity remains below its pre-hurricane levels. The recovery will continue as more federal reconstruction funding is disbursed and rebuilding of the Island's damaged capital progresses. While fiscal measures will have a temporary contractionary effect on the economy, structural reforms will have a permanent positive impact on economic growth.

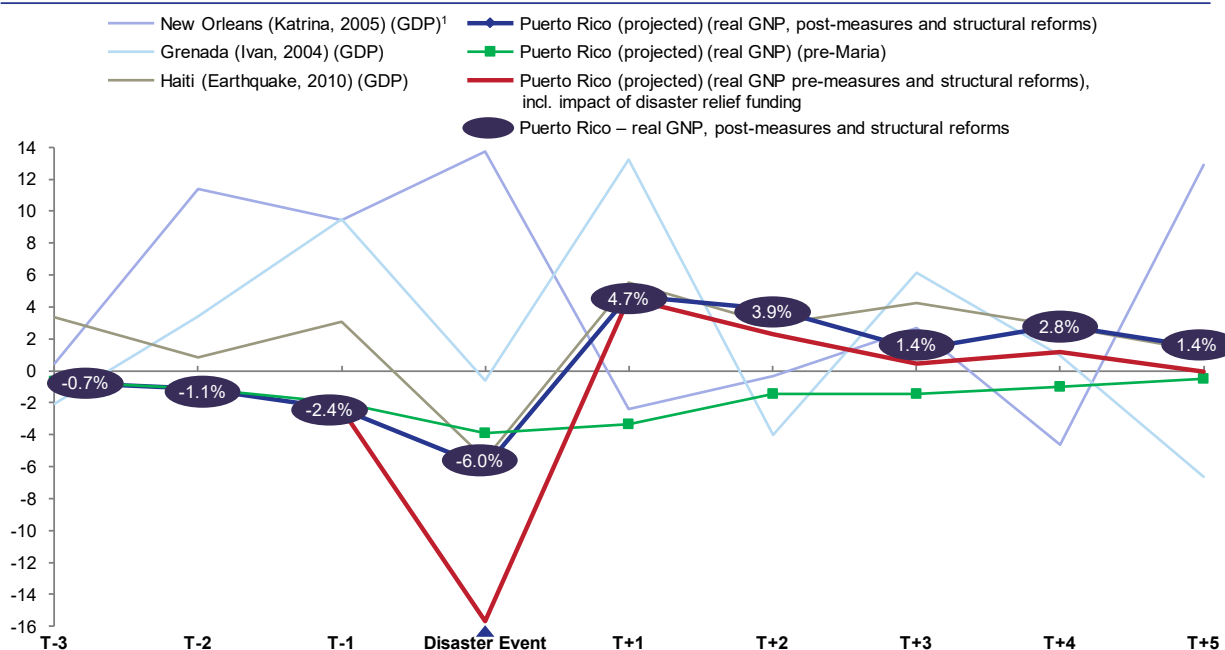
EXHIBIT 5: REAL GNP GROWTH RATE, BEFORE AND AFTER MEASURES AND STRUCTURAL REFORMS, INCLUSIVE OF DISASTER RELIEF SPENDING



This trendline has similarities to the growth trendline faced by other jurisdictions that have suffered from major natural disasters (**Exhibit 6**).

EXHIBIT 6: PUERTO RICO'S PROJECTED GROWTH TRAJECTORY COMPARED TO OTHER JURISDICTIONS AFTER NATURAL DISASTERS

Puerto Rico's projections track with other areas suffering from natural disasters, T = year of shock; constant local currency units (LCU) unless otherwise stated; year on year change



¹ Katrina figures not adjusted for inflation

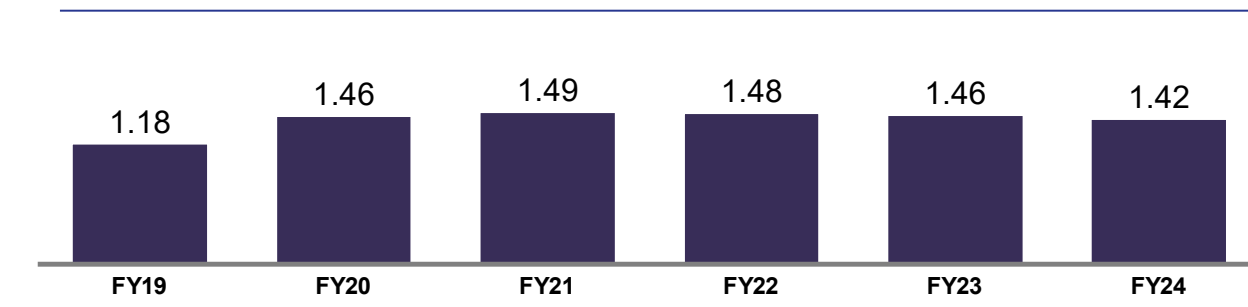
SOURCE: World Bank, Bureau of Economic Analysis, and ECCB

The Revised Fiscal Plan economic outlook model estimates the pre-hurricane trend growth of Puerto Rico as well as the economic impact of hurricanes based on a comprehensive data set of official Puerto Rico economic data from 1965 to 2017. The data set includes both variables that collectively describe the Puerto Rico economy (e.g. growth, federal transfers, capital investment, etc.) and data on past hurricane damage. Reflecting the close relationship of Puerto Rico to the U.S. mainland economy and the rest of the world, the model also includes external economic data: U.S. mainland GDP growth and inflation and world price conditions also influence economic conditions in Puerto Rico and are included in the model.⁵ The model uses statistical regression techniques to estimate and describe the impact of each economic driver on Puerto Rican growth from 1965 to 2017. This analysis forms the basis for the economic projections from 2018 to 2058: by combining the estimated effects with projections of the stimulative impact of disaster relief assistance and its impact on the growth of the capital stock and future policy changes such as the proposed fiscal measures and structural reforms, the model produces a forecast of economic growth for the Commonwealth.

⁵ The current version of the Fiscal Plan sources U.S. mainland GDP and inflation projections from the Congressional Budget Office (CBO) January 2019 Economic Outlook. Historical data and projections of world price conditions, which influence price levels and inflation in Puerto Rico, are sourced from the October 2018 edition of the International Monetary Fund's *World Economic Outlook*.

EXHIBIT 7: ANNUAL INFLATION RATE

Annual inflation rate, %



The Revised Fiscal Plan macroeconomic forecast reflects updates made to source data. New editions of the Congressional Budget Office Economic Outlook and IMF World Economic Outlook have been released since the Currently Effective Fiscal Plan was developed. In addition, the disaster relief pass-through has been revised back to 18% (consistent with the Government’s September 7, 2018 Fiscal Plan) and the omission of programs and services related to federal disaster relief funding from capital investment made in the Currently Effective Fiscal Plan has been corrected for consistency with the statistical model and previous editions of the Fiscal Plan.

4.1 Disaster Relief Funding

In November 2017, the Government presented the Build Back Better Plan to Congress, which included a preliminary description of the damage caused by the onslaught of hurricanes Irma and María, along with an initial evaluation of the recovery funds required to rebuild Puerto Rico in a way that was stronger, smarter, and more resilient. On August 8, 2018, the Central Office of Recovery, Reconstruction and Resiliency (COR3)⁶ delivered to Congress Governor Rossello’s Economic and Disaster Recovery Plan as required by the Bipartisan Balanced Budget Act of 2018. The Government has expanded the discussion and methodology of Build Back Better Plan to continue directing the recovery processes to rebuild a new Puerto Rico.

The *Transformation and Innovation in the Wake of Devastation: An Economic and Disaster Recovery Plan for Puerto Rico* (the “Recovery Plan”) outlines the Governor’s vision for Puerto Rico’s recovery built around four core principles: (1) promoting effective governance and transparency, (2) investing in building the capacity needed both for reconstruction and for the future of Puerto Rico, (3) incorporating resiliency into everything that is built and done, and (4) pursuing innovation in the recovery wherever possible. The Recovery Plan is divided into 17 initiatives with the purpose of making Puerto Rico stronger and more resilient, while guaranteeing a long-term economic recovery.

⁶ Following the devastation wrought on Puerto Rico in the wake of Hurricane María, Governor Rosselló signed Executive Orders Nos. 2017-065 of October 23, 2017 and 2017-069 of November 10, 2017. The Executive Orders directed the Puerto Rico Public-Private Partnership Authority to organize COR3 a division of the P3 Authority for the purpose of assuming the principal responsibility of developing and implementing a strategic plan for the reconstruction of Puerto Rico after the passage of Hurricanes Irma and María. The P3 Authority formalized the creation of the COR3 on December 8, 2017 pursuant to Resolutions 2017-39 and 2017-41 of the Board of Directors of the P3 Authority. The COR3 is based on best practices identified in the recovery and reconstruction efforts of the States of Louisiana and New York after Hurricane Katrina and Super Storm Sandy. The COR3 is also based on the successful Puerto Rico ARRA Program Management Office established within PRIFA in 2009 to direct the investment and deployment of funds awarded to Puerto Rico under the American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5 (“ARRA”).

Building on these principles, the vision for Puerto Rico seeks to define how it will fit into the economy, environment, and the society of the future at not only the national but also the global levels. Puerto Rico has much to contribute to America's success as a global leader, and the Recovery Plan sets the foundation for a strong, resilient, and thriving Puerto Rico. This plan addresses how Puerto Rico can accomplish this as (1) a source of the "Human Cloud," (2) a platform for innovation, (3) "open for business," (4) a connector of the Americas, and (5) a place that enhances the quality of life of the U.S. citizens of Puerto Rico. Each of these components of the vision strengthens the Island's ability to be a leader in a global economy.

The path presented in the Recovery Plan is not only essential to Puerto Rico's recovery and reconstruction, but also marks a key opportunity for America to correct course on the patchwork of separate, unequal and incoherent federal laws and policies that have limited Puerto Rico from reaching its full potential to date. The plan presents an opportunity to build on the policies of fiscal stabilization and debt restructuring laid out in PROMESA and to invest in a way that revitalizes the Island and people as an asset for America's national and global economic success.

In preparing the Recovery Plan, the Government has also taken into account the requirements of Section 21210(a)(6) of the Bipartisan Budget Act of 2018, Pub. L. 115-123, which establishes that the Recovery Plan must be certified by the Oversight Board to be consistent with the purpose set forth in section 101(a) of PROMESA (48 U.S.C. 2121(a)). Toward that end, a draft of the Recovery Plan was delivered to the Oversight Board during its development and the final version of Recovery Plan has been provided for their analysis in compliance with the Bipartisan Budget Act of 2018. On August 28, 2018, the Oversight Board certified that the Economic and Recovery Plan satisfies the requirement in Section 2010(a)(6) of the Bipartisan Budget Act of 2018.

The recovery funding that Congress has appropriated to date should provide the resources needed to jumpstart this vision. The Government is fully committed to invest those federal resources responsibly and wisely and to take the actions necessary to modernize government structures and truly transform Puerto Rico. Toward that end, COR3 will serve as a focal point for strategic thought and management of the recovery. This office will lead the implementation of the Governor's vision and coordinate with other stakeholders across the Island and across the nation to make it a reality.

In its development, COR3 worked closely with a long list of federal government agencies, the Homeland Security Operational Analysis Center (HSOAC, a federally funded research and development center operated by the RAND Corporation under contract with the U.S. Department of Homeland Security), municipalities, the private sector, the nonprofit sector, and others to begin the process of developing and operationalizing this shared vision for Puerto Rico.

Disaster spending has a short-term stimulative effect on an economy post-crisis. While the fiscal impact of the spending is short-lived, disaster relief spending also serves an important function as a means to rebuild the Island's productive capital and its long-term productive capacity.⁷ In Puerto Rico, the level of public and private disaster relief spending is anticipated to be significant when compared to the overall size of the economy. Public and private disaster relief spending will impact the economy in two ways in the short term:

- **Short-term stimulative impact caused by spending on the Island.** This stimulus will come in multiple forms, such as construction companies hiring local, unemployed workers, or

⁷ Relief aid after the Haitian Earthquake represented nearly 200% of overall GDP, providing a major economic "cushion" after the disaster. In Grenada, disaster aid after Hurricane Ivan (2005) equaled about two-thirds of GDP at the time, and after declines in growth immediately following the hurricane, Grenada's economy grew at a faster rate than any year since 1985, at a clip of 12.5%. However, revenues returned to pre-storm levels after about two fiscal quarters.

workers from the mainland U.S. paying local withholding taxes and spending money for food and lodging.

- **Expected refurbishment of the capital stock on the Island.** The Revised Fiscal Plan factors in significant damage to the Island's capital stock that is repaired, rebuilt, and augmented in large part, by this significant infusion of federal and private monies, contributing to increase in long-term trend growth by rebuilding destroyed capital and contribution to long-term productive capacity.

The Revised Fiscal Plan projects that ~\$86 billion of disaster relief funding including federal and private sources, will be disbursed in the reconstruction effort. It will be used for a mix of individual assistance (e.g., reconstruction of houses, personal expenditures related to the hurricane such as clothing and supplies), public assistance (e.g., reconstruction of major infrastructure, roads, and schools), and to cover part of the Commonwealth's share of the cost of disaster relief funding (states often must match some portion of federal public assistance funds).

FEMA now estimates ~\$60 billion in public assistance funding⁸ but the Government is assuming ~\$46 billion in FEMA public assistance for several reasons. Generally, Puerto Rico is treated more stringently than other states. In addition, implementation of new recovery programs and application of unique requirements are delaying recovery progress. Also, acceptance of Section 428 has been conditioned on certain improvements to the program which are not being met. At the current pace, the deadline for achieving agreement on all Fixed Cost Estimates (FCE) is not likely. FEMA's position on limiting its authority to waive the pre-existing condition rebuild requirement. For example, a project to rebuild 64 damaged schools would cost \$435 million if they are rebuilt to pre-existing conditions, versus \$1.4 billion if rebuilt to modern standards, including new standards relating to resilience to natural disasters.






Of the total \$86 billion disaster relief funding, ~ \$46 billion is estimated to be FEMA public assistance funding, ~\$20 billion is expected from CDBG funding, ~\$2.5 billion is expected from FEMA funding for individual assistance, and ~\$9.5 billion is expected from other federal funding such as mission assignments. In addition, ~\$8 billion is estimated to be disbursed from private and business insurance pay outs.

A total of \$3.7 billion in CDBG funding is estimated to be allocated to offset the Commonwealth's and its entities' expected cost-share requirements under federal programs. This portion of CDBG funding will go towards covering the ~10% cost share burden on expenditures attributable to the Commonwealth between fiscal year 2019 and fiscal year 2025, and the ~10% cost share burden attributable to PREPA, PRASA, and HTA between fiscal year 2019 and fiscal year 2032. While current statute calls for CDBG funds to be spent over the next seven years, HUD has historically extended the expenditure deadlines for countless CDBG-DR recipients including: Texas after Hurricane Ike, Louisiana after Hurricane Katrina, and Mississippi after Hurricane Katrina. Given the magnitude of the devastation experienced in Puerto Rico on account of both Hurricane Maria and Hurricane Irma, it is assumed that Puerto Rico will receive an extension to the 7-year CDBG expenditure deadline.

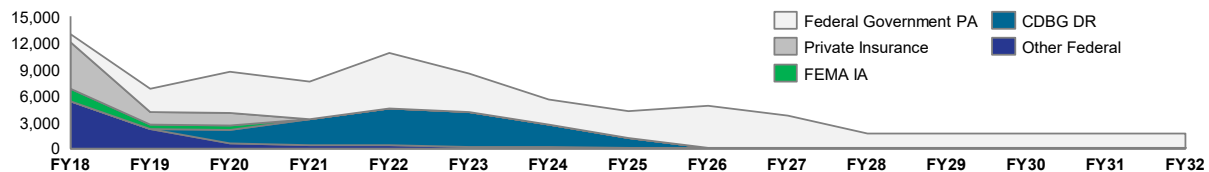
The estimated ~10% cost share comes from a weighted average of all categories of FEMA Public Assistance funding expected to be received by Puerto Rico, and is informed by specific FEMA cost share guidelines (**Exhibit 8**). It is also estimated there is an approximate one-year lag between cost share receipts and CDBG funding.

⁸ Public Assistance is inclusive of \$4 billion of FEMA Hazard Mitigation funding. This amount excludes approximately \$4.5 billion of mission assignments.

EXHIBIT 8: PROJECTED PRIVATE AND PUBLIC DISASTER RELIEF FUNDING AND ROLL OUT

| | FY18 | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | FY25 | FY26 | FY27 | FY28 | FY29 | FY30 | FY31 | FY32 + | Total | Total |
|---|----------|---------|---------|---------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|--------|
| | \$M | \$M | \$M | \$M | \$M | \$M | \$M | \$M | \$M | \$M | \$M | \$M | \$M | \$M | \$M | \$M | % |
| Federal Public Assistance  | \$997 | \$2,675 | \$4,622 | \$4,265 | \$6,277 | \$4,390 | \$2,872 | \$3,039 | \$4,744 | \$3,708 | \$1,651 | \$1,651 | \$1,651 | \$1,651 | \$1,651 | \$45,843 | 55.7% |
| | 2.2% | 5.8% | 10.1% | 9.3% | 13.7% | 9.6% | 6.3% | 6.6% | 10.3% | 8.1% | 3.6% | 3.6% | 3.6% | 3.6% | 3.6% | | |
| CDBG-DR¹  | - | - | \$1,585 | \$2,864 | \$4,133 | \$4,028 | \$2,578 | \$1,114 | - | - | - | - | - | - | - | \$16,302 | 19.8% |
| | - | - | 9.7% | 17.6% | 25.4% | 24.7% | 15.8% | 6.8% | - | - | - | - | - | - | - | | |
| FEMA Individual Assistance²  | \$1,437 | \$533 | \$533 | - | - | - | - | - | - | - | - | - | - | - | - | \$2,502 | 3.0% |
| | 57.4% | 21.3% | 21.3% | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Private Insurance  | \$5,235 | \$1,383 | \$1,383 | - | - | - | - | - | - | - | - | - | - | - | - | \$8,000 | 9.7% |
| | 65.4% | 17.3% | 17.3% | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Other Federal Funding  | \$5,335 | \$2,205 | \$534 | \$421 | \$379 | \$128 | \$128 | \$79 | \$79 | \$58 | \$50 | \$50 | \$50 | \$47 | \$47 | \$9,592 | 11.7% |
| | 55.6% | 23.0% | 5.6% | 4.4% | 4.0% | 1.3% | 1.3% | 0.8% | 0.8% | 0.6% | 0.5% | 0.5% | 0.5% | 0.5% | 0.5% | | |
| Total³ | \$13,003 | \$6,796 | \$8,656 | \$7,550 | \$10,789 | \$8,546 | \$5,578 | \$4,232 | \$4,823 | \$3,766 | \$1,701 | \$1,701 | \$1,701 | \$1,699 | \$1,699 | \$82,240 | 100.0% |
| Spending as a % of GNP | 19.3% | 9.5% | 11.5% | 9.8% | 13.4% | 10.3% | 6.6% | 5.0% | 5.6% | 4.4% | 2.0% | 2.0% | 2.0% | 1.9% | 1.9% | | |
| CDBG cost share | - | - | \$266 | \$460 | \$424 | \$625 | \$437 | \$286 | \$302 | \$255 | \$199 | \$89 | \$89 | \$89 | \$177 | | |

Disaster aid by source of funding, \$M



1 Excludes CDBG offset for FEMA cost match
 2 ~\$2.5 billion is current FEMA projected funding for Maria-related disasters
 3 Total disaster relief is \$85.9 billion when the CDBG offset for FEMA cost match is included

The major sources of disaster relief funding are detailed below:

- FEMA Disaster Relief Fund (DRF):** FEMA provides Individual Assistance to individuals and families who have sustained uncovered losses due to disasters. FEMA also provides Public Assistance for infrastructure projects and other permanent improvements.⁹ The FEMA-PA spend curve is based on the spend curve experienced following Hurricane Katrina.¹⁰ Relative to the Currently Effective Fiscal Plan, the FEMA-PA spend curve included herein is flatter with lower spend upfront and a less significant decline in the latter years. The extended spend curve relative to the Currently Effective Fiscal Plan is also based on operational issues the Government is experiencing. For instance, Puerto Rico’s acceptance of section 428 of the Stafford act was conditioned on certain improvements to the program which are not being met. COR3 has been drafting, submitting, and agreeing on Damages, Descriptions, and Dimensions (DDD’s) with FEMA, but the process from DDD to Fixed Cost Estimate (FCE) has stalled, slowing down the flow of funds despite the continuous identification of disaster recovery related needs. In addition, the 270 process has become an onerous requirement which augments the reporting burden and impedes standard procedure by delaying the process. While COR3, has been working closely with FEMA to address these areas of concern, there has yet to be a material pick up in FEMA-PA Obligations.

⁹ The Revised Fiscal Plan does not account for Operations and Administration funding, which only flows to federal agencies. Rather, it looks at funds that are spent for reconstruction on-Island, though those funds could flow to firms that are local or external.

¹⁰ See “United States Government Accountability Office Report to Congressional Committees Sept 2016 Federal Disaster Assistance” report.

- **HUD Community Development Block Grant-Disaster Recovery (CDBG-DR):** Based on a housing recovery plan, HUD provides CDBG-DR funding that can be used for assistance to individuals (e.g., housing repair), for public assistance (e.g., infrastructure development), and for covering disaster relief funding match among other things. To date, two action plans have been approved, leading to the approval of ~\$9.7 billion in CDBG federal relief funding. The first action plan was approved on July 29, 2018 and outlined the uses of the approximately \$1.5 billion in CDBG-DR made available by Congress on February 1, 2018. The allocation focused primarily on addressing urgent housing and socioeconomic needs and laying the foundation for the next phase of the long-term recovery. The foundational approaches included: planning, housing, economy, and infrastructure. An amended action plan was approved on March 1, 2019 and incorporated an additional ~\$8.2 billion in CDBG-DR funding. This Substantial Amendment amended program scope and budget in some of the original 19 programs from the initial Action Plan, and included eight additional programs for unmet needs. The Revised Fiscal Plan also assumes that \$3.7 billion in CDBG funding will be used to cover cost share for the Commonwealth and its instrumentalities.
- **Private insurance funding:** Large personal property and casualty losses have been incurred in the aftermath of Hurricane Maria. Early analysis of data from the Office of the Insurance Commissioner of Puerto Rico, adjusted for self-insured and other types of coverage, was used to determine the total amount that will be paid out to individuals and businesses for major damages.
- **Other supplemental federal funding:** Additional federal funding has been allocated to various agencies and projects in Puerto Rico following the hurricane. This money is directed at a wide range of recovery efforts, from reconstruction of damaged buildings (for example, funding to repair damage to Job Corps centers in Puerto Rico) to funding for health programs and environmental management (for example, NOAA coastal habitat restoration funding).

Disaster roll out for FEMA public assistance funds have been projected in line with historical spending on other major disaster events, particularly Hurricane Katrina in Louisiana. Rollout was then slowed to reflect Puerto Rico specific conditions: Public Assistance rolls out over the next 15 years. An extension past the current seven-years as per the statute is assumed for CDBG expenditures. Seven-year CDBG roll out assumptions are derived from HUD projections, and additional CDBG funding is assumed to cover the FEMA public assistance cost share requirements post FY2025. Individual assistance and private insurance are assumed to have been spent in the immediate aftermath of the storm.

Disaster relief funds will impact the economy in a number of ways: building the capital stock of the Island by constructing, repairing, or replacing damage to buildings, utilities, or other physical goods, directly through consumption of goods and services on the Island, or funding programs and services on the Island. The Plan estimates the rate of pass-through to the economy for these different types of funding as follows:¹¹

- A 100% pass-through rate is assumed for funding that is used directly and in full to replace income or stimulate spending on goods and services originating on the Island. Hence, this corresponds to the final consumption expenditure that are spent on the island for immediate disaster relief needs, and that are financed by transfer payments from Federal Disaster Relief Spending funds. This kind of current expenditure or final consumption expenditure on relief goods and services does not contribute to the capital stock on the Island, and therefore does

¹¹ Estimated using local contracts for PREPA, residential construction and school construction. These contracts were estimated to have between 10% and 18% pass-through on the economy, respectively, which was then augmented by 5.5% average spend on transportation and logistics on construction projects, which rely on 100% domestic labor. Historical FEMA spending and the percentage of DHS contracts awarded to local Puerto Rican firms supported this figure.

not contribute to long-term growth. A 100% pass-through rate is assumed for funding that is used directly and in full to replace income or stimulate spending on goods and services originating on the Island. This kind of spending does not contribute to the capital stock on the Island, and therefore does not contribute to long-term growth.

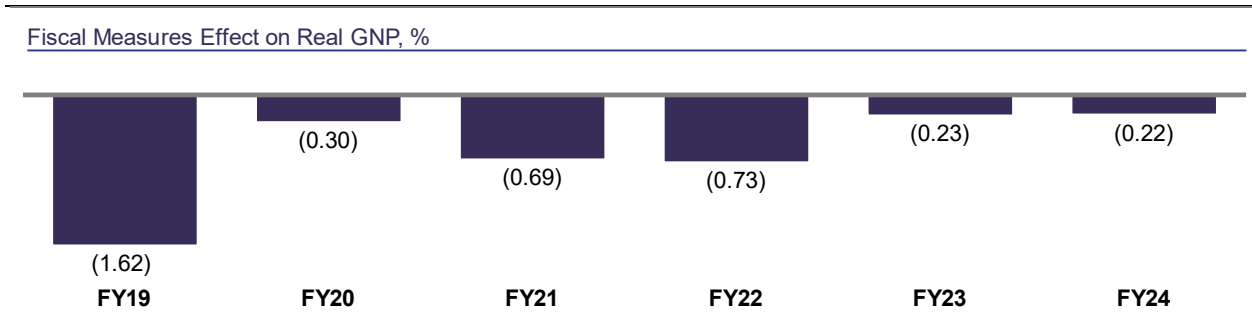
- An 18% pass-through rate is assumed for all other funding, including funding used to construct, repair, and replace buildings, utilities, and other physical goods, or funding directed toward programs and services on the Island. The pass-through of 18% consists of a base pass-through rate of 12.5% estimated using a weighted average of FEMA and non-FEMA individual and public assistance based on study of historical reconstruction spending contracts. It is augmented by a 5.5% addition for on-cost logistics for a total pass-through rate of 18%. The 18% represents the portion of funding spent on-Island on labor and on-Island services. The remaining 82% corresponds to capital expenditures or fixed capital formation, and consists of spending on goods and services intended to create future benefits, such as infrastructure investment in transport, health, communication, education, etc.¹².

4.2 Economic Outlook

4.2.1 Impact of fiscal measures and structural reforms

By optimizing revenue collection and reducing government-wide expenditures, fiscal measures seek to streamline and transform the Government of Puerto Rico to a size appropriate for its population. Such policy actions will generate a contractionary impact on the economy in the short term, but are necessary to drive fiscal sustainability in the long term. The net effect of these two forces is still significantly positive from a fiscal savings perspective. In addition, the economic contraction estimated from cost-saving measures is limited in the long-term, while such measures are critical for providing long-term financial stability. The macroeconomic impact of the measures is summarized in **Exhibit 9** below.

EXHIBIT 9: MACROECONOMIC IMPACT OF FISCAL MEASURES, INCLUSIVE OF DISASTER RELIEF SPENDING

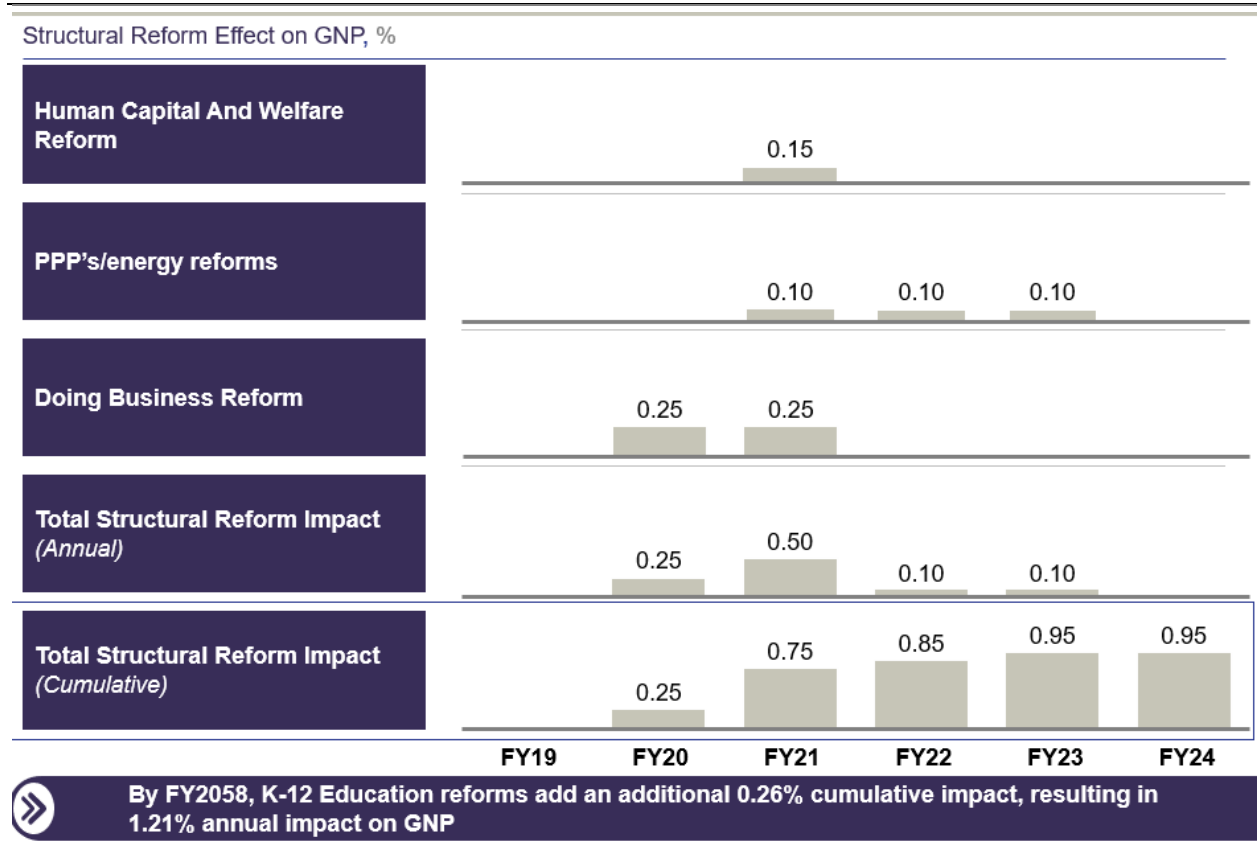


The timing and impact of structural reforms are based on work done by the IMF on similar reforms implemented in Europe (e.g., Spain and Estonia), South America (e.g., Peru and Colombia), among other jurisdictions, utilities reform in Latin America, and broadly accepted metrics for measuring improvement in the World Bank’s Ease of Doing Business Rankings.

¹² The Government recognizes all capital formation related expenditure consistent with the above definition as yielding an increase in Puerto Rico’s capital stock. This recognition drives a material difference with the FOMB plan, which excludes a category of capital expenditures defined as funding that is directed towards programs and services (e.g., private insurance payments to reimburse personal auto expenditures). The Government views programs and services that lead to increases in the capital stock, such as new auto expenditures, as on-island fixed capital formation that increases the capital stock. The FOMB excludes these from the capital stock.

Structural reform benchmarks generally come from nations or jurisdictions without monetary policy options and large informal labor markets, like Puerto Rico. Labor, energy, and doing business reforms are projected to increase GNP by 0.95% by FY2024 (**Exhibit 10**). K-12 education reforms add an additional 0.01% annual impact beginning in FY2033, resulting in a total annual GNP increase from structural reforms of 1.21% by FY2058.

EXHIBIT 10: MACROECONOMIC IMPACT OF STRUCTURAL REFORMS

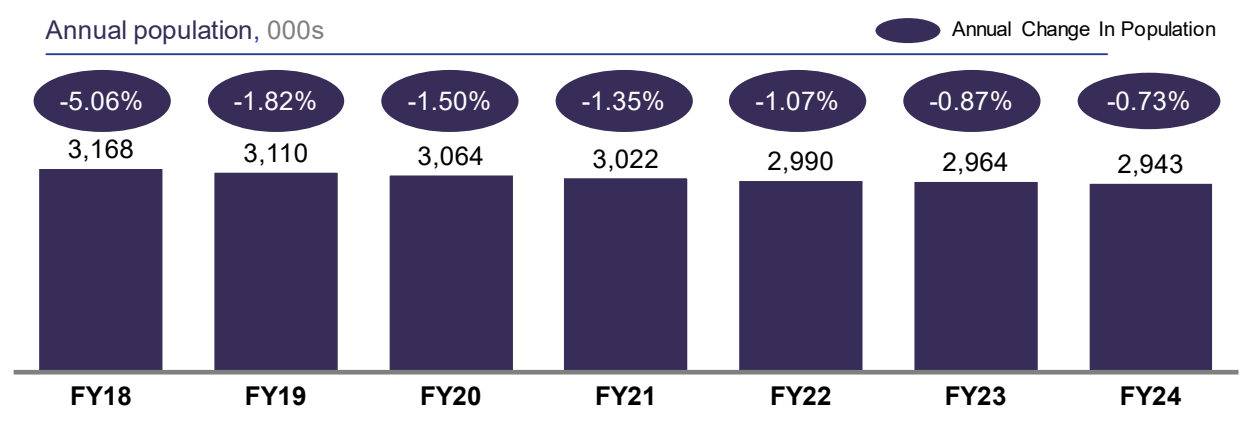


4.2.2 Population projections

In the five years prior to Hurricanes Irma and Maria, Puerto Rico's population trended downward by 1-2% every year as residents left to seek opportunities elsewhere and birth rates declined.¹³ The trend of outmigration accelerated after the storm as population declined by ~5.1% in FY2018. While some are expected to return as the Island rebuilds, population is projected to decline a further 5.4% over the next six years (**Exhibit 11**). In the long term, population is projected to continue to decline, but at a rate slower than the years immediately following the hurricanes. One key element of the population projection is the assumption that the low historical rate of immigration in Puerto Rico will continue.

¹³ Federal Reserve Bank of St. Louis Economic Research (FRED).

EXHIBIT 11: PROJECTED POPULATION CHANGE



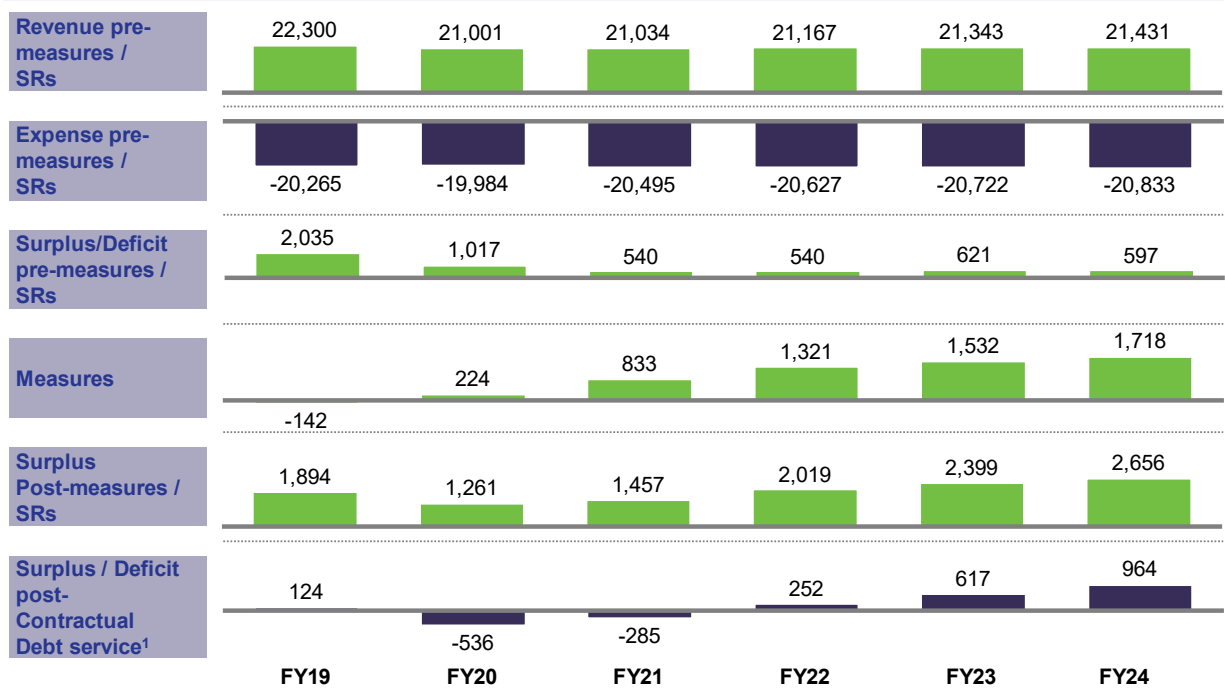
The Currently Effective Fiscal Plan includes population growth of -5.1% for FY2018, for a population of 3,165,469. Population estimates as of July 1, 2018 of 3,168,273, suggest a decline of -5.1% (from 3,337,177 in July 2017). The Revised Fiscal Plan includes updates to these population figures, which reflect less outmigration than previously expected.

Chapter 5. FISCAL PLAN FINANCIAL PROJECTIONS

Before measures and structural reforms (“baseline forecast”), there is a pre-contractual debt service surplus through FY2024. The surplus is due, in part, to revenues that are bolstered by a positive macroeconomic trajectory resulting from the massive disaster relief funding stimulus. Over the long term, the baseline forecast surplus is not sustainable as Federal disaster relief funding slows down, supplemental Medicaid funding phases out, Act 154 and Non-Resident Withholding revenues decline, and pensions and healthcare expenditures rise. Fiscal measures and structural reforms contained in the Revised Fiscal Plan help transform what would be a cumulative deficit into a cumulative surplus through FY2024 (**Exhibit 12**) prior to the COFINA settlement and post-contractual debt service, as structural reforms will drive a 1.21% increase in growth (by FY2058), and fiscal measures will drive ~\$5.5 billion in savings and extra revenue through FY2024. However, even after fiscal measures and structural reforms, there is an annual pre-contractual debt service deficit reflected in the projection starting in FY2035.

EXHIBIT 12: PROJECTED DEFICIT / SURPLUS PRE- AND POST-MEASURES AND STRUCTURAL REFORMS

Projected deficit / surplus pre- and post- measures and structural reforms (“SRs”), \$M

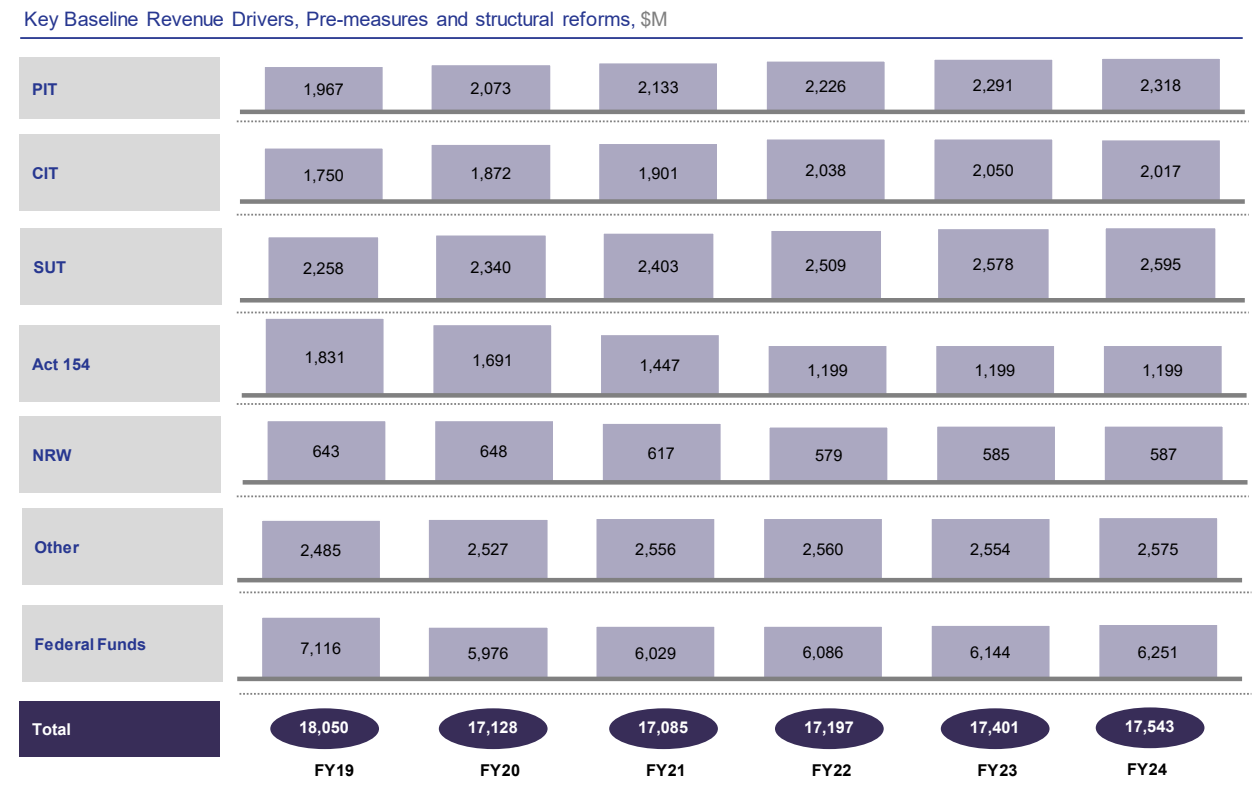


¹ Debt service based on prepetition contractual debt obligations. Presented for illustrative purposes only and does not represent anticipated future payments on restructured debt. Excludes HTA, UPR, PREPA, PRASA, Children’s Trust, and COFINA

5.1 Baseline revenue forecast

Major revenue streams (**Exhibit 13**) include non-export sector General Fund revenues (including individual, corporate, and sales and use taxes) and export sector revenues (including Act 154 excise taxes paid by multinationals operating on the Island, and Non-Resident Withholdings), as well as federal funding.

EXHIBIT 13: MAJOR REVENUE CATEGORIES PRE-MEASURES AND STRUCTURAL REFORMS



5.1.1 Non-export sector General Fund revenue projections

In the midst of a decline in economic activity from FY2017 to FY2018, income tax collections proved more resilient than the economy as a whole. A close analysis of the underlying data reveals that tax collections in FY2018 were buoyed by tax receipts from mainland corporations remitting taxes in Puerto Rico related to recovery-related activities and associated consumption activity. The forecast for FY2019 and beyond attempts to segregate these recovery-related revenues from revenues driven by recurring on-island economic activity.

Individual income taxes: Individual income taxes are highly concentrated, with 78.2% of revenues coming from the 8.7% of returns reporting income above \$60,000.¹⁴ FY2018 revenue was impacted by mainland corporations ramping up activity to support disaster recovery related projects. The revenue associated with this activity has been excluded from the base used to forecast FY2019 and onward. Growth in PIT is indexed to Puerto Rico nominal GNP which captures the impact of continued disaster related recovery spend.

Corporate income taxes: There is also concentration in tax receipts among the largest corporations operating in Puerto Rico (e.g., ~29% of corporate income taxes are paid by 20 corporate taxpayers).¹⁵ Based on aggregated data from Hacienda, and outperformance of revenues relative to GNP, the Revised Fiscal Plan estimates that \$245 million in corporate tax revenues resulted from recovery-related economic activity in FY2018, due to the influx of corporate activity spurred by reconstruction funding, mainland-based firms entering the Island

¹⁴ Hacienda historical reports as of April 2018.

¹⁵ Hacienda historical reports as of April 2018.

economy, and Puerto Rican firms receiving new business. Corporate income tax revenues associated with baseline economic activity change in tandem with Puerto Rico nominal GNP, while the portion related to recovery-related activities persist through the recovery period and is consistent with the pacing of disaster related spend. This is different than the PIT assumption because the profits generated by these mainland corporations are not captured within Puerto Rico nominal GNP.

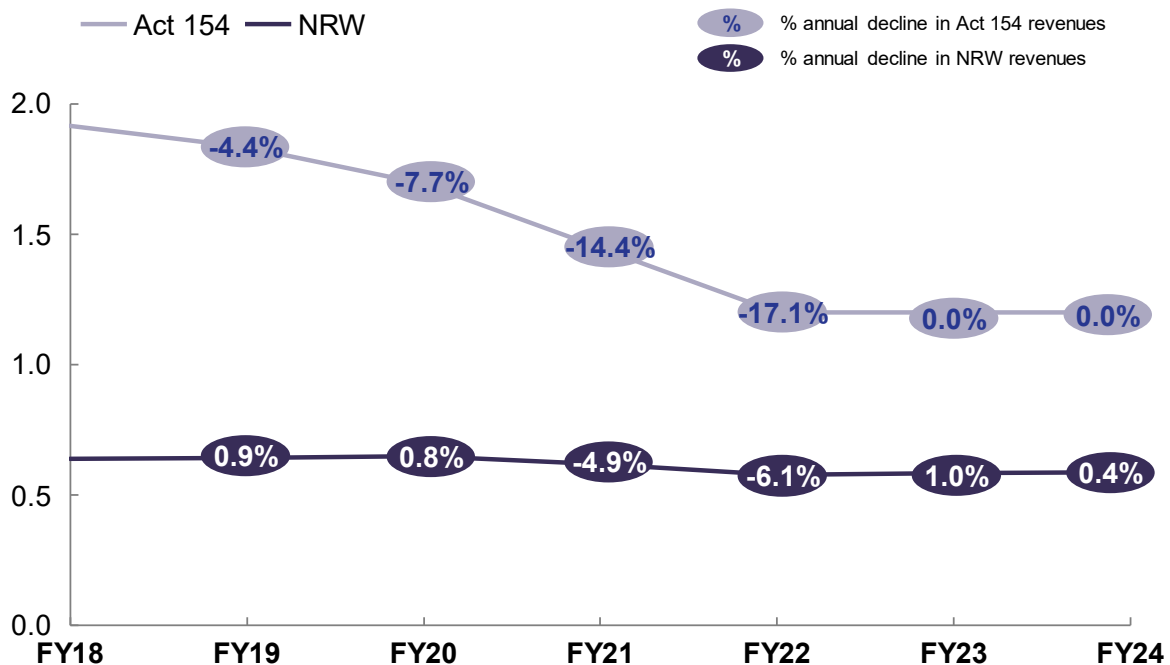
Sales and use taxes (SUT): Like corporate and personal income taxes, SUT revenues were likely boosted by the increased economic activity resulting from the post-disaster reconstruction process (including through replacement of lost inventory), as well as enhanced compliance by those firms less impacted by the storm. SUT is treated similarly to PIT whereas a base amount for FY2018 is determined and then grown consistent with Puerto Rico nominal GNP. Following the COFINA Title III Plan of Adjustment, a portion of SUT collections will be used to pay the settlement going forward. This portion reaches about \$1 billion annually starting in FY2041. Additionally, in FY2019, there was a receipt of \$42.3 million due to prior year SUT collections.

Other General Fund Revenue (Motor Vehicles, Alcoholic Beverages, Cigarettes): In FY2018 other General Fund revenues were impacted differently by the economic activity following the storm. Of particular note, disaster related spend had an estimated positive impact on motor vehicle revenue of \$55 million which is estimated to be due to many residents replacing motor vehicles in the wake of the storm and purchases of vehicles to support recovery-recovery activities. The expected recovery related surge in motor vehicle revenue is expected to continue in FY2019 with \$100 million of revenue incremental to what baseline economic growth would suggest. After FY2019, motor vehicle revenue is determined by growing the base amount (excluding the \$100 million) at Puerto Rico nominal GNP.

Export sector revenue projections: Act 154 and Non-Resident Withholding (NRW) tax revenues have proven to be less resilient than other types of revenues after the hurricane. Both revenue types are concentrated in a small number of multinational corporations, and the absence of payments from large payers in previous years has had an impact on the overall trendline of these revenues. From FY2018 to FY2024, Hacienda estimates that ~37% of Act 154 and 8% of NRW revenues will erode (**Exhibit 14**) due to the combination of federal tax reform (reducing Puerto Rico's attractiveness as a low tax jurisdiction for multinationals) and hurricane impacts (creating challenges of restoring manufacturing operations and exporting).

EXHIBIT 14: PROJECTED ACT 154 AND NON-RESIDENT WITHHOLDING (NRW) REVENUES

Projected annual Act 154 and NRW revenues, \$M



5.1.2 Medicaid funding

Medicaid costs are typically funded primarily by the Commonwealth, as there is a cap on available federal funding. Typical annual federal funding streams for the Commonwealth are the following, projected based on current law and statutory growth rates:

- **Standard annual federal Medicaid funding.** Although Puerto Rico has a 55% federal matching assistance percentage (FMAP), the amount of annual federal funding received under Section 1108 is capped each year. For FY2019, this funding stream was capped at \$369.6 million, and though the cap grows each year at Medical CPI-U, it does not keep pace with healthcare expenditure growth.¹⁶
- **Children’s Health Insurance Program (CHIP) funding.** CHIP funding is not subject to a federal cap. It also has a higher FMAP at 91.5%, though this federal cost share is projected to decrease in FY2020 with the expiration of the Affordable Care Act’s temporary increase. In FY2019, this amount totaled \$167.7 million.
- Each year, funds are passed directly through to the Department of Health. These primary annual disbursements of \$176.9 million go to Federally Qualified Health Centers (Centros 330, “FQHC”) and Medicaid Operations. As a result, baseline federal funding available to cover Vital and CHIP premiums totals only \$119 million in FY2019.

¹⁶ According to §1108(g) of the Social Security Act., from 2011 to 2016, the cap grows by the medical component of CPI-U as reported by BLS each year. From FY2011-FY2016, this growth averaged 2.9%. This inflation rate differs from the healthcare inflation index for Medicaid and Medicare used elsewhere in this Revised Fiscal Plan (0.5% to 5.1% from FY2019-FY2024, and remaining constant at 5.1% through FY2058). Instead, the medical component of CPI-U includes other factors that lower the inflation rate by approximately 3-5 percentage-points, meaning the increase in the federal funding cap will not keep up with actual increases in expenditures.

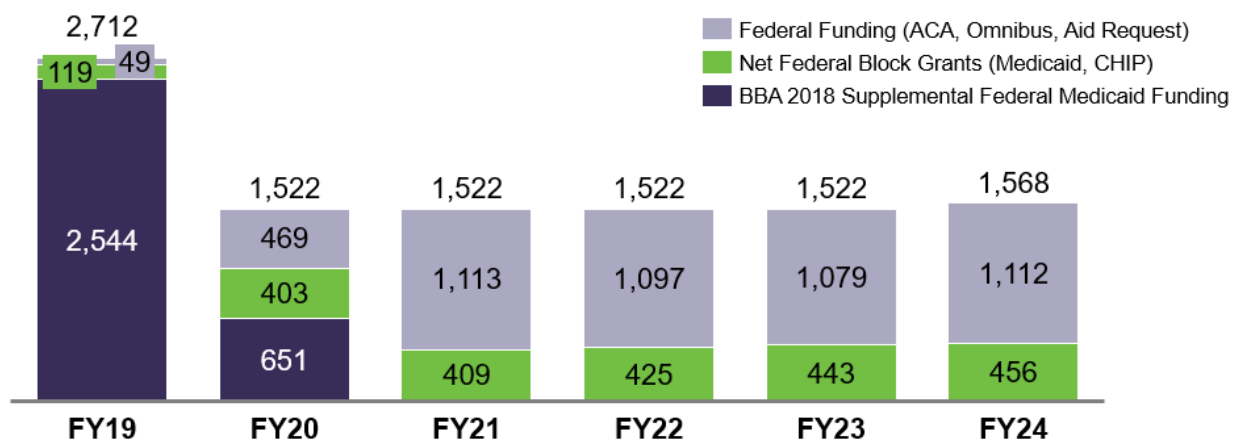
In February 2018 the Bipartisan Budget Act of 2018 (BBA) allocated a supplemental \$4.8 billion of federal funding to Puerto Rico Medicaid for use between January 2018 and September 2019. Per guidance from the Centers for Medicare and Medicaid Services, this funding is estimated to apply only as a reimbursement for eligible populations (i.e., federally funded Medicaid expenditures). The Puerto Rico Health Insurance Administration (ASES) will spend as much of the BBA allocation as possible before drawing down any remaining ACA funds, which can resume use from September 30, 2019 until expiration in December 31, 2019. Depending on the exact costs incurred in eligible spending buckets, ASES will be able to absorb approximately \$4.4 billion of the allocated BBA funding for core Medicaid expenditures.¹⁷ It will continue to receive its annual CHIP,¹⁸ FQHC, and DOH Medicaid operations funding.

- Beginning in FY2020, it is assumed that Puerto Rico receives incremental federal funding consistent with a recent request by the Government to the Federal Government for annual support of approximately \$1.7 billion.

Exhibit 15 outlines expected Medicaid federal fund receipts.

EXHIBIT 15: MEDICAID EXPECTED FEDERAL FUND RECEIPTS

Medicaid Federal funding sources, \$M



5.1.3 Other federal funding

In addition to Medicaid funding, Puerto Rico receives other federal funds on a regular basis. (These are not to be confused with disaster relief funds, which are directly tied to post-storm reconstruction activity.) These funds typically cover both social benefits and operational expenditures. In the Revised Fiscal Plan, these funds have been modeled based on what types of costs they cover (e.g., benefits or operations) as well as the statutory formula that defines the size of Puerto Rico’s allotment. For example, while TANF funds are typically pass-through (e.g., none

¹⁷ Current assumption is that only federally funded Medicaid beneficiaries (excluding all CHIP and Commonwealth members) are eligible for reimbursement using BBA funds. These beneficiaries represent approximately 88% of total MCO disbursements, 100% of Platino premiums, all administrative costs, and less any cost-saving measures that reduce reimbursable spend during the timeframe.

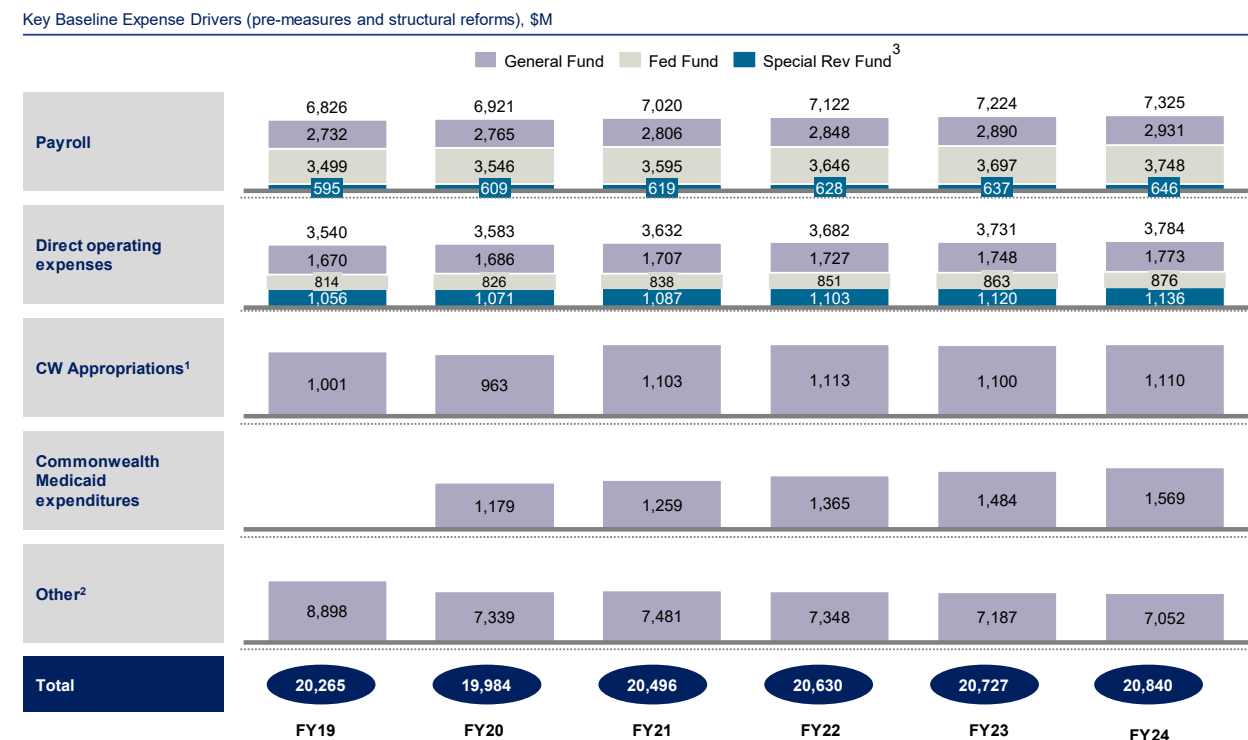
¹⁸ CHIP funding will continue at 91.5% FMAP until expiration of the ACA enhanced FMAP in September 2019. At that point, FMAP will return to 68.5% pre-ACA level, according to §2101(a) of the Affordable Care Act which amended §2105(b) of the Social Security Act. Post ACA levels for FMAP from FY2020 will remain at 55% for Core Medicaid/90% for newly eligible-1/3 fed qualified population/80%CHIP for an effective blended rate of 62% from Jan 2020 onward.

of these funds go to operational costs), some Title I education funds are used for operational purposes (e.g., teachers’ salaries, school supplies for programs for students with special needs, etc.). For the former, federal fund inflows and outflows mirror each other (as benefit needs decline, so do funds). For the latter, though inflows may decline, it does not necessarily mean expenditures decline as well – as expenditures are based on operations, not on benefits formulas. Meanwhile, while Head Start funds are allocated from the Federal Government based on the number of children living in poverty, NAP funds are provided through a block grant that is capped. The former, therefore, should change by population, while the latter should be consistent regardless of population size.

5.2 Baseline expenditure forecast

Over the next six years, baseline expenditures are set to increase relative to FY2019 due to inflation and increases in Medicaid costs (**Exhibit 16**).

EXHIBIT 16: MAJOR EXPENDITURE CATEGORIES PRE-MEASURES AND STRUCTURAL REFORMS



¹ Includes appropriations to HTA, UPR, and municipalities

² Includes appropriations to utilities, pension expenses, disaster recovery cost match, Title III, reserve for emergency fund, federal Medicaid and social program contributions, maintenance capex, enterprise funds, disbursements to entities outside the fiscal plan, and other non-recurring and recurring costs.

³ The General Fund, Federal Fund, and Special Revenue Fund are all gross of IFCU's.

5.2.1 Payroll expenditures and non-payroll operating expenditures

Payroll expenditures: FY2019 payroll expense is expected to be consistent with the FY2019 certified budget, including reapportionments and adjustments that have been approved by the FOMB. The FY2019 budget includes measures described in the Currently Effective Fiscal Plan. Beginning in FY2020, base payroll is assumed to grow by Puerto Rico specific inflation rate. Any reduction to baseline payroll expenditure projections from attrition or absenteeism will be captured through fiscal measures.

Non-personnel operating expenditures: Non-personnel operating expenditures are based on the FY2019 budgeted levels, similar to payroll expenditures. Like payroll expenditures, non-personnel operating expenditures are forecast to grow by Puerto Rico specific inflation beginning in FY2020.

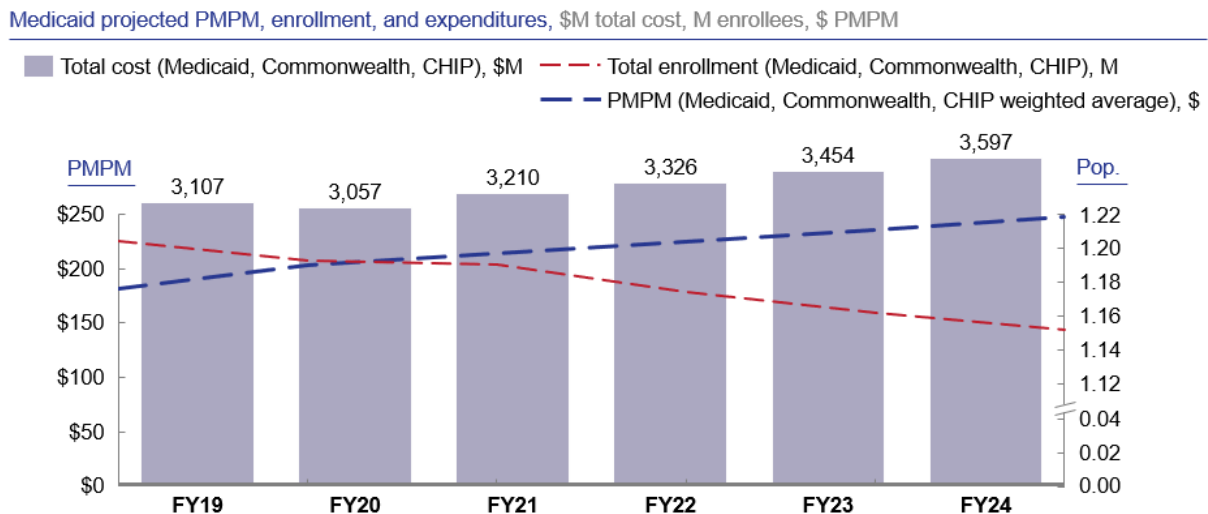
5.2.2 Medicaid costs

Medicaid costs are projected to reach over \$3.6 billion annually by FY2024 (**Exhibit 17**). These costs are primarily driven by the cost per member per month (PMPM) and the estimated number of people enrolled in Medicaid (Federal and Commonwealth), CHIP, and Platino dual eligible programs. Other categories also include health-related expenditures (e.g., HIV and pulmonary programs) and program administration.

As a result of the increased exodus of healthcare professionals to the mainland caused by Hurricanes Irma and María, ASES has begun implementing initiatives to mitigate the trend in FY2019. In order to curb the exodus and further stabilize and expand the participation of physicians and specialists, among other healthcare providers, year two of Vital’s current MCOs contract will include improved provider reimbursement rates. As a result, projected expenditures include investing approximately \$142 million to increase provider reimbursement rates from FY2020 onward.

PMPM costs are projected to grow at 5.7% on average from FY2019 – FY2021 and decrease to an annual growth rate of 5.1% in FY2024. This rate tracks pre-hurricane growth in Puerto Rico after the Island switched to a fully managed care model in 2015. As the overall population of Puerto Rico decreases, the Vital population will decline concurrently, but will likely lag overall outmigration trends by one year due to the time needed for individuals to switch to a new plan once they have left the Island. In the long term, costs increase according to an age-mix adjusted PMPM growth rate. The incremental Medicaid funding requested to the Federal Government will allow the Commonwealth to lower the income threshold to be closer to comparable US states, resulting in increased enrollment and provision of other services, this impact is not included in the baseline, but in the measures section.

EXHIBIT 17: PROJECTIONS FOR VITAL BASELINE PMPM AND ENROLLMENT (NOT INCLUDING PLATINO)



Note: Only includes Medicaid (CHIP, Commonwealth- and federally-funded). Excludes Platino dual-eligible.

Other Commonwealth expenditures, which include HIV/PDP, Health Insurance Provider Fee, Air Ambulance, MC21 administrative fee, Super Utilizers, and Pulmonary, among others, are projected to grow at the rate of Puerto Rico inflation. The Health Insurance Provider fee also must be paid per federal law unless Congress imposes a moratorium. It is calculated each year by the Federal Government, but estimated to be 1.80% of premiums.¹⁹

Expenditures for the Platino dual-eligible program were estimated using a consistent \$10 PMPM over FY2019-FY2024, representing payment for wrap-around services supplementing main Medicare coverage. Enrollment is projected to be affected similarly to Medicaid enrollment, though with less fluctuation in actual proportion of population enrolled.²⁰ Platino costs fluctuate from \$32 to 30 million from during the period FY2019 to FY2024.

5.2.3 Other expenditures

Appropriations: Baseline municipal appropriations are projected to remain constant at ~\$176 million from FY2019-FY2024 based on the FY2019 budget. The University of Puerto Rico appropriation baseline remains at ~\$646 million from FY2019 - FY2023, and increases slightly to \$655 in FY2024.

Pension costs: Projections rely on demographic estimations for Employees' Retirement System (ERS), Teachers' Retirement System (TRS), and Judicial Retirement System (JRS) populations and benefit obligations, and include updated data and actuarial projections for regular TRS benefits. From FY2019-FY2024, costs are projected to grow slowly but remain at approximately \$2.3 billion.²¹ Since FY2018, ERS pension benefits have been paid on a pay-as-you-go basis, given that the majority of the liquid assets in the retirement system have been depleted.

The projection of TRS cash flows include updated census data from FY2015 to FY2016 and higher refund contributions (cash out elections from plan participants) from the 2018 VTP program. The net effect is a positive impact of \$1.5 billion attributable to the Government not having to pay future employer contributions for participants that cashed out.

Capital expenditures: Centrally funded maintenance and capital expenditures of the Commonwealth (excluding PREPA, PRASA, HTA self-funded capex and one-time transfers) are expected to grow by inflation from a baseline of ~\$400 million in FY2018. Of this, ~\$125 million will be appropriated annually to HTA and UPR, with the remaining ~\$275 million for use by the Commonwealth. After the devastation caused by Hurricanes Irma and Maria, Puerto Rico is in a unique position to become a platform for innovation in resiliency. To this end, the Governor is making a pledge to invest 100% of available capital expenditure resources (except funds needed for UPR and HTA) solely for resiliency purposes. These amounts will be assigned to and managed by PRIFA.

HTA's capital expenditure funds will be used to support reconstruction, maintenance, traffic reduction, completion of the strategic network, and P3-related expenditures. UPR's capital expenditure funds will support, among other projects, several floors of the Molecular Sciences building, building restoration at Rio Piedras and Medical Sciences, and the development and restorations of campus buildings at Mayagüez.

¹⁹ See section 4003 of FOURTH CONTINUING APPROPRIATIONS FOR FISCAL YEAR 2018 at <https://www.congress.gov/115/plaws/publ120/PLAW-115publ120.pdf> See sec 4003. Growth estimated by Milliman Consulting and Actuary based on 2016 estimated percent of premiums calculated as the total fee due by ASES contracted MCOs divided by the total capitation paid to MCOs for the GHP program.

²⁰ Projected based on a smaller observed spike in actual enrollment from pre- to post-Maria relative to Medicaid spike

²¹ Projections for pension expenditures are provided by Milliman.

Disaster relief funding cost share: Federal funds for public assistance typically require a local match from the entity receiving them (anywhere from 10-25% of funds). The Revised Fiscal Plan projects that the Commonwealth will need to cover an estimated 10% of federal public assistance funds, amounting to approximately \$2.1 billion from FY2018-FY2033, and instrumentalities not covered under the Revised Fiscal Plan will shoulder a further ~\$2.4 billion in total cost match expenditures during the same period, for a total of ~\$4.5 billion. The Revised Fiscal Plan cost match expenditures covered by CDBG funds through FY2025 are projected to be ~\$3.7 billion, ~\$1.3 billion of which relates to the Commonwealth and ~\$2.4 billion of which relates to instrumentalities. The remaining \$765 million of Commonwealth cost share is forecast to be paid out of Commonwealth cash flows.

PROMESA-related costs: Commonwealth PROMESA-related expenditures are projected to be \$1.2 billion for FY2019 to FY2024, comprised of professional fees (approximately \$855 million over six years) and funding for the Oversight Board (\$370 million over six years). The estimate for professional fees was developed by analyzing FY2018 run-rate billings and soliciting input from certain professionals. Fees were benchmarked versus comparable restructuring situations that yield an average professional-fee-to-funded-debt ratio of 1.89% relative to 1.68% projected for the Commonwealth. It is assumed that the Plan of Adjustment is confirmed by December 2019, (**Exhibit 18**).

EXHIBIT 18: PROJECTED PROFESSIONAL FEES RELATIVE TO OTHER MAJOR RESTRUCTURINGS

Professional fees for restructuring

| | Date filed | Outstanding debt, USD | Total fees and expenses, USD | Fees to funded debt, % |
|--|------------|-----------------------|------------------------------|------------------------|
| City of Detroit, Michigan | Jul. 2013 | \$20,000,000,000 | \$177,910,000 | 0.89% |
| Residential Capital, LLC | May 2012 | \$15,000,000,000 | \$409,321,308 | 2.73% |
| Sabine Oil & Gas Corp. | Jul. 2015 | \$2,800,000,000 | \$78,553,223 | 2.81% |
| Caesars Entertainment Operating Company | Jan. 2015 | \$18,000,000,000 | \$258,278,005 | 1.43% |
| Lehman Brothers Holdings Inc. | Sep. 2008 | \$613,000,000,000 | \$956,957,469 | 0.16% |
| Lyondell Chemical Company | Jan. 2009 | \$22,000,000,000 | \$205,932,292 | 0.94% |
| American Airlines | Nov. 2011 | \$11,000,000,000 | \$391,637,858 | 3.56% |
| Washington Mutual, Inc. | Sep. 2008 | \$8,000,000,000 | \$271,085,213 | 3.39% |
| Edison Mission Energy | Dec. 2012 | \$5,000,000,000 | \$96,244,628 | 1.92% |
| Energy Future Holdings Corp. | Apr. 2014 | \$40,000,000,000 | \$450,110,233 | 1.13% |
| Puerto Rico | 2017 | \$64,000,000,000 | \$1,075,026,215 | 1.68% |

Summary Statistics

| | |
|------|-------|
| Avg. | 1.89% |
| Max | 3.56% |
| Min | 0.16% |
| Med | 1.68% |



Puerto Rico involves added complexity as the largest public sector restructuring in the history of the United States

Emergency reserve: The Commonwealth must establish an emergency reserve of \$1.3 billion, or ~2.0% of FY2018 GNP, by reserving \$130 million per year for 10 years starting in FY2019. The methodology supporting this reserve is informed by guidance provided to other Caribbean islands by the International Monetary Fund in defining an adequate emergency reserve (2-4% of GNP,

accumulated at 1/2% per year).²² Restrictions on the use of this fund will ensure that it is a true emergency reserve.

Other non-recurring expenditures: The Commonwealth's Revised Fiscal Plan includes additional disbursements totaling \$105 million in FY2020 related to the payment of federal funds that were deposited over time at the GDB. These deposits, together with all other non-federal deposits at GDB are unavailable as a result of restrictions imposed by Act 5-2017, as amended, together with Executive Orders 2016-010, 2016-14 and 2017-076, as well as with GDB's restructuring as set forth in the Restructuring Support Agreement which, in general terms, provides for the qualified modification of GDB's debt under Title VI of PROMESA.

The determination to disburse these funds from the general fund was made to mitigate the risk of potential offsets by the U.S. Treasury under the Treasury Offset Program (TOP). The Bureau of the Fiscal Service explains the TOP as follows:

- Individuals, businesses, and states owe nontax debts to the federal government for various reasons. Examples of debts owed to the federal government can include grant overpayments, loans, overpayments on projects, and debts owed to Medicare. On occasion, an entity's indebtedness to the federal government will become delinquent. As required by federal law, federal agencies submit these delinquent debts to the Treasury Offset Program (TOP) for interception of eligible federal and state payments payable to the delinquent debtor, a process known as "centralized offset."

The Government believes that there is a material risk that non-disbursement of federal funds held at GDB could trigger centralized offsets that could have material effects on other federal funds expected to be received throughout government agencies. Given the post-Hurricane crisis on the Island and the need for federal funds to reach those in great need, the disbursement of these federal funds must be prioritized through the central government.

In addition, the Revised Fiscal Plan includes \$424 million in ordinary course claims filed by United States agencies and departments that may be subject to set off by claims of the Commonwealth against the United States or any of its agencies, departments, or instrumentalities.²³

Chapter 6. LONG-TERM FINANCIAL PROJECTIONS (DSA)

The DSA is intended to provide a framework for assessing the long-term capacity of the Government to pay debt service on its bonded debt. Debt levels post-restructuring need to be sustainable over the long-term and consistent with both a minimal risk of default on the restructured debt and a recovery of market access for future new money capital borrowings for ongoing infrastructure investment. The analysis begins with the Revised Fiscal Plan and is then informed by the debt sustained by the most appropriate peer group against which to benchmark Puerto Rico. The DSA then applies rating agency metrics for that benchmark group to Puerto Rico to arrive at an assessment of what debt levels are sustainable in light of long-term projections and the peer metrics. Net tax-supported debt is defined as debt payable from statewide taxes and other

²² IMF Bahamas Article IV report published March 22, 2018.

²³ The Government reserves all rights, arguments, objections, and defenses to object to any proofs of claim filed by the United States or any of its agencies, departments, or instrumentalities.

general resources, net of obligations that are self-supporting from pledged sources other than state taxes or operating resources (such as utility or local government revenues). Puerto Rico has approximately \$41 billion of net tax-supported debt comprised of GO, PBA, COFINA, PRIFA, HTA, CCDA, ERS, PFC, and other intergovernmental loans. Net of the COFINA debt that is now the subject of a separate COFINA Fiscal Plan and was restructured pursuant to a COFINA Title III Plan of Adjustment, Puerto Rico’s other net tax-supported debt outstanding totals approximately \$28 billion.

U.S. states as peer comparables: For many reasons, U.S. states are the most appropriate comparison group to use in benchmarking sustainable debt levels for Puerto Rico. Like U.S. states, Puerto Rico does not control its own currency, has no access to IMF restructuring support programs or similar international sovereign relief funding packages, and traditionally has been reliant on access to the same long-term municipal bond market used by the U.S. states to finance their capital needs. Puerto Rico’s bonds are also rated by the same rating agency analyst groups that assign ratings to U.S. states, not by foreign sovereign bond rating analysts. For these and other reasons, Puerto Rico has more similarities to U.S. states than to sovereign nations. By virtually any measure tracked by the rating agencies, Puerto Rico’s existing debt levels are clear outliers relative to these U.S. state peers (**Exhibit 19**).

EXHIBIT 19: US STATES AS COMPARABLES



¹ Own revenues includes all Commonwealth-collected revenues and excludes all federal transfers.
 SOURCE: Moody’s investors service, “Medians – State debt continues slow growth trend from April 24, 2018”; Puerto Rico data from Moody’s investors service, “Medians – Total State Debt Remains Essentially Flat in 2017 from May 3, 2017”
 NOTE: Puerto Rico benchmark metrics per Moody’s debt service as % of revenues based on 2016 own-source government revenues, personal income reflects FY18 preliminary estimates from Commonwealth. In Puerto Rico’s case, net tax supported debt totals approximately \$46 billion and includes GO, PBA, COFINA, PRIFA, HTA, CCDA, ERS, PFC, and other intergovernmental loans

While some observers note that Puerto Rico residents do not pay federal income taxes, they do pay Social Security and Medicare taxes, and the low per capita income levels would place most Puerto Ricans in a tax bracket where they would otherwise pay little or no federal income tax. Meanwhile, federal reimbursement levels provided to Puerto Rico for the largest Commonwealth spending programs (including Medicaid and transportation) are capped at levels well below the

FMAP and federal highway reimbursement levels provided to comparably sized and wealthier states. Puerto Rico’s residents pay graduated income taxes to Puerto Rico at brackets comparable to the federal income tax rates, thereby providing the funds needed to provide services to the Puerto Rico resident population, which is far poorer than the population of any U.S. state. Yet Puerto Rico receives less federal support. The most recent U.S. Census Bureau estimate of per capita income in Puerto Rico was \$12,081, 70.3% below the lowest U.S. state and 75.7% below average U.S. state 2017 per capita income.²⁴

Metrics for debt sustainability: Viewing U.S. states as the most comparable group for benchmarking Puerto Rico, the DSA uses the debt ratio metrics in the April 24, 2018 Moody’s Investors Service (“Moody’s) report “States – U.S. Medians – State debt continues slow growth trend” and the “Fixed Costs” ratio metrics in Exhibit 20 of the August 27, 2018 Moody’s report “States – U.S. Medians – Adjusted net pension liabilities spike in advance of moderate declines” to develop a range of levels for sustainable debt capacity, including maximum annual debt service levels for Puerto Rico on its restructured existing debt. The key debt ratios for the ten lowest indebted states, the ten highest indebted states, and the mean for all U.S. states are shown below (**Exhibit 20**).

EXHIBIT 20: KEY DEBT RATIOS FOR TEN HIGHEST INDEBTED STATES

| NTSD as a % of GDP ¹ | | | NTSD as a % of Personal Income ¹ | | | Debt per capita (U.S. dollar) ¹ | | | Debt Service to Revenue ¹ | | | Fixed Cost to Own-Source Revenues ² | | |
|---------------------------------|---------------|--------|---|---------------|--------|--|---------------|---------|--------------------------------------|---------------|--------|--|---------------|--------|
| Low 10 | Mean | Top 10 | Low 10 | Mean | Top 10 | Low 10 | Mean | Top 10 | Low 10 | Mean | Top 10 | Low 10 | Mean | Top 10 |
| 0.4% | 2.6% | 5.9% | 0.5% | 2.9% | 6.8% | \$239 | \$1,477 | \$3,779 | 1.0% | 4.5% | 9.2% | 3.6% | 10.4% | 20.9% |
| 1 | Connecticut | 9.0% | 1 | Hawaii | 10.4% | 1 | Connecticut | \$6,544 | 1 | Connecticut | 13.8% | 1 | Connecticut | 30.3% |
| 2 | Hawaii | 8.9% | 2 | Connecticut | 9.5% | 2 | Massachusetts | \$6,085 | 2 | Massachusetts | 11.7% | 2 | Illinois | 28.4% |
| 3 | Massachusetts | 8.3% | 3 | Massachusetts | 9.5% | 3 | Hawaii | \$5,257 | 3 | Hawaii | 10.5% | 3 | Hawaii | 24.8% |
| 4 | New Jersey | 6.7% | 4 | New Jersey | 7.0% | 4 | New Jersey | \$4,281 | 4 | New Jersey | 9.4% | 4 | Kentucky | 20.5% |
| 5 | Mississippi | 5.1% | 5 | Illinois | 5.6% | 5 | New York | \$3,082 | 5 | Illinois | 9.2% | 5 | Massachusetts | 19.9% |
| 6 | Illinois | 4.7% | 6 | Delaware | 5.5% | 6 | Illinois | \$2,919 | 6 | New York | 8.1% | 6 | New Jersey | 19.1% |
| 7 | Kentucky | 4.5% | 7 | Mississippi | 5.2% | 7 | Washington | \$2,662 | 7 | Washington | 7.7% | 7 | Pennsylvania | 17.9% |
| 8 | Washington | 4.1% | 8 | New York | 5.2% | 8 | Delaware | \$2,587 | 8 | Kentucky | 7.3% | 8 | Maryland | 17.5% |
| 9 | New York | 4.1% | 9 | Kentucky | 5.1% | 9 | California | \$2,188 | 9 | Maryland | 7.0% | 9 | West Virginia | 16.0% |
| 10 | Rhode Island | 4.0% | 10 | Washington | 5.0% | 10 | Rhode Island | \$2,188 | 10 | Mississippi | 6.9% | 10 | Utah | 14.2% |

1 Moody’s investors service, “Medians – State debt continues slow growth trend from April 24, 2018”

2 Moody’s investors service, “Medians – Adjusted net pension liabilities spike in advance of moderate declines from August 27, 2018”

“Fixed costs” are the FY2017 sum of each state’s (1) net tax-supported debt service expense and their (2) actual budgetary contributions to pension expense and retiree health care (“OPEB”), as reported by Moody’s

Exhibit 21 uses the long-term 30-year macroeconomic forecast to determine a range of implied debt capacity based on the debt and fixed cost metrics of the *average* U.S. state. The debt capacity ranges shown are based off the following four methodologies: (i) debt to own-source revenues, (ii) debt per capita, (iii) debt to state personal income; (iv) debt to GDP; and (v) fixed costs to own-source revenues. Implied debt capacity and expected growth in debt capacity must be sufficient to cover both restructured debt and debt service on any future new money capital borrowings Puerto Rico needs to maintain its public infrastructure. To the extent new and additional revenues are enacted in the future, including revenues designed to support future capital projects or generated by public-private partnership infrastructure investments, then those initiatives could generate additional debt capacity for Puerto Rico that is not reflected in the current Revised Fiscal Plan projections. The 5-year average capacity statistics represent the average par amount between the five methodologies of an implied 5% 30-year level debt service structure. Moody’s defines “fixed costs” as the sum of a state’s annual debt service and its annual budgetary pension and retiree health care (i.e. OPEB) expenditures. Given that Puerto Rico’s public employee pension system is essentially zero percent funded—and that as a consequence the central Government must pay pension expenditures on a fully “Paygo”

²⁴ U.S. Bureau of Economic Analysis in the November 18, 2018 release.

basis from budgeted revenues each year—the fixed costs ratio helps capture that burden in comparison to the level of fixed costs as a percentage of Own- Source Revenues for U.S. States.

EXHIBIT 21: IMPLIED NET TAX-SUPPORTED DEBT CAPACITY RANGE BASED ON AVERAGE U.S. STATE (\$M)

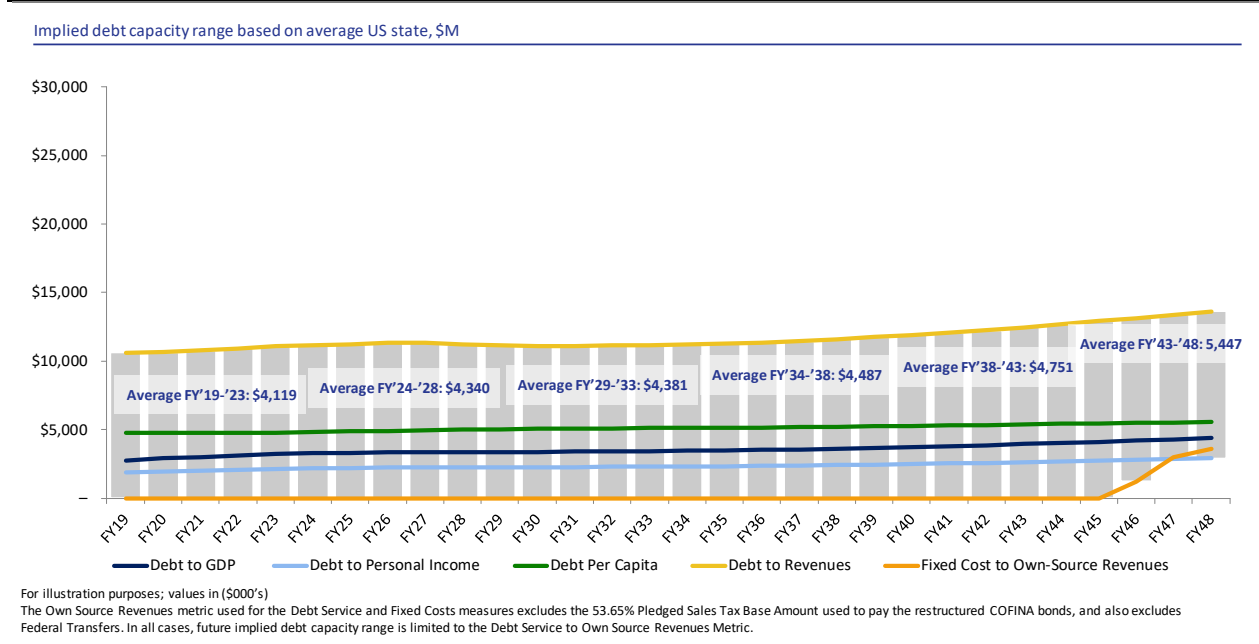
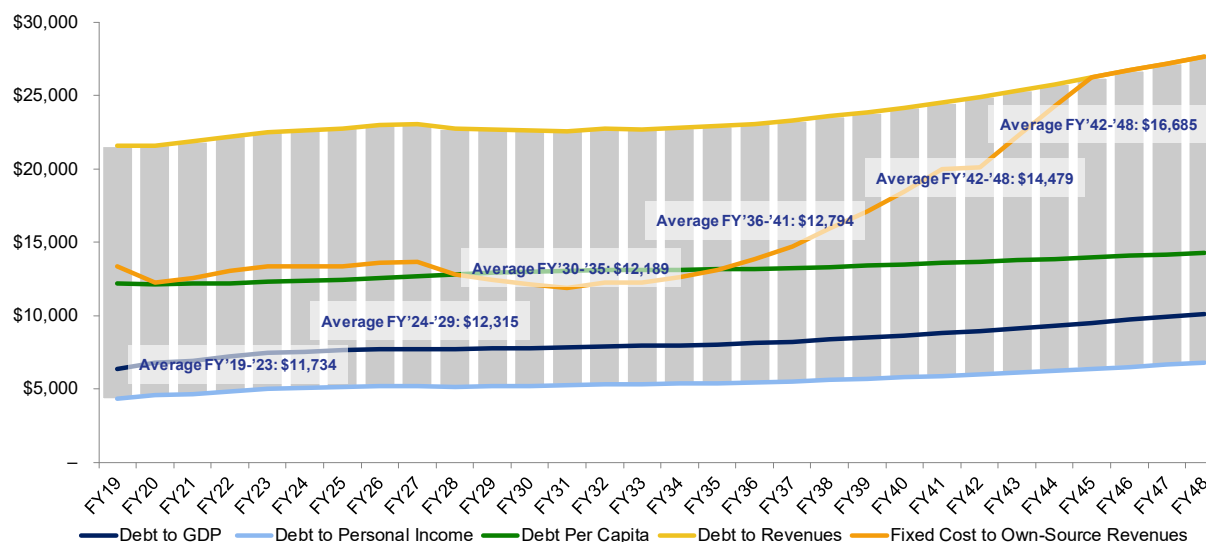


Exhibit 22 uses the long-term 30-year macroeconomic forecast to determine a range of implied debt capacity based on the debt metrics of the *10 highest indebted* U.S. states. The debt capacity ranges shown are based off the following four methodologies: (i) debt service to own source revenues, (ii) debt per capita, (iii) debt to state personal income, (iv) debt to GDP, and (v) fixed costs to own-source revenues. Implied debt capacity and expected growth in debt capacity must be sufficient to cover both restructured debt and future debt issuance. The 5-year average capacity statistics represent the average par amount between the five methodologies of an implied 5.0% 30-year level debt service structure.

EXHIBIT 22: IMPLIED NET TAX-SUPPORTED DEBT CAPACITY RANGE BASED ON TOP-10 HIGHEST INDEBTED U.S. STATE DEBT METRICS (\$M)

Implied debt capacity range based on top-10 highest indebted US state debt metrics, \$M



For illustration purposes; values in (\$000's)
 The Own Source Revenues metric used for the Debt Service and Fixed Costs measures excludes the 53.65% Pledged Sales Tax Base Amount used to pay the restructured COFINA bonds, and also excludes Federal Transfers. In all cases, future implied debt capacity range is limited to the Debt Service to Own Source Revenues Metric.

The illustrative implied levels of the Government’s restructured debt in the previous chart are calculated by applying the Net Tax Supported Debt ratios of the “top ten” U.S. states (in terms of debt load) to Puerto Rico’s future projected GDP, population and Own-Source Revenues. Debt Service to Own Source Revenue and Fixed Costs to Own Source Revenues figures are derived assuming debt service of a long-term level debt service structure, with a 5% average coupon.

Maximum annual debt service cap on restructured fixed payment debt: The implied debt capacity and expected growth in debt capacity must be sufficient to cover both the payments due on the restructured debt and all payments due on future new money borrowings. Accordingly, the aggregate debt service due on all fixed payment debt issued in the restructuring of the Government’s existing tax-supported debt should be capped at a maximum annual debt service (“MADs”) level. The cap would be derived from the U.S. state rating metrics, and specifically from what Moody’s calls the “Debt Service Ratio.” The Debt Service Ratio is the ratio of total payments due in a year on all existing net tax-supported debt over that state government’s own-source revenues (i.e., excluding federal transfer payments) in that year.

The Moody’s report indicates that the average Debt Service Ratio for the all U.S. states is 4.5%. The Moody’s report indicates that the average Debt Service Ratio for the top 10 most indebted states is 9.2%. To the extent either of these Debt Service Ratios is used to set a MADs cap on the restructured debt and the Primary Surplus is below the MADs level, then the debt service due on fixed payment debt would need to be set at the lower of the amount available for debt service or the MADs limit.

With respect to the Moody’s Fixed Costs Ratio, the August 2018 Moody’s report indicates that the average Fixed Costs Ratio for all U.S. States is 10.4%. The same report indicates that the average Fixed Costs Ratio for the 10 States with the highest Fixed Costs Ratios is 20.9%

Any additional cash flow above the MADs cap applied to the restructured fixed payment debt that is generated over the long-term from successful implementation of the Revised Fiscal Plan could be dedicated to a combination of contingent “growth bond” payments to legacy bond creditors, debt service due on future new money borrowings needed to fund Puerto Rico’s infrastructure investments and additional “PayGo” capital investment to reduce the Government’s historically out-sized reliance on borrowing to fund its needs, among other purposes.

Debt sustainability analysis: Exhibit 23 below calculates implied debt capacity based on a range of interest rates and Revised Fiscal Plan risk factors under an assumed illustrative 30-year term and level debt service. The risk factor is calculated by reducing the amount of projected cash flow available per year for debt service by a certain percentage. For example, a 20% risk factor case would use only 80% of the projected cash flow available to pay debt service on fixed payment debt.

EXHIBIT 23: IMPLIED DEBT CAPACITY BASED ON RANGE OF INTEREST RATES AND RISK FACTORS (\$M)

| Implied debt capacity based on range of interest rates and contingency, \$M | | | | | | |
|---|-------|-------------------------------------|----------|----------|----------|----------|
| Illustrative Cash Flow Available | | Implied Debt Capacity at Cash Flow | | | | |
| | | \$600 | \$800 | \$1,000 | \$1,200 | \$1,400 |
| Sensitivity Analysis: PV Rate % | 4.0% | \$8,300 | \$11,067 | \$13,834 | \$16,600 | \$19,367 |
| | 5.0% | 7,379 | 9,838 | 12,298 | 14,758 | 17,217 |
| | 6.0% | 6,607 | 8,809 | 11,012 | 13,214 | 15,417 |
| Illustrative Cash Flow Available | | Implied Debt Capacity at 5% PV Rate | | | | |
| | | \$600 | \$800 | \$1,000 | \$1,200 | \$1,400 |
| Sensitivity Analysis: % Contingency | 10.0% | \$8,301 | \$11,068 | \$13,835 | \$16,602 | \$19,369 |
| | 20.0% | 7,379 | 9,838 | 12,298 | 14,758 | 17,217 |
| | 30.0% | 6,456 | 8,609 | 10,761 | 12,913 | 15,065 |

Restoration of cost-effective market access: As Puerto Rico seeks to regain cost-effective capital markets access, rating analysts and investors will demand that the Commonwealth demonstrate improvement in all four core areas of creditworthiness identified by Moody’s: the economy, government finances, governance and “fixed cost” debt service and pension expenditures. The Government will adhere to structurally balanced budgets reflecting ongoing fiscal discipline and return to the timely publication of audited financial statements and related disclosure information. Together, these and other measures outlined in the Revised Fiscal Plan can chart a path to restoring Puerto Rico’s market access.

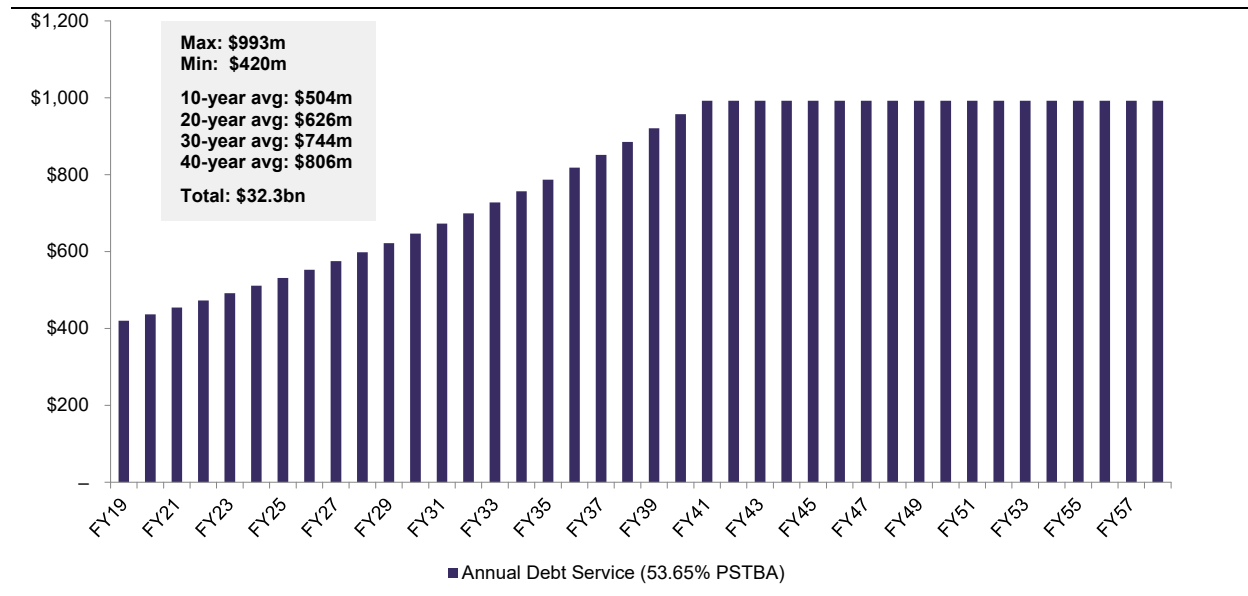
6.1 COFINA Settlement

On February 5, 2019, the U.S. District court for the District of Puerto Rico (the “District Court”) entered an amended order confirming COFINA’s plan of adjustment (the “COFINA Plan”). The COFINA Plan became effective on February 12, 2019.²⁵ The Commonwealth-COFINA Dispute settlement, which was incorporated to the COFINA Plan and also approved by separate order of the District Court in the Commonwealth’s Title III case, grants COFINA an ownership interest in 53.65% of the PSTBA. COFINA’s portion of the PSTBA will be used to fund debt service payments on new COFINA bonds distributed under the COFINA Plan. COFINA will also receive “first dollars” collected from the pledged SUT until it has received an amount equal to 53.65% of the

²⁵ Certain parties whose objections were overruled in confirming the COFINA Plan filed notices of appeal in the District Court. None of these parties have obtained a stay of the effectiveness of the COFINA Plan.

PSTBA (unless certain conditions are satisfied on a quarterly basis after 2024). The Commonwealth has an ownership interest in the remaining 46.35% of the PSTBA and will receive pledged sales tax revenues in any fiscal year that exceeds the PSTBA. The annual 53.65% PSTBA is illustrated in the table below.

EXHIBIT 24: THE COFINA SETTLEMENT DEBT SERVICE (\$M)



Chapter 7. FISCAL RISKS

Risk to Revenue Generation: Revenues could be compromised through lower growth generation than expected by structural reforms, and revenues could be impacted by demographic shifts described below.

Economic Downturn: The Commonwealth is in the midst of a profound fiscal and economic crisis, which has affected many of the Commonwealth’s municipalities and public instrumentalities. The Commonwealth’s gross national product contracted in real terms in all but one year between fiscal year 2007 and fiscal year 2017. The Planning Board’s latest forecast was published in April 2018, which forecasted -5.6% real GNP for FY2018. Actuals are expected to be released later this month. The Revised Fiscal Plan, which accounts for the impact of Hurricanes Irma and Maria, estimates a 6.0% contraction in real gross national product in fiscal year 2018. Factors that may continue to adversely affect the Commonwealth’s ability to increase economic activity include the following:

- high cost of energy,
- changes in federal policy,
- the cost of repairs and rebuilding from severe weather events,
- United States and global economic and trade conditions,
- population decline,

- epidemics or pandemics of communicable diseases,
- the Commonwealth's high level of debt and the ongoing debt restructuring proceedings.

Rebuilding efforts, funded by federal disaster recovery assistance, are expected to alleviate the recession and result in positive growth in the short term, but growth is dependent on the disbursement of federal funds and the Commonwealth's economic fundamentals remain weak.

Implementation risk of agency efficiency measures: The implementation of a massive reorganization of Government agencies could be difficult to achieve due to unforeseen obstacles or delays at some point along the way.

Population loss: Population decline has had, and may continue to have, an adverse impact on the Commonwealth's economic growth. According to the United States Census Bureau, the population of the Commonwealth decreased by 2.2% from 2000 to 2010, and by an estimated 6.8% from 2010 to 2015, driven primarily by the falling birth rate, a rising death rate, and migration to the United States mainland. The U.S. Census Bureau estimates suggest that the Commonwealth continued to lose population during fiscal year 2017 as well. Population decline has accelerated following the disruption caused by Hurricanes Irma and Maria, with a decline of 5.1% in fiscal year 2018. Reductions in population, particularly of working-age individuals, are likely to have an adverse effect on tax and other government revenues that will not be entirely offset by reductions in government expenses in the short or medium term. In addition, the average age of the population of the Commonwealth is increasing, due mainly to a reduction in the birth rate and the migration of younger people to the United States mainland. This phenomenon is likely to affect every sector of the economy to the extent that the local consumer base is diminished and the local labor force fails to meet the demand for workers. Moreover, this trend increases the demand for health and other services provided by the Commonwealth and its municipalities, and the relative cost to the Commonwealth and its municipalities of providing such services.

Political Risk: Federal Government policy has a direct impact on the economy of Puerto Rico. With uncertainty surrounding the amount and timing of disaster relief funding that will ultimately be disbursed to Puerto Rico, the Commonwealth may need to delay repairs to infrastructure and the funding to those on the island impacted by hurricanes Irma and Maria. This could significantly impact the economy's ability to recover.

PART III: Restoring growth to the Island

Chapter 8. STRUCTURAL REFORMS

A sustainable fiscal and economic turnaround depends largely on comprehensive structural reforms to the economy of Puerto Rico. Only such reforms can drive growth in the economy, reversing the negative growth trend over the last ~10 years and enabling the Island to become a vibrant and productive economy going forward. To reverse the negative economic trends, the Government is pursuing reforms in the following areas:

- Human capital and welfare reforms will improve workforce participation and the well-being and self-sufficiency of welfare recipients.
 - *Earned Income Tax Credit (EITC)*: The EITC is a benefit for working people with low to moderate income. The EITC reduces the amount of taxes owed and may result in a cash refund if the benefit is higher than owed taxes. From 2006 to 2014, Puerto Rico had a Worker’s Tax Credit, which was later discontinued due to its ineffective application. This prior Work Credit applied to 45% of all tax filers at a cost of \$152 million in its last year of implementation. It was smaller than federal EITC programs (\$150 to \$450 versus ~\$2,000 average credit) and did not eliminate high implicit tax rates on low-income employees or do enough to incentivize formal employment. The EITC program would cost approximately \$205 million per year, but the program will raise formal labor force participation significantly, providing a positive return on the investment.
 - *NAP Work Requirements*: NAP (or “PAN” for its Spanish acronym) is Puerto Rico’s largest welfare program. It is similar to the mainland SNAP, but it is funded and administered separately and does not include a work requirement nor specific budget allocations to administer such requirements. As part of the human capital and welfare reform package, the Government will institute work requirements for able-bodied adults without dependents in order to qualify for PAN benefits. Puerto Rico has already submitted a work requirement language in its FY2019 Annual State Plan to the Food and Nutrition Service Agency. During FY2019 the Government will develop, alongside the Food and Nutrition Service Agency, the work requirement program policies, parameters, operational guidelines and compliance oversight that will be included in its FY2020 Annual State Plan submission. The annual state plan may be amended at any point throughout the fiscal year with the proper request, review, and approval by the Food and Nutrition Service Agency.
 - *Workforce Innovation and Opportunity Act (WIOA)*: The Government has already updated the WIOA State Plan to focus its programs and incentives on high-priority sectors and capabilities (e.g., aerospace, software development, and creative services). WIOA is the primary way in which the Federal Government invests in adult education and workforce development, and it is designed to help jobseekers access employment, education, and support services to succeed in the labor market, and to match employers with the skilled workers they need. The Government must broaden the list of core industries that qualify under WIOA and focus on high impact economic sectors to provide a skilled workforce that meets

the needs of employers in each specific region. It will integrate this WIOA program with the broader promotional efforts of the Department of Economic Development and Commerce (DDEC).

- Ease of doing business reforms will improve conditions for economic activity, job creation, and business vitality.
 - *Improve Ease of Doing Business World Ranking:* One of the strongest means of increasing economic growth is by reducing a variety of inefficiencies related to building, expanding and attracting businesses. Easier-to-navigate regulations, less complex and faster permitting processes, and other legal and regulatory changes can encourage new businesses to hire employees and invest in growth. To quantify a jurisdiction's overall effectiveness in this regard, the World Bank created the Doing Business Index, which ranks 190 countries and entities worldwide on several core indicators. Countries and territories that have been able to meaningfully improve their ranking have shown real growth. For example, when the Republic of Georgia improved its ranking from #98 in 2006 to #8 by 2014, output per capita increased by 66% and business density tripled. Meanwhile, ease of doing business remains an area in which Puerto Rico has much room for improvement. Puerto Rico will achieve a best-in-class business environment by taking targeted steps to improve rankings in key identified Doing Business Index indicators by FY2023, with the goal of closing the gap with the mainland U.S. by at least 50% from its 2018 rankings:
 - Overall: Move from 64 to at least 57²⁶
 - Getting Electricity: Move from 69 to at least 59
 - Construction Permits: Move from 138 to at least 87
 - Registering Property: Move from 153 to at least 95
 - Paying Taxes: Move from 161 to at least 99
 - *Digitize Unified Information System (SUI):* In addition to migrating government processes toward a streamlined and/or “one-stop shop” processes on SUI, the Government will move forms online to whatever extent is possible. This involves decoupling all non-related procedures from permitting, centralizing and digitizing permits. The Government is targeting to for a 100% integration into SUI by end of FY2019 for the following metrics: Licenses integrated into SUI; cases filed in SUI; cases issued in SUI; concerned entities integrated into SUI; and autonomous municipalities integrated into SUI. PRITS serves as a collaborator in all of the Government's transformation including the implementation of the SUI platform. All nineteen municipalities are on track and expected to be fully integrated by the end of the quarter.
 - *Reduce occupational licensing:* Reducing occupational licensing requirements can encourage activity in the formal labor market. Therefore, the Government is taking inventory of all occupational licensing requirements and undertaking reforms to reduce unnecessary regulations, creating a more open labor market. It will also consider joining U.S. mainland agreements to recognize licenses obtained in other states, such as the Compact for the Temporary Licensure of Professionals. Such an agreement enables professionals with licenses from other states to enter the Puerto Rican labor market without undue barriers. The Dale Tijera initiative seeks to

²⁶ In line with the top ranked Latin American country in 2018.

identify ineffective or obsolete regulations which can help streamline and reduce timing of the license process.

- *Deregulate condominium law:* Currently, condominium laws discourage investment in real property by requiring unanimous approval by all title owners in the condominium to execute a project. Deregulation can promote the development of investments by rental residents, increase population density and accelerate decision-making. PS1874 provides a framework for short-term rentals and includes change from unanimous approval to supermajority approval. It has been presented and is currently in process of public hearings. Expected to be implemented in FY2019.
 - *Improve ease of registering property:* Streamline the process for business permitting and registrations by creating a streamlined, digitized one-stop-shop system for business processes, expanding on work initiated under Act 19. Construction permits specifically required a drastic reduction in the time required (particularly the 120 days, or 73% of total time, due to municipal evaluation), and processes/procedures (reducing 22 procedures to at most 10). An online platform for property registry (Karibe.ridpr.pr.gov) was announced in August 2018. It facilitates searches, property studies, related payments and document filing making it easier for real estate, banking and legal sectors to operate. Finally, to reduce cost of receiving a construction permit, the Government will evaluate its municipal construction tax (80% of total cost).
 - *Improve ease of paying taxes:* Develop e-payment system (through the SURI platform) for taxation wherever possible to reduce time taken to file corporate and sales tax to Hacienda.
 - *Invest Puerto Rico and Discover Puerto Rico:* Recently, the Government has made important efforts to generate investment in the Island by creating the Destination Marketing Office (DMO), now branded *Discover Puerto Rico*, and Invest Puerto Rico (iPR) in 2017, aiming to incentivize foreign direct investment (FDI), private sector investment and tourism. DMO and iPR are already operational and have started to develop their strategic plans in order to execute their respective missions. Both entities, will establish clear metrics and regular tracking and reporting mechanisms for iPR and DMO. A new investment code proposed re-envisions the way the Commonwealth grants incentives and puts emphasis on return on investment and other evidence-based studies.
- Power sector reform will improve availability and affordability of energy for families and businesses.
 - Infrastructure reform and capital investment will improve the flow of goods, services, information, and people across the Island. It has not been scored to provide a specific GNP uptick, yet undoubtedly contributes a consequential uptick in the Island's long-term development.

PART IV: Transforming the Government to better serve the Island

Chapter 9. NEW GOVERNMENT MODEL

In addition to structural reforms, the Government is also implementing fiscal measures to create a sustainable fiscal future for Puerto Rico. Fiscal reforms will reduce costs while maintaining or improving the quality of services. There are a wide range of government efficiency initiatives which target an increase in revenues through new and more efficient collections activities and decrease government expenditures by ensuring reasonable usage of resources. The Revised Fiscal Plan defines fiscal measures which are in alignment with savings as set forth in the Currently Effective Fiscal Plan (except for the addition of approximately \$734 million in implementation costs required to successfully achieve said savings through FY2024) but does not go into the granular detail of defining savings by measure/agency which will be thoughtfully defined as part of the budgeting process. The measures include the following:

Office of the CFO - The Office of the CFO (“OCFO”), will be responsible for—and crucial to achieving—a variety of reforms to ensure the responsible financial stewardship of the Island’s resources. For example, through fiscal controls and accountability, the OCFO will provide oversight to reduce historical Special Revenue Fund (SRF) deficits and drive \$5 million in yearly savings by FY2024.

Agency Efficiencies: A new model for government operations will “right-size” the Government through agency consolidation and optimizing government services. It includes comprehensive reform initiatives in the Departments of Education, Health, Public Safety, Corrections, Hacienda/OCFO, and Economic Development, as well as consolidations and reductions across other agencies. Agency efficiency measures, net of implementation costs, will result in \$1,647 million in run-rate savings by FY2024 (inclusive of savings embedded in FY2019 baseline).

The implementation of a massive re-organization as proposed in this plan requires implementation costs including professional services support, Voluntary Transition Plan (“VTP”) costs, and the payout of statutory liabilities. This revision, like the Government’s September 7, 2018 fiscal plan submission, incorporates \$36 million in professional fees, \$570 million of VTP implementation costs and \$128 million of statutory liabilities through FY2024.

Healthcare Reform: Healthcare measures seek to reduce the rate of healthcare cost inflation through a comprehensive new healthcare model that prioritizes quality relative to cost, and must result in \$279 million in run-rate savings by FY2024 (inclusive of savings embedded in FY2019 baseline), projected to grow with healthcare inflation.

Tax Reform: Puerto Rico will reduce income tax rates as well as other taxes such as business to business sales and use tax and prepared foods sales and use tax while broadening the tax base and technology and other innovative practices.

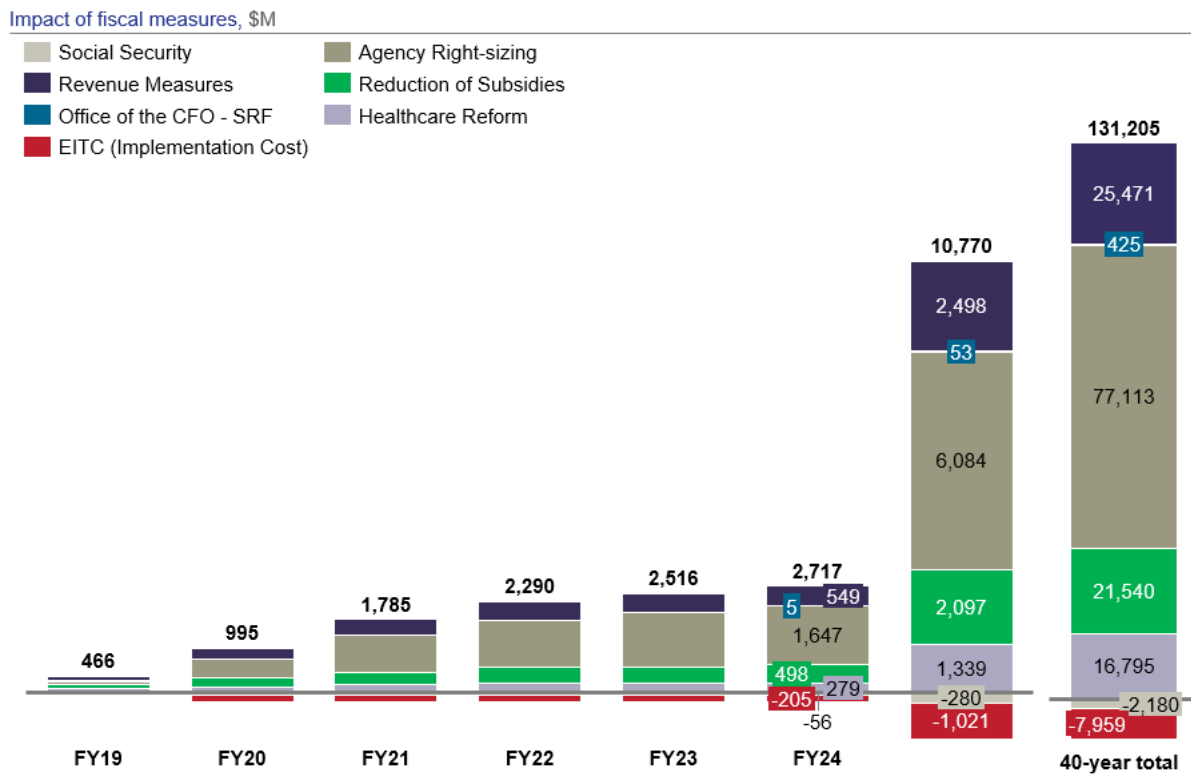
Tax Compliance and Fees Enhancement: Tax compliance initiatives involve employing technology and other innovative practices, to capture revenue from under-leveraged sources. These initiatives must increase run-rate revenues by \$549 million by FY2024.

Reduction of Appropriations: The central Government will decrease appropriations granted to municipalities and UPR, which must result in \$498 million in run-rate savings by FY2024 (inclusive of savings embedded in FY2019 baseline).

Social Security: Social security contributions to enroll police officers in social security program will result in ~\$280 million contributions through FY2024.

Together, these measures are crucial to the structural balance of Puerto Rico’s economy, and are projected to result in over \$10.8 billion in the next six years and over \$131 billion over the next 40 years (**Exhibit 25**).

EXHIBIT 25: IMPACT OF FISCAL MEASURES SAVINGS AND REVENUES²⁷



9.1 Office of the CFO²⁸

One of the highest priorities of the Government transformation remains the implementation of the Office of the CFO. The Government continues to make progress in centralizing and improving financial management functions.

²⁷ Totals do not include Medicaid counter measure.

²⁸ Although the FOMB does not consider and has not considered anything in the Revised Fiscal Plan as a “recommendation” pursuant to Section 205(a), to the extent that the Government considers or has considered anything in this chapter a “recommendation” pursuant to Section 205(a), the FOMB hereby incorporates it into the Revised Fiscal Plan pursuant to 201(b)(1)(K).

By centralizing all financial management functions per the Revised Fiscal Plan, the OCFO will improve fiscal governance and forecasting, increase transparency, substantiate accountability, heighten internal controls, and improve stakeholder confidence in Puerto Rico's financial management. Most importantly, these efforts will enable the Government to achieve fiscal responsibility and restore access to the capital markets, two cornerstones of PROMESA.

Core objectives of the OCFO:

- A) Centralize treasury and liquidity management
- B) Enhance budget development process and improve monitoring / performance tracking
- C) Drive standardization and integration of financial IT systems
- D) Increase transparency, centralization and compliance of procurement, contracts, pensions, and human resources management policies and practices
- E) Reduce special revenue funds deficits through enhanced control mechanisms and oversight
- F) Improve timeliness of CAFR (Comprehensive Annual Financial Report) and financial reporting
- G) Centralize and validate management of funds and other financial transactions

9.1.1 Responsibilities and actions of the OCFO

To carry out the above objectives, the OCFO will be endowed with the following responsibilities:

- The OCFO shall continue to act as the central authority over finance, budget, HR, audit, procurement, and cash management for all entities that receive support from the General Fund or otherwise depend on the Government's taxing authority
- The OCFO will continue to have the ability to remove any fiscal officer for violations of, or non-compliance with, the law, including failure to provide timely and accurate fiscal and financial information
- The OCFO will continue to oversee the transition to modified accrual accounting standards

To enable this level of centralized control, these functions have been consolidated under a single individual. The Governor recently announced the joint appointment of the CFO as Secretary of Treasury and Director of the Office of Management and Budget. This step reflects a primary milestone to consolidate, establish clear authority within the executive branch, and permanently align two of the key OCFO responsibilities over finance and budget, subject to the requirements of PROMESA. Other offices will be merged into the OCFO. These agencies include, but are not limited to: Treasury (consolidated, not eliminated), OMB, GDB²⁹, OATRH, and GSA. All other fiscal functions of any departments, agencies, and instrumentalities that receive support from the General Fund or otherwise rely on the Central Government's taxing authority would all fall under the OCFO's authority.

A) Centralize treasury and liquidity management

- Enforce and manage a consolidated treasury single account for the Government; this involves consolidating visibility and control of all Government bank accounts, including CU accounts at private banks and creating a true Treasury Single Account. All other public entities should maintain zero balance sweep accounts

²⁹ Scheduled to be liquidated.

- Serve as the sole authority for new bank account creation and closure, as well as ongoing and ad-hoc liquidity reporting, monitoring and analysis. The OCFO will rationalize the bank account portfolio, optimize cash pooling/daily cash sweeps and treasury operations, and implement uniform accounts payable and disbursement prioritization policies, processes and reports. Determining the most appropriate account structure will enable operational efficiencies and achieve savings

B) Enhance budget development process and improve monitoring and performance tracking

- Comply with the recently established Oversight Board budget guidelines and timeline to develop a budget that is consistent with the Revised Fiscal Plan and easily traceable to the Revised Fiscal Plan and the audited financials
- Forecast and manage receipt and disbursement seasonality
- Oversee all tax decrees and tax agreements issues
- Operationalize the budget in the financial system to ensure consistency between accounts and facilitate monitoring of those accounts
- Estimate, protect, and enhance collections and revenue streams, and establish budgetary priorities and oversight, including effective expenditure controls and procurement reform

C) Drive standardization and integration of financial IT systems

- Drive the comprehensive upgrade and standardization of accounting and IT systems across all agencies

D) Increase transparency, centralization and compliance of procurement, contracts, pensions, and human resources management policies and practices

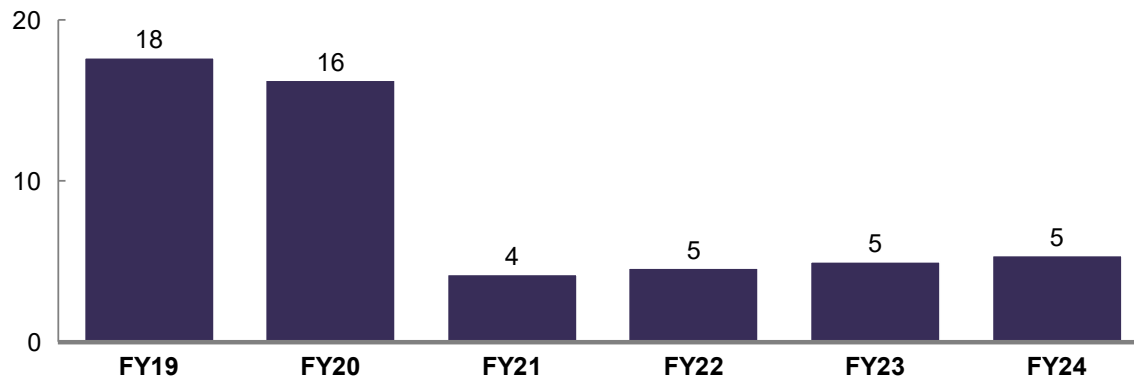
- Certify all contracts, bills, invoices, payroll, and other evidences of claims, demands or charges related to the central Government and all entities reliant on the Government's taxing authority, including prescribing forms of receipts, vouchers, bills and claims to be used by all agencies
- Manage centralized health insurance procurement and policy management
- Oversee human resources as well as all governmental payroll operations and all government-related financial transactions. The office must have the sole responsibility within the Government for reforming personnel policies, including the renegotiation of existing collective bargaining agreements ("CBAs") consistent with the Revised Fiscal Plan objective to achieve budget savings and efficiencies, ensure enhanced delivery of governmental services, and negotiate all future CBAs to achieve the same ongoing results
- Modify existing regulations as needed to implement centralization and other efficiency measures

E) Reduce special revenue fund deficits through increased investment in revenue-generating opportunities alongside enhanced control mechanisms and oversight. Implement additional measures to ensure responsible stewardship of Puerto Rico's Special Revenue Funds ("SRF"). The OCFO will advocate and support the efforts of agencies and other entities to increase existing streams and source new streams of independently-generated revenue, as allowed by law, to lessen the burden on State funds. This will likely include one-time spending to "kick-start" such renewed and new efforts. Additionally, ensure all dedicated revenue streams attributable to SRF have their funds first

deposited in the newly established Treasury Single Account. In this process, it will ensure a balance between current SRF revenues and expenditures to align with the legislative mandate that SRFs cannot outspend their resources (**Exhibit 26**).

EXHIBIT 26: SAVINGS GENERATED FROM ELIMINATION OF SPECIAL REVENUE FUND DEFICIT

Summary of special revenue funds deficit reduction measure impact, \$M



F) Improve timeliness of CAFR and financial reporting

- Establish a clear timeline to publish outstanding CAFRs and manage it to completion as soon as possible
 - The administration had submitted the below target dates for its issuance of the Commonwealth’s audited financial statements for the previous three fiscal years:
 - (a) Fiscal 2016 financial statements by June 2019;
 - (b) Fiscal 2017 financial statements by December 2019;
 - (c) Fiscal 2018 financial statements by March 2020.
- Implement a new process for publishing subsequent CAFRs within the established regulatory timeframes, and drive improvements in the process and quality of the data provided. All releases will implement the modified-accrual basis of accounting as required in PROMESA and leverage the new forecasting, e-settlement, and analytics capabilities to support all OCFO functions
- Enact effective measures implementation forecasting and reporting
- Supervise property tax assessment reforms, prepare tax maps, and provide notice of taxes and special assessments

G) Centralize and validate management of funds, transactions, and other financial transactions

- Maintain custody of all public funds, investments, and cash, and administer cash management programs to invest surplus cash
- Maintain control and accountability over all funds, property, and other assets controlled or managed by the Government, and oversee all tax decrees and tax agreements issued
- Publish an annual Tax Expenditure Report that identifies and quantifies all tax expenditure (including all tax exclusions, exemptions, adjustments, deductions, subtractions, credits, abatements, deferrals, rebates and special rules).

9.2 Agency Efficiencies

The right-sized Government of the future will wherever possible reflect mainland U.S. benchmarks in terms of both number of agencies and size of agencies themselves to deliver services in as efficient a manner as possible. As part of the new Government model, the Government will consolidate agencies into groupings and a number of independent agencies, approximately one-third the current number. In some cases, the groupings are designed to better focus the competing efforts of multiple agencies, such as the Economic Development grouping which will consolidate ten agencies into one. In other cases, the consolidations will serve to move services closer to citizens, such as Healthcare which will consolidate access points to important services like Medicaid. Furthermore, in cases where agencies will be left independent, measures will be applied to improve the quality of the underlying services, especially in the case of PRDE.

9.2.1 New Government Model Progress

On December 18, 2017 the Governor signed the bill to enact the “New Government of Puerto Rico Act” (Act 122 of 2017), which seeks to achieve savings by establishing a more efficient government structure. The “New Government” act was designed to establish a uniform and agile process for the reorganization of the new government. This includes consolidation, outsourcing, reorganization of government agencies and corporations, including their programs, the creation of new agile and efficient government structures, and transfers through the submission of reorganization plans that would be reviewed, approved, or repealed by the Legislative Assembly of Puerto Rico.

The Government has instituted transformational initiatives over the past year to realize the Governor’s vision of a “solid and sustainable economic development through productivity and added value, which will propel the transformation and growth of our economy.” (Plan for Puerto Rico: “A Model for the Socioeconomic Transformation of Puerto Rico”).

Specifically, the Executive and Legislative branches have devoted a significant amount of time and effort to understand agency structure and coordinate amongst agency leaders to achieve desired efficiencies. The OCFO team, in collaboration with the Governor’s Office, work to align public policy in preparation for agency legislative submission. Below is a summary of initiatives already carried out as part of the implementation of the New Government model. It includes executive orders, agency legislation and interagency agreements.

Legislation and Executive Order:

- Department of Public Safety (Act 20-2017)
- Office of the Municipal Affairs Commissioner into the Office of Management and Budget (Act 81-2017)
- Model Forest to Nonprofit Trust (Act 131-2018)
- Puerto Rico Education Council into the Department of State (Act 212-2018)
- Environmental Quality Board, Natural Resources Administration, and Solid Waste Authority into the Department of Environmental and Natural Resources (Act 171-2018)
- Puerto Rico Energy Board, Public Services Commission, Independent Bureau of Consumer Protection, and Telecommunications Regulatory Board into the - Public Service Regulatory Board (Act 211-2018)
- Office of the Chief Financial Officer (Executive Order 2018-034)³⁰

³⁰ Pending final signature.

- Department of Economic Development and Commerce (Act 122-2018)
- Department of Agriculture, the Agricultural Enterprise Development Administration, and the Farm Insurance Corporation into the Agriculture grouping (Executive Order 2018-039)
- Office of the Financial Institutions Commissioner and the Office of the Commissioner of Insurance into the Finance Commission grouping (Executive Order 2018-040)

Interagency agreements

Another strategy used by the Government to generate savings and efficiencies are interagency agreements signed to leverage shared services by pooling administrative resources such as HR, Accounting and Finance, Legal Services, Technology, and sharing real estate, among other initiatives:

- Agreement between the Department of Agriculture, the Agricultural Enterprise Development Administration, and the Farm Insurance Corporation;
- Agreement between AAFAF and OMB (Executive Order 2018-034) ³¹
- Agreement between Office of the Financial Institutions Commissioner and the Office of the Commissioner of Insurance; and
- Agreement between the Fine Arts Center Corporation, the Institute of Puerto Rican Culture, and the Musical Arts and Stagecraft Corporation.

Future Reorganization Plans³²

The Government expects to submit the following reorganization plans to be considered by the legislative assembly in the coming months:

- Investigation, Prosecution and Appeals Commission, Labor Relations Board, Public Service Appeals Commission into the Department of Labor
- Integrated Transport Authority and Traffic Safety Commission into the Department of Transportation and Public Works
- Ombudsman grouping
- Department of Family grouping
- Department of Health grouping

9.2.2 New Government Model Savings Targets

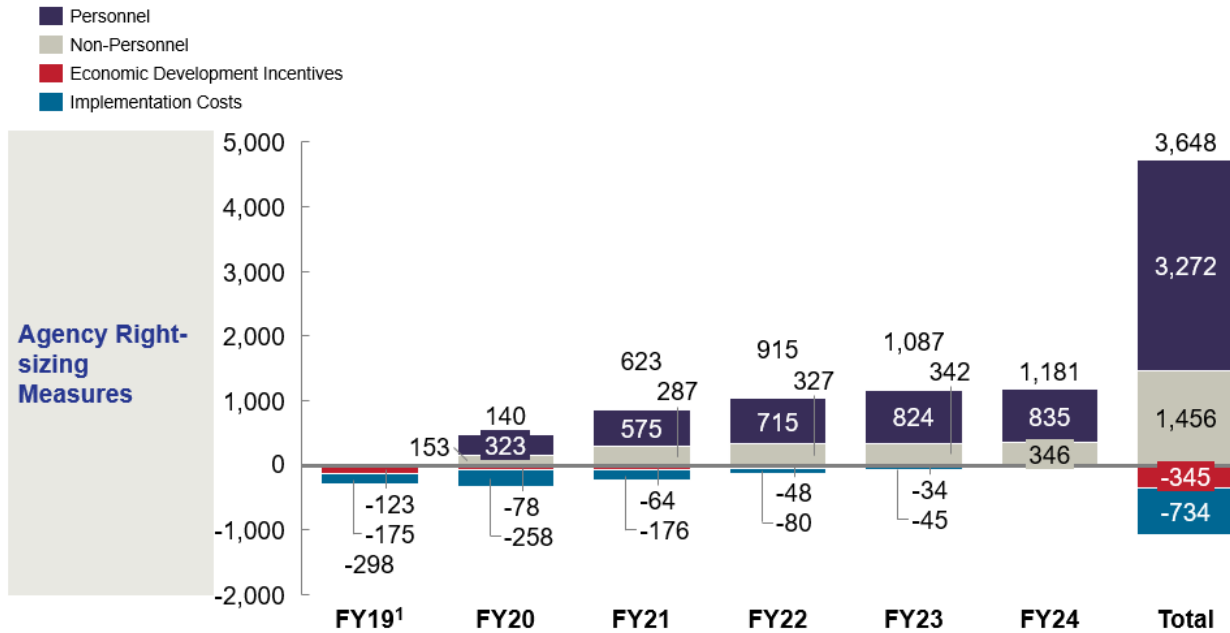
Aggregate savings targets for the Commonwealth included in this Revised Fiscal Plan are consistent with aggregate savings targets as outlined in the Currently Effective Fiscal Plan. In addition, total savings by spend category (personnel/non-personnel) are also consistent with the Currently Effective Fiscal Plan. The identification of measures, sizing of measures and ultimate enforcement of measures is more efficiently managed by the Office of Management and Budget as part of the budgeting process. Leveraging the budget process simplifies the iterative nature of aligning budgets with the Revised Fiscal Plan as the Office of Management and Budget can efficiently allocate budget dollars based on their intimate knowledge of the needs and operations of each of the Commonwealth agencies and public corporations. Below is an aggregate build of savings by personnel and non-personnel and year included in the Revised Fiscal Plan:

³¹ Pending final signature.

³² The proposed reorganizations are subject to public policy decisions and, therefore, may change periodically as plans, initiatives and reforms are revised and implemented.

EXHIBIT 27: AGENCY RIGHT SIZING SAVINGS

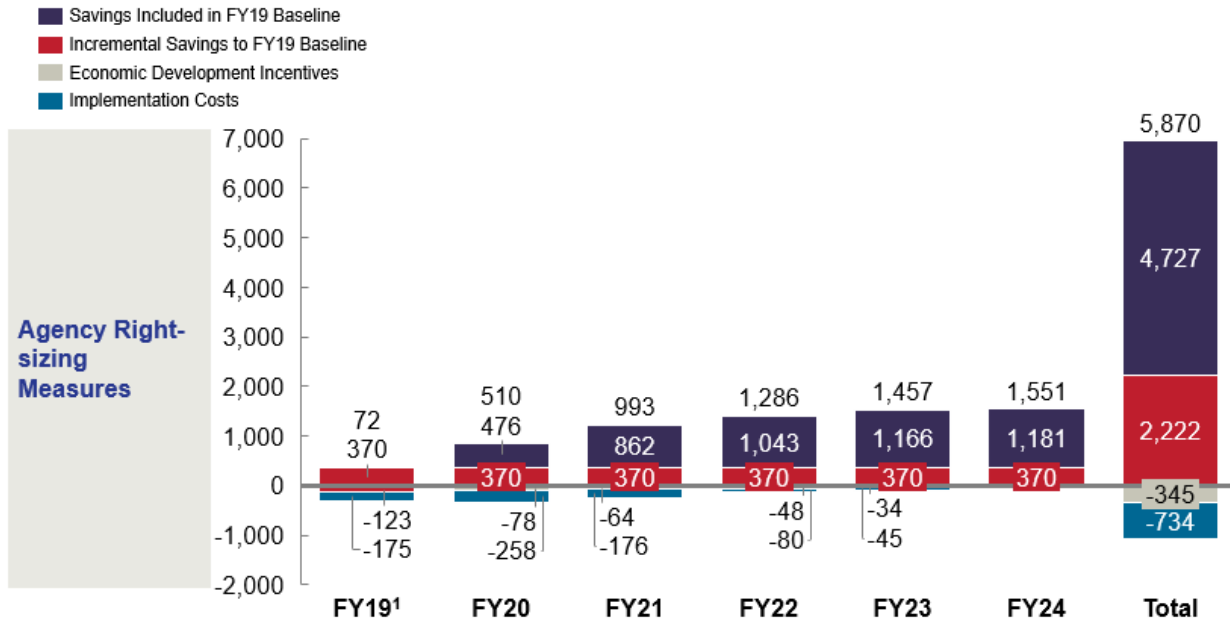
Agency Right-sizing Savings



1 FY19 Savings from previous fiscal plan are embedded in the FY19 baseline
 2 Excludes reinvestment in UPR scholarship fund and Utilities reduction.

EXHIBIT 28: AGENCY RIGHT -SIZING SAVINGS INCLUDING FY19 BASELINE AND INCREMENTAL

Agency Right-sizing Savings – FY19 Baseline & Incremental

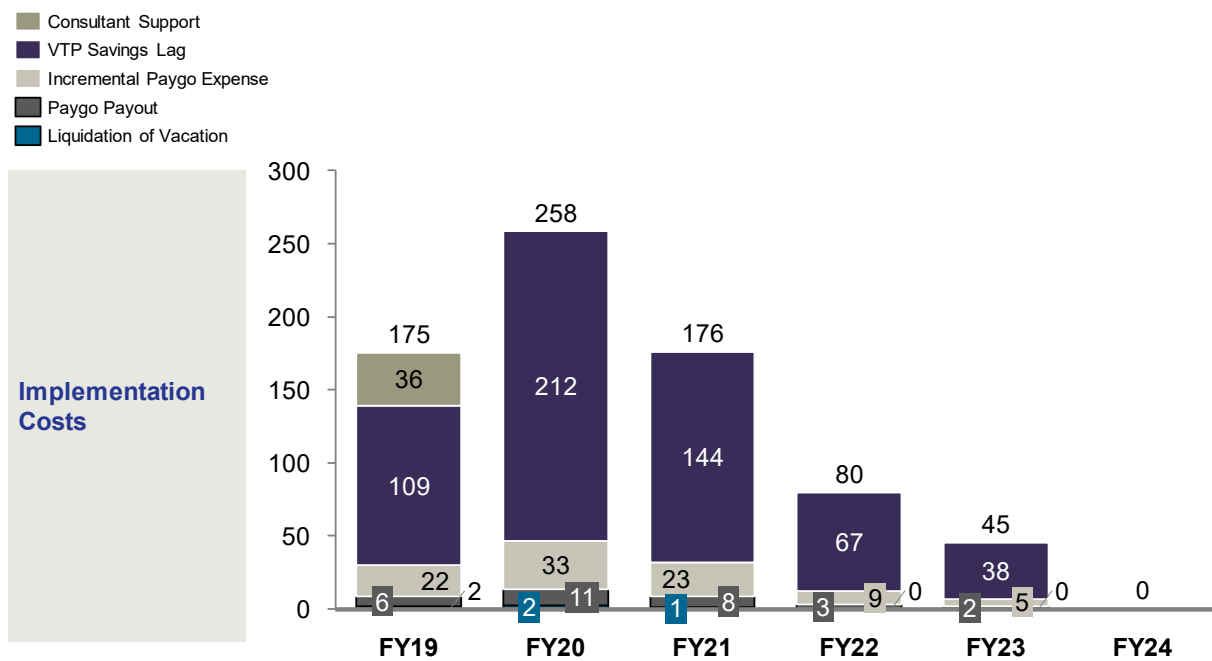


1 FY19 Savings from previous fiscal plan are embedded in the FY19 baseline

In order to carry out a massive reorganization as proposed in this plan, certain costs that are one time in nature must be incurred to ensure the success of this plan. These costs include professional services support, Voluntary Transition Plan (“VTP”) costs, and the payout of statutory liabilities. This revision incorporates \$36 million in professional fees, \$570 million of VTP implementation costs and \$128 million of statutory liabilities through FY2024.

EXHIBIT 29: IMPLEMENTATION COSTS

Implementation Costs, \$M



9.2.3 Example of Agency Efficiency Plans - Department of Education (PRDE)

9.2.3.1 CURRENT STATE AND FUTURE VISION FOR THE DEPARTMENT OF EDUCATION

Throughout the last decade, PRDE has encountered longstanding challenges which have contributed to low academic performance, including bureaucratic hurdles associated with operating as a single local education agency, inability to execute professional evaluations tied to quality outcomes in the classroom, and lack of a cohesive strategy for academic improvement.

In addition, PRDE, though the largest agency in the central Government by spend, is non-strategically and inadequately resourced relative to need. While student enrollment has declined considerably over the past few decades (over 50% decline since its peak in 1980, and by about 33% in the past decade alone),³³ the number of schools and teachers has not decreased proportionally (with only about a 30% reduction in public schools since 1990).³⁴ With an expected additional student decline of ~15% over the next 6 years, PRDE has significant room to right-size

³³ Helen F. Ladd and Francisco L. Rivera-Batiz, “Education and Economic Development in Puerto Rico” The Puerto Rican Economy: Restoring Growth, Brookings Institution Press, Washington, D.C., 2006, 189-238.

³⁴ There were 1,619 public schools in 1990 and 1,131 at the time of reporting. Oversight Board Listening Session, Secretary Julia Keleher, “On the Road to Transformation,” November 30, 2017.

its education system relative to number of students. Tightening its system will give PRDE the flexibility and funding to focus on improving the quality of education provided.

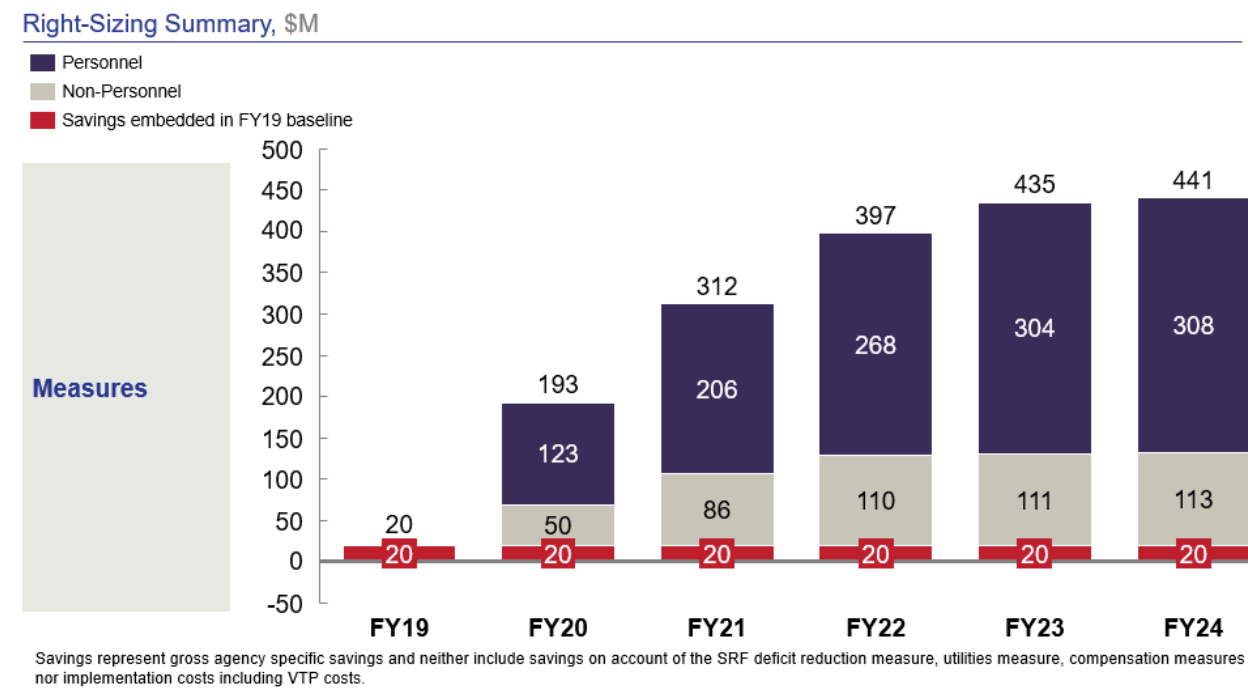
To improve the capabilities and capacity of the Puerto Rican population, the Government will need to set high aspirations. PRDE aims to improve student academic achievement by reducing the achievement gap by 12% annually on Puerto Rico proficiency tests, achieving 80% proficiency in Spanish, 73% in Mathematics, and 77% in English; and further, improving the graduation rate to 90% by FY2023. This mandate is not easy but is attainable through a series of education efficacy and efficiency measures as well as material reinvestment in student and teacher outcomes.

Transforming the PRDE also requires a revision of the budget structure to provide more transparency into how basic services are funded and where strategic investments are made in a way that: (1) ensures appropriate levels of funding, and (2) allows the public to hold the PRDE accountable for delivering those resources to students.

9.2.3.2 PRDE EFFICIENCY MEASURES

PRDE must achieve \$123.5 million in personnel savings and \$49.6 million in non-personnel savings in FY2020 when compared with the FY2018 budget baseline³⁵. **Exhibit 30** shows the annual personnel and non-personnel savings that must be achieved through FY2024. To accomplish this, PRDE consolidated its footprint (including schools, classes, teachers, and administration), modernize facilities, revise the curriculum, and equip teachers with what they need to succeed. This is expected to generate savings in the outyears following an initial implementation expense. Measures will generate \$441 million in run-rate savings by FY2024 inclusive of savings embedded in FY2019 baseline and funds needed for requisite reinvestments to increase quality.

EXHIBIT 30: DEPARTMENT OF EDUCATION MEASURES SUMMARY OF IMPACT



³⁵ Savings for the Department of Education are net of implementation costs.

Reducing non-payroll spend through consolidating the K-12 school footprint and procurement

PRDE has closed over 480 schools (30% of K-12 schools) since 1990. After SY2016-17, PRDE closed 167 schools,³⁶ and closed another 255 schools in SY2017-18.³⁷ After an analysis of several factors including capacity, geographic and cultural characteristics, distance to neighboring schools, transportation costs, and facility quality, among others, the Government has determined that it cannot close any additional schools without materially increasing capital expenditures and transportation costs to provide basic services to students. Mountainous and other rural areas of Puerto Rico often lead to sparsely populated communities that still require the same level of educational services. It is the Government's responsibility to attend to these populations, even when it becomes cost-ineffective compared to target allocation rules and resource utilization levels.

Identifying further opportunities to consolidate schools and improve the level and quality of resources directed at each student must be a collaborative process with municipalities. Over the next fiscal year, municipalities should create individual economic development, recovery, and transformation plans that reflect the deployment of FEMA funding for reconstruction of school and other community facilities. A collaborative approach between the PRDE and the municipalities of Puerto Rico could create a truly optimized footprint for the future system that requires fewer schools with greater capacities and modernized facilities.

The PRDE will target an average capacity of 330 students per school for each primary school and 550 students per secondary school, wherever physical capacity of the school and available classrooms permit. Each year, the PRDE will evaluate whether additional school consolidations are feasible and cost effective, due to the anticipated declining enrollment. Where the Department can use recovery funding to upgrade, replace, and expand facilities of existing schools, ideally in partnership with municipalities, it will.

Independent of, but accelerated through, consolidations, PRDE procured spend will be reduced by approximately 10-15% through centralized procurement policies including strategic purchasing and demand controls as well as reducing the number of professional services contracts by investing in middle management to professionalize the workforce. Investment in workforce requires professionalizing the workforce, upskilling, and creating clear career paths with rewards and recognition that incentivize the right behavior and drive effective management and leadership. The PRDE will evaluate creating a contracts office to improve management and transparency of contracting activities and to enable continuous improvement of managing contracted spend over time. All contracts must be aligned to transformation goals and the Revised Fiscal Plan.

Personnel optimization from school consolidation

To date, school consolidations have not always led to proportional cost savings because they are often not accompanied with concurrent reductions in staff. Going forward, the number of school staff is expected to be right-sized based on the number and size of schools. The number of school administration and other school-specific support staff will be scaled to meet student needs using a rule-based allocation process based on enrollment levels and the number of active schools.

All administrative and support staff in a school will be assigned using a set of predetermined rules that allow for the provision of critical services while responsibly managing fiscal obligations. To ensure the Department of Education is sufficiently able to provide the requisite services in support

³⁶ Puerto Rico Department of Education Report "Schools Closed FY2017." Accessed January 2018.

³⁷ Puerto Rico Department of Education Press Release, March 2018.

of the aggressive academic improvement targets, the support staff of each school should include the following:

- One librarian per school
- One psychologist per school
- One physical education teacher for each 150 students
- One social worker for each 250 students
- One elementary English teacher for every 5 groups of elementary students
- One exploratory subjects teacher for every 9 groups of students
- One nurse per school
- One health teacher per non-elementary school, or for every 30 groups of students
- One technical support resource per school
- One counselor for each secondary school
- One teacher supporting each of the following cross-disciplinary topics per school: technology, entrepreneurship, and overall wellness
- One administrative assistant for each 300 students
- One security guard per school
- One food service professional for each 75 students
- One janitor or handyman for every 13 physical units
- One director per school, or for every 800 students
- One fine arts teacher for every 5 groups of students (~125 students in primary schools; ~150 students in secondary schools)

Outside of these rule-based assignments, excess school personnel will be identified and reclassified into a new, value-adding role at the regional level as a part of the reorganization.

Increasing student-teacher ratio

In FY2018, Puerto Rico's student-teacher ratio was 11:1, compared to approximately 16:1 in many comparable districts on the mainland such as Miami-Dade County Public Schools in Florida. Puerto Rico's student-teacher ratio will only continue to decrease with the projected student enrollment declines in the coming years. To address this, classrooms will be consolidated to enable lower teacher staffing levels to reach a target student-teacher ratio of 14:1. This ratio is slightly smaller than the mainland benchmark due to several constraints specific to Puerto Rico, such as its high proportion of special education students, rural geographies, and size constraints on actual classroom size, in some cases. To achieve the targeted student teacher ratio, teachers of "mainstream" classrooms will be assigned using the following industry-standard rules:

- Pre-kindergarten: one teacher for every group of 16 students
- Kindergarten through 3rd grade: one teacher for every group of 25 students
- 4th grade through 12th grade: one teacher for every group of 30 students

Special education teachers and assistants will be identified based on the needs determined for each student and as required by law.

Sample calculations of various school levels are included in Exhibit 31. The sample schools included were selected for having the average or near the average quantity of students for that type of school. The calculations do not include special education students in separate classrooms or any special education teachers.

EXHIBIT 31: STUDENT TEACHER ANALYSIS

| Category | Rule | School Levels | | |
|--|--|---------------|-------------|-------------|
| | | K-5 | 6-8 | 9-12 |
| Matricula | | 272 | 343 | 515 |
| Grupos PK | 16 students max | 0 | 0 | 0 |
| Grupos K-3 | 25 students max | 9 | 0 | 0 |
| Grupos 4-5 | 30 students max | 4 | 0 | 0 |
| Grupos 6-12 | 30 students max | 0 | 15 | 20 |
| Core Academic Teachers | | 13 | 15 | 20 |
| Maestros PK | 1 per group PK | 0 | 0 | 0 |
| Maestros K-3 | 1 per group K-3 | 9 | 0 | 0 |
| Maestros 4-5 | 1 per group 4-5 | 4 | 0 | 0 |
| Maestros 6-12 | 5 per 6 groups 6-12 | 0 | 15 | 20 |
| Ancillary Academics - with classes | | 6 | 7 | 10 |
| Elementary English | 1 per 5 groups, grades K-5 only | 3 | 0 | 0 |
| Health teacher | 1 per school or 18 groups, grades 6-12 | 0 | 1 | 2 |
| Fine arts | 1 per 5 groups, all levels | 1 | 1 | 1 |
| Exploratory | 1 per 9 groups, grades 6-12 | 0 | 2 | 3 |
| Educacion fisica | 1 per 150 students, all levels | 2 | 3 | 4 |
| Academic Support Staff - no classes | | 9 | 10 | 12 |
| Director | 1 per school, all levels | 1 | 1 | 1 |
| Bibliotecario | 1 per school, all levels | 1 | 1 | 1 |
| Psicologo | 1 per school, all levels | 1 | 1 | 1 |
| Trabajador social | 1 per 250 students, all levels | 2 | 2 | 3 |
| Enfermera | 1 per school, all levels | 1 | 1 | 1 |
| Consejero | 1 per 500 students, grades 6-12 | 0 | 1 | 2 |
| Cross disciplinary teachers | Max 3 per school, all levels | 3 | 3 | 3 |
| School Support Staff | | 9 | 11 | 14 |
| Administrativos | 1 per 300 students, all levels | 1 | 2 | 2 |
| Seguridad | Min 1 per school, all levels | 1 | 1 | 1 |
| Technical support resource | 1 per school, all levels | 1 | 1 | 1 |
| Comedores | 1 per 75 students, all levels | 4 | 5 | 7 |
| Conserjes | 1 per 13 units, all levels | 2 | 2 | 3 |
| School full faculty | | 37 | 43 | 56 |
| Teachers in school | | 20 | 22 | 29 |
| Student/teacher ratio | | 13.6 | 15.6 | 17.8 |
| Weighted average S/T ratio | | 16.1 | | |

PRDE's approach of defining rule-based human resource allocation allows for the redistribution of excess employees to ensure all employees are adding maximal value to the system. To both realize the fiscal transformation and drastically improve outcomes, these reinvestments in historically weak areas is essential.

Right-sizing regional and center level structure

Rather than function as a single Local Education Agency (LEA), PRDE will create regional LEAs (**Exhibit 32**).

EXHIBIT 32: LOCAL EDUCATIONAL AGENCIES FUTURE STATE REGIONS



This new regional LEA model will be fully and effectively staffed to provide appropriate supervision and support to schools while also decentralizing the administration of individual schools, putting decisions closer to students and families and improving outcomes. Developing and relying on local leadership must also allow PRDE's central administrative structure to transition over time to staffing levels comparable to state educational agencies (SEAs) in comparable mainland U.S. states. Currently, the central administration has one staff per 133 students projected in FY2022; the 50th percentile of U.S. states is a ratio of 1:166. A decentralized model also decreases dependency on the secretary's office for day-to-day decision making, building capabilities of second-line management at the regional level.³⁸ Each regional office is expected to have capable leadership and staff to execute core functions, including operations, student services, accountability, school management, human resources, legal, and academic standards.

To facilitate this transition, the Department will need to re-define core administrative and academic leadership functions and where they are executed, and employees will need to be reclassified and upskilled at the regional level to support the new level of responsibilities they will have. In cases where the requisite skill set does not already exist within the PRDE, the Department

³⁸ Oversight Board Listening Session, Secretary Julia Keleher, "On the Road to Transformation" November 30, 2017.

of Education will commence targeted external recruiting efforts with the primary goal of achieving regional operating effectiveness. Administrative employees who do not, cannot, or are unwilling to perform these new roles will be considered for participation in the Single Employer program. The Department will review its consolidated human capital strategy to determine how to best use formal and informal mechanisms to achieve these changes, within the confines of Puerto Rican law.

Implementing the regional LEA model will allocate administrators more effectively for decision-making. The model should decrease headcount requirements at the regional level and central level over time. As resources and functions are pushed closer to the schools and regions, an estimated total of nearly 750 employees at the central level in FY2018 would be reduced to approximately 600 by the end of the reorganization transition, likely during calendar year 2020.

As the PRDE overhauls its poorly functioning information systems planned for FY2019 and FY2020, it is anticipated that total administrative support needs may continue declining over time as (currently manual) processes are automated and cross-system reconciliation needs decline. The PRDE should expect a reduction in both employees required and professional services that support these systems.

9.2.3.3 ADMINISTRATIVE REINVESTMENTS

As part of the reorganization, the PRDE should identify areas of necessary administrative investment that present opportunities to improve fiscal controls and managerial oversight. As of FY2018, the PRDE did not have a contracts management office, any managerial oversight at the central level of the transportation function, an office of school choice as required by law, an independent appeals function to service employee inquiries, nor a strategic facilities management office (including capacity to manage hurricane recovery). These gaps should be addressed as part of the reorganization of the central level.

The education of the children of Puerto Rico, and their successful entrance into the workforce, is a core goal of PRDE. Investment in education has also been shown to drive long-term economic growth – and in the case of Puerto Rico is projected to add 0.26% increase in GNP growth by FY2058 and keep growing thereafter. As a result, it is important that some of the savings from education measures are reinvested to drive student and teacher outcomes. PRDE will drive two such initiatives, both funded through reinvesting right-sizing savings and targeted additional investments:

1. Learning experiences and classroom resources
2. Supports of whole child to combat issues of poverty
3. Teacher recruitment, development, and retention
4. Implementing learning experiences that are aligned with workforce training and economic development

Learning experiences and classroom resources

Teachers are currently limited in their ability to provide the best educational opportunities because of the limited resources and curricular materials available, including up-to-date textbooks and instructional materials aligned to content areas. Through the Academics program, the Department will make the following investments to achieve its goals of transforming outcomes:

1. **Purchasing high-quality textbooks aligned to the curriculum:** This current school year, the Department made the first significant purchase of textbooks in over a decade. Specific subjects and grades still lack up-to-date textbooks and class materials. Therefore, \$75 per student (for FY2019-FY2021) will be invested in procuring new textbooks, or \$21-24 million each year as one-time costs.
2. **Creation of STEM labs:** The Department is investing in the integration of STEM (Science, Technology, Engineering and Math) to better prepare students to be critical thinkers prepared for 21st century college and career success. Throughout the island, schools lack laboratory spaces and materials required for interactive, applied STEM instruction.
3. **Purchase of K-3 classroom libraries:** Third grade is a critical year for literacy instruction. Research shows that students who are not reading proficiently by third grade are less likely to succeed in later grades without the ability to fluently access content. The Department will invest in purchasing sets of “classroom libraries” in every classroom in Kindergarten through third grade, providing a diverse set of fictional texts that teachers can use to enrich their instruction and engage students in literature.
4. **Project-based learning:** The Department will continue to invest in teacher professional development and curricular materials to more deeply integrate project-based learning into the curriculum, providing students opportunities to engage in authentic experiences, develop their critical thinking skills, and build deep content knowledge.

Supports of whole child to combat issues of poverty

A “whole child” approach to education recognizes that students’ social, emotional, physical and mental health needs need to be considered in order to achieve academic success, particularly given the socioeconomic realities in Puerto Rico. The student population has a high set of needs as a result of both chronic causes, such as intergenerational poverty, and acute causes, such as the trauma students suffered in the wake of Hurricane Maria. As part of its responsibility to care for the holistic education of children, the PRDE will invest in supports that attend to these student needs:

1. **Nurses and psychologists:** Children whose health needs have not been attended to face incremental challenges in even meeting expectations, let alone demonstrating material growth. The PRDE should invest in health professionals that will support a system identifying, managing, and treating students for both physical and mental health concerns.
2. **Social and emotional learning:** The Department should invest in professional development for teachers to integrate social and emotional learning into the curriculum, systematically promoting students’ social and emotional competence for this needy population.
3. **Family engagement:** Active family engagement in a child’s education results in better academic outcomes, as those parents will be able to better support their children’s learning progress. The Department should invest in developing a family engagement strategy to foster greater parent participation, including the creation of family centers in every school.
4. **Transportation:** A student who cannot arrive to school reliably cannot benefit from improved classroom instruction, and a student who spends extended periods of time walking between home and school loses valuable time for homework and/or sleep, both of which are critical enablers for performance in the classroom. The PRDE’s current eligibility rules for transportation are so extreme that they restrict access to thousands of impoverished families. The Department should target an increase in capacity of its

transportation system to providing consistent and safe transportation to school for a greater number of students.

Teacher recruitment, development, and retention

Teachers are considered one of the most influential factors in student success in the classroom and standard of living beyond the classroom. For example, one U.S. study found that classes with an average-quality teacher had a lifetime income of \$266,000 higher than classes with a poor-quality teacher in each year.³⁹ Improved education through enhanced teacher quality is critical to the long-term success of the children of Puerto Rico and will help to lift a new generation of Puerto Rican citizens out of poverty. Recognizing this, PRDE has committed to transforming system practices related to attracting, retaining, and developing teachers and administrators:

- 1. Providing increased opportunities for and higher quality of training** (e.g., in-class; through leadership academies; STEM development through collaboration with universities)
- 2. Creating opportunities for targeted skill development** (e.g., instituting mentorship programs to enable coaching by experienced and high-performing teachers as a cost-neutral, and often high impact, initiative)
- 3. Investing in teacher salaries that approach mainland comparators and standardizing the pay scale for all teachers.** As of FY18, teachers in Puerto Rico had not received a pay raise in nearly a decade, while salaries on the mainland consistently increase in keep up with cost of living. Salaries are significantly lower than mainland comparators, causing Puerto Rico to lose out on opportunities to attract and retain talent in its teacher and administrator positions. In FY2019, the Government implemented a \$1,500 annual salary increase for teachers⁴⁰ and has introduced a \$5,000 annual salary increase for principals (effective November 2018) to begin closing this gap, although the gap remains large, and incentivize retention of highest quality teachers. For subsequent years, the PRDE is expected to develop a comprehensive, standardized compensation strategy for teachers, including integrating a series of standard raises that correspond to tenure and performance in role. The PRDE will identify ways to standardize the logic of compensation to create transparency and accountability, thereby improving the quality of the teaching workforce over time.
- 4. Identify opportunities to build capabilities in the workforce currently lacking.** Particularly for difficult-to-recruit core subjects that have a direct correlation with student performance, such as English and high school math and sciences, the Department will identify creative ways to increase its permanent workforce to ensure it can provide these services to students. The Department will consider converting transitory teachers with in good standing, recruiting new teachers both internally and externally to Puerto Rico, and up-skilling or cross-skilling through alternative certification programs, at a minimum.

Implementing learning experiences that are aligned with workforce training and economic development

The PRDE is committed to preparing students for the workforce and will begin to offer occupational exploratory courses in middle school starting in August 2019, exposing students to

³⁹ Raj Chetty, John N. Friedman, and Jonah E. Rockoff, "The Long-Term Impact of Teachers: Teacher Value-Added and Student Outcomes in Adulthood," National Bureau of Economic Research, 2011.

⁴⁰ In 2016, mainland U.S. teachers earned an average salary of over \$58,000 (U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts, table 6.6D, August 2016). The average salary for a teacher in Puerto Rico (less benefits) is approximately \$32,000 per year. An increase of \$1,500 per year would bring average teacher salary to \$33,500, still approximately 42% lower than the mainland U.S.

future opportunities to cultivate early alignment between industry needs and student interests. The PRDE will review its Career and Technical Education programs to ensure alignment with industry standards and best practices, increasing the degree to which Puerto Rican students are competitive and employable.

The PRDE will invest in Work Based Learning experiences that offer students real work experience in their area of interest, placing them in positions with local businesses, and creating clear and direct pathways to employment opportunities. The Department should target a doubling of their current activity in this area (~3,500 students in FY2018), in support of long-term economic development efforts. Certification programs for students through industry partnerships will continue to be developed, including dual-enrollment programs with the University of Puerto Rico.

Funding Sources

These outcome-oriented reforms are essential to achieve the turnaround in student achievement⁴¹ and career readiness, which together provide the foundation for future labor participation and continued economic activity. One-time reforms should be funded through federal supplements and private infusions of capital wherever possible. New ongoing operating expenses and one-time investments ineligible for external sources of funding should be funded primarily through reinvestment in savings achieved through the right sizing measures to the extent possible.

The PRDE had 359 participants in the first Voluntary Transition Program in FY2018 and 2,422 participants in the second Voluntary Transition Program in FY2019. In combination with implementing rule-based resource allocation and the consolidation of a large number of schools, this should provide a surplus of personnel funds that could be redirected to support some of the most critical reinvestments. Additional investment may be required; the Government should consider the redistribution of state funds to provide for the additional investments that may be necessary to support an operation of the size, need, and ambition of the Department of Education.

9.2.4 Example of Agency Efficiency Plans - Department of Economic Development (DDEC)

9.2.4.1 CURRENT STATE AND FUTURE VISION FOR THE DEPARTMENT OF ECONOMIC DEVELOPMENT

DDEC includes a consortium of agencies critical to incentivizing and managing the economic recovery of Puerto Rico's private sector. This new and more robust DDEC implements and supervises the execution of PR's economic development policy fostering a wide array of business sectors, ranging from manufacturing and trade to tourism and business services, offering incentives and other types of guidance and support to entrepreneurs and established companies, both large and small, that are currently doing or planning to do business in PR. In addition, the Department is committed to implementing strategies that encourage investment, spur job creation, and improve the quality of life for all Puerto Ricans. With a strengthened focus on client experience and improving the ease of doing business, the DDEC will achieve not only greater efficiency but also greater effectiveness of its programs. Furthermore, DDEC will ensure that every dollar invested in economic development translates into positive growth.

⁴¹ For example, reducing teacher absenteeism, which was found to reduce 4th-graders' math test scores by 3.2% of a standard deviation for every additional 10 days of teacher absence, could create a step change in student proficiency.

The agencies to be consolidated are as shown below (**Exhibit 33**).

EXHIBIT 33: LIST OF AGENCIES IN FUTURE STATE DEPARTMENT OF ECONOMIC DEVELOPMENT GROUPING

| | |
|--|---|
| 1 Department of Economic Development and Commerce (DDEC) | 6 Commonwealth of Puerto Rico Regional Center Corporation |
| 2 Puerto Rico Industrial Development Company | 7 Local Redevelopment Authority for Roosevelt Roads |
| 3 Puerto Rico Trade and Export Company | 8 Permits Management Office |
| 4 Office of Industrial Tax Exemption | 9 Puerto Rico Tourism Company |
| 5 State Office of Energy Policy | 10 Planning Board |

EXHIBIT 34: LIST OF AGENCIES IN FUTURE STATE DEPARTMENT OF ECONOMIC DEVELOPMENT GROUPING INTO A CLIENT CENTRIC ONE-STOP SHOP FOR ALL CLIENTS' NEEDS



According to Act 141 -2018 The Department of Economic Development and Commerce, The Puerto Rico Tourism Company, The Puerto Rico Trade and Exports Company, The Office of Industrial Tax Exemption, State Office of Energy Policy, Commonwealth of Puerto Rico Regional Center Corporation and The Permits Management Office will be consolidated, whereas The Puerto Rico Industrial Development Company, The Local Redevelopment Authority for Roosevelt Roads and the Planning Board will remain ascribed. Additionally, two new organizations have been established to promote Puerto Rico overseas as an investment destination (Invest Puerto Rico) and the visitor's economy (Discover Puerto Rico).

The new DDEC structure stands on five pillars: Economic and Social Planning, Client Services, Strategic Sectors and Strategic Operations supported by a robust Shared Services structure.

An integrated DDEC will be better able to coordinate its efforts to spur economic development by providing clear goals and metrics for success. In addition, it will drive savings by consolidating the back-office operations of the newly-consolidated agencies, pursuing digitization, procurement centralization and other efforts to reduce non-personnel spend.

9.2.4.2 EFFICIENCY MEASURES FOR DDEC

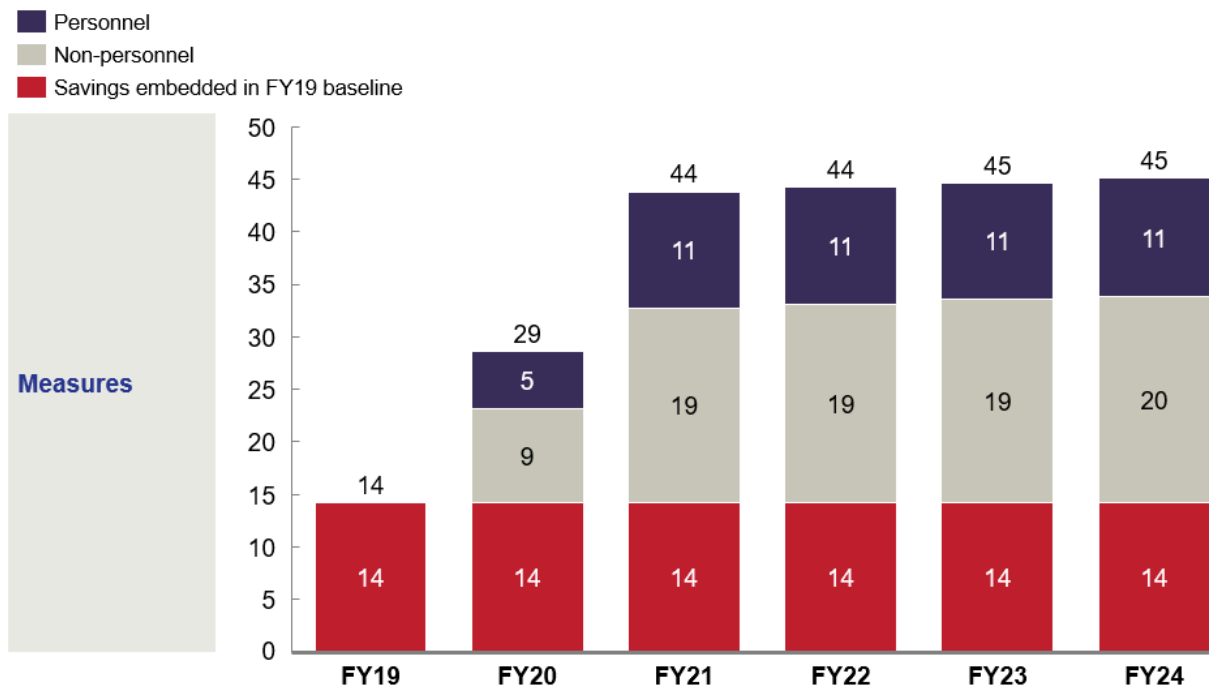
The following stipulations will govern the future state of DDEC:

- The DDEC budget will include carve outs for Discover Puerto Rico and Invest Puerto Rico, as these institutions will perform complementary functions to DDEC
- Each program within DDEC will have clearly defined responsibilities and governance structures that limit costs moving forward and prevent overlapping duties among agencies in the grouping

DDEC must achieve \$11 million in personnel savings and \$20 million in non-personnel savings in FY2024. **Exhibit 35** illustrates annual personnel and non-personnel savings that must be achieved through FY2024.

EXHIBIT 35: DEPARTMENT OF ECONOMIC DEVELOPMENT MEASURES SUMMARY OF IMPACT

Summary of Department of Economic Development measures impact, \$M



Savings represent gross agency specific savings and neither include savings on account of the SRF deficit reduction measure, utilities measure, compensation measures nor implementation costs including VTP costs, incremental Paygo and payout of statutory liabilities.

Right-size the number of front-line and back office employees

A government analysis identified a redundancy in back-office personnel across DDEC.⁴² DDEC is consolidating back-office operations of the newly-merged agencies, seeking savings efficiencies by freezing hiring and eliminating redundant positions, while also redistributing certain personnel to front-line operations that are considered understaffed or that require strengthening due to their strategic impact (e.g., Export Services).

Optimize non-personnel spend

DDEC will pursue a variety of initiatives to reduce non-personnel spend, primarily centered on operational efficiencies, procurement optimization, and digitization of operations (e.g., digitizing the permit application process).

9.3 Healthcare Reform

Prior to Maria, 46% of Puerto Rico residents received their health coverage through the Commonwealth’s state-run insurance program, Mi Salud; this was the highest share of publicly-funded health insurance coverage in America, with the next highest state, West Virginia, covering

⁴² DDEC analysis, 2018.

only 29% of its population under public plans.⁴³ In addition to its large coverage population, Puerto Rico lags mainland states in both health outcomes and access. Puerto Rico residents face higher rates of chronic conditions like hypertension (11.3%-points higher than the U.S. mainland), diabetes (4.4%-points higher), and asthma (1.6%-points higher).⁴⁴ Only 28% of the 62,000 Mi Salud members with diabetes and 17% of the 132,000 Mi Salud members with hypertension are in the respective disease management programs. Puerto Rico also has higher premature birth and infant mortality rates,⁴⁵ and higher rates of adults reporting fair or poor health.⁴⁶ At the same time, 72 of Puerto Rico's 78 municipalities are deemed "medically underserved areas,"⁴⁷ with 500 doctors leaving per year (pre-Maria). Puerto Rico has half the rate of specialists compared to the mainland in critical fields (e.g., emergency physicians, neurosurgeons).⁴⁸

Mi Salud covers individuals through three primary funding sources: Federally-matched Medicaid, the Children's Health Insurance Program (CHIP), and the Commonwealth's self-funded insurance program for low-income adults who do not qualify for Federally-matched Medicaid. An additional 8% of the Puerto Rican population receives some benefits from Mi Salud as part of the Platino program, which supports Medicare recipients who also qualify for Medicaid (also known as "dual-eligible"). Annually, these programs collectively cost \$2.65 billion (as of FY2019), with the Commonwealth responsible for most costs due to caps on Federal matching. Puerto Rico faces real and growing challenges with rising healthcare costs, with premiums growing significantly faster than inflation. Based on national healthcare cost inflation trends plus increased post-hurricane need, Mi Salud PMPMs are projected to rise by nearly 30% over the next 5 years in the absence of additional measures.

9.3.1 Future vision for healthcare reform

The future vision for the Puerto Rican healthcare system has already begun with the implementation of Vital, the new healthcare model designed to promote an overall healthier population through provision of high-quality services to all citizens in need. To do so, the Government is targeting the following:

1. **Decrease the annual per-member cost growth rate to the median level of Medicaid growth rate** by implementing value-based healthcare reforms, such as new payment models to incentivize care integration among providers
2. **Shift care from higher-cost to lower-cost channels;** for example, reducing the number of emergency room visits and encouraging and enabling the role of primary care physicians in providing preventative care
3. **Drive better health outcomes for the population,** indicated especially by reduced rates of chronic conditions among adults

⁴³ Kaiser Family Foundation, "Medicaid State Fact Sheets: Percent of People Covered by Medicaid/CHIP, 2015".

⁴⁴ CDC (Centers for Disease Control and Prevention), "BRFSS Prevalence and Trends Data," 2015-2016. Behavioral Risk Factor Surveillance System.

⁴⁵ Puerto Rico infant mortality rate is 6.4 per 1000 (2016) vs. U.S. 5.8 per 1000; premature birth rate is 11.8% vs. 9.6% in U.S. "Puerto Rico," World Factbook (Washington, DC: CIA).

⁴⁶ 35.4% of Puerto Ricans report fair or poor health, versus 17.9% U.S. average, and 19.3% in Florida and 22.0% in Mississippi (two most comparable states). Table 3, Krista Perreira et al. Urban Institute. Jan 2017. "Environmental Scan of Puerto Rico's Health Care Infrastructure".

⁴⁷ Areas with a shortage of personal health services, e.g., areas or populations that have too few primary care providers, high infant mortality, high poverty, and/or high older adult population.

⁴⁸ U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, "ASPE Issue Brief: Evidence Indicates a Range of Challenges for Puerto Rico Health Care System" (Jan 12, 2017).

4. **Coordinate healthcare initiatives between managed care organization and community** to promote efficiency of services and a community-wide focus on the social determinants of health

9.3.2 Key initiatives for healthcare reform

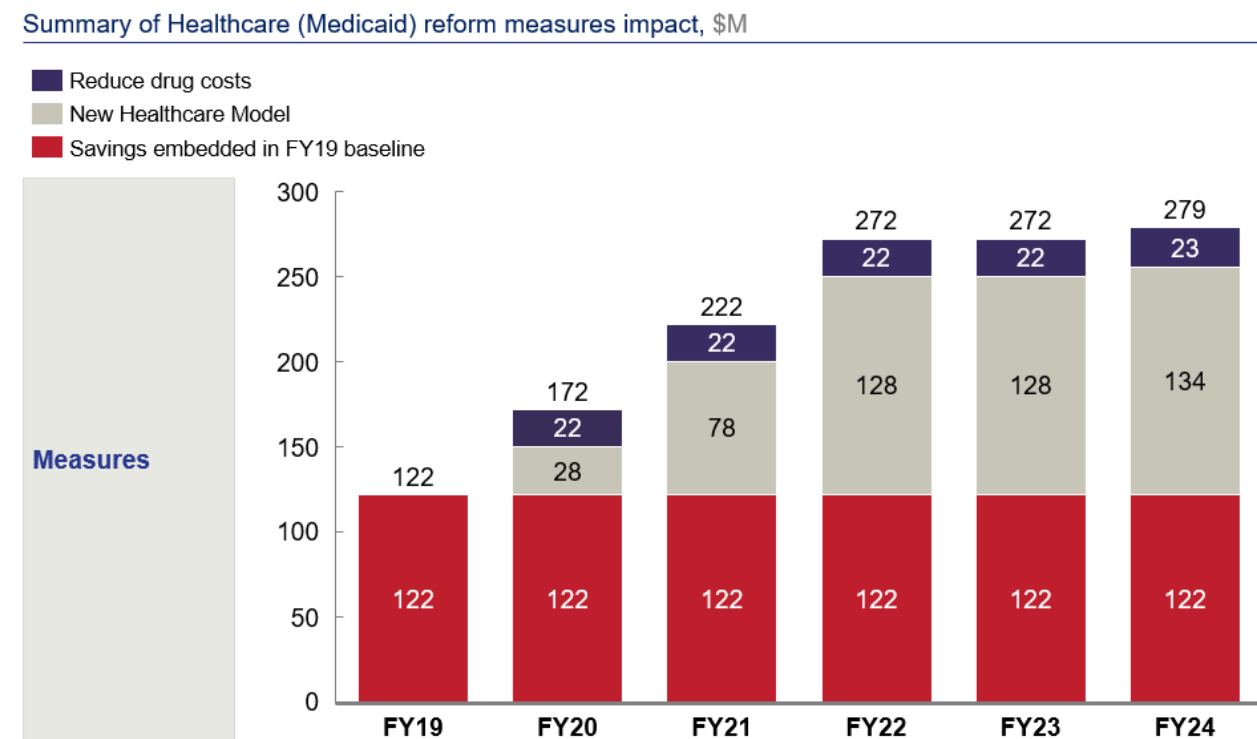
Addressing Puerto Rico’s healthcare challenges while also reducing costs will require a portfolio of targeted actions in the short term (e.g., reducing waste and abuse) and long term (e.g., structural reforms to healthcare model to improve quality relative to cost).

In early FY2018, ASES began efforts to reduce healthcare costs, including implementation of preliminary enrollment verification efforts with DCR and private insurers; standardization of fee schedules for providers; and prescription drug cost controls such as increased pharmacy discounts on branded drugs, mandatory dispensing of generic drugs, and changes to prescription coverage guidelines.

Vital, the new healthcare model, was launched on November 1, 2018. The new model changes how the Island’s managed care organizations (MCOs), are contracted and incentivized as third-party administrators. The new model savings will reach an annual run-rate savings of ~\$157 million by FY2024 (off the FY2022 baseline of approximately \$3.7 billion), a measure run-rate which is then projected to increase as the baseline expenditures increase at long-term healthcare inflation rate of 5.1%.

Exhibit 36 provides an overview of the core savings measures.

EXHIBIT 36: HEALTHCARE BASELINE SPEND AND MEASURES



1 Includes MFCU and MMIS

2 Includes only premium-related expenditures for Vital and Platino costs

The proposed additional investment in provider reimbursements included in FY2020 and onward affects the program savings previously projected otherwise. The impact of this policy decision is estimated at \$50 million beginning in FY2020 growing to \$157 million in FY2024. Consequently, the program savings have been adjusted accordingly. Furthermore, the level of accumulated savings included in the Currently Effective Fiscal Plan of \$823 million by FY2023 no longer holds, as indicated by over \$170 million already earmarked for additional provider investments including hospital in FY2020 and FY2021. Said FY2023 savings would have necessarily required the material reduction of most optional benefits as federally defined, including pharmacy benefits. The segment of the Puerto Rico population covered by Vital cannot effectively access healthcare services through any other venue. Therefore, the projection in this Revised Fiscal Plan considers the Administration's policy decision not to reduce or eliminate benefits that would negatively affect the health of the population. It has become patently clear that - absent a dramatic reduction in the number of lives participating in the program - total program expenditures cannot be reasonably expected to be lower than the revised expenditures indicated in this Revised Fiscal Plan projection.

The Government has included a separate counter-measure related to healthcare reform which provides for increased enrollment and enhanced services to Puerto Ricans based on higher federal funding. Increasing enrollment and providing other benefits will have a positive impact on the Puerto Rico economy.

9.4 Tax Reform

9.4.1 Future Vision for Tax Environment

The Revised Fiscal Plan includes a revenue neutral tax model that provides significant relief to individuals and businesses and helps drive economic development as described below:

- Reduces by 5% the total regular tax responsibility for individuals
- New thresholds for Alternative Basic Tax rates that range from 1% to 24%
- Earned Income Tax Credit ranging from \$300 dollars to \$2,000 dollars, will be granted to qualifying Puerto Rico resident taxpayers with earned income
- Reduces the corporate base tax from 20% to 18.5%, and the top rate from 39% to 37.5%
- The AMT rate is reduced to 18.5% for certain small and medium enterprises, and 23% to those corporations with volume of business of \$3 million or more
- Reduction of the cost of compliance to taxpayers through offering Optional Contribution option for self-employed individuals and corporations that have income derived primarily from services. This provides the option for taxpayers to pay fixed tax rates of up to 20% as long as income is subject to withholding tax or estimated payments
- Use of greater controls in deductions to provide a greater degree of certainty and discourage tax evasion
- Increased use of technology and digitization of information that will allow simplification of interaction with the Department of the Treasury, increased efficiency in making tax administration decisions, improve operational aspects of the Department of Treasury, and reduce the complexity using a unified and integrated system
- Eliminates the requirement of collect B2B tax for 77% of merchants registered in SURI

- Reduces the tax rate on prepared foods transactions (e.g., at restaurants) from 11.5% to 7%

The projected value of tax reductions and offsets are shown below (**Exhibit 37**).

EXHIBIT 37: DETAILED TAX REFORM INITIATIVES AND OFFSETS

| Tax cuts / revenue reductions | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | Total |
|---|---------------|----------------|----------------|----------------|----------------|----------------|------------------|
| Individual nonrefundable credit 5% | (41) | (101) | (103) | (105) | (106) | (106) | (562) |
| Corporate income tax reductions to 37.5% | (15) | (36) | (37) | (37) | (37) | (37) | (199) |
| Phase out of B2B tax | (6) | (17) | (18) | (18) | (18) | (18) | (95) |
| Reduction of SUT on prepared foods | 0 | (68) | (91) | (91) | (91) | (91) | (432) |
| Subtotal | (\$62) | (\$222) | (\$249) | (\$251) | (\$252) | (\$252) | (\$1,289) |
| Tax initiative offsets | | | | | | | |
| Miscellaneous changes in Sales and Use Tax Regime | 1 | 3 | 3 | 3 | 3 | 3 | 15 |
| Tax credits | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cash grants | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Corporate AMT & Flat Tax Potential Revenue | 103 | 248 | 254 | 257 | 257 | 257 | 1,376 |
| Individual AMT & Flat Tax Potential Revenue | 20 | 49 | 50 | 50 | 51 | 51 | 271 |
| Individual Cafeteria Plans - Technical Adjustments | 58 | 59 | 61 | 62 | 63 | 63 | 365 |
| Other Measures | 8 | 0 | 0 | 0 | 0 | 0 | 8 |
| Subtotal | 190 | 358 | 367 | 372 | 374 | 374 | 2,034 |
| Subtotal Total Net Impact Before Implementation Risks | 128 | 136 | 118 | 121 | 121 | 121 | 745 |
| Implementation Risk Adjustments | | | | | | | |
| Corporate AMT behavioral adjustment discount | (17) | (42) | (43) | (43) | (43) | (50) | (238) |
| Corporate AMT economic adjustment discount | (4) | (10) | (10) | (10) | (10) | (14) | (59) |
| Individual AMT behavioral adjustment discount | (3) | (8) | (8) | (8) | (8) | (11) | (48) |
| Individual AMT economic adjustment discount | (1) | (2) | (2) | (2) | (2) | (3) | (12) |
| Other measures behavioral adjustment discount | (8) | (5) | (5) | (5) | (6) | (8) | (37) |
| Additional Reduction of SUT on prepared foods | (8) | (17) | (20) | (22) | (22) | (26) | (115) |
| Elimination B2B ONLY on businesses of \$200k or less in Sales Behavioral Change | (2) | (3) | (3) | (3) | (3) | (5) | (20) |
| Additional Adjustment Requested by the FOMB | 38 | 27 | 0 | 0 | 0 | 0 | 65 |
| Total Net Impact After Implementation Risk Adjustments | \$123 | \$76 | \$26 | \$27 | \$27 | \$4 | \$282 |
| Unallocated implementation risk | (123) | (76) | (26) | (27) | (27) | (4) | (282) |
| Unallocated implementation risk | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

9.5 Tax Compliance and Fees Enhancements

9.5.1 Current state and future vision for tax revenue collection

Puerto Rico has suffered from low tax compliance due to an unevenness in who pays taxes and lack of fear among violators, leading to limited downside for non-compliance and high upside for tax avoidance. **Due to its compliance and collections issues, the Commonwealth has not been able to drive as many revenues from taxes as it should each year.**

In response to these challenges, the Government has already started implementing compliance-related changes. It is driving improvements in its culture and organization to boost enforcement capabilities, streamlining the process of filing taxes and reducing complexity in the system to lighten the burden of compliance on taxpayers. These efforts have already resulted in some success: in 2012, SUT compliance stood at 56%, and by 2016 had improved by 12 percentage points, to 68% compliance.⁴⁹

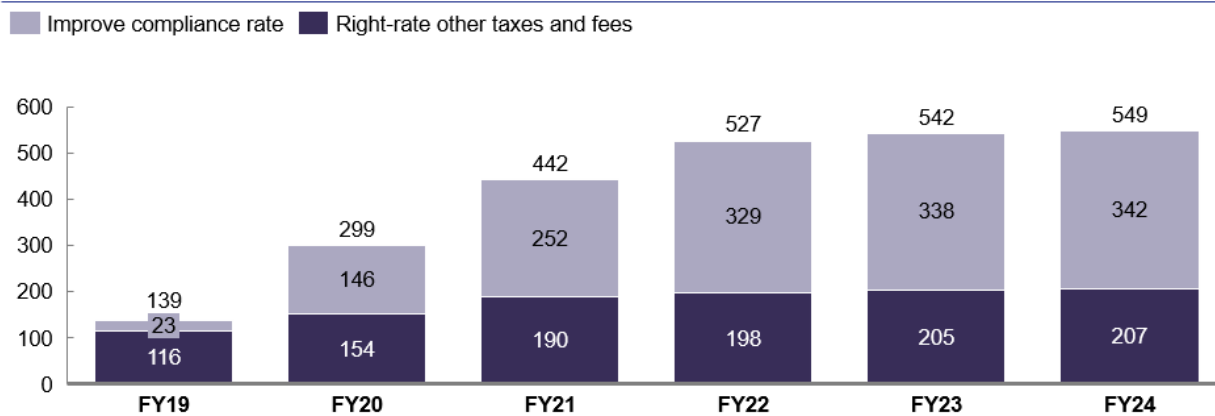
9.5.2 Administrative tax initiatives to increase revenue collections

By driving administrative reform, the Commonwealth will increase revenues by approximately \$2.5 billion over five years, as shown below (**Exhibit 38**).

⁴⁹ Departamento de Hacienda, November 2016.

EXHIBIT 38: TAX COMPLIANCE AND FEE ENHANCEMENTS SUMMARY OF IMPACT

Summary of tax compliance and fees enhancement measures impact, \$M



9.5.3 Improve compliance rate

Given the progress to date in improving compliance rates and the ongoing gap to reach mainland performance, the Government is targeting a 5% net uplift in revenues due to enhanced compliance by FY2022 – inclusive of implementation costs from reinvestment described in the “*Office of the CFO*” – across the major tax lines (personal income tax, corporate income tax, and SUT). Such an improvement would also be in line with improvements seen in other tax transformations.⁵⁰

Recent compliance efforts have largely focused on collections outreach activities, obtaining one-time back taxes owed through a collection call center, flexible payment plans, and a large corporate taxpayer-focused team (with a longer-term goal of establishing a permanent separate unit). In the future, emphasis will shift towards initiatives that promote a culture of compliance to boost voluntary payment. The goal will be to reduce the cost of compliance while simultaneously raising the cost of non-compliance, through a combination of an increased likelihood of being caught while not paying taxes owed and more effective and enforceable penalties.⁵¹

- **Use new systems and processes to identify and remediate non-payment.** Hacienda will create a “premium return system” for individual and corporate taxpayers that enables taxpayers to claim certain deductions and exemptions only if their return is prepared by a certified public accountant following agreed upon procedures; the CPA’s review and certification of the return and supporting documentation as compliant with Puerto Rico’s tax laws would functionally serve as a “pre-audit,” reducing the likelihood of tax evasion and the need for a fuller review by Hacienda.
- **Create a new culture internally and externally** that shifts from the agency existing to serve the public (“*Hacienda para servirle*”) towards emphasis on Hacienda making sure everyone pays their taxes, but with as little friction as possible for the taxpayer and the agency.

⁵⁰ Analogous case studies include Panama, Jamaica, and Spain, which saw 1.0 to 2.5 percentage point increases in tax ratio relative to GDP through their comprehensive tax overhauls. Puerto Rico achieving a 5% uplift from compliance, along with the other measures on corporate tax reform and increased fees, would produce a 2.25 percentage point increase in tax ratio relative to GDP, in line with these case studies.

⁵¹ Ms. Xenia Velez presentation to the Oversight Board (Nov. 30, 2017).

- **Reduce the complexity of the tax system and process of filing taxes** to make it easier for individuals and businesses to pay their taxes correctly. Hacienda reports it plans to introduce pre-filled tax returns and fully digitize the tax filing system onto the Internal Revenue Unified System (SURI) platform that will enable easier filing, communication, and levying of penalties for late payment or non-payment. It must also ease the process of paying for licenses, stamps, and fees by shifting from a system of 64 agency payment centers to instead partner with retail banks, enabling taxpayers to pay their fees at any of 200 private sector locations in various communities (and within four years, 1,000 locations).
- **Institute advanced analytics and broad-reach, low-touch correspondence audits.** Small and medium taxpayers account for a significant share of the unpaid and underpaid taxes, but only a tiny fraction of these taxpayers receive full-scale audits due to the significant time and cost investment needed. While a traditional IRS audit costs an average of \$2,278 per case, automated notices or letters can be executed for \$52 to \$274 per case.⁵² Hacienda had begun a correspondence audit program prior to Hurricanes Irma and Maria, receiving such a strong response to the first batch of 1,000 letters that it overwhelmed the call center. This program helped contribute to \$7.1 million of collections outreach revenues in the first 2 months of FY2018 (against a \$1.4 million target),⁵³ with half of those responding to the letters agreeing to pay the proposed penalty amount.⁵⁴ Fully implementing data-driven tiered audits will enable Puerto Rico to reach a significantly larger share of nonpayers.
- **Collecting SUT on Internet sales.** Nationally, the percent of taxpayers voluntarily reporting and paying use tax on their income tax forms ranges from 0.2% to 10.2%,⁵⁵ while nearly 80% of Americans shop online.⁵⁶ Pursuant to the recently published United States Supreme Court (the “Supreme Court”) decision on *South Dakota vs. Wayfair*, U.S. S.Ct., Dkt. No. 147-494 (June 21, 2018), the Supreme Court overruled the judicially created physical presence requirement to the imposition of SUT collection responsibility on remote retailers (or internet retailers) and validated the economic nexus standard implemented by South Dakota. The Supreme Court ruled that the correct standard is “whether the tax applies to an activity with a substantial nexus with the taxing State”. In holding that the substantial nexus requirement was met, the Supreme Court noted that the sellers in *South Dakota vs. Wayfair* “maintain an extensive virtual presence”.⁵⁷ Through legislation combining click-through nexus, affiliate nexus, and economic nexus following the standards of *South Dakota vs. Wayfair*, as well as voluntary agreements with major online retailers, the Government should be able to capture SUT on a much larger share of Internet sales.⁵⁸ In fact, the Government has

52 IRS Enforcement Results, TIGTA Filing Season Audit, IRS Taxpayer Advocate, Team Analysis, GAO.

53 Hacienda, Fiscal Reforms August 2017 reporting.

54 Conversation with Hacienda, Dec 13, 2017.

55 <http://www.house.leg.state.mn.us/hrd/pubs/usetax.pdf>.

56 Tech Crunch, 2016.

57 The economic nexus standard in *South Dakota vs. Wayfair*, U.S. S.Ct., Dkt. No. 147-494 (June 21, 2018) imposing SUT collection and remittance responsibility on out-of-state sellers applies to retailers that deliver more than \$100,000 of goods or services to South Dakota or engage in 200 or more separate transactions for the delivery of goods or services to South Dakota. In upholding the South Dakota’s economic nexus law, the Supreme Court held that the standard met the constitutional requirements of the Commerce Clause because: (i) “the Act applies a safe harbor to those who transact only limited business in South Dakota”, (ii) “the Act ensures that no obligation to remit sales tax may be applied retroactively”, and (iii) “South Dakota is one of the more than 20 States that have adopted the Streamlined Sales and Use Tax Agreement”.

58 Click Through refers to a nexus between an out of state seller and the state, which enables them jurisdiction to collect taxes, created via an affiliate in the state that links to another “out-of-state” business via an affiliate program (i.e., they send sales your way, you give them a small cut of the profits). Economic nexus refers to the dollar amount spent by a consumer at a business, which provides sufficient local economic activity for the state to be able to collect taxes from that out-of-state seller. Affiliate nexus refers to out-of-state sellers with ties to local sellers, such as through parent or subsidiary arrangements, or local order fulfillment, which creates sufficient local ties to subject the out of state seller to local taxes. Voluntary agreements occur when corporations agree through individual negotiations with states to collect and remit sales tax directly to the state.

approved several amendments to the Puerto Rico Internal Revenue Code of 2011, as amended, that incorporate these nexus standards and impose certain notice and reporting obligations on out of state retailers that don't meet the nexus requirements.⁵⁹ For example, out of state sellers classified as non-withholding agents for SUT are required to: (i) include with their invoice a notice to every Puerto Rico customer of their obligation to pay the SUT and (ii) file a quarterly report with Hacienda to report sales made to Puerto Rico residents.⁶⁰ Additionally, Hacienda has already announced an agreement with a large online retailer to charge Puerto Rico sales tax on sales of goods.⁶¹ With Internet sales growing at ~15% annually, Internet sales tax presents an even more important opportunity going forward.

Considering the post-hurricane limitations, additional compliance activities should be implemented throughout FY2019, and would expect to see revenue impacts growing throughout FY2020 and beyond. The impact would phase in over the course of 4 years given the need for training and movement of workers into Hacienda through the Single Employer Act (Act 8-2017), establishment of new offices and processes, and gradual shift in public perception and voluntary compliance as a result of enforcement activities.

9.5.4 Right-rate other taxes and fees

Prior to Hurricane Maria, the Government had already developed a plan to right-rate the following taxes and fees. These original plans, as well as any adjustments mutually agreed upon between the Government and the Oversight Board during implementation of the March 2017 Fiscal Plan, have been largely included in this Revised Fiscal Plan, except where explicitly noted below.

Gaming tax. Legislation passed in 2017 that increased licenses and fees on mechanical and electronic gaming machines to \$3,000 from \$100. This was originally estimated to generate \$~71 million in incremental revenues.⁶² Part of this calculation involved assumptions of improved enforcement improvements, as the Government has previously estimated it is losing approximately \$170 million per year due to illegal machines that are not paying licensing fees. However, when factoring in the potential that a 2,900% increase in taxes on the machines could decrease total revenues from gaming – a change from 2017 forecasting – run-rate, incremental revenue from the gaming tax has now been reduced to approximately ~\$56 million by FY2024.

Licenses and other fees. Act 28-2017 legislation enabled fee increases in miscellaneous categories. A committee composed of AAFAF, Hacienda and OMB will determine which exact fees are to be increased to meet these minimum thresholds, achieving an overall revenue of ~\$69 million by FY2024.⁶³ Categories that will be considered are: Charges for services; Fines; Insurance; Licenses; Permits; Rent; Royalties; Stamps; Other.

Tobacco taxes. Legislation was passed in 2017 to increase specific tobacco taxes, including taxes on cigarettes, cigars, rolling tobacco, cigarette paper and tubes, chewing tobacco, snuff, electronic cigarettes, nicotine cartridges, and vaporizers. Accounting for one-time declines in use due to

⁵⁹ Sections 4010.01(h), 4020.08 and 4041.03 of the Puerto Rico Internal Revenue Code of 2011, as amended (the "PR Code").

⁶⁰ Sections 4020.08 and 4041.03 of the PR Code.

⁶¹ Caribbean Business, "Amazon to charge Puerto Rico sales tax".

⁶² Based on an assumption of 23,000 gaming machines on which Hacienda is able to collect fees (<http://www.oslpr.org/2017-2020/leyes/pdf/ley-108-23-Ago-2017.pdf>).

⁶³ Assumes an 80% capture rate on the \$73 million potential to account for potential elasticities in demand based on fee increases.

price-related elasticities after the new fees went into place,⁶⁴ a ~\$57 million per year increase in revenues due to the new taxes is projected.

Medical marijuana tax. The Government has passed legislation to tax medical marijuana. Based on an estimated 29,000 patients, the Government can be expected to collect approximately ~\$16 million per year in additional revenue through this initiative.⁶⁵

Airbnb & Short-term Rental Tax. The Government has passed a law to apply a 7% hotel room tax to Airbnb and all other short-term rentals, resulting in a projected ~\$4 million of annual revenue increases, based on annualization of the actual Airbnb tax receipts from before the hurricane.⁶⁶

9.6 Reduction of Appropriations

9.6.1 Current state and vision for the commonwealth appropriations

The central Government provides a range of appropriations to three main groups of recipients: The University of Puerto Rico, Puerto Rico's 78 municipalities, and "other" recipients (typically private industry or non-profit institutions).

Currently, UPR is 47.5% subsidized (~\$646 million in annual appropriations) by state and local funds, compared to 25% average level of state/local subsidization of U.S. public universities.⁶⁷ UPR's tuition is less than one-third of the U.S. public average even after adjusting for per-capita income, and UPR spends ~10% more per student on operational spend than the average public university.

A reduction of the appropriation for UPR was determined in 2017 through a shared process with the Oversight Board to identify reasonable, sustainable reductions to the UPR appropriation that brought UPR closer to U.S. public university tuition and cost benchmarks. This reduction was included in the original March 2017 Fiscal Plan.

Municipalities receive ~\$176 million in annual appropriations from the Commonwealth, but despite this aid many municipalities are operating significant deficits.⁶⁸ With additional reductions on the horizon, municipalities must undergo substantial operating model changes, or else risk increasing their annual operating deficits. In addition to reducing the appropriations to municipalities to drive fiscal discipline, the Commonwealth can support consolidations of municipal services to encourage efficiencies, such as through service provision collectives or streamlining the legal framework to remove barriers to collaboration.

In total, the central Government will decrease appropriations granted to municipalities and UPR, which will result in \$383 million in run-rate savings by FY2024 (**Exhibit 39**).

⁶⁴ Based on an 18% decline, per Hacienda (April 5, 2017 calculations).

⁶⁵ \$15 million projected receipts, minus \$1.5 million of dedicated revenues for the medical marijuana council established in 2017-Act 42 and controlled substances monitoring in 2017-Act 70.

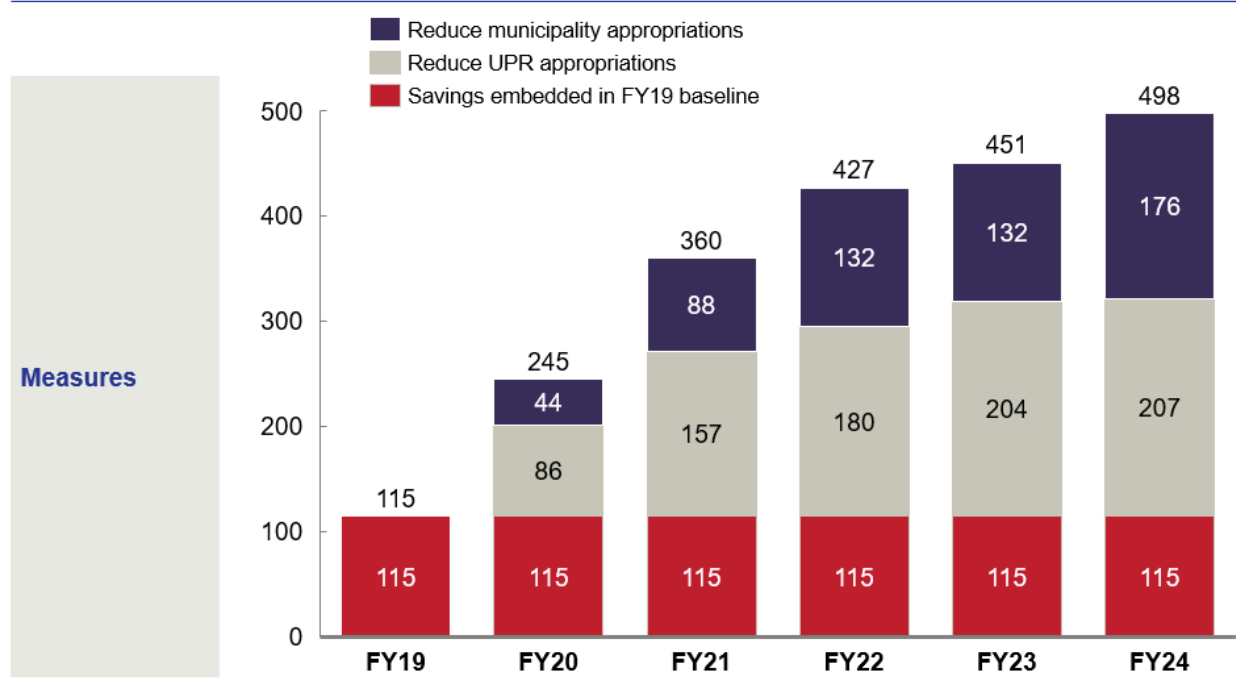
⁶⁶ Hacienda August 2017 Revenue Scorecard, submitted Sept 15, 2017.

⁶⁷ UPR, IPEDs, College Board.

⁶⁸ Draft Report prepared by V2A November 2016.

EXHIBIT 39: REDUCTION IN APPROPRIATION SUMMARY OF MEASURES IMPACT

Summary of appropriations measures impact, \$M



9.6.2 Reduce UPR appropriations to levels in line with funding of other U.S. public universities

The Revised Fiscal Plan has maintained the March 2017 Fiscal Plan and Currently Effective Fiscal Plan measures, less reductions to the appropriation that have already been factored into the FY2018 baseline, as well as reductions in addressable spend.

Targeted measures to increase revenues and reduce expenditures will allow UPR to operate sustainably under a reduced subsidy. On the revenue side, these include modestly raising tuition using a means-based approach (e.g., creating a means-based scholarship fund in parallel), applying more aggressively for Federal grants (seeking to achieve funding equal to the level of 25th percentile of U.S. public universities), charging more dues and fees to students, applying for patents and other intellectual property, and continuing to provide trainings to the PRDE and the Government more broadly.

On the expense reduction side, measures include implementing hub structures, optimizing HR through reducing temporary and trust positions, improving procurement, reducing the cost of medical insurance, and reducing tuition exemptions and special scholarships. These include identifying campuses and programs for consolidations based on performance metrics, tying personnel savings to roles specifically consolidated with campus consolidations and service reductions and increasing tuition in future years to be roughly equivalent to Federal Pell grant less cost of living.

These efforts to improve the operations of UPR will in turn allow the University to renew its operating model to provide the best outcomes for its students. These outcomes will include reduced time to degree, improved job placement, and higher standardized test scores, among

others. A re-envisioned University, which focuses on areas of strengths and on improving outcomes for students, will ultimately prove to be a critical source of renewal for the Island, as it is a cornerstone of human capital development to propel growth in the economy.

9.6.3 Establish independent scholarship fund for UPR

A means-based scholarship fund for UPR will be supported by reductions to the budgets of the Oversight Board, General Court of Justice, Legislative Assembly, and AAFAF. These reductions shall generate ~\$34 million annually in reinvestment funds starting in FY2019 for five years, and they will be used to help build up an endowment to pay for need-based scholarships for UPR students. Approximately ~\$33 million is already included in the baseline for 2019. The annual reinvestment is ~\$2 million by FY2024. Specifically, the savings will fund an independent endowment for needs-based scholarships for students at UPR, which will be managed by OCFO. The final total balance of the scholarship fund will be established once the rightsizing exercise is completed.

9.6.4 Reduce municipal appropriations

Already in FY2019, the total municipal appropriation was reduced, bringing the new baseline appropriations to ~\$176 million per year. Going forward from this current baseline, there will be a reduction in each successive year until they are ultimately phased out at FY2024.

Due to the Commonwealth's financial situation, the Government has no choice but to continue to gradually reduce the current level of municipal appropriations before ultimately phasing out all subsidies in FY2024. This, together with the same economic and fiscal challenges that the central government is facing, could cause significant financial stress for municipalities over the coming years. Two levers in particular should enable municipalities to mitigate the impact:

- municipal service consolidations
- institution of property tax reform

Municipal Shared Services

Consolidating services across multiple municipalities can help reduce cost by leveraging scale, especially in areas of services provided directly to citizens, including public works and infrastructure, public safety, family services, education, and housing. Prior to Hurricanes Irma and Maria, a study estimated that operating expense reduction measures, in part from municipal service sharing, could result in a potential combined fiscal impact of ~\$150 million to \$450 million.⁶⁹

The Commonwealth could pursue several initiatives to incentivize and streamline consolidation:

- Offer financial incentives (e.g., remaining municipal subsidy) for municipalities who hit targets
- Provide transparency into service performance by creating performance metrics and publishing the results, benchmarked against peer municipalities
- Develop and operate service provision collectives across counties
- Streamline legal frameworks to remove any barriers to collaboration between municipalities (e.g., liability issues); for example, the Government can pass legislation like

⁶⁹ Estudio para evaluar la estructura municipal de Puerto Rico", Estudios Técnicos (2016).

New Jersey's 2007 Uniform Shared Services and Consolidation Act to formalize accountability for pursuing shared services by placing the onus on local leadership⁷⁰

Property tax reform

In partnership with the Municipal Revenues Collection Center (CRIM), the municipalities should identify and register tens of thousands of non-registered properties to begin collecting tax on them,⁷¹ and re-categorize misclassified properties (e.g., residential properties marked as commercial). Additionally, CRIM can streamline collection activities and use proven compliance practices, such as advanced analytics to identify non- or under-payment, to raise payment rates.

9.7 Social Security

9.7.1 Enrollment of Police Officers in Social Security

Currently, police officers do not participate in the federal Social Security program. They do not pay into the program, nor does the Government make a Social Security contribution on their behalf. Police officers are entirely reliant on their government pensions for income in retirement.

Police officers are exempt from Social Security because of the "Section 218" agreement between the Puerto Rico and the Social Security Administration, which stipulates that government employees may be exempt from Social Security if they participate in a "comparable" retirement plan such as one which includes total employee and employer contributions equal to at least 7.5% of employee wages.

Enrolling police officers in Social Security will provide them with diversified sources of income in retirement, and Social Security's progressive benefit formula will provide a stronger safety net for lower-paid employees. Workers will typically earn greater retirement benefits under Social Security based on a 6.2% employee contribution and a 6.2% employer (government) match. For example, a typical full-career government employee retiring with a salary of \$35,000 will be entitled to a Social Security benefit of approximately \$16,000, in addition to the benefit the employee builds in their defined contribution retirement account.

The Revised Fiscal Plan includes the enrollment of all police officers in Social Security and an additional adjustment in compensation to cover the individual police officer contribution beginning in FY2019.

The Commonwealth contribution to Social Security will be ~\$280 million by FY2024.

9.8 Direct New Investment Towards Economic Development and Implementation Priorities

Funding will be invested in areas which the Oversight Board and the Government mutually agree will aid in growth over the coming years. The Government will spend up to a total of \$345 million

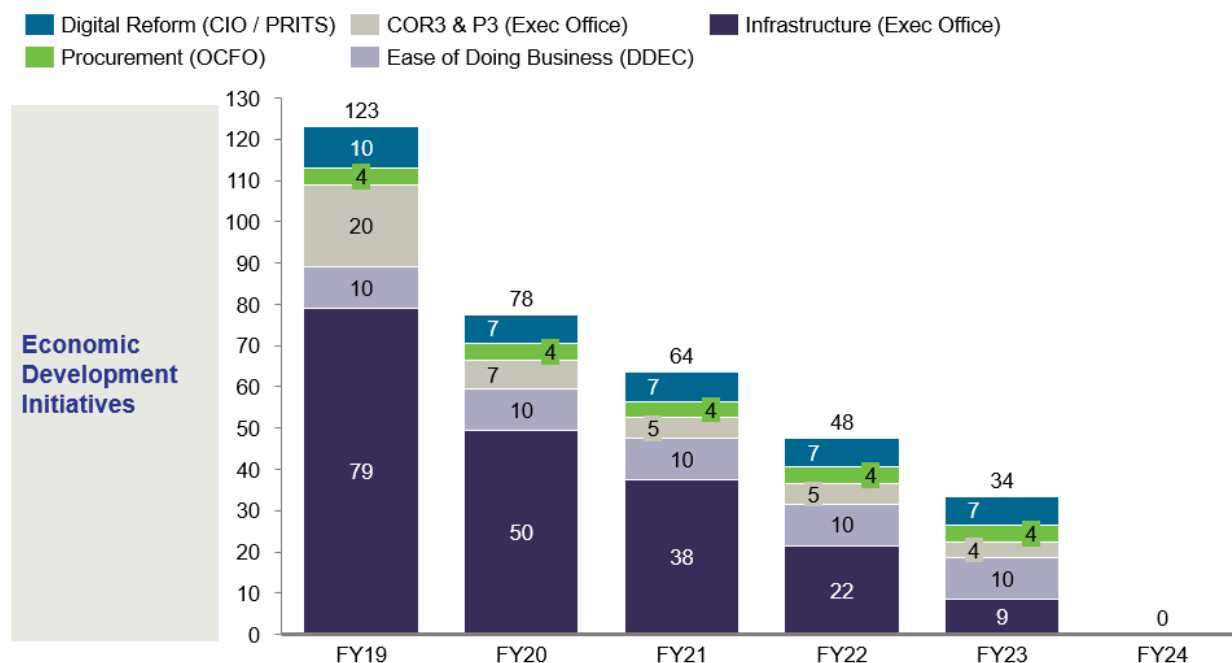
⁷⁰ New Jersey Department of Community Affairs, Shared Services – Working Together. April 2011
http://www.nj.gov/dca/divisions/dlgs/programs/shared_docs/sharedsvcsrefguide.pdf.

⁷¹ Many homes in Puerto Rico have not been registered with the Government, which has led to difficulties for thousands in receiving assistance from FEMA's Individual Housing Program. For example, as of mid-January 2018, 62% of the 1.1 million applications for disaster assistance has been either rejected or were still "in-process", often due to lacking registration and title deeds ("Majority of Claimants in Puerto Rico Still Await Assistance from FEMA, Many Found 'Ineligible'", Caribbean Business).

over FY2019-FY2024 in reform implementation and development initiatives in the following categories (**Exhibit 40**):

EXHIBIT 40: ECONOMIC DEVELOPMENT INITIATIVES

Summary of economic development initiatives, \$M



9.8.1 Digital reform (directed towards CIO and PRITS)

The Revised Fiscal Plan includes an investment of \$10 million for FY2019, and \$7 million each year until FY2023, in digital government innovation. The investment will reduce implementation risk associated with the measures included in the plan, and otherwise improve the efficiency of government service delivery. For instance, digitization of tax collections will help improve compliance needed to increase Government revenues. Leading governments worldwide have launched central digital transformation hubs that serve to attract digital talent and introduce Agile approaches to digital service delivery (e.g., the U.S. Digital Service, Service New South Wales in Australia, the U.K. Government Digital Service). Beyond delivering more effective citizen-centered government digital services, this investment will provide critical skills and capabilities needed to help de-risk the elements of the Revised Fiscal Plan with significant dependence on technology changes (e.g., agency efficiencies, tax compliance, Office of the CFO).

9.8.2 Procurement reform (directed towards OCFO)

The Revised Fiscal Plan includes an investment of \$4 million per year until FY2023 in supporting procurement reform. These reforms, carried out through the OCFO, will focus on building capabilities and tools to: drive near term cost savings associated with existing contracts; improve negotiations related to new or extended contracts; develop contract specifications that drive overall better value; manage demand for procured goods and services centrally; build spend databases to allow for rapid benchmarking of different spend categories; and improve the speed and transparency of procurement processes. Investments in these reforms can take a variety of

forms, including leveraging third party experts, purchasing supporting IT systems, training, and buying access to proprietary datasets. Any expenditures in these categories will flow from an overall procurement transformation roadmap.

9.8.3 Ease of Doing Business reform (directed towards DDEC)

Most of the initiatives relating to the Ease of Doing Business reform will be run through the new Department of Economic Development (DDEC), iPR or the DMO. To support these initiatives, the Revised Fiscal Plan includes an investment of \$10 million per year until FY2023.

9.8.4 Infrastructure and reconstruction efforts (directed towards COR3, P3, PRIFA)

The COR3 will lead coordination, development and execution of long-term recovery and reconstruction efforts, and facilitate federal funding and private capital to promote a more rapid economic turnaround. The P3 Authority, a new independent creditworthy entity, could serve as counter-party, introducing exclusivity provisions to lower the risk for private capital, and subordinating government-provided capital. The P3 Authority would further seek to leverage the skills and assets of the public and private sectors to service the people of Puerto Rico in delivering prioritized projects efficiently and effectively. Puerto Rico's proven P3 framework and record in executing landmark projects such as Toll Roads PR-22 / PR-5 and LMM International airport highlight the potential for an island-wide team to develop and deliver technical, financial and legal expertise for P3 projects. Further investing in these entities can enable their ability to facilitate needed improvements in infrastructure, knowledge services, and other strategically important sectors to improve the fiscal situation in Puerto Rico and spark economic growth and environmental compliance. Additional funding that becomes available for the COR3/P3 Authority could also go towards improving governance and execution. Additional investment in infrastructure projects and recovery efforts, through PRIFA and Fortaleza, will promote further economic growth and reduce the risk of reform implementation. To avoid the potential for wasteful spending, these investments must continue in line with the principles outlined in the Revised Fiscal Plan:

- Set clear priorities using cost-benefit analysis to guide investment
- Accelerate the pre-construction process
- Build sustainable funding models and financing strategies focused on full lifecycle costs of any capital investments
- Promote procurement and project delivery best practices to lower costs
- Build infrastructure of tomorrow

To support these initiatives, the Revised Fiscal Plan includes an investment of \$79 million in FY2019 that decreases to \$0 by FY2024.

9.9 Baby bonds

The Government proposes to implement a policy for new students admitted to the public education system in the next school year. The statute will authorize the creation of a trust where each child will have an account opened in his or her name upon entering the public education system and in which the Government will deposit an initial contribution (similar to a Section 529 savings plan). The funds identified in the Revised Fiscal Plan would allow an initial contribution of \$1,000 per admitted child. Assuming a period of 10 years with an investment return of 4% per annum, the trust could increase by 50% by the end of the term, assuming no additional deposits

into the account. Likewise, to the extent that not every student finishes his or her academic career and is not eligible for his or her share of the state contribution, the remainder may be distributed amongst the other students. The costs of baby bonds are estimated at approximately \$29 million in FY2019 and approximately \$25 million in FY2024.

The Government will select the financial institution that will manage the fund, in order to guarantee the best operation in favor of our students and their future.

Chapter 10. CAPITAL IMPROVEMENT PLAN

Relative to the mainland U.S., Puerto Rico's infrastructure outcomes rank near the bottom in quality and operating performance. In particular, poor transport infrastructure has contributed to congestion and thus impacted the ease of doing business on the Island. The capital investments enabled by post-Maria federal recovery funding offer a unique opportunity to make transformational investments that support economic development. This moment is unique as FEMA has expanded overall flexibility and willingness to support more transformational investments under Section 428 (under Title IV of the Stafford Act).

10.1 Current state of infrastructure and capital investment

Infrastructure investment as a percentage of GDP decreased from 3.3% in 2000 to 1.4% in 2014,⁷² indicating a lack of recent experience in large-scale building. The Government also has a history of failed large-scale projects. For example, Tren Urbano was scheduled to open on July 1, 2001 after beginning construction in 1996; it finally opened in 2005 and the budget for the project increased more than 60%, from \$1.38 billion to \$2.25 billion.

In addition to the challenges with infrastructure delivery and maintenance, the poor state of transport related infrastructure is a key constraint on mobility. Puerto Rico is ranked 51st out of 52 (states + DC + PR) for quality of roads and is ranked 45th out of 52 (states + DC + PR) for congestion of roads.⁷³ Urban congestion is a particular problem in San Juan and on major highways. San Juan is in the top 15% of most congested cities worldwide, according to the 2017 INRIX Traffic Scorecard. It incurs daily delays of ~54,000 hours on average, costing ~\$165 million annually in commuter cost, without including the impact of congestion on the transport of goods, or the costs of unreliability or lack of safety.

Improving traffic on major highways along which goods travel, such as PR-52 and PR-18, is critical to enhancing growth. A 25% reduction in congestion can reduce travel cost by over 6% (NCHRP Report 463). Investments to reduce congestion should prioritize the most economically important trips, or provide alternative travel capacity to enable access despite congestion (Sweet, 2013). Targeted investments, such as "smart intersections", dynamic tolls and reversible lanes using movable barriers will reduce delays on key routes and journeys, and facilitate economic growth.⁷⁴

⁷² Puerto Rico Planning Board.

⁷³ U.S. Bureau of Transportation Statistics.

⁷⁴ See, Jamal Haidar, "The impact of business regulatory reforms on economic growth," *Journal of the Japanese and International Economies*, Vol 26, 2012, pp. 285-307. In addition, there are several studies that review the impact of decongestion of roads on growth. Two examples are: New Zealand Institute of Economic Research, *Benefits from Auckland road decongestion*, July 2017, and Clifford Winston and Quentin Karpilow, *A New Route to Increasing Economic Growth Reducing Highway Congestion with Autonomous Vehicles*, Mercatus Working Paper, January 2017.

Meanwhile, there are several critical elements that Puerto Rico will include to capitalize on the transformational opportunity afforded by historic federal capital funding.

- a) **Build organizational structures and capabilities** in the Government to prioritize and deliver projects faster and at lower cost;
- b) **Prioritize projects with the highest long-term benefit-cost ratios** taking account a variety of monetizable and non-monetizable benefits; and
- c) **Systematically leverage private sector capabilities** to improve overall public outcomes

10.2 Organizational structures and capabilities

When creating a reconstruction plan, it is imperative to build a central capability with the skills and mandate to design an overall recovery portfolio and oversee efficient project delivery. As such, the Government created the Central Office of Recovery, Reconstruction, & Resiliency (COR3) as a Division of the P3 Authority to lead the coordination, development, and execution of long-term recovery and reconstruction efforts. The COR3 has been created based on leading practices used in many jurisdictions, including New Jersey, Louisiana, New York and New Zealand, to ensure higher accountability, transparency and coordination of disaster recovery efforts.

COR3 should commit itself to a decision-making framework that incorporates not only the degree of damage, but also the future level of service required from the asset and future risks to that asset, when deciding how that asset should be rebuilt. New York and New Jersey received ~\$10 billion in Section 428 funding post Hurricane Sandy, which decreased their vulnerability and helped ensure that capital dollars spent then did not simply have to be re-spent cleaning up after the next storm. COR3 will aggressively pursue next level resiliency activities with federal dollars, to ensure that Puerto Rico's critical assets are sufficiently protected from future hazards.

Specific COR3 activities will include:

- Developing, presenting and administering recovery action plans
- Financing, executing and effecting infrastructure projects related to recovery efforts
- Monitoring contracting for compliance and effectiveness purposes
- Implementing and enforce checks and balances for procurement and approval of contracts and payments
- Coordinating and channeling all efforts and activities of the Government related to recovery efforts
- Monitoring capital project delivery, focused on major projects, to ensure on-time, on-budget delivery, highlight risks of cost overrun or delay, and create transparency for overall capital program delivery, including recovery spending led by COR3 or another Commonwealth entity with capital delivery expertise

10.3 Prioritization and delivery

The Government will employ infrastructure delivery best practices (e.g., prioritization of projects for economic impact, fast-track permitting, procurement reform). These best practices improve efficiency and transparency and should be applied to all areas of infrastructure expenditure of the Commonwealth including: reconstruction, construction and maintenance of government owned

assets, and procurement of infrastructure through public corporations and Public-Private Partnerships (P3's).

The Government will pursue five sub-strategies:

Set Commonwealth infrastructure priorities to guide investment

- Set target outcomes to guide prioritization of projects
- Develop clear, systematic cost-benefit analysis and quantitative scoring to prioritize projects based on return on public investment and the ability to implement

Accelerate the pre-construction process

- Identify opportunities for local review and permitting, for as many projects as possible, to avoid federal delays
- For projects requiring local review, revisit existing process to reduce hurdles, and ease of meeting them, wherever possible
- Where federal approval is needed, focus on: clarifying decision rights and confirming processes with all major stakeholders; harmonizing local processes to match federal processes and seeking waivers where applicable; ensuring transparency and clarity from Federal Government on where projects are in the pipeline; and utilizing Title V of PROMESA

Build sustainable funding models and financing strategies

- Leverage external capital, by expanding P3's and access to federal credit (e.g., TIFIA) and grant (e.g., INFRA) programs
- Increase bankability, and eligibility for participation in a P3's by deploying monetary and non-monetary incentives (e.g., recyclability of proceeds from asset monetization, including monetization of Government-owned real estate to support the revenue models for P3's)
- Provide support to de-risk greenfield investment (e.g., reduction of early stage demand risk)

Promote procurement and delivery best practices

For projects that receive Commonwealth funding, ensure such projects:

- Develop an aligned owner organization with streamlined processes (e.g., early procurement involvement, accountable owner team oversight)
- Build an effective contracting strategy (e.g., tailored bidding process and pricing models, change order management tools)
- Utilize advanced procurement tools and approaches (e.g., rigorous clean sheet models, quantified view of Total Cost of Ownership drivers)
- Implement lean construction and digital techniques

Build the infrastructure of tomorrow

- Identify innovative technologies (e.g., automotive transformations, drones, new tunnel creation methods, the Internet of Things) and develop a strategy to actively promote them (e.g., AV pilot test zones), or at least find a way to not stifle their development (e.g., job trainings for displaced workers)

- Critically evaluate major new investments against future trends, to avoid disruption by innovation (e.g., avoid the buildout of excessive parking given increase in shared mobility and growth of autonomous vehicles)

Chapter 11. CONCLUSION

Despite our many challenges, the state of the U.S. territory of Puerto Rico is optimistic, determined and full of potential. In the 17 months since the hurricanes of 2017 and nearly three years since Congress passed PROMESA, Puerto Rico has been challenged by the most damaging storms in U.S. history, significant population loss, as well as an island-wide recession. Our goal is to re-imagine, revitalize and rebuild Puerto Rico so that it can develop to its full capacity for the benefit of not only island residents, but for America as a whole.