

FISCAL PLAN FOR PUERTO RICO

AS SUBMITTED TO THE FINANCIAL OVERSIGHT
AND MANAGEMENT BOARD FOR PUERTO RICO
AUGUST 20, 2018 REVISION



RICARDO ROSSELLÓ NEVARES
GOVERNOR OF PUERTO RICO

AAFAF

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- 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
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List of Acronyms and Key Terms

AACA	Automobile Accident Compensation Administration
AAFAF	Puerto Rico Fiscal Agency and Financial Advisory Authority (Spanish acronym)
ADEA	Agricultural Enterprise Development Administration (Spanish acronym)
Administration	Administration of Governor Ricardo Rosselló
ASEM	Puerto Rico Medical Services Administration (Spanish acronym)
ASES	Puerto Rico Health Insurance Administration (Spanish acronym)
BBB	Request for supplemental Federal assistance submitted on November 13, 2017 by the Government entitled Build Back Better Puerto Rico
CAFR	Comprehensive Annual Financial Report
CAGR	Compound Annual Growth Rate
Cardiovascular	Cardiovascular Center Corporation of Puerto Rico and the Caribbean
CDBG	Community Development Bank Grant
CDL	Community Disaster Loan from the CDL program
CFC	Controlled Foreign Corporations
CHIP	Children's Health Insurance Program (CHIP)
COFINA	Puerto Rico Sales Tax Financing Corporation (Spanish acronym)
COSSEC	Public Corporation for the Supervision and Deposit Insurance of Puerto Rico Cooperatives (Spanish acronym)
COR3	Central Recovery and Reconstruction Office
DCR	Department of Corrections and Rehabilitation
DB	Defined Benefit pension plan
DC	Defined Contribution pension plan
DDEC	Puerto Rico Department of Economic Development Commerce (Spanish acronym)
DMO	Destination Marketing Organization
DOH	Department of Health
DOJ	Department of Justice
DOL	Department of Labor
DOT	Department of Transportation
DPS	Department of Public Safety
DSA	Debt Sustainability Analysis
EEI	Electronic Export Information
EITC	Earned Income Tax Credit
ERS	Employee Retirement System
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
FYTD	Fiscal-Year-To-Date
GAO	U.S. Government Accountability Office
GDB	Government Development Bank for Puerto Rico
GDP	Gross Domestic Product
GF	General Fund
GFEWG	Governor's Fiscal and Economic Working Group
GILTI	Global Intangible Low Income Tax
GNP	Gross National Product
GOSR	State of New York's Office of Storm Recovery
Government	Government of Puerto Rico
Governor	Governor Ricardo Rosselló
Hacienda	Puerto Rico Department of Treasury
HHS	U.S. Department of Health and Human Services
HUD	U.S. Department of Housing and Urban Development
Hurricanes	Hurricane Irma and Hurricane Maria
IFCU	Independently Forecasted Component Units
IMF	International Monetary Fund
IPR	Invest Puerto Rico
Island	Puerto Rico
KPIs	Key Performance Indicators
LEA	Local Education Agency
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)
NRW	Non-Resident Withholdings
OCFO	Office of the CFO

OMB	Office of Management and Budget
P3	Public Private Partnerships
P3 Authority	Public Private Partnership Authority
PA	Public Assistance
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
Platino	Medicare Advantage program that also provides Medicaid wraparound services equivalent to Mi Salud program
PMO	Program Management Office
PMPM	Per Member Per Month
PRASA	Puerto Rico Aqueduct and Sewer Authority
PRCCDA	Puerto Rico Convention Center District Authority
PRDE	Puerto Rico Department of Education
PREC	Puerto Rico Energy Commission
PREMA	Puerto Rico Emergency Management Agency
PREPA	Puerto Rico Electric and Power Authority
PRHFA (or HFA)	Puerto Rico Housing Finance Authority
PRHTA (or HTA)	Puerto Rico Highway and Transportation AUTHORITY
PRIDCO	Puerto Rico Industrial Development Company
PRITS	Puerto Rico Information Technology Service
PROMESA	Puerto Rico Oversight, Management and Economic Stability Act
PRTC	Puerto Rico Tourism Corporation
PSC	Puerto Rico Public Service Commission
RFQP	Request for Proposal
SCO	State Coordinating Officer
SRF	Special Revenue Fund
SR	Structural Reform
SUT	Sales and Use Tax
SIFC	State Insurance Fund Corporation
TANF	Temporary Assistance for Needy Families
UPR	University of Puerto Rico
WIOA	Workforce Innovation and Opportunity Act

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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 Fiscal Plan provides a blueprint of the reforms and fiscal measures that will give Puerto Ricans 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. These guidelines are necessary to restoring economic sustainability for the Island.

* * *

For over a decade, Puerto Rico has experienced a severe fiscal and economic crisis. Since 2006, Puerto Rico's real gross national product (GNP) shrunk by more than 14%. More than 45% of Puerto Rico residents live in poverty, which is more than double the highest poverty rate of any U.S. state.¹ Puerto Rico's 9.1% unemployment rate is almost three times the national average.² 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 left Puerto Rico for the mainland United States. The impact of Hurricanes Irma and Maria accelerated this trend with an additional 458,000 people (or about 14% of the population) expected to leave Puerto Rico by fiscal year 2023.

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 as 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

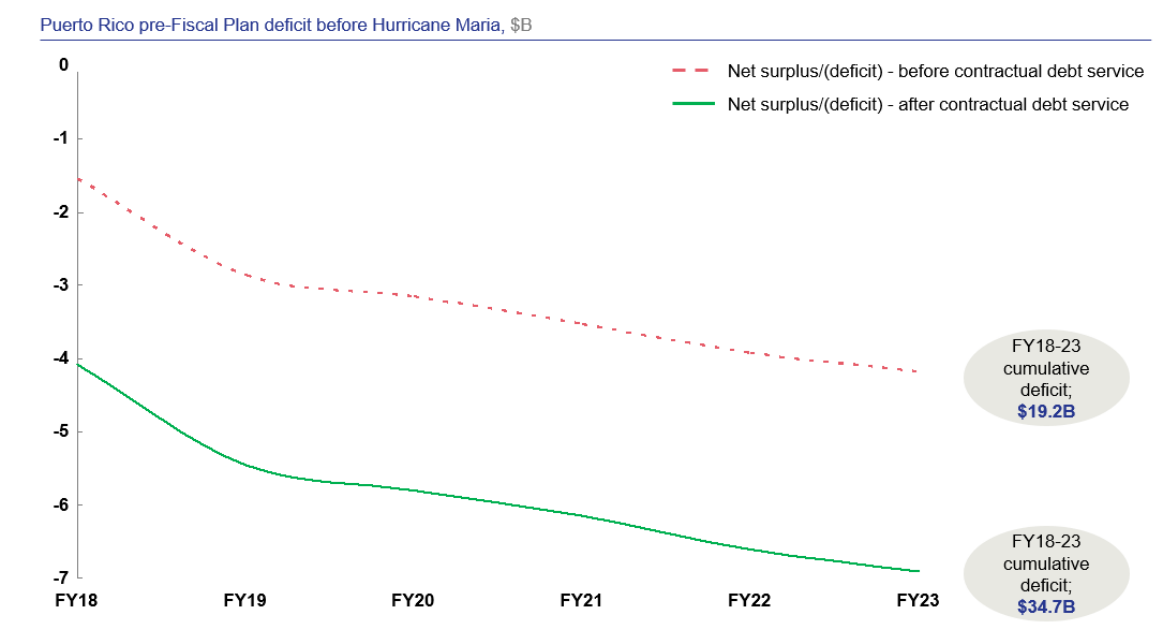
1,2 US DOL Bureau Labor of Statistics

result, Puerto Rico residents could shape federal legislation and receive equal treatment under 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 these 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 7.4% in FY18. On the other hand, over \$86 billion in Federal dollars is estimated to be invested in helping Puerto Rico recover and rebuild from Hurricane Maria. The Fiscal Plan is thus prepared assuming this support from the Federal Government as outlined in more detail in

“MACROECONOMIC AND DEMOGRAPHIC TRAJECTORY POST-MARIA”. 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. While Puerto Rico will experience a brief stimulus from Federal disaster relief funding and is benefiting from a temporary reprieve from debt service due to PROMESA and Title III, we must change the underlying economic foundations to prevent fiscal imbalances from inevitably returning.

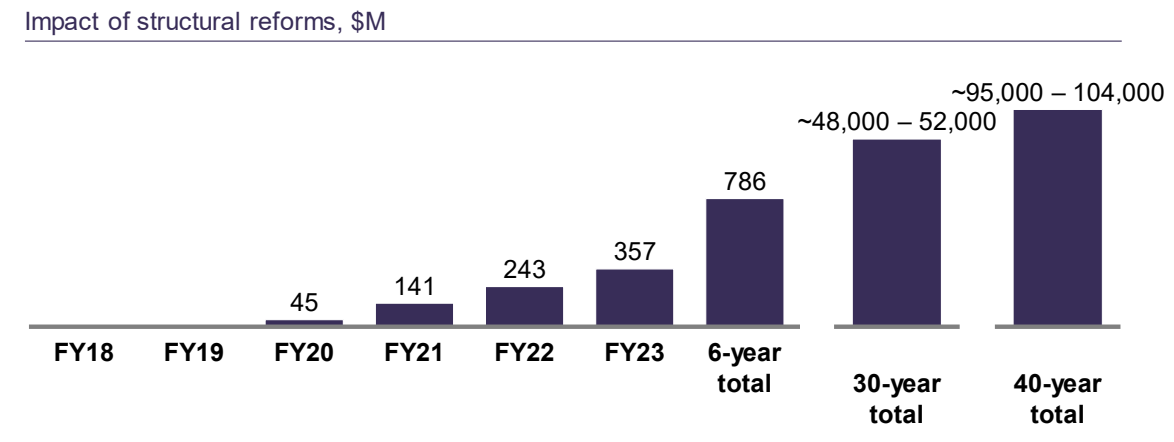
The Government is committed to adopting a series of bold actions to improve its fiscal and economic trajectory. These reforms and measures are essential to making the Government of Puerto Rico more efficient and responsive.

Structural reforms

The Fiscal Plan includes a series of reforms (“structural reforms”) to improve the trajectory of 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 0.30% by FY2022 due to EITC and labor reforms, and by an additional 0.26% from FY2033-2058 from long-term benefits of education and workforce development.
- *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 0.65% uptick in overall growth by FY2023.
- *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% starting in FY2020.
- *Infrastructure reform:* prioritizing economically transformative capital investments with Federal funds and launching maintenance and infrastructure investment policies.

EXHIBIT 2: IMPACT OF STRUCTURAL REFORMS

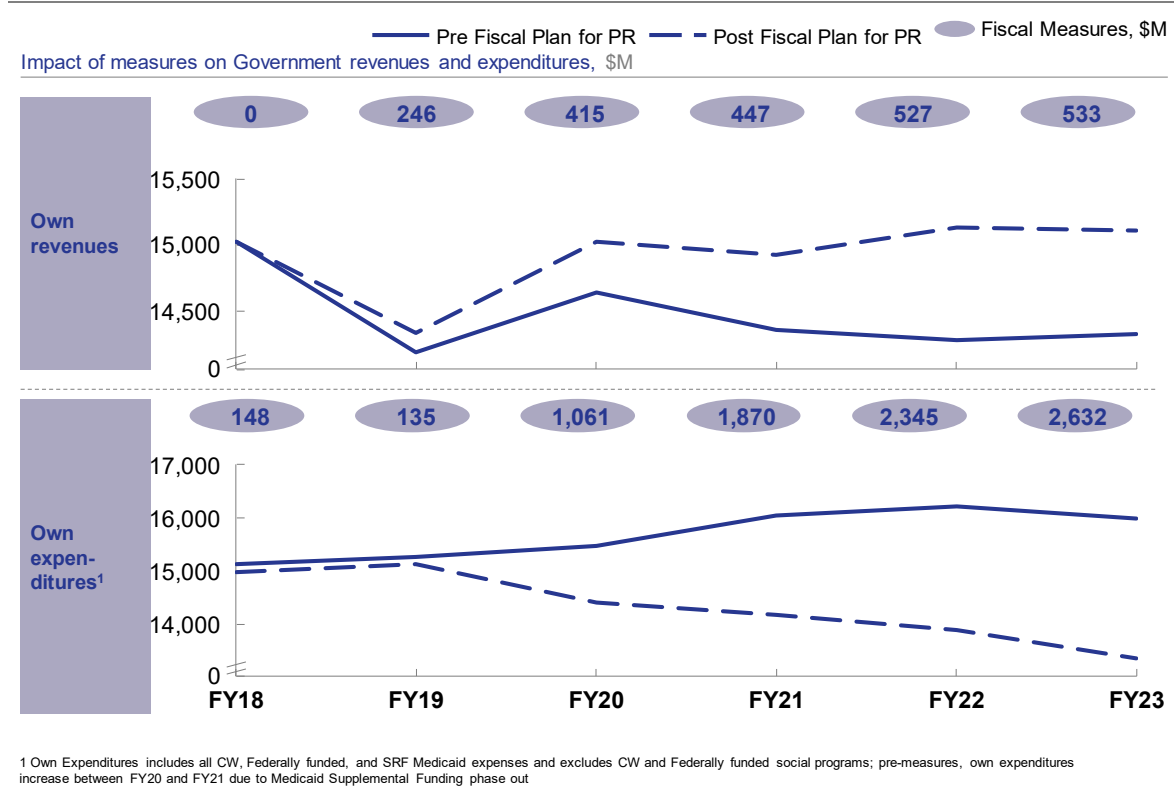


Fiscal measures

The Fiscal Plan includes a set of fiscal actions (“measures”) to increase Government revenues and reduce expenditures (**Exhibit 3**):

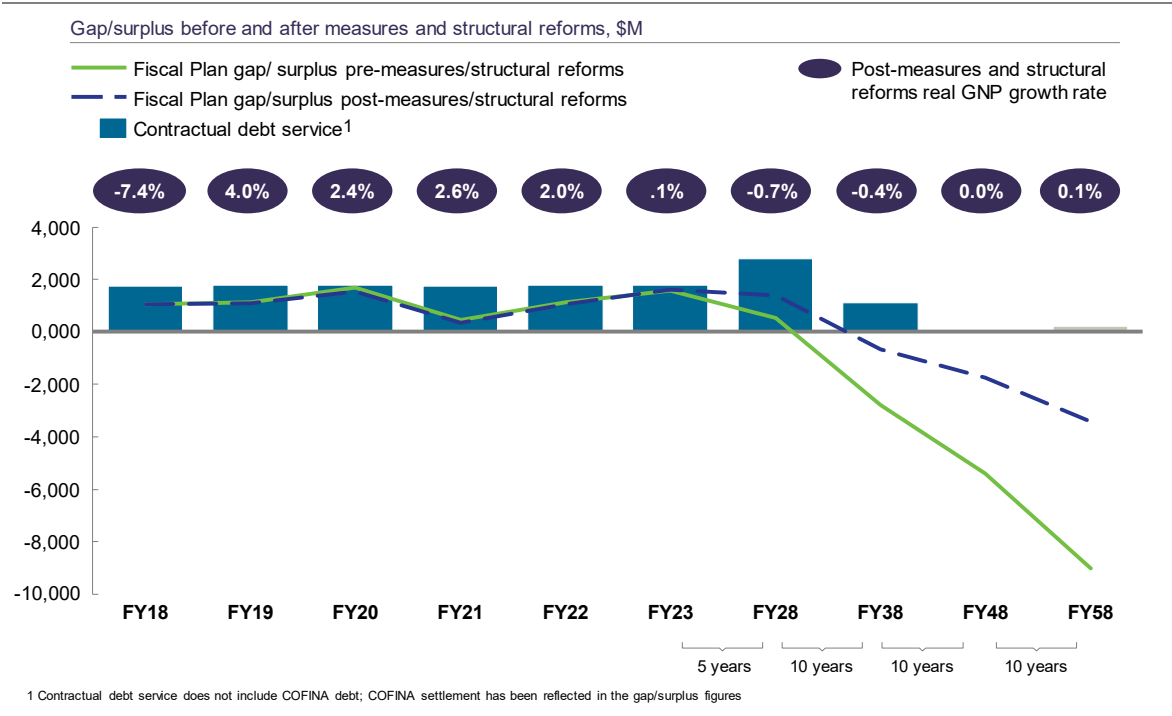
- *Enhancing tax compliance*: Employing new technology and other innovative practices to broaden the tax base, reduce fraud, and improve fairness to boost overall tax revenues.
- *Agency efficiencies*: Consolidating agencies, instituting shared services programs and incorporating best practices to deliver 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, cost-effective care
- *Office of the CFO*: Instituting fiscal controls and accountability, reducing special revenue fund deficits, and improving governance, accountability, and transparency

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



Implementing these structural reforms and fiscal measures, which will provide low-cost and reliable energy, robust infrastructure, more incentives to enter the formal labor market, an improved regulatory and permitting environment, and a more effective and efficient public sector, 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: FISCAL PLAN PROJECTED SURPLUS BEFORE AND AFTER MEASURES AND STRUCTURAL REFORMS MACROECONOMICAND DEMOGRAPHIC TRAJECTORY POST-MARIA



Puerto Rico cannot afford to meet all its contractual debt obligations, even with 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 best time to implement these reforms and restructure the debt is while Puerto Rico has the temporary benefits of Federal disaster relief funding and a stay on debt service.

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 Ricans 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 therefor."³ 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 pharmaceuticals and life sciences, became a pillar of Puerto Rico's economy, creating valuable local supply chains, 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,

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

today Puerto Rico underperforms on all important measures of a modern economy, including 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, the Commonwealth 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%. Today, Puerto Rico is much poorer relative to the U.S. than it was in 1970.

Chapter 2. ENACTMENT OF PROMESA

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 PROMESA, 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, 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.

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.

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 29th Certified Fiscal Plan”).

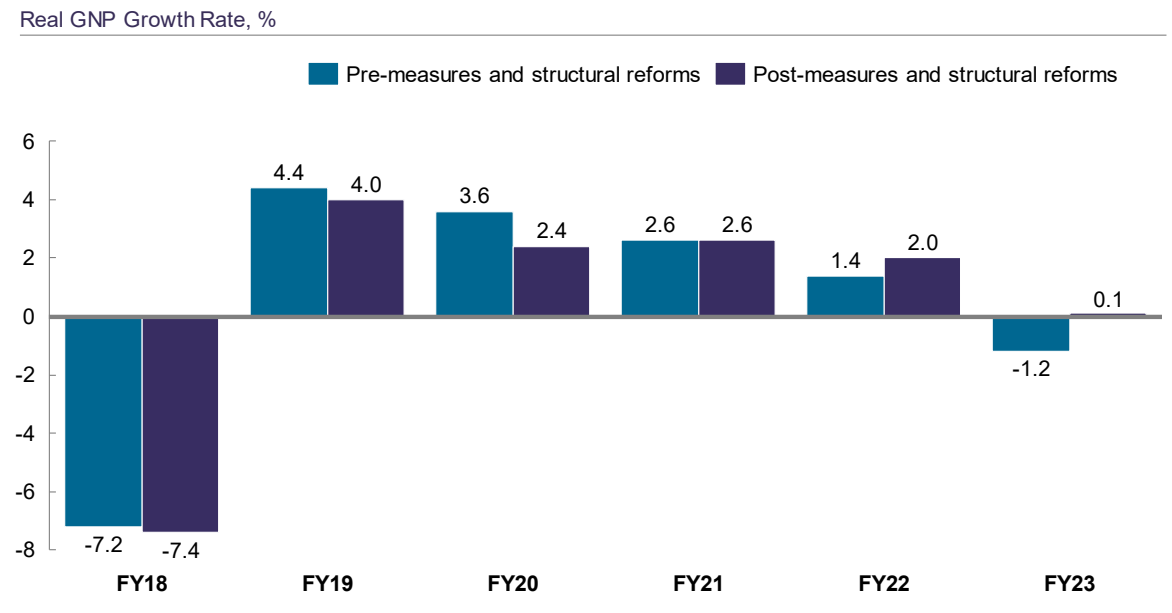
On August 1, 2018, the Oversight Board requested the Government to submit a revised fiscal plan to replace the June 2018 Certified Fiscal Plan in light of new information including, among other things, fiscal year 2018 financial information, revised federal disaster spending estimates, and updated demographic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

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 Fiscal Plan projects there will be macroeconomic volatility in the wake of the storms. In FY2018, there is a significant decline in GNP, followed by a partial bounce-back in FY2019 due to disaster relief funding, then a return to slightly above trendline by FY2023 due to the impact of structural reforms.

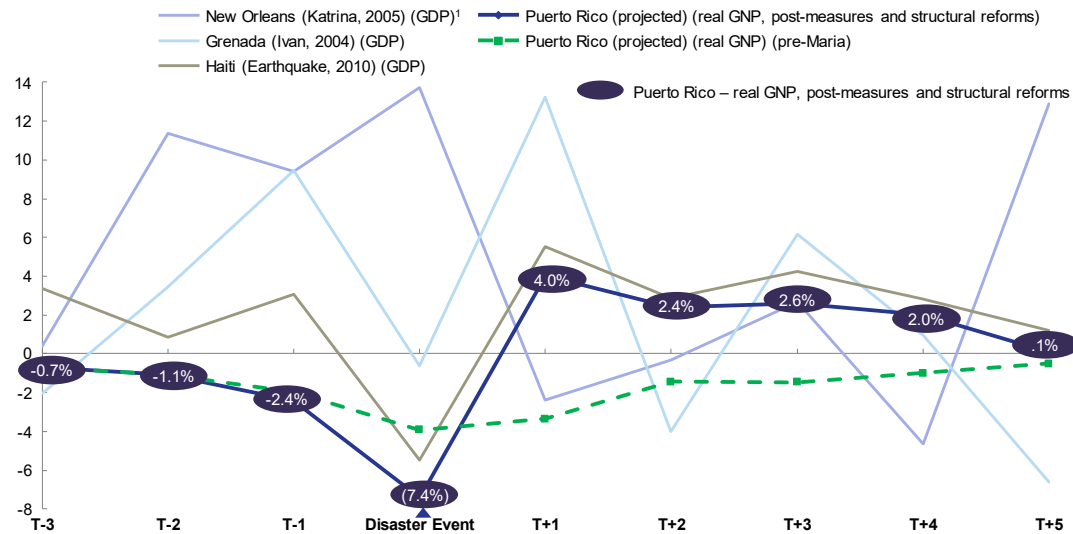
EXHIBIT 5: REAL GNP GROWTH RATE, BEFORE AND AFTER MEASURES AND STRUCTURAL REFORMS, INCLUSIVE OF DISASTER RELIEF SPENDING



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

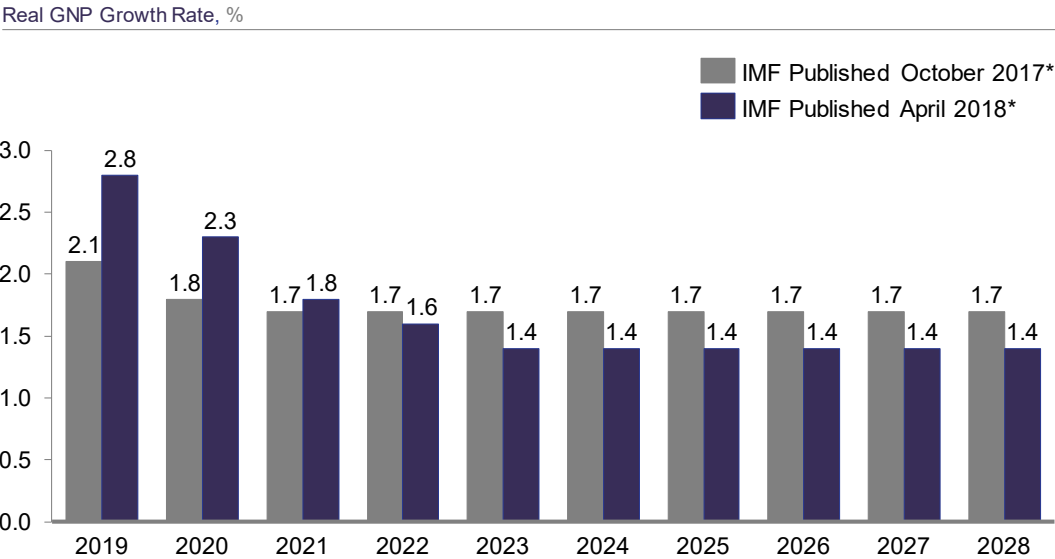
SOURCE: World Bank, Bureau of Economic Analysis, and ECCB

As part of the revision requested by the Oversight Board, new and updated data has been incorporated in the macroeconomic model, including actual consumer price inflation for Puerto Rico in fiscal year 2018, new data on actual and projected future reconstruction spending, and other updated source data used in macroeconomic projections.

The source for the forecasts of world oil and food prices and United States inflation and gross domestic product used in the macroeconomic projections is the International Monetary Fund's World Economic Outlook (WEO). The June 29 2018 Certified Plan included forecasts from the October 2017 vintage of the WEO. After the fiscal plan was first certified on April 19, 2018, the IMF published an updated WEO in late April 2018. This edition of the WEO included a marked downward revision in medium term economic growth for the United States, from 1.7% to 1.4%, citing lower potential growth in the outer years of the forecast following a temporary strong expansion caused by recent fiscal policy changes in the United States. U.S. Treasury has rejected the IMF's view that tax cuts will provide the U.S. economy only a temporary boost and is projecting a stronger economic outlook since it believes that U.S. policies, including the productivity-boosting blend of tax reform and regulatory relief, will result in more sustainable economic growth. This revision has a material negative impact on the macroeconomic forecast for Puerto Rico. There has been no methodological change to the macroeconomic model; all changes reflect only the incorporation of new information into the existing model.

The financial model relies on the IMF WEO forecast, but the Congressional Budget Office (CBO) 10-year economic projections offer an alternative source for economic projections. The CBO forecast is also widely utilized by forecasters as one input for determining growth. The Government has modeled its financial projections utilizing both the IMF WEO and CBO forecasts, but for illustrative purposes and in order to reasonably compare to the June 29 2018 Certified Fiscal Plan, we will only reference in this document figures derived utilizing the IMF WEO forecast in this document.

Exhibit 7: Real GNP Growth Rate Comparisons (IMF World Economic Outlook)



*The IMF forecasts are 5 year forecasts and years 2024-2028 are a continuation of 2023.

Exhibit 8: Real GNP Growth Rate Comparisons (CBO)

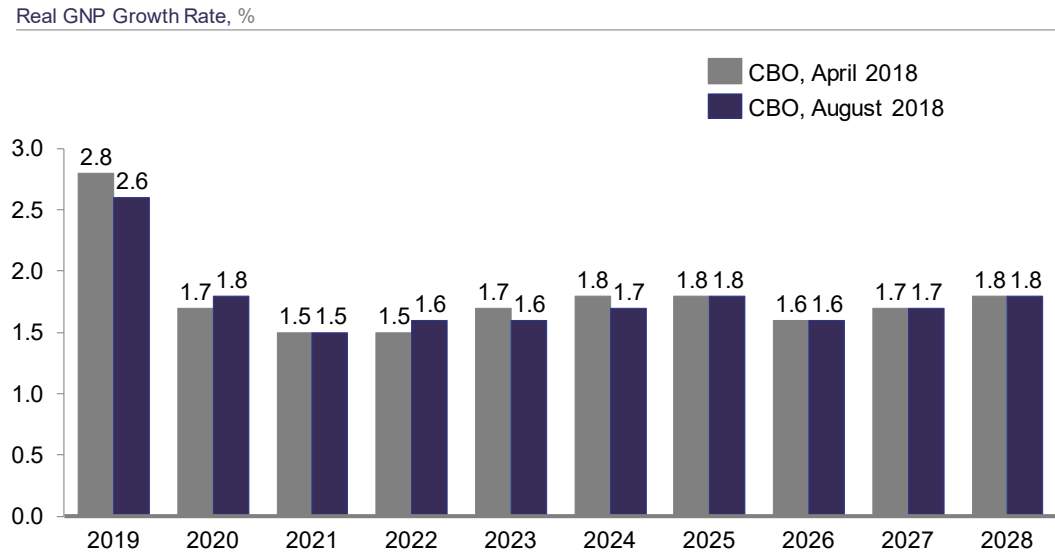
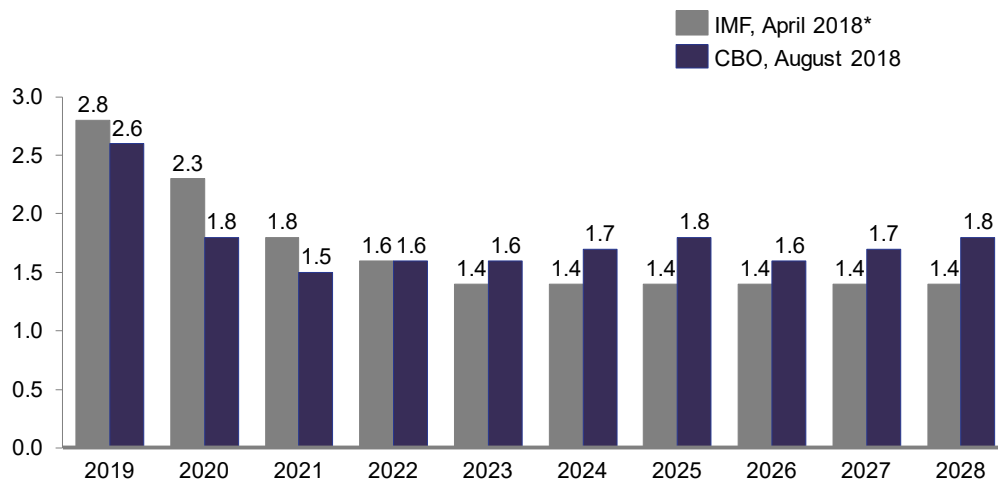


Exhibit 9: Real GNP Growth Rate Comparisons (Most recent IMF and CBO forecasts)

Real GNP Growth Rate, %



*The IMF forecast is a 5 year forecast and years 2024-2028 are a continuation of 2023.

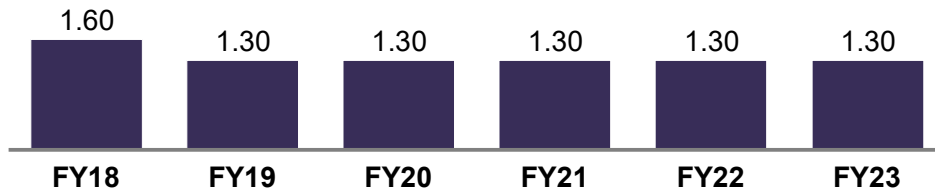
The economic outlook model, which forecasts GNP growth, primarily relies on a comprehensive data set on the Puerto Rican economy from 1965 to 2017. It includes dozens of variables that collectively describe the Puerto Rican economy (e.g., growth, population, capital stock, etc.),⁴ and is largely impacted by four major factors: a) the pre-hurricane trendline of Puerto Rico, b) short- and long-term impacts from the storm on economic activity and capital stock, c) the stimulating impact of disaster relief assistance (*discussed in Section 4.1*), and d) proposed fiscal consolidation measures and structural reforms (*discussed in Section 4.2*).

These factors result in a -7.4% decline in real GNP for FY2018, which is directionally in line with the Fiscal-Year (FY) activity of the Puerto Rican Economic Activity Index (EAI) – a metric that historically tracks closely with GNP. For Fiscal Year 2018, EAI was down 6.8% from the previous year. Projected inflation rates (**Exhibit 10**) serve as a proxy for the GNP deflator yielding nominal GNP growth rates of -5.9 to 5.4% each year, while real GNP grows in the range of -7.4% to 4.0% each year.

⁴ The forecast relies on a 60-year comprehensive dataset and applying statistical regressions to show the effects of multiple yet distinct inter-related components of past hurricanes, exogenous developments, and economic policies on growth and inflation

EXHIBIT 10: ANNUAL INFLATION RATE

Annual inflation rate, %



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)⁵ 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 our recovery wherever possible. The Recovery Plan is divided into 17 initiatives with the purpose of making Puerto Rico stronger and resilient, while guaranteeing a long term economic recovery.

Building on these principles, the vision for Puerto Rico seeks to define how we 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.

⁵ 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 assuming the principal responsibility of developing and implementing a strategic plan for the reconstruction of Puerto Rico after the passage 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").

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 our island and people as an asset for America's national and global economic success.

In preparing the Recovery Plan, the Government of Puerto Rico 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)). Towards 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. The Oversight Board has yet to provide certification.

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 our government structures so that we can truly transform Puerto Rico. Toward that end, the 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.

The Fiscal Plan incorporates updated information contained in the Recovery Plan.






Disaster spending tends to have a major stimulating effect on an economy post-crisis.⁶ The Government anticipates the level of public and private disaster relief spending 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:

- **Stimulating impact over the life of the plan caused by spending on the Island that is expected to be nearly 100% of the projected 2018 GNP.** This stimulus can come in multiple forms such as construction companies hiring local, unemployed workers or 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 Fiscal Plan factors in the estimated damage to capital stock which is repaired, largely due to the infusion of federal and private monies. This infusion contributes to the bounce-back anticipated in FY2019 and for the increase in growth above pre-Maria trend thereafter.

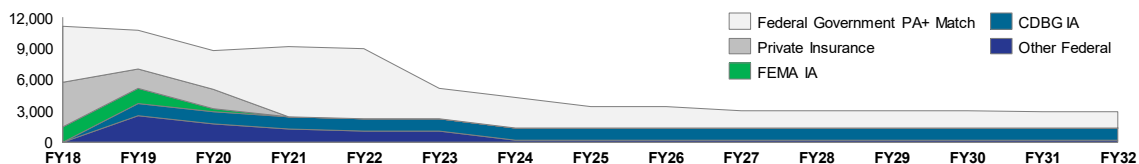
⁶ Relief aid after the Haitian Earthquake represented nearly 200% of overall GDP, providing a major economic "cushion" after the disaster. In Grenada, disaster aid equaled about 2/3 of GDP at the time, and despite declines immediately after the hurricane, revenues returned to pre-storm levels after about two fiscal quarters and growth rebounded quickly. The year after Hurricane Ivan (2005) Grenada's economy grew at a faster rate than any year since 1985, at a clip of 12.5%

The Fiscal Plan projects that approximately \$86.8⁷ billion of disaster relief funding in total, from 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 expenses 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 spend⁸). **Exhibit 11** shows the different sources of disaster relief funding and expected rollout.

EXHIBIT 11: 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 + PR Match ¹ 	\$5,397	\$3,697	\$3,697	\$6,709	\$6,709	\$2,912	\$2,912	\$2,023	\$2,023	\$1,656	\$1,656	\$1,656	\$1,656	\$1,569	\$1,569	\$45,843	55.2%
	11.8%	8.1%	8.1%	14.6%	14.6%	6.4%	6.4%	4.4%	4.4%	3.6%	3.6%	3.6%	3.6%	3.4%	3.4%		
CDBG-DR 	-	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$16,096⁴	19.4%
	-	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%		
FEMA Individual Assistance² 	\$2,310	\$564	\$330	-	-	-	-	-	-	-	-	-	-	-	-	\$3,204	3.9%
	72.1%	17.6%	10.3%	-	-	-	-	-	-	-	-	-	-	-	-		
Private Insurance³ 	\$4,299	\$1,851	\$1,850	-	-	-	-	-	-	-	-	-	-	-	-	\$8,000	9.6%
	53.7%	23.1%	23.1%	-	-	-	-	-	-	-	-	-	-	-	-		
Other Federal Funding 	-	\$2,562	\$1,769	\$1,315	\$1,133	\$1,091	\$224	\$224	\$224	\$224	\$224	\$224	\$224	\$224	\$225	\$9,888	11.9%
	-	25.9%	17.9%	13.3%	11.5%	11.0%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%		
Total	\$12,006	\$9,824	\$8,796	\$9,174	\$8,992	\$5,153	\$4,286	\$3,397	\$3,397	\$3,030	\$3,030	\$3,030	\$3,030	\$2,943	\$2,944	\$83,031	100.0%
Spending as a % of GNP	12.3%	9.5%	8.1%	8.1%	7.7%	4.3%	3.6%	2.8%	2.8%	2.5%	2.4%	2.4%	2.4%	2.3%	2.3%		
CDBG cost share	-	\$271	\$271	\$271	\$271	\$271	\$271	\$271	\$271	\$271	\$271	\$271	\$271	\$271	\$271		

Disaster aid by source of funding, \$M



¹ Includes \$2B of CDBG funding allocated specifically for electrical infrastructure

² \$3.2B is current FEMA projected funding for Maria-related disasters

³ Based on analysis of data from the Office of the Insurance Commissioner of Puerto Rico on already processed payments

⁴ Excludes CDBG expected cost match which is included as an offset for cost share

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 including the Hazard Mitigation Grant Program.⁹
- **HUD Community Development Block Grant- Disaster Recovery (CDBG-DR):** HUD provides CDBG-DR funding that can be used for assistance to individuals (e.g., housing repair) and public assistance (e.g., infrastructure development), or can also be used by the

⁷ \$3.8 billion of disaster relief funding is used for payment of cost share.

⁸ The Fiscal Plan only contemplates cost share paid for by the Commonwealth (and UPR), not PREPA / PRASA or HTA.

⁹ The 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

Government for certain operational costs (e.g., to cover their disaster relief funding match.) The supplemental appropriation included in the Bipartisan Budget Act of 2018 requires that at least ~\$2 billion be used to repair the Island's electric infrastructure.

- **Private insurance funding:** Large personal property and casualty losses have been incurred in the aftermath of Hurricane Maria. Analysis of data from the Office of the Insurance Commissioner of Puerto Rico was used to determine the amount that will be paid out to individuals and businesses for major damages.

Disaster roll out for FEMA funds, CDBG funds, and private spending have been projected separately:

- **Roll out of Public Assistance and private insurance funds.** It will take time to disburse the total amount of funding, due to a combination of factors, including capacity constraints and permitting as well as other requirements necessary to access FEMA funding.¹⁰ As a result, projected roll out declines over time and is spread out as shown in **Exhibit 11**.
- **Roll out of CDBG.** It is estimated to be even slower given the length of time typically needed for the application and disbursement process. As a result, projected roll out is also spread out over time, as shown in **Exhibit 11**.

In assessing impact of disaster relief funding on the economy of Puerto Rico, it is important to isolate what portion of the disaster relief funding directly affects the local economy and what portion flows to entities off-Island. The Fiscal Plan estimates that, on a weighted average basis, 12.5% of funds will directly impact the local economy. This figure is estimated using a weighted individual and public assistance (FEMA and non-FEMA) and is supported by history of previous FEMA spending. It is augmented by a 5.5% addition for on-cost logistics for a **total passthrough rate of 18%**.¹¹

GNP is projected to rebound quickly in FY2019 in large part due to disaster relief funding, and this has a direct positive influence across most revenue categories.

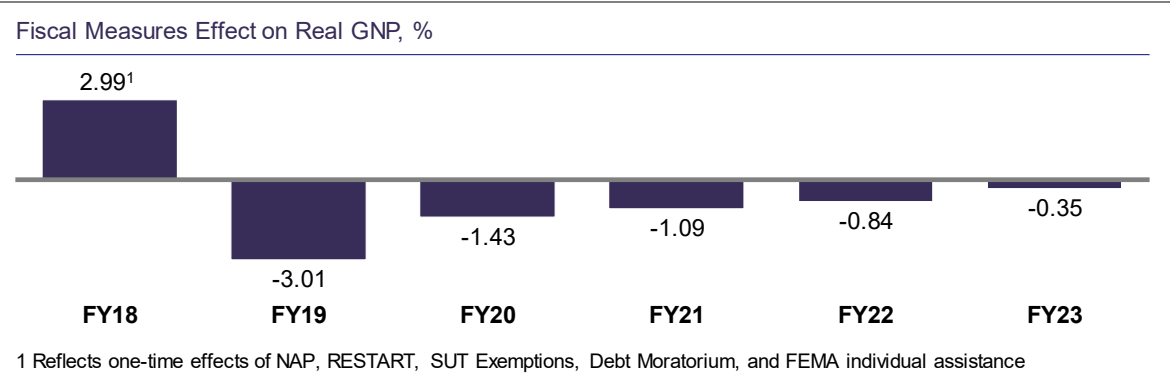
4.2 Impact of fiscal measures and structural reforms

By optimizing revenue collection and reducing government-wide expenses, **fiscal measures** seek to strategically streamline the Government of Puerto Rico to a size appropriate for its population. Such policy actions, inescapably, will generate a contractionary impact on the economy in the short term, but are necessary to drive fiscal sustainability in the long term. In fact, they drive significantly more in savings than revenues lost due to economic contraction. In addition, the economic contraction 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 12**.

¹⁰ According to FEMA and Government reports, FEMA spend in Puerto Rico has been slower than anticipated in 2018. It has also been slower in Puerto Rico than in other natural disasters to which FEMA has responded in 2018 (*Economist*, 2018)

¹¹ Estimated using local contracts (e.g., PREPA contract representing public project assistance and a multi-unit residential construction project representing Individual Assistance, which were estimated to have a 10% and 17% pass-through on the economy, respectively). Maintenance and repair of projects related to individual assistance have less specialized requirements and can expect a larger pass through from direct labor. Historical FEMA spending and the percentage of DHS contracts awarded to local Puerto Rican firms supported this figure. The pass-through is augmented by a 5.5% addition for on-cost additions to logistics based on a study of main contractor on-costs in multi-layered supply chains in the construction industry.

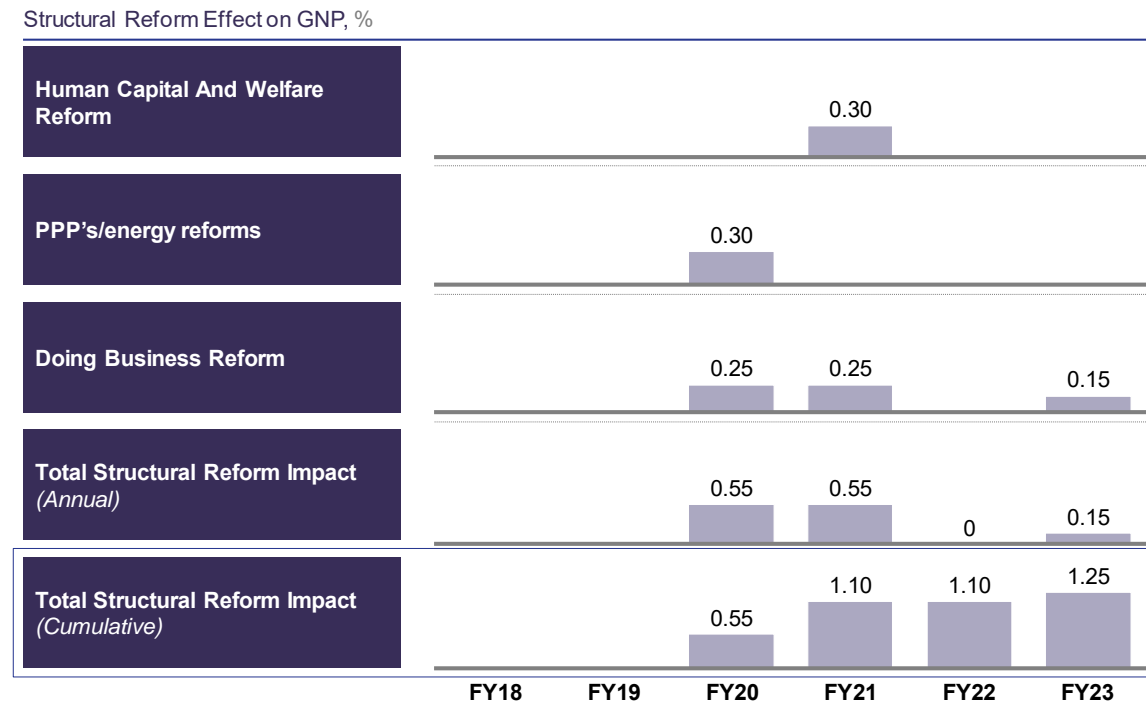
EXHIBIT 12: MACROECONOMIC IMPACT OF FISCAL MEASURES, INCLUSIVE OF DISASTER RELIEF SPENDING



The timing and impact of **structural reforms** is based on work done by the IMF on similar reforms implemented in Europe (e.g., Spain, Estonia), South America (e.g., Peru, 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. Structural reform benchmarks broadly come from nations or jurisdictions without monetary policy options and high informal labor markets. **Labor, energy, and ease of doing business, reforms** are projected to increase GNP by **1.25 % by FY2023 (Exhibit 13)**. **K-12 education reforms** add an additional 0.01% annual impact beginning in FY2033, resulting in total GNP increase of **1.51% by FY2048**.¹²

¹² The impact of educational / human capital structural reforms is 0.26% by FY2058

EXHIBIT 13: MACROECONOMIC IMPACT OF STRUCTURAL REFORMS



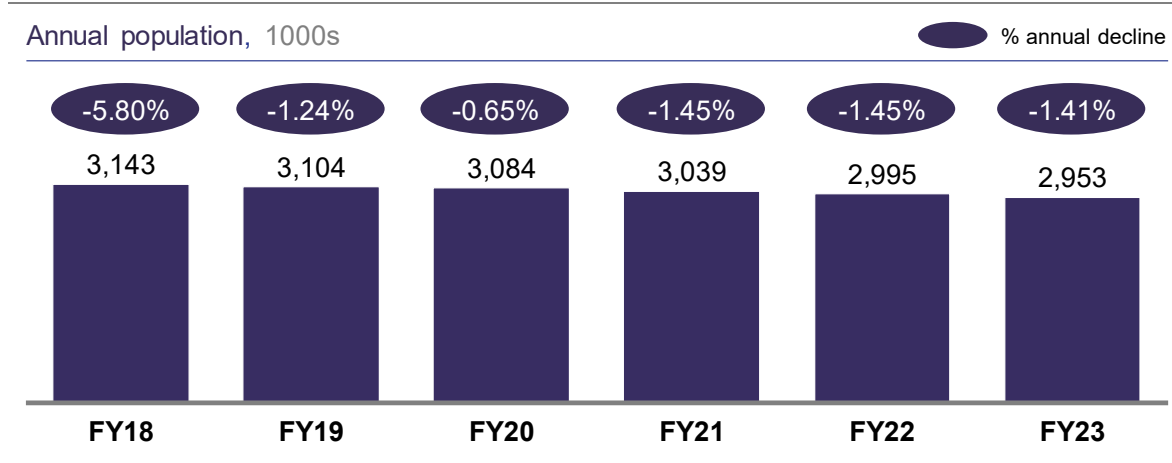
4.3 Population projections

In the past five years, Puerto Rico's population has trended downward by 1-2% every year as residents have left to seek opportunities elsewhere and birth rates have declined.¹³ This trend accelerated after the storm. While some are projected to return as the Island rebuilds, population is still projected to decline over the period of the Fiscal Plan by ~11.2% over six years (**Exhibit 14**).¹⁴ Much of this is based on estimated net departures in FY2018, while in the long term, population is projected to continue to decline, but at a rate closer to pre-hurricane trends. One key element of the population projection is the assumption that the low historical rate of immigration into Puerto Rico will continue.

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

¹⁴ The Fiscal Plan adopts demographic projections calculated by the Oversight Board's demographer. The projections were initially presented in an Oversight Board listening session held on November 16, 2017 and have since been updated to incorporate the latest available migration data and economic growth projections, as well as real-time estimates of population loss since the hurricane (e.g. net airplane departures). This revision includes a correction due to a forecasting error included in the June 2018 Certified Fiscal Plan.

EXHIBIT 14: PROJECTED POPULATION CHANGE



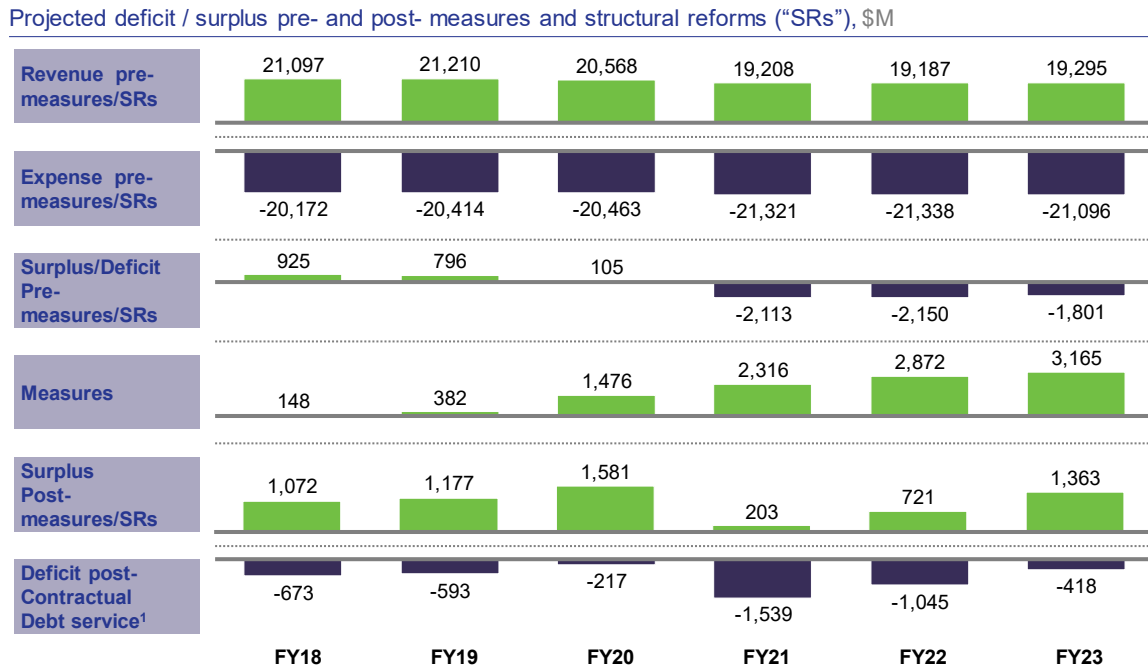
Chapter 5. FISCAL PLAN FINANCIAL PROJECTIONS¹⁵

Before measures and structural reforms (“baseline forecast”), there is a pre-contractual debt service surplus in through FY23. The surplus is due, in part, to revenues that are bolstered by a positive macroeconomic trajectory resulting from the massive disaster relief funding stimulus, as well as incremental, temporary Federal Medicaid funding. 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. Without decisive action, the Island would begin incurring a deficit by FY21 that would continue to grow over the remainder of the forecast period.

Fiscal measures and structural reforms contained in the Fiscal Plan help transform what would be a cumulative deficit through FY23 into a cumulative surplus, prior to the expected COFINA settlement and contractual debt service, as structural reforms will drive a 1.51% increase in growth (by FY58), and fiscal measures will drive ~\$10.4 billion in savings and extra revenue through FY2023. However, even after fiscal measures and structural reforms, there is an annual deficit reflected in the projection starting in FY34. After contractual debt service, this deficit drops to much more severe annual deficit for all years of the plan (**Exhibit 15**).

¹⁵ For illustrative purposes, financial projections referenced in this plan utilize the IMF WEO data released in April and the Article IV consultation data released in June 2018

EXHIBIT 15: PROJECTED DEFICIT / SURPLUS PRE- AND POST-MEASURES AND STRUCTURAL REFORMS



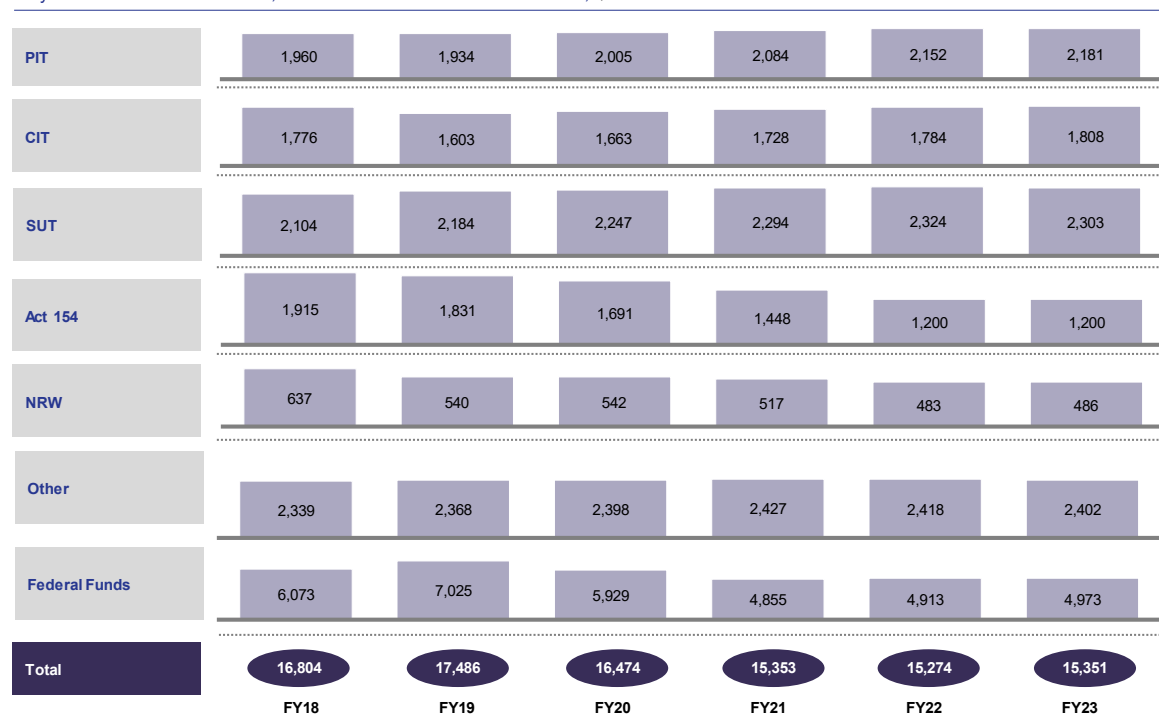
¹ Debt service based on prepetition contractual debt obligations. Presented for illustrative purposes only and does not represent anticipated future payments on restructured debt. Excludes HTA, UPR, PREPA, PRASA, Children's Trust, and COFINA

5.1 Baseline revenue forecast

Major tax revenue streams (**Exhibit 16**) 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 16: MAJOR REVENUE CATEGORIES

Key Baseline Revenue Drivers, Pre-measures and structural reforms, \$M



5.1.1 Non-export sector General Fund revenue projections

Despite a precipitous drop in revenue immediately post-hurricane, FY18 revenues recovered in Q4 and were generally consistent with FY17. Initial expectation was that FY18 revenues would have been 10% - 15% lower than FY17 due to the negative impact of the hurricane. The primary drivers of the relative outperformance include faster and greater than expected economic impact of disaster recovery spend; resilience within the Act 154 base and the impact of previously unaccounted for temporary stimulus such as the credit moratorium, incremental nutritional assistance and other initiatives.¹⁶

Individual income taxes: Individual income taxes are concentrated, with 78.2% of revenues coming from the 8.7% of returns reporting income above \$60,000 per year. Revenues from individual income taxes were up 0.8% relative to prior year. **Normalizing for non-recurring income related to reconstruction, revenue is down 3.8% relative to prior year.** Hacienda initially expected to see increased deductions related to property damage which would result in refund claims of \$112 million.¹⁷ FY18 saw an impact of \$16 million. The FY19 revenue projection is based on the normalized FY18 and incorporates the \$46 million estimate for additional claims.

¹⁶ The Fiscal Plan incorporates preliminary FY18 actual revenue for income taxes and SUT normalized for potential non-recurring items to forecast FY19 and beyond.

¹⁷ This calculation was based on casualty and personal property loss estimates from Hurricane Georges, and the impact is intensified (by about 4x) to account for the increased severity of Maria. Hacienda's analysis would result in ~20% increase in tax refunds/ deductions, which is in-line with the impact seen on U.S. Federal tax refunds in 2001 and 2008, in the aftermath of two large economic recessions.

Corporate income taxes: There is also concentration in tax receipts among the largest corporations operating in Puerto Rico (e.g., ~29% of corporate income tax is paid by 20 corporate taxpayers).¹⁸ Corporate income tax revenues in FY18 were the most impacted by the reconstruction spend as several new companies entered Puerto Rico to assist with the reconstruction of the power grid and other facets of the recovery. These companies made large initial quarterly estimated tax payments. **Normalizing for the reconstruction impact and several other non-recurring items, corporate income tax revenue was down 2.8% relative to FY17.** Before these adjustments, corporate income tax revenue was up 11%. Similar to individual taxes, FY19 is projected from the FY18 normalized base and an adjustment is made in FY19 of \$38 million to account for potential claims related to property losses.

Sales and use taxes (SUT):¹⁹ SUT revenue was expected to maintain a post-hurricane down-approximately ~14%; however, reconstruction efforts had an amplified impact on Q4 FY18 resulting in revenues that were down only 3.1% relative to FY17. FY19 revenues are projected from a normalized FY18 base that accounts for ~\$114 million of emergency measures taken immediately post-hurricane that were partially offset by \$109 million on non-recurring benefit related to reconstruction.

Other General Fund Revenue (Motor Vehicles, Alcoholic Beverages, Cigarettes): These revenues ended the year generally consistent with FY17 despite the initial drop post-hurricane. Several one-time adjustments were identified, primarily related to cigarettes and motor vehicles. Cigarette revenues for FY18 are normalized by \$64 million to account for one-time promotions and the need for distributors to restock damaged inventories. Motor vehicle excise taxes are normalized by \$46.5 million to account for promotions and temporary impacts associated with reconstruction.

5.1.2 Export sector revenue projections

Act 154 and Non-Resident Withholding (NRW) tax revenues are both concentrated in a small number of multinational corporations that are subject to potential risk factors such as the impact of the Federal tax reform (creates uncertainty, until regulations are filed, related to Puerto Rico's attractiveness as a low tax jurisdiction for multinationals) and hurricane impact (creating challenges restoring manufacturing operations and supply chain logistics). In some cases, these disruptions revealed concentration risk in Puerto Rico that manufacturers may consider in making future business continuity plans. Without major reform to the corporate tax code, it's expected that no major new payers will locate on island and the existing base will continue to

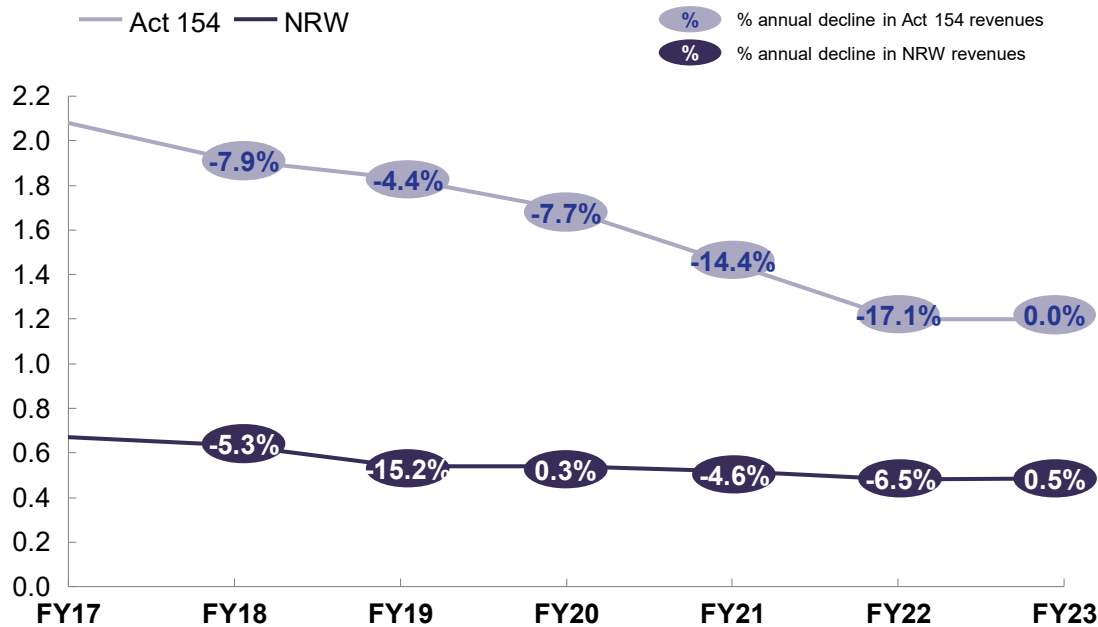
¹⁸ Hacienda historical reports

¹⁹ The Fiscal Plan incorporates the proposed COFINA settlement which if implemented would result in 53.65% of the PSTBA being utilized to settle the COFINA debt.

erode. It is assumed that the Act 54 base declines by 37% of the FY18 level by FY23 and then by 55% of the FY18 level by FY31.

EXHIBIT 17: PROJECTED ACT 154 AND NON-RESIDENT WITHHOLDING (NRW) REVENUES

Projected annual Act 154 and NRW revenues, \$M



5.1.3 Medicaid Federal funding

In the steady state, Medicaid costs are typically funded primarily by the local Government, as there is a cap on available Federal funding. Yearly Federal funding streams 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), this amount is capped each year at an amount that is below 10% of costs. As of FY2018, this funding stream was capped at \$359.2 million, and though the cap grows each year, it does not keep pace with healthcare expenditure growth.²⁰
- **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 FY2018, this amount totaled \$172 million.
- Each year, funds are **passed directly through to the Department of Health**, totaling \$200 million out of the annual Federal funds available for Medicaid. This funds Federally Qualified Health Centers (Centros 330, "FQHC") and Medicaid Operations.

²⁰ According to the Social Security Act, 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 Fiscal Plan. 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

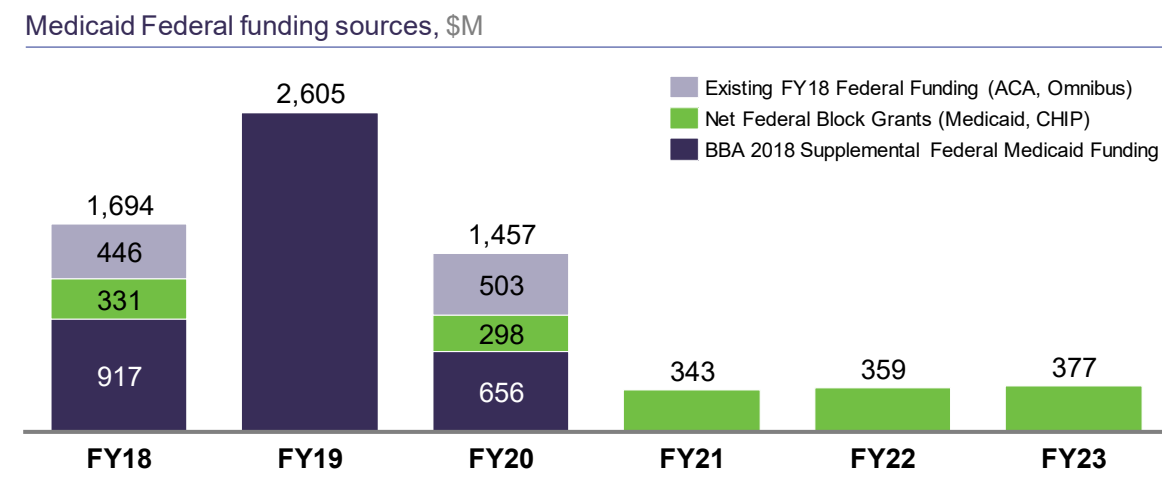
In FY2018, however, the available share of Federal funds is much higher due to several Federal fund sources. Additional Federal funding is provided in FY2018 by **remaining Affordable Care Act (ACA) block grant** funds (approximately \$598 million as of the beginning of the fiscal year) and supplemental FY2017 Omnibus Federal funding of \$296 million.

In addition, 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 CMS guidance, this funding is estimated to apply only as a reimbursement for eligible populations (i.e., Federally funded Medicaid expenses). The Puerto Rico Health Insurance Administration (ASES) will spend as much of the 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 parameters of eligible spending (e.g., if Commonwealth-funded populations and/or some dual-eligible CHIP members are eligible), ASES will be able to absorb between \$4.5 billion and \$4.8 billion of the allocated funding for core Medicaid expenditures.²¹ It will continue to receive its annual CHIP,²² FQHC, and DOH Medicaid operations funding.

Exhibit 18 outlines expected Medicaid Federal fund receipts. Starting in FY2020, Supplemental funding is projected to phase out. This “funding cliff” highlights the need to implement cost-saving measures to reduce long-term Medicaid costs (Medicaid expenditures are discussed in detail in *Section 5.2.2*).

EXHIBIT 18: MEDICAID EXPECTED FEDERAL FUND RECEIPTS



5.1.4 Other Federal Funding

In addition to Medicaid funding, Puerto Rico receives other federal funds, which cover both social benefits and operational expenditures. In the Fiscal Plan, these funds have been modeled based

²¹ 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 80% of total MCO disbursements, 100% of Platino premiums, all administrative costs, and less any cost-saving measures (*described in Chapter 14*) that reduce reimbursable spend during the timeframe

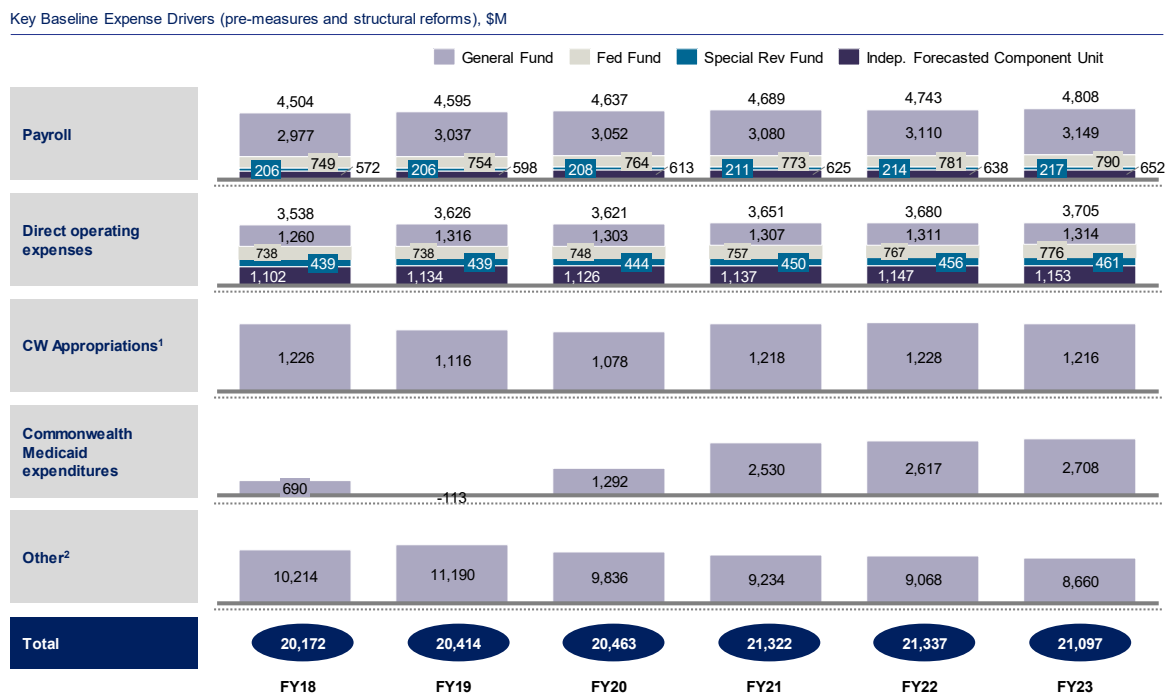
²² CHIP funding will continue at 91.5% FMAP until expiration of the ACA enhanced FMAP in September 2019. At that point, FMAP will return to 68.5% pre-ACA level, according to §2101(a) of the Affordable Care Act which amended §2105(b) of the Social Security Act

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 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, PAN 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 five years, baseline expenditures are set to increase over FY2018 due to inflation and increases in Medicaid and pensions costs (**Exhibit 19**).

EXHIBIT 19: MAJOR EXPENDITURE CATEGORIES



¹ Includes appropriations to HTA, UPR, and municipalities

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

5.2.1 Payroll expenses and non-payroll operating expenditures

Payroll expenses: The expenditure model holds payroll expense constant at the FY2018 approved budget levels based on legislation approved in 2017. Payroll projections do not assume reductions from either attrition or absenteeism, as reductions would need to be met with limits on rehiring to truly capture any cost savings – therefore, any workforce reductions will be

captured only through fiscal measures. Further, whereas the March 2017 Fiscal Plan included a payroll freeze through FY2019 (which is reflected in the baseline), the extension of this payroll freeze is proposed by the Fiscal Plan and will therefore be counted as a measure. After FY2019, all figures are projected to grow by Puerto Rican inflation.

Non-Personnel Operating Expenses: Like payroll expenses, non-personnel operating expenses are projected to be frozen FY2018-FY2019 by the March 2017 Fiscal Plan measures, with costs growing by inflation thereafter.

5.2.2 Medicaid costs

Medicaid costs are projected to reach over \$3.1 billion annually by FY2023 (**Exhibit 20**). These costs are primarily driven by the cost per member per month (PMPM) and the number of people enrolled in Medicaid (Federal and Commonwealth), CHIP, and Platino dual eligible programs. Other categories also contribute, including health-related expenses (e.g., HIV and Pulmonary programs) and program administration, bringing total expenditures to \$3.5 billion by FY2023.

In the short term, Hurricane Maria is expected to affect both PMPM and enrollment, as evidenced by historical post-disaster environments. From August (pre-Maria) to March 2018, actual enrollment data has indicated nearly a 5% increase in enrollment, as residents face higher rates of utilization and struggle to fulfill basic needs. Other post-disaster areas have exhibited a similar spike in proportion of population enrolled in Medicaid but have shown that enrollment soon declines back to trend.²³ Similarly, the proportion of Puerto Ricans enrolled in Medicaid is expected to slightly drop after a time. As the overall population of Puerto Rico decreases, the Mi Salud population will decline concurrently, but will likely lag overall outmigration trends by a year due to the time needed for individuals to switch to a new plan once they have left the Island.

PMPM costs are projected to grow at 6.2% annually from FY19 to FY20. This rate combines expected normal healthcare cost inflation rate of 5.1% experienced in Puerto Rico before the storm,²⁴ along with an additional 1.1% observed in other post-disaster environments.²⁵ After FY20, the healthcare cost inflation rate drops to 5.1% in perpetuity.

²³ Analysis included effect of Hurricane Katrina on Medicaid population in New Orleans. Directly following the storm, the proportion of overall population on Medicaid spiked, but declined beginning a year after the hurricane. Source Louisiana Department of Health and Hospitals, Bureau of Health Services Financing. "Louisiana Medicaid Annual Report," 2005-2009, <http://dhh.louisiana.gov/index.cfm/newsroom/detail/1699/>

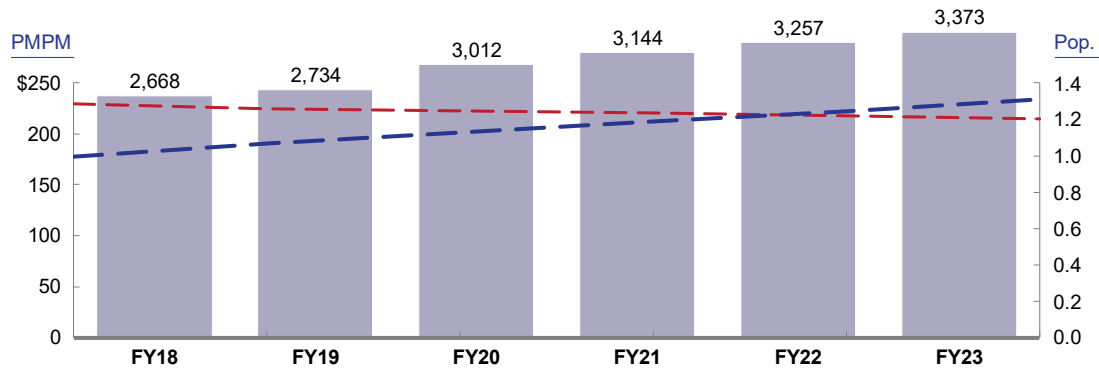
²⁴ From 2011-2016, the CAGR for PMPM inflation in Puerto Rico averaged about 6.6% (ASES analysis of historical PMPM rates). Milliman actuarial analysis projects a 5-7% PMPM inflation rate from FY2018-FY2020 and 4-6% PMPM inflation rate from 4-6%

²⁵ NBER working paper 22272 analyzing fiscal effects of hurricanes on healthcare costs. Table 7, Panel B coefficient for implied effect after 7.5 years spread year over year; Took the value of the implied effect after 7.5 years (0.085); Divided this by the number of years (7.5); Provided the change year over year = $0.085/7.5 = 0.0113$; Then, interpreted the coefficient; Given the y variable is logged, the interpretation is: (change year over year) * (100%) = % change year over year, generating a 1.13% change projected year over year. Deryugina, Tatyana. "The Fiscal Cost of Hurricanes: Disaster Aid Versus Social Insurance." National Bureau of Economic Research, May 2016

EXHIBIT 20: PROJECTIONS FOR MI SALUD BASELINE PMPM AND ENROLLMENT (NOT INCLUDING PLATINO)

Medicaid projected PMPM, enrollment, and expenditures, \$M total cost, M enrollees, \$ PMPM

■ Total cost (Medicaid, Commonwealth, CHIP), \$M — Total enrollment (Medicaid, Commonwealth, CHIP), M
— PMPM (Medicaid, Commonwealth, CHIP weighted average), \$



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

Other costs, 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.

Expenditures for the Platino dual eligible program were estimated using a consistent \$10 PMPM over FY2018-FY2023, 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.²⁶ Platino costs are expected to total \$29 million in FY2018 and decline slightly to \$28 million by FY2023.

5.2.3 Other costs

Appropriations: Baseline municipal appropriations are projected to remain constant at ~\$220 million from FY2018-FY2023, apart from a *one-time* allotment to municipalities because of Hurricanes Irma and Maria, provided in FY2018 for \$78 million, and which will be allocated on the same basis as the existing municipality subsidies. The University of Puerto Rico appropriation baseline is \$708 million in FY2018 and remains ~\$717 million from FY2019-FY2023.

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 and JRS benefits (extrapolated to update estimates for ERS). From FY2018-FY2023, costs are projected to grow slowly but remain approximately \$2.3 billion for the Fiscal Plan period.²⁷ Starting in 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.

Capital expenditures: Centrally funded maintenance and capital expenditures of the Commonwealth (excluding PREPA, PRASA, HTA self-funded capex/one-time transfers) is

²⁶ Projected based on a smaller observed spike in actual enrollment from pre- to post-Maria relative to Medicaid spike

²⁷ Projections for pension expenses are provided by Pension Trustee Advisors (PTA) calculations

expected to be \$400 million annually. Of this, \$124 million will be appropriated to HTA and UPR, with the remaining \$276 million for use by the Commonwealth. The capital expenditure costs are lower in the short-term because of the large disaster relief funding allocations from the Federal Government and from Puerto Rican cost match. 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, Phase III of the large Molecular Sciences building, building restoration at Rio Piedras, and the development of a major campus building at Mayagüez.

Independently Forecasted Component Units (IFCUs): IFCUs include Puerto Rico Industrial Development Company, Public Buildings Authority, Ports Authority, State Insurance Fund Corporation, Medical Services Administration, Tourism Company, Health Insurance Administration, Cardiovascular Center, Housing Finance Authority, Department of Agriculture, Integrated Transport Authority, AAFAF, and Convention Center Authority. From FY2018-FY2023, IFCU payroll expenditures are projected to be ~\$600 million annually. Non-payroll operating expenditures are projected to remain at ~\$1.1 billion annually.

Disaster relief funding cost share: Federal funds for public assistance typically require a local match from the entity receiving them. In the case of Puerto Rico, the Fiscal Plan projects that the Commonwealth will need to cover an estimated 11% of Federal public assistance funds, amounting to \$5.0 billion from FY2018-FY2032. However, \$3.8 billion is expected to be covered by CDBG funds.

PROMESA related costs: PROMESA related expenses are projected to be \$1.5 billion for FY2018 to FY2023, comprised of professional fees (approximately \$1.1 billion over six years) and funding for the Oversight Board (\$430 million over six years) which includes professional fees as well. The estimate for professional fees was developed, in conjunction with the FOMB, by analyzing FY2018 run-rate billings based on available information 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 1.65% projected for the Commonwealth (**Exhibit 21**).

EXHIBIT 21: PROJECTED PROFESSIONAL FEES RELATIVE TO OTHER MAJOR RESTRUCTURINGS

Title III costs 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%	Summary Statistics	
Residential Capital, LLC	May-12	\$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%		Avg. 1.89%
Lyondell Chemical Company	Jan. 2009	\$22,000,000,000	\$205,932,292	0.94%		Max 3.56%
American Airlines	Nov. 2011	\$11,000,000,000	\$391,637,858	3.56%		Min 0.16%
Washington Mutual, Inc.	Sep. 2008	\$8,000,000,000	\$271,085,213	3.39%		Med 1.68%
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	\$1,057,990,545	1.65%		



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

Emergency reserve: The Government is establishing an emergency reserve of \$1.3 billion, or ~2.0% of FY2018 GNP, by reserving \$130 million per year for 10 years. The methodology supporting this reserve is informed by guidance provided to The Bahamas, another Caribbean island, by the International Monetary Fund in defining an adequate emergency reserve (2-4% of GNP, accumulated at ½% per year).²⁸ Restrictions on the use of this fund will ensure that it is a true emergency reserve.

²⁸ IMF Bahamas Article IV report published March 22, 2018

Chapter 6. LONG-TERM PROJECTIONS AND DEBT SUSTAINABILITY ANALYSIS (DSA)

The DSA provides a framework to assess the Government's long-term debt capacity, minimizing the risk of future default, and provides a framework for future market access. The DSA aims to provide a view of a sustainable level of Net Tax-Supported²⁹ debt ("NTSD") by:

- (i) comparing Puerto Rico's financial metrics to other US States,
- (ii) estimating debt levels given a range of fixed annual debt service, sensitizing for interest rates and contingency levels

6.1.1 U.S. States as comparable peers

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 or similar international sovereign restructuring support programs or funding packages, is reliant on the same long-term municipal bond markets as U.S. states and is rated on the same metrics as U.S. states.

Moody's³⁰ identifies four key financial ratios when comparing states (the "NTSD Ratios"): (i) net tax-supported debt as a percentage of GDP, (ii) net tax-supported debt as a percentage of state personal income, (iii) debt service as a percentage of revenues, and (iv) net tax-supported debt per capita.

EXHIBIT 22: NTSD RATIOS³¹

Net tax-supported debt, as a % of GDP		Net tax-supported debt to state personal income, %		Debt Service Ratio, % of Own Source Revenues		Net tax-supported debt per capita, \$	
Puerto Rico	55.1%	Puerto Rico	91.2%	Puerto Rico	28.1%	Puerto Rico	\$16,662
Low 10	0.4%	Low 10	0.5%	Low 10	1.0%	Low 10	\$239
Mean	2.6%	Mean	2.9%	Mean	4.5%	Mean	\$1,477
Top 10	5.9%	Top 10	6.8%	Top 10	9.2%	Top 10	\$3,779
1 Connecticut	9.0%	1 Hawaii	10.4%	1 Connecticut	13.8%	1 Connecticut	\$6,544
2 Hawaii	8.9%	2 Massachusetts	9.5%	2 Massachusetts	11.7%	2 Massachusetts	\$6,085
3 Massachusetts	8.3%	3 Connecticut	9.5%	3 Hawaii	10.5%	3 Hawaii	\$5,257
4 New Jersey	6.7%	4 New Jersey	7.0%	4 New Jersey	9.4%	4 New Jersey	\$4,281
5 Mississippi	5.1%	5 Illinois	5.6%	5 Illinois	9.2%	5 New York	\$3,082
6 Illinois	4.7%	6 Delaware	5.5%	6 New York	8.1%	6 Illinois	\$2,919
7 Kentucky	4.5%	7 Mississippi	5.2%	7 Washington	7.7%	7 Washington	\$2,662
8 Washington	4.1%	8 New York	5.2%	8 Kentucky	7.3%	8 Delaware	\$2,587
9 New York	4.1%	9 Kentucky	5.1%	9 Maryland	7.0%	9 California	\$2,188
10 Rhode Island	4.0%	10 Washington	5.0%	10 Mississippi	6.9%	10 Rhode Island	\$2,188

6.1.1.1 PUERTO RICO IMPLIED DEBT CAPACITY – AVERAGE U.S. STATES

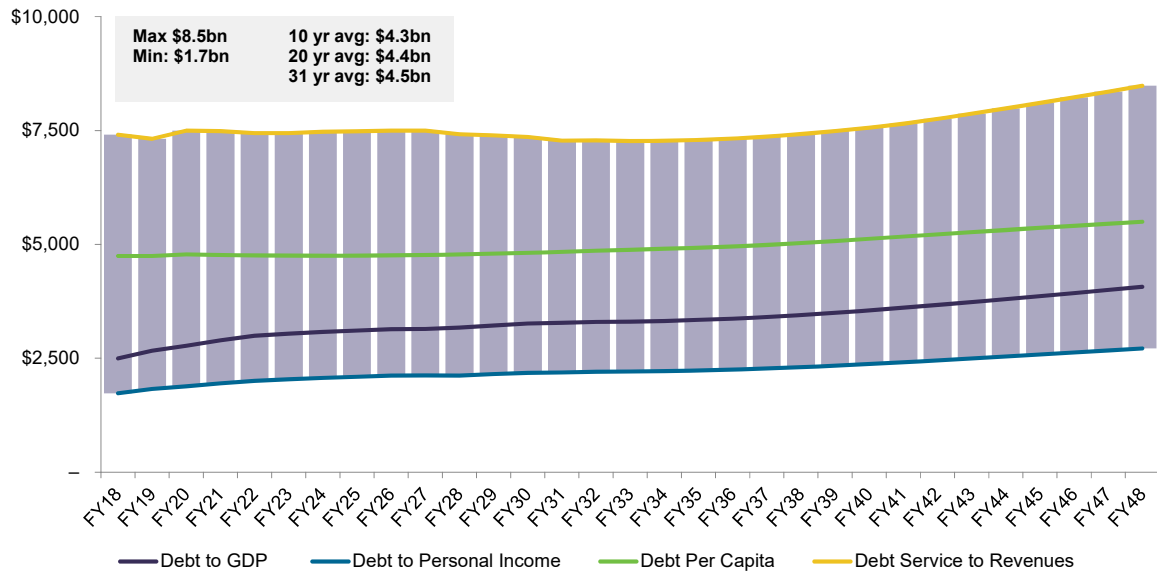
²⁹ Net Tax-Supported debt is defined as debt payable from statewide taxes and other general resources, net of obligations that are self-supporting from pledged sources other than state taxes or operating resources (such as utility or local government revenues). Puerto Rico had \$56.8 billion of Net Tax-Supported debt (2017 – Moody's) and includes GO, PBA, COFINA, PRIFA, HTA, PRCCDA, ERS, PFC, and UPR

³⁰ Moody's Investor Services, "Medians - State Debt Continues Slow Growth Trend", dated 24 April 2018

³¹ Due to withdrawn ratings, Moody's did not report metrics for Puerto Rico in the April 2018 report. Puerto Rico metrics per Moody's Investor Services, "Medians – Total State Debt in 2017 Remains Essentially Flat" report, dated 3 May 2017. Personal income for Puerto Rico based on Government estimates for FY17

Applying the NTSD Ratios of the average U.S. states to Puerto Rico's future projected GDP, population and Own-Source Revenues provides an average implied debt capacity over 31-years of \$4.5bn.

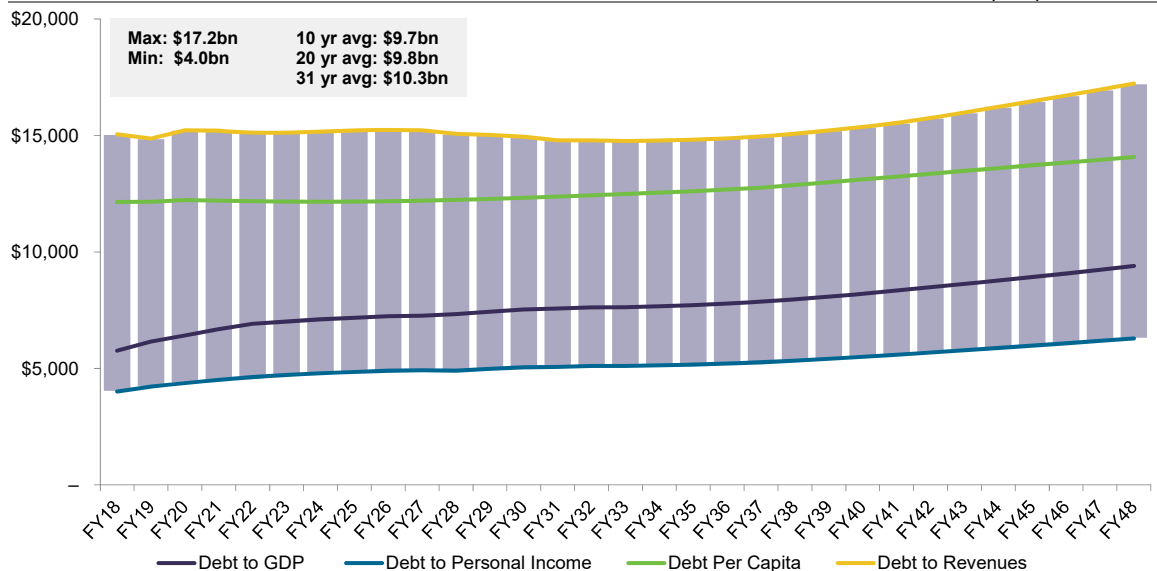
EXHIBIT 23: IMPLIED DEBT CAPACITY – AVERAGE U.S. STATES (\$M)



6.1.2 Puerto Rico Implied debt capacity – 10 most-indebted U.S. states

Applying the NTSD Ratios of the 10 most indebted U.S. states to Puerto Rico's future projected GDP, population and Own-Source Revenues provides an average implied debt capacity over 31 years of \$10.3bn.

EXHIBIT 24: IMPLIED DEBT CAPACITY – 10 MOST-INDEBTED U.S. STATES (\$M)



6.1.3 Maximum annual debt service cap on restructured fixed payment debt

The aggregate debt service due on all fixed payment debt of the Government should be capped at a maximum annual debt service (“MADs”) level derived from NTSD Ratios, and specifically from the “Debt Service Ratio.”

To the extent the Debt Service Ratio 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 from the Primary Surplus (less any contingency) or the MADs limit.

Any additional cash flow above the MADs cap that is generated over the long-term could be dedicated to a combination of contingent “growth bond” payments to legacy bond creditors, debt service due on future new money borrowings, and/or additional “PayGo” capital investment, among other purposes.

6.2 Illustrative fixed debt service

The implied debt capacity can also be estimated based on a range of interest rates and Fiscal Plan implementation risk factors (contingency) under an assumed illustrative 30-year term and level debt service. The implementation 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% implementation risk factor case would use only 80% of the projected cash flow available to pay debt service on fixed payment debt.

EXHIBIT 25: FIXED DEBT SERVICE IMPLIED DEBT CAPACITY (\$M)

Illustrative Debt Sustainability Analysis (\$M)								
		Sensitivity Analysis: Implied Debt Capacity at 20% Contingency						
Illustrative Cash Flow Available		\$600	\$800	\$1,000	\$1,200	\$1,400	\$1,600	\$1,800
Sensitivity Analysis: PV Rate %	4.0%	\$8,300	\$11,067	\$13,834	\$16,600	\$19,367	\$22,134	\$24,901
	5.0%	7,379	9,838	12,298	14,758	17,217	19,677	22,136
	6.0%	6,607	8,809	11,012	13,214	15,417	17,619	19,821
		Sensitivity Analysis: Implied Debt Capacity at 5% PV Rate						
Illustrative Cash Flow Available		\$600	\$800	\$1,000	\$1,200	\$1,400	\$1,600	\$1,800
Sensitivity Analysis: % Contingency	10.0%	\$8,301	\$11,068	\$13,835	\$16,602	\$19,369	\$22,136	\$24,903
	20.0%	7,379	9,838	12,298	14,758	17,217	19,677	22,136
	30.0%	6,456	8,609	10,761	12,913	15,065	17,217	19,369

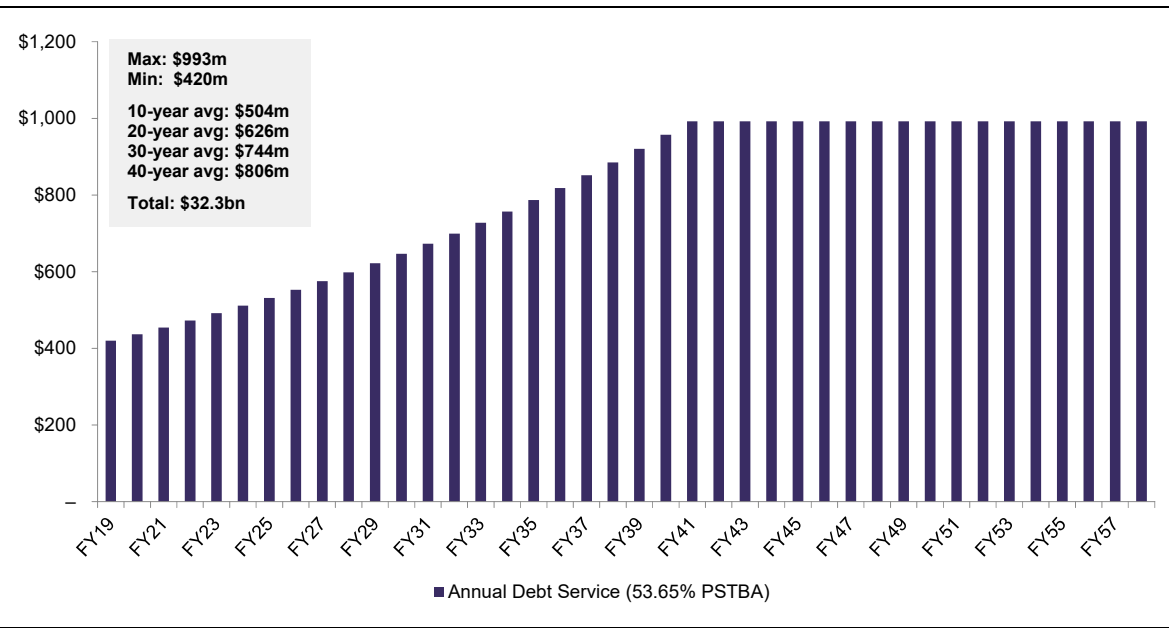
6.3 The COFINA Settlement

On June 7, 2018, the Commonwealth Agent and the COFINA Agent publicly announced an agreement in principle (the “June Agreement in Principle”) to settle the dispute between the Commonwealth and COFINA regarding ownership of the sales and use taxes purportedly transferred by the Commonwealth to COFINA and pledged by COFINA to secure the repayment of certain indebtedness, including, without limitation, ownership of tax collections held to the credit of the “Dedicated Sales Tax Fund,” which funds accumulate to the “Pledged Sales Tax Base Amount” (or “PSTBA”). Under the June Agreement in Principle,

subject to limited exceptions, the Commonwealth will have a 46.35% ownership interest in the PSTBA, and COFINA will have a 53.65% ownership interest in the PSTBA.

Subsequently, on August 8, 2018, the Oversight Board and publicly announced that they had reached an agreement in principle (the “August Agreement in Principle”) with COFINA’s bondholders and monoline insurers centered on the June Agreement in Principle, including the 46.35%/53.65% split. The Oversight Board and AAFAF expect the August Agreement in Principle to lead to a consensual plan of adjustment to restructure COFINA’s outstanding indebtedness and validate the Commonwealth’s 46.35% ownership interest in the PSTBA. The August Agreement in Principle remains subject to finalization of a plan term sheet, execution of a plan support agreement, agreement on such other definitive documentation required to implement the transactions contemplated thereby, and approval of the Title III Court in the Commonwealth’s Title III proceeding and COFINA’s Title III proceeding. Upon court approval and implementation of the transactions contemplated by the August Agreement in Principle, the Commonwealth will own a 46.35% interest in the PSTBA, which funds will be used in their entirety and without restriction to fund Government operations, consistent with the assumptions and projections of this Fiscal Plan.

EXHIBIT 26: THE COFINA SETTLEMENT (\$M)



PART III: Restoring growth to the Island

A sustainable fiscal and economic turnaround depends entirely on comprehensive reforms. Only such reforms can drive growth in the economy, reversing the negative trend growth 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 will implement reforms in the following areas:

Human capital and welfare reforms will improve job creation, workforce participation, and the well-being and self-sufficiency of welfare recipients, resulting in a cumulative GNP impact of 0.30% by FY2023. The impact is enhanced in the long-term as K-12 education reforms begin adding an additional 0.01% GNP impact per year, resulting in an additional 0.16% uptick by FY2048 that continues growing in outer years (to 0.26% by FY2058).

Ease of doing business reforms will improve conditions for economic activity and job creation, trading across borders, employment opportunities, and business vitality, resulting in a cumulative GNP impact of 0.65% by FY2023.

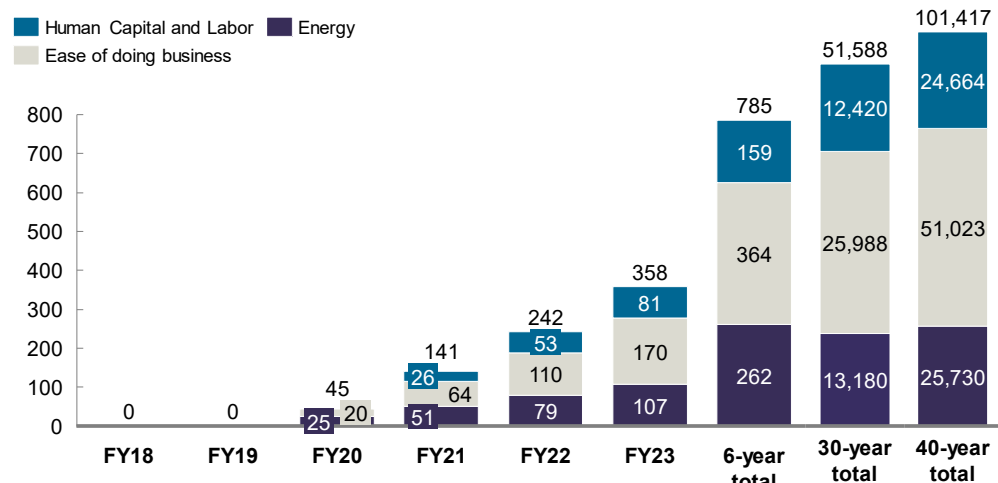
Power sector reforms will improve availability and affordability of energy for families and businesses, resulting in 0.30% cumulative GNP impact by FY2023.

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.

The structural reforms are projected to result in a sustained 1.25% annual real GNP growth by FY2023. As shown below (**Exhibit 27**), these reforms equal approximately \$50 billion in increased Commonwealth revenues over 30 years (and over \$100 billion over 40 years). In the long term, **education reforms are projected to add an additional cumulative 0.26% to GNP growth, making total impact 1.41% by FY2048 and 1.51% by FY2058.** The reforms are crucial to placing Puerto Rico on a path to long-term structural sustainability.

EXHIBIT 27: IMPACT OF STRUCTURAL REFORMS OVER 30 YEARS

Impact of structural reforms, \$M



¹ Structural reforms in the 30 & 40 years are estimated due to macroeconomic compounding and long-term projection uncertainty

Chapter 7. HUMAN CAPITAL & WELFARE REFORM

7.1 Current state of human capital and welfare laws

Puerto Rico faces immense challenges with formal labor force participation and preparedness. The Island's formal labor force participation rate is only ~40%, compared to the U.S. mainland average (63%) or the lowest-ranked U.S. state (West Virginia, 53%), and below other Caribbean islands. According to World Bank data, Puerto Rico's formal labor force participation rate is currently 7th lowest in the world and has never ranked higher than the bottom 20.³² Puerto Rico's youth unemployment rate is 23.8%, almost double the world average (13.8%) and more than double the U.S. average (10%).³³ These low rates of employment are a long-term structural problem that the Government will address through changes to public policy.

Unless Puerto Rico substantially increases its labor force participation and employment, incomes will always fall far below mainland states and outmigration will continue to draw Puerto Ricans away from the island of their birth. If Puerto Rico's labor force participation rate grew to match even to that of the lowest U.S. state, incomes would rise, poverty would decline, and the budgetary deficit would improve. **The Government is committed to increasing labor force participation, as it may be the single most important reform for long-term economic well-being in Puerto Rico.**

³² Puerto Rico ranking has never surpassed 215th out of the 232 countries, states, and territories tracked by The World Bank Group since The World Bank Group began collecting data in 1990

³³ The World Bank Group, 2017, via International Labour Organization, ILOSTAT database. Data retrieved in March 2017. <https://data.worldbank.org/indicator/SL.UEM.1524.ZS>

7.1.1 Labor laws

As mentioned before, Puerto Rico's historically low levels of formal labor force participation cannot be attributed to any single factor, but a range of public policies have served to reduce employment on the Island.

In order to improve labor force participation, the Government has recently made strides to improve labor market conditions with the Labor and Flexibility Act (Act 4-2017) enacted in January 2017, which added flexibility to overtime regulations and increased work requirements to become eligible for Christmas Bonus and severance pay, among other reforms.

Key labor market measures are showing signs of improvement:

- Seasonally adjusted employed persons reached 1,004,000 people in June 2018, which represented an increase of 2.3 percent, compared to July 2017. Total employed persons had not reached more than 1,000,000 people since August 2013.
- Number of self-employed persons reached 153,000 people in July 2018, which represented an increase of 8.5 percent compared to the same month of the previous year.
- Non-seasonally adjusted labor participation rate reached 41.0 percent in July 2018, which reflected an increase of 1.4 percentage points as compared to the same month of the previous year.
- Unemployment rate was 9.1 percent in the month of July 2018 and, compared to July 2017, reflected a decline of 1.2 percentage points.

7.1.2 Welfare policies

Puerto Rico residents may also face disincentives to participate in the formal labor market due to rules attached to various welfare benefits, including the Nutritional Assistance Program (PAN), Mi Salud (Medicaid), Section 8 public housing, TANF, WIC, and other welfare programs.

The phase-out of government transfer benefits as earned income increases acts as a tax to disincentivize formal employment, as effective hourly wage (income received by working minus the loss of benefits) can be substantially lower than the formal hourly wage received.

When benefits are phased out as a beneficiary works, loss of benefits may be larger relative to earnings than for a mainland worker. This can serve as a greater deterrent to seek a formal job, than on the mainland.

It is difficult to quantify how large such disincentive effects may be due to limitations on the data available. Different individuals entitled to different sets of benefits are thus faced with various incentives that inform the ways they engage with the labor market. It is reasonable to conclude that for many welfare beneficiaries, a formal employment may sometimes do little to increase household incomes.

For individuals receiving food stamps (PAN), Mi Salud, TANF and public housing, it often makes little financial sense to work at the minimum wage in the formal sector. For a full-time minimum wage worker, the loss of benefits will probably offset most or all income received from work, leaving the household no better off.³⁴

³⁴ Burtless, Gary, and Orlando Sotomayor. "Labor supply and public transfers." In *The Economy of Puerto Rico: Restoring Growth* (2006): 82-151

Mainland states face many of these same incentive issues, which they address in two ways. First, residents of mainland states are eligible for the Federal Earned Income Tax Credit (EITC), which provides a partial refund against Federal income taxes for eligible low-income workers. Many states supplement the Federal EITC to increase benefits to recipients. By increasing the reward to work, the EITC has been shown to increase labor force participation.³⁵

Likewise, the Federal Government requires that food stamp programs on the mainland (Supplemental Nutrition Assistance Program, “SNAP”) contain a work requirement. In general, working-age SNAP beneficiaries on the mainland must register for work, cannot turn down a job if offered, and may be required by the state to attend education or work training classes. In addition, Federal law requires that able-bodied adults without dependents must work, attend education, or volunteer at least 20 hours per week to maintain eligibility for benefits. Puerto Rico’s food stamp program funds are received as a block grant (unlike states in the Mainland). This grant does not include any specific allocation for the Government to provide trainings or educational services to its beneficiaries.

7.1.3 Workforce preparedness

Finally, Puerto Rico’s potential workforce is also not well prepared to fill jobs currently needed by the economy. Around 20% of Puerto Rico’s working age population has less than a high school diploma (compared to U.S. average of under 12%), and about 30% of that same population have a college degree, which is about 3% below the mainland average.³⁶ These challenges contribute to Puerto Rico’s rate of youth unemployment, which is more than double the rate in the U.S. mainland.³⁷

7.2 Future vision for the Puerto Rican human capital and welfare reform

To ensure Puerto Rico can provide opportunities for its people for years to come, structural reforms must increase workforce participation, and enhance student outcomes and workforce development opportunities to ensure a pipeline of prepared and appropriately-skilled individuals.

7.3 Structural reform initiatives for human capital and welfare reform

Labor market reforms should increase the availability of jobs while increasing incentives and preparedness to work. To accomplish this broad-based reform, the Government will enact welfare reform measures including a local earned income tax credit (EITC) for low-income workers and a work requirement for able-bodied PAN beneficiaries. It will also implement programs to develop critical skills in the workforce and improve employment readiness for jobseekers and students.

³⁵ See Eissa, Nada, and Jeffrey B. Liebman. “Labor supply response to the earned income tax credit.” *The Quarterly Journal of Economics* 111, no. 2 (1996): 605-637

³⁶ Federal Reserve Bank of New York, “An Update on the Competitiveness of Puerto Rico’s Economy.” July 31, 2014. <https://www.newyorkfed.org/medialibrary/media/outreach-and-education/puerto-rico/2014/Puerto-Rico-Report-2014.pdf>

³⁷ The World Bank Group, via International Labour Organization, ILOSTAT database. Data retrieved in March 2017. <https://data.worldbank.org/indicator/SL.UEM.1524.ZS>

7.3.1 Welfare structure reforms

To implement the human capital and welfare reform package, address labor market challenges and encourage residents to participate in the formal labor market, the Government will launch an Earned Income Tax Credit (EITC) program by January 2019, raising pay for formal laborers. The Government will also institute a work requirement for the Nutrition Assistance Program (PAN) which is currently being discussed with the Food and Nutrition Service (FNS) federal agency in order to be included as part of its FY 2020 Annual State Plan.

Earned Income Tax Credit (EITC)

The EITC is a benefit for working people with low to moderate income. To qualify, people must meet certain requirements and file a tax return, even if they do not owe any tax. The EITC reduces the amount of taxes owed and may result in a cash refund if the benefit is higher than owed taxes.

Since the welfare reform in 1996, the EITC has become the cornerstone of anti-poverty policy in the United States. It has refocused the U.S. safety net on working families, dramatically increasing employment among single women with children and removing more children from poverty than any other program. In the U.S., this translates to approximately 6.5 million people (half of whom are children) lifted out of poverty. Furthermore, the EITC improves employment rates (a \$1,000 increase in EITC benefit has been tied to a 7.3% increase in employment)³⁸ and provides increased opportunities for individuals to invest in their own futures with education, training, childcare, or other costs that improve longer-term outlook. The EITC has proven to be a powerful tool to encourage the transition into the formal labor force and file taxes.

From 2006 to 2014, Puerto Rico had a Worker's Tax Credit, which was later discontinued due to its unsuccessful individual eligibility parameters, but mostly as a cost saving measure. This prior Work Credit applied to 45% of all tax filers at a cost of \$152 million in its last year of implementation.

The implementation of the a new EITC program will be similar to the Federal EITC but adjusted to the relative wages of the Island. Eligible recipients will receive credits according to their marital status, family size, and earned income. As earnings increase, the benefit will increase up to a specified cap; at the cap, benefits will plateau and eventually decrease at the phase-out income level until it reaches \$0 (**Exhibit 28**), resulting in an **average benefit of \$525.30** per individual per year. This structure diminishes the "benefits cliff" many face as their earned income increases, as it incentivizes citizens who participate in the formal economy.

³⁸ Hoynes and Patel 2015, <http://www.taxpolicycenter.org/briefing-book/how-does-eitc-affect-poor-families>

EXHIBIT 28: EITC BENEFIT FORMULA

EITC Benefit Formula, \$

- Benefits begin with the first dollar of reported income. As income increases, **benefits also increase at the phase-in rate** (different depending on household size), **up to the maximum credit**
- When income **reaches the phase-in cap, the benefit increase ceases**. Benefits remain constant at income levels that fall between the phase-in cap and phase-out start
- When income **reaches the phase-out start, benefits begin decreasing at the phase-in rate** for each additional dollar earned, **until income reaches the income cap** (at which point benefits are \$0)

Number of Children	Phase-in rate, %	Phase-in cap, \$	Phase-out start, \$	Individual/ Single income cap, \$	Married income cap, \$	Maximum Credit, \$
0	5.00%	6,000	18,000	20,500	21,750	300
1	7.50%	12,000	13,000	20,500	24,250	900
2	10.00%	15,000	16,000	28,500	34,750	1,500
3 or more	12.50%	16,000	17,000	33,500	42,000	2,000

For example, a single mother with two children working at minimum wage for 35 hours per week earns approximately \$12,180 annually. With EITC, she can qualify for up to \$1,500 in additional take-home pay per year, effectively raising the minimum wage by more than 12%.

The EITC program would cost approximately \$200 million per year, but it will raise formal labor force participation significantly, providing a positive return on the investment. The EITC will be implemented no later than FY2019.

PAN Work requirement

PAN 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.

7.3.2 Workforce development programs

Human capital and welfare reforms should increase supply and demand for jobs; to fully close the gap and implement the human capital and welfare reform package, however, the Government is committed to ensure that its future workforce is prepared with critical skills.

Workforce Innovation and Opportunity Act (WIOA)

First, the Government is updating 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 will 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), iPR, and the DMO. The Government will submit a revised WIOA annual plan to the Federal Department of Labor by the end of 2018.

Youth development initiatives

In addition to WIOA, the Government will help develop critical skills in the workforce through multiple proposed initiatives, including:

- **Youth development:** Investment in STEM through targeted teacher professional development and related programs; apprenticeship programs through partnership with universities and local businesses; opportunities for work-based learning and business programs; occupational opportunities and certification programs
- **Higher education:** Curriculum development grants and scholarships for UPR students focused on high-impact sectors, e.g., the IT industry and Computer Science.
- **Current labor market:** Apprenticeship Programs through collaboration with the private sector; training & certification programs focused on the areas of reconstruction efforts; creation of a job council to coordinate development and employment opportunities for youth and the unemployed

By pursuing aggressive reforms to incentivize job creation and formal labor market participation, and to improve the overall quality of human capital in Puerto Rico, the Government will fundamentally transform the Island's labor market for the better.

Chapter 8. EASE OF DOING BUSINESS REFORM

8.1 Current state of business regulation and investment attraction

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. Ease of doing business remains an area in which Puerto Rico has much room for improvement.

In the 2018 Ease of Doing Business Report, Puerto Rico was ranked 64th. This represents a 9-point decline from 2017 and is 58 spots lower than the U.S., which ranks 6th overall. There are some areas of strength: Puerto Rico placed 6th for Getting Credit and 9th for Resolving Insolvencies. It has also made recent efforts to digitize government services to improve speed and accessibility, having digitized more than 50% of licenses transferred to the Unified Information System (SUI, a central and digital location for applications for licenses, incentives, autonomous municipalities, etc.) as of July 2018. However, when compared to the mainland, the Government recognizes that Puerto Rico has several areas for improvement, in particular:

Getting Electricity (rank 69, U.S. 49): Energy costs remain a major inhibitor to operating large-scale business efficiently on the Island. Electric bills for similar amounts of electricity can cost twice as much in Puerto Rico as it would in the U.S. mainland.³⁹ Puerto Rico's low ranking is also driven largely by low reliability of supply and transparency of tariff index -- rated a 4 (on a 0 to 8 scale) by the World Bank, compared to 8 in the U.S.⁴⁰

Dealing with Construction Permits (rank 138, U.S. 36): It takes 22 procedures and 165 days to get a construction permit in Puerto Rico, compared to 5 procedures and 89 days in the U.S. Obtaining a permit in Puerto Rico costs 6.2% of total future value of the permit (0.3% in U.S.). Despite these challenges, Puerto Rico is already strong in its building quality control index (12 on a 0-15 scale, compared to 8 for the U.S.).

Registering Property (rank 153, U.S. 37): It takes 191 days to register property in Puerto Rico, compared to 12 days in the U.S.

Paying Taxes (rank 161, U.S. 36): Puerto Rico requires 16 payments per year (11 in U.S.), and it takes 218 hours per year to prepare, file, and pay the corporate income tax (175 in U.S.). Puerto Rico also has a comparatively high total tax and contribution rate at 63.4%,⁴¹ compared to 45.8% in the U.S.

Trading Across Borders (rank 64th, U.S. 36): Despite the advantage enjoyed by Puerto Rico through its link to the U.S., its trading across borders ranking is more in line with regional peers (e.g., Dominican Republic and Costa Rica are 59th and 73rd, respectively). This is largely due to lengthy border handling times, which total 48 hours on average compared to 1.5 in the U.S.

In addition to needing to improve its overall business regulatory climate, Puerto Rico is lagging in its ability to attract investment and tourism. For example, in 2015-2016 Puerto Rico saw its number of jobs and establishments declining (before the effects of Maria),⁴² and it ranks 55th overall in the World Economic Forum's worldwide Travel & Tourism Competitiveness Index (while the U.S. rank is 6).⁴³ Countries that have focused on improving investment and tourism

³⁹ The Guardian, "Puerto Rico's Soaring Cost of Living," 2015. <https://www.theguardian.com/world/2015/jul/12/puerto-rico-cost-of-living>

⁴⁰ All specific U.S. comparison based on New York City, as averages vary across the country

⁴¹ The total tax rate measures the amount of taxes and mandatory contributions payable by the business in the second year of operation, expressed as a share of commercial profits

⁴² Puerto Rico Department of Labor and Human Resources, Bureau of Labor Statistics. "Puerto Rico Economic Analysis Report 2015-2016." https://www.doleta.gov/performance/results/AnnualReports/docs/2017_State_Plans/Economic_Reports/Puerto%20Rico/PR%20Economic%20Analysis.pdf

⁴³ As of 2015, latest available information for Puerto Rico. Puerto Rico was not included in World Economic Forum's 2017 report due to insufficient data

have seen great success. When Ireland created its Industrial Development Authority (IDA), it transformed Ireland into a popular location for new investments.⁴⁴ Ireland is now home to 9/10 of the world's top pharmaceutical and software companies. Meanwhile, when Barbados created its Tourism Product Authority in 2014, it began generating returns as soon as 1-2 years later: travel and tourism direct contribution to GDP increased by 5.4% in 2015 and 10.3% in 2016; and direct contribution of tourism to employment increased by 4.3% in 2015 and 9.8% in 2016.

Recently, the Government has made important efforts to generate investment in the Island by creating the Destination Marketing Organization (DMO) 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.

8.2 Future vision for Ease of Doing Business

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 57⁴⁵
- 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
- Trading Across Borders: Move from 64 to at least 50

In addition, in line with best-in-class investment offices,⁴⁶ by FY2023 **iPR shall:**

- Create 54,000 new jobs (or average 9,000 new jobs per year)⁴⁷
- Lead 750 new capital investments (or average 150 per year)⁴⁸
- Achieve a \$20 return in 10 years per dollar invested⁴⁹

In line with best-in-class Caribbean tourism offices,⁵⁰ by FY2023 the **DMO will close Puerto Rico's distance with the highest ranked Latin American country and therefore:**

- Improve World Bank Travel & Tourism Competitiveness Index ranking to at least 43, closing the distance to the highest ranked Latin American country in 2018

⁴⁴ In 2016, the IDA supported 60,000 jobs in 2016 at a cost of ~€9,000 per job sustained, and U.S. companies had invested ~€240 billion in FDI in the country

⁴⁵ In line with the top ranked Latin American country in 2018

⁴⁶ Offices reviewed include: Ireland's Investment Development Agency (IDA), Enterprise Florida, JobsOhio, and Virginia's Economic Development Partnership (VEDP)

⁴⁷ Average of number of jobs created by IDA annually from 2005-2009 equaled 9,700/year. In five years, the U.S. was able to recreate all the jobs lost in the Great Recession, but this was in an environment of economic recovery and population growth. 15% is a more reasonable target for Puerto Rico

⁴⁸ Best practice examples: VEDP had 375 new investments in 2015; IDA had 244 total approved investments in 2016; VEDP tracked 320 companies counseled or participating in trade events

⁴⁹ VEDP estimates \$23 return on each dollar invested in 10 years (\$48 in 20 years). VEDP benchmark adjusted for PPP

⁵⁰ Such as the Barbados Tourism Product Authority and the Bahamas Ministry of Tourism

- Drive 5% annual growth in direct contribution of tourism to GDP and 5% annual growth in direct contribution to employment⁵¹
- Improve tourist service infrastructure score Of 5.4 (2015) by 10% by improving number and quality of lodging services⁵²
- Establish exit surveys to measure visitor satisfaction, length of stay and spend for tourists to highlight key areas of improvement and focus for DMO⁵³

8.3 Core initiatives to improve the ease of doing business

To improve its Ease of Doing Business Rankings and overall tourism and investment outcomes, the Government will 1) pursue core initiatives such as digitizing government services, reducing border handling times, and driving deregulation and 2) establish clear metrics and regular tracking and reporting mechanisms for iPR and DMO.

8.3.1 Initiatives to improve ease of doing business rankings

To date, the Government has made major strides on digitization with the creation of the SUI, now SBP and its also is working on other reforms close the gap to the mainland on key metrics that measure the time and energy expended to register, run, or expand a business.

Digitize Unified Information System (SUI), now upgraded to the Single Business Platform (SBP). In addition to migrating government processes toward a streamlined and/or “one-stop shop” processes on SBP, the Government will move forms online to whatever extent is possible. This involves decoupling all non-related procedures from permitting, centralizing and digitizing permits, licenses, and incentives. The Government is targeting 100% integration into SUI by end of 2018 for the following metrics: Licenses integrated into SBP; cases filed in SUI; cases issued in SBP; concerned entities integrated into SBP; and autonomous Municipalities integrated into SBP. SBP will be the technological backbone of the DDEC’s promotional efforts in conjunction with the reorganization of the Department and the proposed Incentive Code.

Reduce occupational licensing. Reducing occupational licensing requirements can encourage activity in the formal labor market. Therefore, the Government will take inventory of all occupational licensing requirements and undertake reforms to reduce unnecessary regulations, thus creating a more open labor market. It will also consider joining stateside 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.

Dale Tijera. Currently Puerto Rico has around 4,416 active regulations, of which 61% were approved during the last two decades. Some of these regulations are obsolete, inactive or impractical. The goal of the initiative is to eliminate regulations that have been identified as unnecessary or duplicative, simplify those considered too complex, and judge each regulation for

⁵¹ Current state: 2.7% direct contribution to GDP and 2.1% of total employment as of 2016. Puerto Rico has historically seen an annual 4% growth rate in travel & tourism’s direct contribution to GDP and 4.6% growth rate in travel & tourism’s direct contribution to employment (2017). World Travel & Tourism Council, “Travel & Tourism Economic Impact 2017 – Puerto Rico.” Barbados set up its Tourism Product Authority in 2014; in 2015, the country saw a 5.4% increase in travel & tourism direct contribution to GDP and 4.3% increase in direct contribution to employment; in 2016, 10.3% increase in tourism GDP and 9.8% increase in tourism employment

⁵² 10% improvement bring tourist service infrastructure in line with Barbados at 5.9 quality score, top ranked Caribbean nation

⁵³ For example, The Bahamas Ministry of Tourism uses high quality exit surveys to track and respond to visitor satisfaction and tourist habits

intent and effectiveness. Cut-the-Red-Tape initiatives have already commenced, by creating a full regulation inventory with the ultimate goal to create a unified regulations code. The Government expects to have a full inventory and recommendations of regulations to eliminate by end of FY 2019.

Digital Reform. The Government will implement a broad digital reform that maximizes the use of technology to streamline citizen and business services, while providing greater transparency and tracking of data in order to help sustain a modern structure for the economy of Puerto Rico. The Puerto Rico Innovation and Technology Services Office (PRITS) will provide oversight and support to Government agencies in the implementation of structural reforms that incorporate technology. Other initiatives like the recently launched Digital Dashboard (“TIM”) assist the government, and eventually the public, in keeping track of KPI’s and data. Projects like improving the PR.Gov website will facilitate online government services and make it easier to do business in Puerto Rico.

Deregulate condominium law. Currently, condominium laws discourage investment in real property by requiring unanimous approval by all title owners in the condominium to execute certain projects. Deregulation can promote the development of investments by rental residents, increase population density and accelerate decision-making. The Government is expecting to have an approved revamped condominium law by the end of 2018.

Improve construction permitting. Expedite 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).

Improve ease of registering property. Streamline the property registry system to reduce delays from the Puerto Rico Property Registry. Also, improve geographic coverage and transparency of information on the registry system.

Improve ease of paying taxes. As part of the Government’s proposed Tax Reform, it will develop e-payment system for taxation wherever possible to reduce time taken to file corporate and sales tax to Hacienda.

Improve access to reliable and affordable electricity. In addition to the above streamlining and digitization initiatives for receiving permits, see Chapter 9 (Energy and Power Regulatory Reform) for further structural reforms to improve reliability.

Partnering with the Federal Government. In lieu of Puerto Rico’s lack of representation in Congress, the Puerto Rico Federal Affairs Administration (PRFAA) and the Office of the Resident Commissioner are critical to achieving equal treatment for Puerto Rico in federal funding and programs. With the collaboration of these offices and the Government, implementation of structural and welfare reforms that involve federal considerations can be undertaken more effectively. An effort to implement the recommendations of the PROMESA Congressional Bi-Partisan Task Force Report, and the execution of other Congressional or Executive measures that benefit Puerto Rico, through a stronger partnership with the Federal Government, are already underway.

Improve trading across borders. Efficient movement of goods across borders is a critical element of economic competitiveness. Goods that arrive in Puerto Rico are subject to a mix of federal customs procedures if coming from another country (administered by U.S. Customs and Border Patrol, CBP), and local procedures (e.g., certain tax payments). In either case,

downstream infrastructure challenges (e.g., in port ingress/egress capacity, internal transportation inefficiencies and lack of capacity, and power infrastructure), can have upstream impacts on the ability to quickly move goods in and out of the Commonwealth. According to the World Bank Doing Business Rankings, the typical time at import related to port or border handling in San Juan is 48 hours, relative to 1.5 hours in New York or Los Angeles. Improving the overall movement of goods requires an integrated effort that looks across transport infrastructure and programs at the border administered by the Government of Puerto Rico, along with close collaboration with the federal government (primarily CBP).

Domestic transport is also a major concern in Puerto Rico. Ports are spread across the Island with poor connectivity (e.g., between Ponce and San Juan), and the flow of goods across the Island's major highways and big cities is slowed by infrastructure productivity inefficiencies. Reducing this barrier to the efficient transport of goods across the Island could have a significant effect on Puerto Rico's economy, with various studies concluding that transportation improvements can lead to an uptick in growth⁵⁴.

In addition to improving infrastructure productivity, the Government will focus on improving accessibility for foreign and mainland companies and easing the process of moving goods into and out of the Island. While the scope of what some other countries have done to improve border conditions is beyond the scope of what Puerto Rico is responsible for, many of the same principles apply. For instance, from 2012 to 2018, El Salvador streamlined its processes, invested in increased automation technologies, and pinpointed areas of inefficiency at its borders where additional staff were added. During those same years, El Salvador's trading across borders ranking rose 26 spots⁵⁵.

Puerto Rico will use some of these strategies (e.g., automation, staff augmentation where needed, and research into specific areas of inefficiency) in tax collection and other areas where Government officials take full responsibility. By combining these principles with a robust collaborative effort in engaging the U.S. Port Authority and CBP, Puerto Rico will achieve its goal of halving the gap between its current trading across borders ranking and that of the mainland United States.

8.3.2 Invest Puerto Rico (iPR) and the Destination Marketing Organization (DMO)

iPR and DMO have begun their operations, with full operationalized entities expected by the end of 2018.

iPR will begin tracking data (both inputs and outcomes) to inform decision-making – for example, predict and assess project ROI before providing funds or discontinue projects that are not meeting expected results based on formalized project tracking. Further, iPR will publish quarterly or annual reports, addressing key metrics and any underperformance; hold regular (e.g., quarterly) Board meetings; and track/course-correct projects on an ongoing basis, including incorporating feedback from investors and data trends. Recently, the iPR signed the contractual agreement with the DDEC for the transfer of responsibilities.

⁵⁴ In California, the Mercatus Center out of George Mason University found that a 10% reduction in congestion in one of the state's urban centers corresponded to a 0.25% GDP increase and 0.18% wage growth. In New Zealand, the country's Institute of Economic Research estimated that measures to bring the roads in Auckland (New Zealand's largest urban center) to their intended capacity during the work week could boost the city's GDP by 1-1.4%. They also estimated that the benefit to the labor market could be an increase in employment of between 0.17-0.27%, and an increase in real wages of 0.31-0.48%

⁵⁵ <http://www.doingbusiness.org/Reforms/Overview/Topic/Trading-across-Borders>, and "Doing Business 2018: Reforming to Create Jobs" by the World Bank Group

The **DMO** will publish at least annual reports addressing key metrics. The DMO has already completed its strategic marketing plan with the new Discover Puerto Rico campaign and branding and expects to commence its national road show before the end of 2018. Also, it has completed its first hiring wave to staff up the team in order to implement the strategy.

Chapter 9. ENERGY AND POWER REGULATORY REFORM

Over the next five years, the power sector in Puerto Rico will be transformed and modernized to support the delivery of reliable and affordable power. The Commonwealth must implement regulatory reform to enable a successful transformation and the resulting growth that the Fiscal Plan projects. As detailed in the Fiscal Plan for PREPA, the goal of the transformation of the power sector is to provide the residents of Puerto Rico with low-cost, reliable, and resilient power delivered by an efficient and financially sustainable utility in every market. The pillars of this transformation include restructuring the power generation mix to leverage low-cost sources of power, rebuilding and modernizing the power grid, implementing an operational cost transformation, executing a large-scale capital investment program with Federal funds and private sector investments, restructuring the power industry by bringing in private operators, and establishing a new rate structure to allocate costs fairly and equitably across customers.

A strong and independent regulator of the power sector is required and will additionally support the success of the power sector transformation. Clear oversight authority should provide certainty throughout the process and should provide potential investors with confidence in the appropriateness of rate structures and the overall stability of the power sector in Puerto Rico. Furthermore, the long-term sustainability of Puerto Rico's energy sector depends on having a strong, independent, and professional regulator.

9.1.1 Current and future state of energy regulation

The current regulator of the power sector in Puerto Rico is the Puerto Rico Energy Bureau (PREB), formerly known as the Puerto Rico Energy Commission or PREC. The PREB is a bureau of the Puerto Rico Public Services Regulatory Board created pursuant to Reorganization Plan No. 8 of 2018 and the Puerto Rico Public Services Regulatory Board Reorganization Plan Implementation Act of August 13, 2018. As a bureau of the of PRPSRB the PREB has total decision-making autonomy regarding determinations about matters under its jurisdiction. The PREB has the responsibility to “regulate, monitor and enforce the energy public policy of the Commonwealth of Puerto Rico” as provided by a single public monopoly provider.

Under a future transformed power sector in Puerto Rico, PREB will continue to have these responsibilities as it applies to regulating, monitoring, and enforcing the energy policy of the Government of Puerto Rico, acting as the regulator for all participants in the energy sector and providing oversight over P3 Agreements executed pursuant to the Puerto Rico Electrical System Transformation Law, Act No. 120-2018

The ideal regulator for Puerto Rico can be modelled off the traditional Public Utilities Commission model used to oversee mainland U.S. utilities. The regulator is independent of the Government and operates under public service ethics and conduct rules. The regulator has autonomy in decision-making and the authority to approve the Integrated Resource Plan (IRP),

regular rate cases at two- or three-year intervals or through a formulaic rate mechanism and/or flexible rate case intervals consistent with the Fiscal Plan.

9.1.2 Structure of and funding for the Puerto Rico Energy Bureau

In line with best practices for regulatory commissions (e.g. California Public Utilities Commission, Hawaii Public Utilities Commission, New York Public Services Commission), the PREB will be headed by 5 commissioners who serve staggered 6-year terms. The commissioners should be appointed based on their technical credentials, with the appointments selected from a professionally prepared candidate list. All commissioners should deliberate and vote on all cases, though some commissioners may decide to take on “lead” roles in some cases. The commissioners should be supported in their oversight role by a professional civil servant staff that has utility expertise. The roles of advisory and advocacy staff should be strictly separated to better support both fairness and due process. All commission decisions in adjudicatory proceedings should comply with the traditional requirements of administrative procedure. Separate from the regulator, there should also be an independent ratepayer advocate. This role is carried out by the *Oficina Independiente de Protección al Consumidor (OIPC)*.

The regulator is funded by the same mechanism as mainland regulators, with financing provided through rates, as independent funding for a strong regulator should be the best ROI for customers to protect their interests, increase transparency, and reduce system costs. Dedicated funding for power sector regulation should be prescribed in the charter legislation. The regulator will need an annual budget of \$20-\$30 million dollars⁵⁶.

9.1.3 Mandate and authorities for the strengthened regulator

To be effective, the regulator must have a clear mandate to deliver reliable, safe power at an affordable cost. The tools and authorities that the energy regulator should have to enforce this mandate are as follows:

- Approval of the rate case developed by the utility operator, including ability to mandate target rates and the use of rate structure and design tools that create predictability, minimize risk and “rate shock”, and create incentives to support equitability, economic development, and economically efficient rate designs
- Evaluation of utility operator performance incentive and total compensation structure, including a reasonable, market-based return on equity
- Approval of an updated IRP, which will guide generation and capacity needs, including approval of purchased power agreement and other contract terms and Certificate of Public Convenience and Necessity (CPCN) regulation for individual generators
- Support for and integration of renewables, distributed generation and new energy technologies as appropriate and consistent with the PREPA Fiscal Plan (e.g., through IRP process and enforcement of applicable renewable portfolio standards)
- Mechanisms providing for efficient enforcement of final orders and determinations
- Solicitation of input from public related to rates, IRP, and transformation process

⁵⁶ Estimate in line with other jurisdictions; the Hawaii Public Utilities Commission had revenues of \$19M in FY2017 to serve a population of 1.4 million. \$7.6 million annual funding is assumed for the state energy regulator in the Commonwealth budget for FY19.

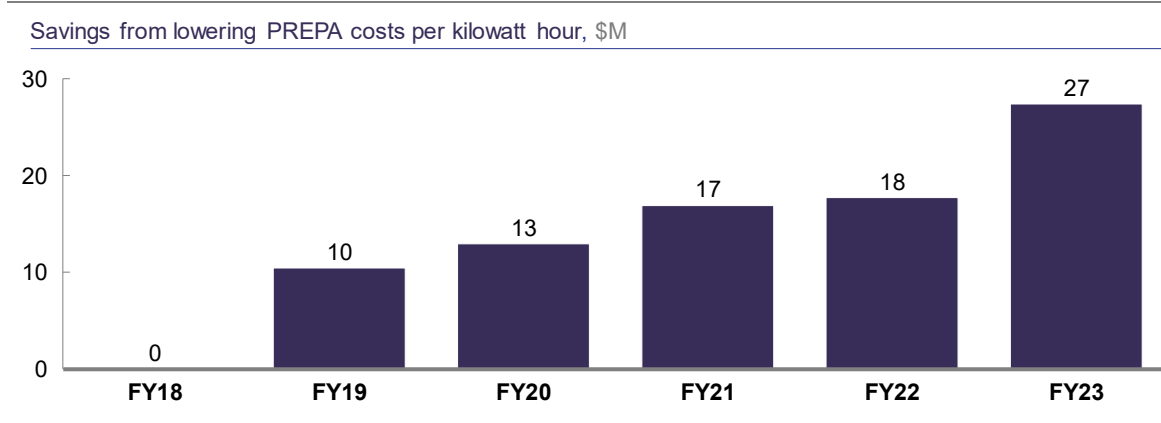
9.1.4 Regulatory reform implementation and transition

To enable the power sector transformation, the transition to a stronger regulatory structure must occur immediately.

The details of the future-state regulatory framework will be designed by a working group comprised of experienced professionals and stakeholders pursuant to the process outlined in Act No. 120-2018.

Regulatory reform is necessary for the successful transformation of the power sector and PREPA, which should generate significant savings to the Commonwealth through the lowering of PREPA costs per kilowatt hour to an aspirational rate of under 20 cents per kWh by FY2023.

EXHIBIT 29: COMMONWEALTH SAVINGS FROM LOWER PREPA COSTS



Chapter 10. INFRASTRUCTURE REFORM

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 offers 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 has decreased from 3.3% in 2000 to 1.4% in 2014⁵⁷, indicating a lack of recent experience in large-scale building.

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

⁵⁷ Puerto Rico Planning Board

congestion of roads⁵⁸. 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 in 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 growth⁵⁹.

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 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 and Resiliency as a Division of the P3 Authority to lead the coordination, development, and execution of long term recovery and reconstruction efforts. 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.

The 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 428 funding post Hurricane Sandy, which decreased their vulnerability and helped ensure that dollars spent then did not simply have to be re-spent cleaning up after the next storm. The COR3 will aggressively pursue next level resiliency activities with Federal funding, to ensure that Puerto Rico’s critical assets are sufficiently protected from future hazards.

Specific COR3 activities will include:

⁵⁸ U.S. Bureau of Transportation Statistics

⁵⁹ 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

- 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
- Deploying a proven grant-management software and provide external visibility via frequent status updates to its public website
- Coordinating and channeling all efforts and activities of the Government related to recovery efforts

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 including: reconstruction, construction and maintenance of government owned assets, and procurement of infrastructure through public corporations and Public-Private Partnerships (P3s).

The Government should 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 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 confirm process 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 P3s and access to Federal credit (e.g., TIFIA) and grant (e.g., INFRA) programs
- Increase bankability, and eligibility for participation in a P3s 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 P3s)
- 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 in airports)

PART IV: Transforming government to better serve the Island

In addition to structural reforms, the Government must also implement fiscal measures to create a sustainable fiscal future for Puerto Rico. Fiscal reforms should reduce costs while maintaining or improving the quality of important services. The wide range of government efficiency initiatives shall target an increase in revenues through new and more efficient collections activities, while decreasing government expenditures by ensuring reasonable usage of resources. The measures include the following:

Office of the CFO (*Chapter 11*). The Office of the CFO, (OCFO), will also 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 shall provide oversight to reduce historical Special Revenue Fund (SRF) deficits and drive \$71 million in run-rate savings by FY2023.

Agency Efficiencies (*Chapter 12*). A new model for government operations will strategically “right-size” the Government through agency consolidation and reduction and/or elimination of 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 within the long tail of other agencies. Agency efficiency measures must result in \$1,517 million in run-rate savings by FY2023.

Healthcare Reform (*Chapter 13*). Healthcare measures seek to reduce healthcare costs through a comprehensive new healthcare model that prioritizes quality relative to cost and must result in \$839 million in run-rate savings by FY2023, projected to grow with healthcare inflation.

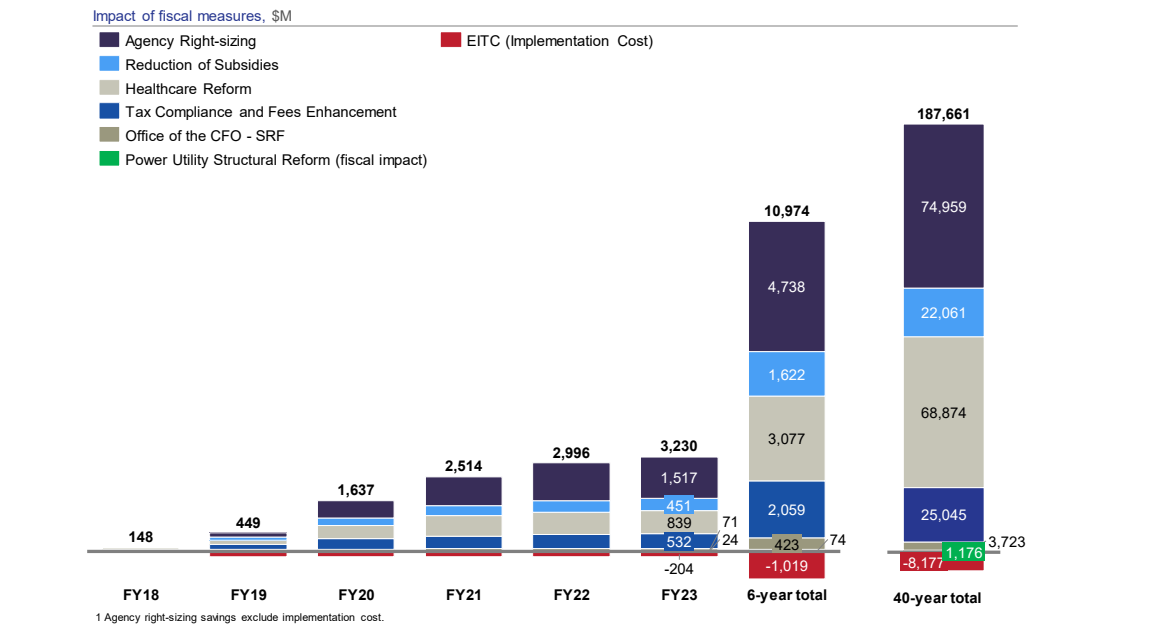
Tax Reform (*Chapter 14*). Puerto Rico will broaden the tax base while maintaining revenue neutrality to ensure that revenues are not unintentionally foregone

Tax Compliance and Fees Enhancement (*Chapter 15*). 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 \$532 million by FY2023.

Reduction of Appropriations (*Chapter 16*). The central Government will decrease appropriations granted to municipalities and UPR, which must result in \$451 million in run-rate savings by FY2023.

Together, these measures are crucial to the structural balance of Puerto Rico’s economy, and are projected to result in over \$187 billion over the next 40 years (**Exhibit 30**).

EXHIBIT 30: SAVINGS AND INCREASES IN REVENUES DUE TO IMPACTS FROM FISCAL MEASURES



Chapter 11. OFFICE OF THE CFO

One of the highest priorities of the Government transformation will be the implementation of the transformed Office of the CFO. The Government's financial management functions are decentralized, fragmented and in need of improvement. This will be solved by the establishment of a strong, centralized Office of the Chief Financial Officer for Puerto Rico. Executive Orders No. OE-2017-033 and OE-2018-034 amend the original executive order creating the post of the chief financial officer in February 2013.⁶⁰ Among other things, the new executive order gives the CFO oversight authority over all fiscal agencies. It also separates the post from that of the Treasury secretary as originally established.

By centralizing all financial management functions, 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, it will enable the Government to achieve fiscal responsibility and restore access to the capital markets, two cornerstones of PROMESA.

Core objectives of the OCFO must be as follows:

- 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

⁶⁰ OE-2013-007

- D) Ensure compliance with procurement, contracts, pensions, and human resources management policies
- 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, debt, and other financial transactions

11.1 Responsibilities and actions of the OCFO

11.1.1 Responsibilities

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

- The OCFO will act as the central authority over finance, budget, HR, audit, procurement, cash management, and debt issuance for all entities that receive support from the General Fund or otherwise depend on the Government's taxing authority
- The OCFO has 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 shall oversee the transition to modified accrual accounting standards

To enable this level of centralized control, these functions must be consolidated under a single individual. The Governor has proposed that this person be the Chief Financial Officer, who will oversee the OCFO. Other offices could be merged completely or partially into Hacienda and subsequently eliminated or modified to transfer certain functions to the OCFO. These agencies include, but are not limited to: Treasury, OMB, AAFAF, 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 will 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.
- Serve as the sole authority for new bank account creation and closure, as well as ongoing and ad-hoc liquidity reporting, monitoring and analysis. It must rationalize this bank account portfolio, optimize cash pooling/daily cash sweeps and treasury operations, and implement uniform accounts payable and disbursement prioritization policies, processes and reports

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

- Develop budgets
- Forecast and managing receipts 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 expense 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

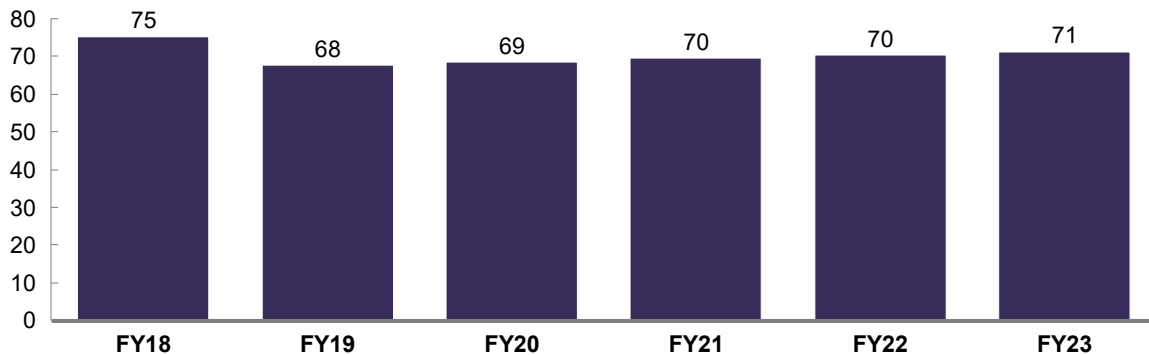
D) Ensure compliance with procurement, contracts, pensions, and human resources management policies

- Certify all contracts, bills, invoices, payrolls, 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 insurance procurement and policy management
- Oversee human resources as well as all governmental payroll operations and all government-related financial transactions.
- Implement uniform time and attendance processes, and payroll controls and reporting

E) Reduce special revenue fund deficits through enhanced control mechanisms and oversight. Implement an additional measure to ensure responsible stewardship of Puerto Rico's SRF. to ensure a balance between current SRF revenues and expenses to align with the legislative mandate that SRFs cannot outspend their resources (**Exhibit 31**).

EXHIBIT 31: 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 the FY2016, and FY2017 CAFRs and manage it to completion as soon as possible
- Implement a new process for the publishing of the FY2018 and subsequent CAFRs within the established regulatory timeframes, and drive improvements in the process and quality of the data provided. All releases should 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 measures implementation impact forecasting and reporting

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

- Maintain custody of all public funds, investments, and cash. It must administer cash management programs to invest surplus cash
- Facilitate long-term and short-term borrowing programs
- 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

Chapter 12. AGENCY EFFICIENCIES

12.1 *Changes to agency operational expenditures*

The Government has approximately 116,500 employees⁶¹ across 116 Executive Branch government agencies⁶², as well as agencies within the Legislative and Judicial branches (excluding large instrumentalities, e.g., PREPA, PRASA, HTA UPR, COSSEC, GDB). Compared with states serving similar populations, Puerto Rico remains an outlier in terms of number of agencies: for example, Iowa has only 36 state agencies and Connecticut has 78.

Therefore, 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 the 114 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 should serve to move services closer to citizens, such as the 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.

The plan contemplates \$172.5m in agency efficiency savings, prior to re-investment, in the first year and \$1.5b in run rate savings by year 5, all while providing the same, if not higher, level of services to the residents of Puerto Rico. In order to ensure savings targets are met, the Government has built in a 6-month planning phase and assumes savings start accruing in the beginning of CY2019. The Government is committed to making progress in implementing measures but believes it is important to have a comprehensive plan with the right amount of resources allocated to achieve the targeted cumulative savings.

Right-sizing savings as outlined in this section were generally developed using a top down approach. While the government intends to meet the aggregate savings target, operationalizing

⁶¹ Excludes transitory employees

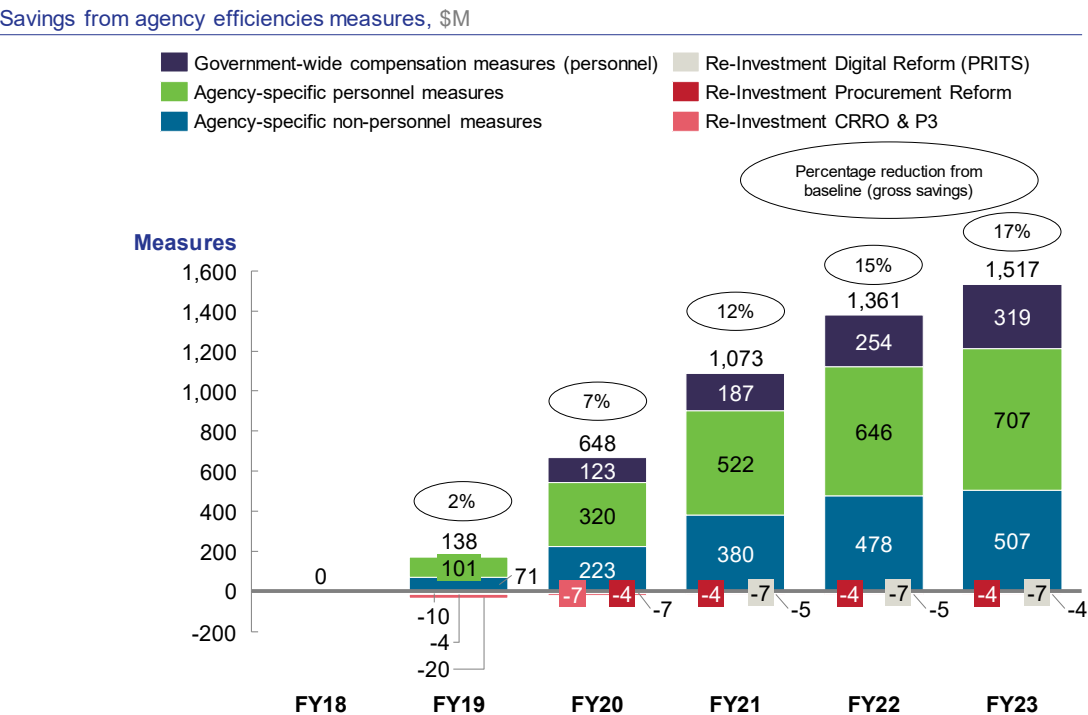
⁶² Excludes agencies which currently have \$0 operating budget and no employees

a reorganization of this magnitude comes with its challenges. **As a result, the Government intends to re-apportion monies between agency budgets to ensure that both the service level provided to the citizens of Puerto Rico are not diminished and savings targets are achieved.**

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 incorporates \$36M in professional fees, \$564M of VTP implementation costs and \$125 million of statutory liabilities⁶³ through FY23.

Total savings from agency-specific personnel and non-personnel measures are shown in **Exhibit 32**, as well as Government-wide compensation-related measures which will ensure properly-resourced compensation through continuing a payroll freeze and standardizing healthcare benefits.

EXHIBIT 32: SUMMARY OF AGENCY EFFICIENCIES IMPACT



63 VTP participants continue being paid for a finite period of time depending on the agency and program they participated in. VTP implementation costs account for the continued payment of salary/benefits for that time. The payout of statutory liabilities includes the payout of accrued PTO (capped at 2 months per Act 26), reimbursement of pension contributions (for employees with < 5 years’ service) and the incremental Paygo on account of employees retiring earlier than what the actuarial curve would suggest.

12.2 Approach to agency efficiency measures

There are 2 principal actions that have been applied to each agency to achieve these targets:

- **Agencies will be merged** when benchmarking and best practices determine that activities across agencies could be better served through a single mission and management to eliminate redundancies, and/or where economies of scale make shared services more economical without reducing quality of service.
- **A subset of agencies will be left independent but made more efficient** through a series of streamlining efforts related to both personnel and operations, allowing the agency to provide existing services at a lower cost to taxpayers. Additionally, some agencies within certain agency groupings will remain independent and will be able to use scale efficiencies through the consolidation of support functions via a shared services model. These independent agencies will enter into a Memorandum of Understanding with other agency grouping counterparts to implement the shared service model.

To the extent legislative approval is required to carry out agency changes, the Government will present reorganization plans to the legislature. Since the commencement of FY19, the Government has successfully presented and received Legislative approval on a number of reorganization plans in support of the agency efficiency savings presented herein.

The target savings methodologies are organized below (**Exhibit 33**).

EXHIBIT 33: SAVINGS TARGETS FOR AGENCY EFFICIENCIES

Savings targets, % off of baseline			
	Closing	Merging	Efficiency
Back-office	100%	40-50%	15-20%
Front-line	100%	Variable	Variable
Non-personnel operations	100%	30%	20%

12.3 Compensation-related initiatives

Instituting a payroll freeze

The Government implemented a measure to freeze all payroll expenses which became law in FY2017 (Act-3-2017). This measure is expected to yield \$262 million in annual savings by FY2023 if continued.

Standardizing healthcare provided to government employees

Medical insurance is a core benefit provided to all government employees. However, the degree of coverage varies widely across government agencies, with some employees receiving superior coverage compared to their peers.

To ensure fairness and reduce expenses, the Government will **standardize the health insurance received by each employee so that everyone⁶⁴ receives \$125 worth of benefits per month, or \$1,500 per year**. This initiative will be fully implemented by the start of FY2020 and is expected to yield \$56.5 million in run-rate savings.

Reducing additional outsized non-salary compensation paid to employees

There are several policies that the Government will continue to enforce through the duration of the Fiscal Plan that will impact personnel spend. These include:

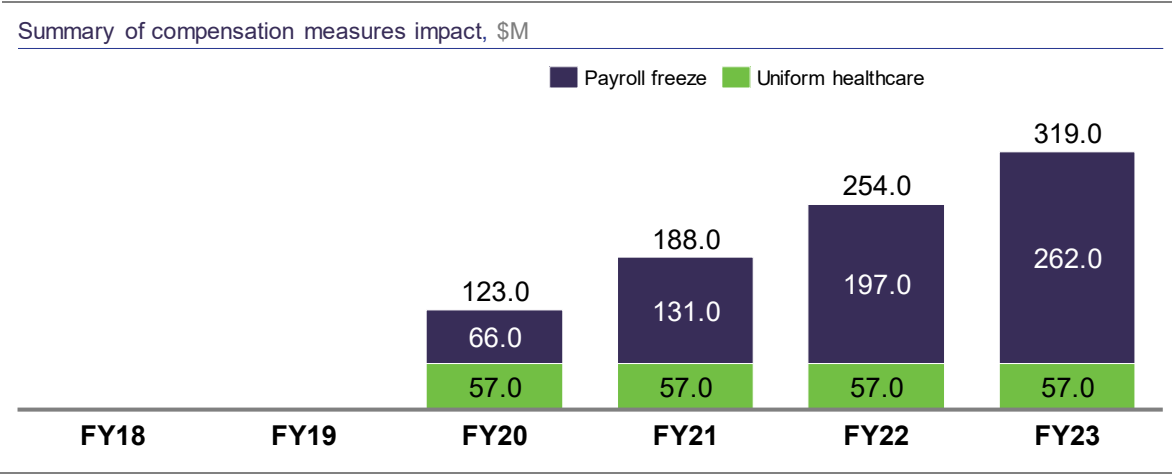
- Asserting a hiring freeze for Commonwealth Agency employees with stringent requirements for backfilling positions left open by attrition or workforce reduction. This hiring freeze was implemented through Executive Order 2017-1.
- Limiting paid holidays to 15 days annually across all public employees – Act-26-2017.
- Prohibiting carryover of sick and vacation days between fiscal years – Act-26-2017.
- Prohibiting any future liquidation of sick days and capping liquidation of vacation days at 60 days – Act-26-2017.

The fiscal impacts of these policies are captured in the baseline expenditures of the Fiscal Plan. These policies will remain in place so as to not increase personnel expenditures.

Total savings from compensation-related measures will reach a run-rate of \$319.0 million per year beginning in FY2023.

Annual savings targets are summarized below (**Exhibit 34**).

EXHIBIT 34: COMPENSATION-RELATED MEASURES SUMMARY OF IMPACT



⁶⁴ Excludes employees of State Insurance Fund Corporation and Automobile Accident Compensation Administration. These public corporations generate their own funds like PREPA. Therefore, a more tailored approach is necessary.

12.4 Department of Education (PRDE)

12.4.1 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 lasting strategy for academic improvement.

In addition, PRDE, the largest agency in the central Government by spend, is outsized 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),⁶⁵ the number of schools and teachers has not decreased proportionally (with only about a 30% reduction in public schools since 1990).⁶⁶ With an expected additional student decline of 14-16% over the next 6 years, PRDE has significant room to right-size 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 targeted reinvestment in student and teacher outcomes.

This year, the Department of Education has benefitted from an influx of federal funding that has been targeted at getting schools back up and running, while helping children recover from and adjust to a post-hurricane world, and for that we are very grateful. The way we have been able to prepare for this school year has been unprecedented in tending to the academic, social-emotional, and overall well-being of our children, and has highlighted the basic needs that have been underserved in our system for years. As we think about what the future looks like for the children of Puerto Rico's educational system, we recognize we will again be underfunded and fall behind in some of the most critical areas if unable to identify external funding to support these needs.

Some of the most pressing needs that the Department of Education anticipates will be underfunded include:

- Student information system, e.g., system support, upgrades, teacher and principal training
- Student services, e.g., safety/security, social-emotional health, nurses, wrap-around services for students and families
- Technology maintenance and security and devices including curriculum integration, teacher and principal training

⁶⁵ 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

⁶⁶ 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

- Transportation management and routing system, e.g., allowing for periodic route optimization and vendor performance management
- Teacher and administrator professional development
- Bilingual education support, including curricular support; products and services; teacher recruitment, training, and retention
- Classroom materials, e.g., manipulatives / licenses / basic materials for teachers / classroom furniture kit by grade by subject matter
- Extracurricular programming to attend to the needs of the whole child, e.g., after school sports, arts programs
- Automated staffing system
- Facilities maintenance and upkeep, strategic portfolio management

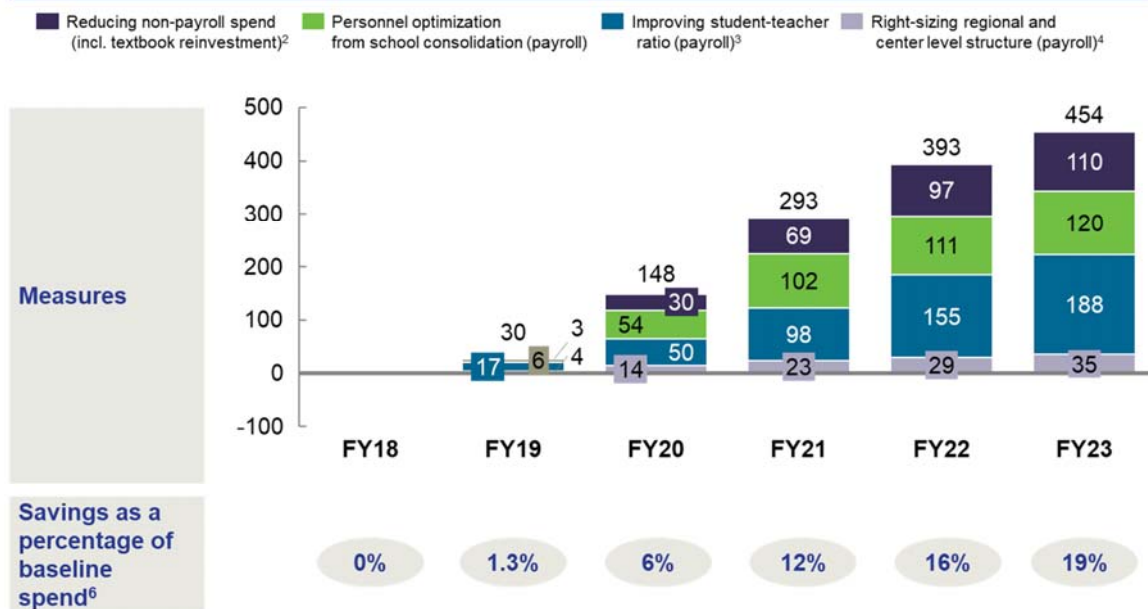
Strategic external support in any of these areas will take us farther down the path of the transformation we are working so hard to achieve.

12.4.2 PRDE Efficiency measures

PRDE will achieve \$27 million in net personnel savings and \$3 million in non-personnel savings in FY2019, excluding any savings accrued from the elimination of the Special Revenue Fund deficit and implementation of the uniform healthcare measure. Refer to **Exhibit 35** for annual personnel and non-personnel savings that will be achieved through FY2023. To accomplish this, PRDE could consolidate its footprint (including schools, classes, teachers, and administration), modernize facilities, revise the curriculum, and equip teachers with what they need to succeed. Measures will generate \$454 million in run-rate savings inclusive of funds needed for requisite reinvestments to increase quality.

EXHIBIT 35: EDUCATION RIGHT-SIZING SUMMARY OF IMPACT

Summary of Department of Education measures impact¹, \$M



¹ Savings in graph exclude additional personnel savings achievable through compensation measures (e.g., payroll freeze, uniform healthcare) detailed earlier in Chapter 12 and SRF deficit reduction measures attributed to this grouping detailed in Chapter 11. However, total savings as a percentage of baseline is included below chart.

² Includes school closure implementation costs

³ Includes teacher and director salary reinvestment as well as all implementation costs

⁴ Includes director salary increase

⁵ Includes all general and federal fund payroll and non-payroll expenses. Excludes own income, non-addressable opex (e.g., student food services), and permanent improvements

⁶ Excludes savings measures attributable to payroll freeze, uniform healthcare, SRF reduction

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

Consolidation of schools will also enable higher quality outcomes at lower cost by enabling systems to invest in a smaller number of higher-performing schools. Each school closure should save an estimated \$47,000 annually by reduction of facility costs.

Independent of, but accelerated through, consolidations, PRDE procured spend should be reduced by approximately 10-15% through centralized procurement policies including strategic purchasing and demand controls.

Personnel optimization from school consolidation

The number of school staff is expected to decline proportionally to the projected decrease in number of schools due to attrition and VTP programs. This should result in \$120.3 million in savings by FY2023.

Improving student-teacher ratio

Puerto Rico's student-teacher ratio is currently 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, teacher staffing levels will be reduced 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 currently poor student

outcomes and its extremely high proportion of special education students. These teacher-focused measures should achieve \$188.3 million in run-rate savings by FY2023, inclusive of transition costs under workforce reduction policies (e.g., liquidation of vacation pay). The savings figure is also reduced to reflect additional investment in increased salary for remaining teachers (detailed below).

Right-sizing regional and center level structure

Rather than function as a single Local Education Agency (LEA), PRDE shall create regional LEAs (**Exhibit 36**).

EXHIBIT 36: LOCAL EDUCATIONAL AGENCIES FUTURE STATE REGIONS



This new regional LEA model will be leaner 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 right-size 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.⁶⁷

Implementing the regional LEA model must allocate administrators more effectively for decision-making. The model shall decrease headcount requirements at the regional level and central level; further, allocation of administrators in less costly regional centers (as opposed to centrally)

⁶⁷ Oversight Board Listening Session, Secretary Julia Keleher, "On the Road to Transformation" November 30, 2017

should enable cost savings on retained positions. Each regional office is expected to have capable leadership and staff to execute core functions, including operations, student services, accountability, and academic standards. This model results in a total of \$35.3 million in run-rate savings each year from less costly regional positions and reduced central staff, while seeking to improve PRDE operations and student outcomes.

12.4.3 Reinvestment in education outcomes

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 0.16% increase in GNP growth by FY2048 and keep growing thereafter (*see Section 4.2 for further discussion of GNP impact*). 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:

1. Teacher development and retention
2. New educational materials such as textbooks

Teacher development and retention

Teachers are considered one of the most determinative 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.⁶⁸ 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 U.S. citizens of Puerto Rico 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.** Teachers in Puerto Rico have 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. The Government will implement a \$1,500 annual salary increase for teachers⁶⁹ and \$23,000 annual salary increase for directors⁷⁰ to begin closing this gap, although the gap remains large, and incentivize retention of highest quality teachers.

⁶⁸ 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

⁶⁹ 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.

⁷⁰ Directors in Puerto Rico currently receive a salary of \$42,000. The mainland benchmark for Elementary, Middle, and High School Principals is approximately \$92,500 per year (Bureau of Labor Statistics 2018). An increase of \$23,000 per year would bring average director salary to \$65,000 in Puerto Rico, still approximately 30% lower than the mainland U.S.

These teacher-focused reforms will be funded through reinvestment of right-sizing measures and are factored in to the measures overall savings as described above. Such reforms will have dramatic impact on student outcomes not only in school but beyond, as they enter the workforce and lead a new generation in Puerto Rico.⁷¹

New educational materials including new textbooks

Teachers are currently limited in their ability to provide the best educational opportunities because of the limited resources available, including up-to-date textbooks. Therefore, \$75 per student (FY2019-FY2021) will be invested in procuring new textbooks, or \$21-24 million each year as one-time costs. This will be funded through reinvestment of non-payroll savings created by measures and is factored into the measure savings as described above.

12.5 Department of Health (DOH)

12.5.1 Current state and future vision for the Department of Health

Currently, the Government has several health-related agencies that are highly fragmented: three public corporations, three public hospitals, seven sub-secretaries, six regional offices, and eight program offices administering 64 Federally funded programs — all with their own support functions. Such fragmentation drives up cost, as each agency provides their own human capital management, procurement, and financial support. Citizen experience and care delivery also suffer.

In the future state, the Governor has proposed that the Department of Health consolidate 5 agencies with centralized support functions: The Department of Health (DOH); Medical Services Administration (ASEM); Health Insurance Administration (ASES); Mental Health and Addiction Services Administration; and Puerto Rico and the Caribbean Cardiovascular Center Corporation (**Exhibit 38**). This new DOH should enable efficiencies while maintaining high quality public health. Consolidating these five agencies should provide opportunity for right-sizing support functions, as well as centralizing procurement to provide savings on costly medical materials and equipment.

EXHIBIT 38: AGENCIES INCLUDED IN FUTURE STATE DOH

1 Department of Health	4 Mental Health and Addiction Services Administration
2 Health Insurance Administration (ASES)	5 Puerto Rico and the Caribbean Cardiovascular Center Corporation
3 Medical Services Administration (ASEM)	

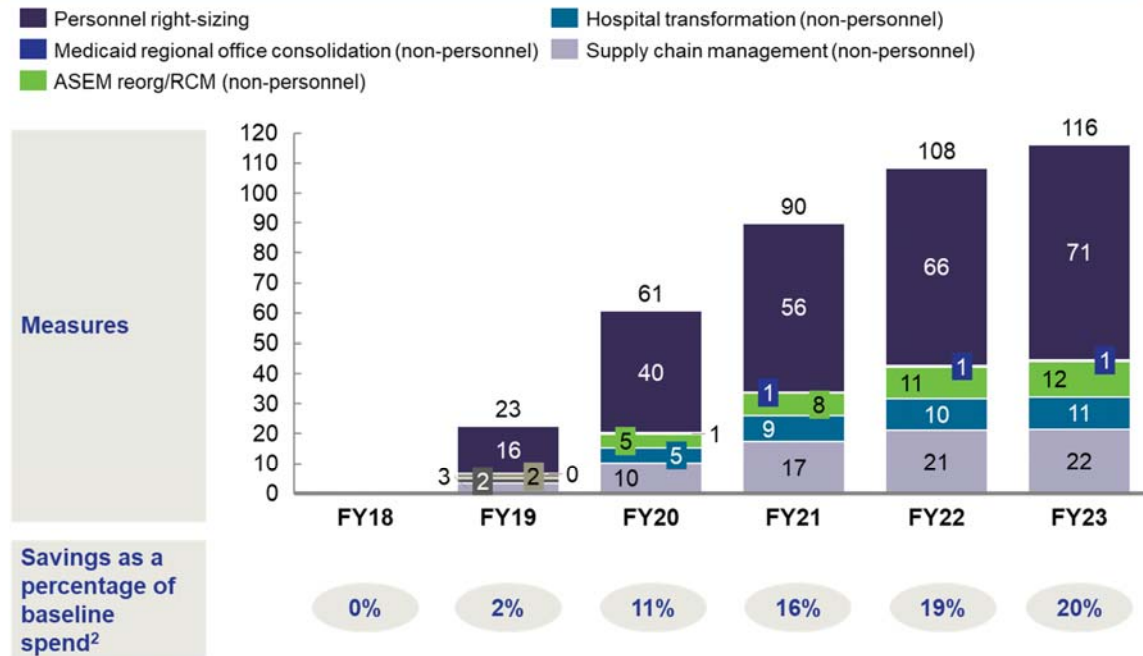
12.5.2 Efficiency measures for the Department of Health

By bringing together five major agencies to create the Department of Health (DOH), the Government will take advantage of personnel and non-personnel savings that can be achieved through consolidation. DOH will achieve \$16.5 million in personnel savings and \$6.7 million in non-personnel savings in FY2019, excluding any savings accrued from the elimination of the Special Revenue Fund deficit. Refer to **Exhibit 39** for annual personnel and non-personnel savings that will be achieved through FY2023.

⁷¹ 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

EXHIBIT 39: DEPARTMENT OF HEALTH RIGHT-SIZING SUMMARY OF IMPACT

Summary of Department of Health measures impact¹, \$M



¹ Savings in graph exclude additional personnel savings achievable through compensation measures (e.g., payroll freeze, uniform healthcare) detailed earlier in Chapter 12 and SRF deficit reduction measures attributable to this grouping detailed in Chapter 11.
² Excludes savings measures attributable to Christmas bonus, payroll freeze, uniform healthcare, SRF reduction

Personnel optimization and centralization

The Government should centralize and consolidate support functions, including finance, HR, legal, revenue cycle management, procurement, grants management, and epidemiology. Improved management and oversight of these functions, and reductions associated with consolidation, will result in \$71.4 million in run-rate personnel savings by FY2023.

ASES and Medicaid consolidation and optimization

Medicaid currently has 85 offices across 78 municipalities that can be consolidated into fewer, more strategic locations. Reducing the Medicaid office and regional hospital office structure will eliminate duplication of effort and redundancies –and allow the Department to provide more robust services at convenient locations. In addition, The Medicaid Office will redesign the eligibility and enrollment process (web based, MCO dependent, hospital responsibility, etc.) and encourage online services to improve data management. Best practices from the mainland include engagement of third-parties within hospitals to identify and enroll eligible patients into the Medicaid program.

Consolidation of regional centers and Medicaid optimization should result in \$500,000 in run-rate savings by FY2023.

Supply chain management

Due to the large volume of spending on procuring medical supplies and equipment, and the high cost of such materials, there is a significant opportunity to improve procurement efficiency through best practice supply and demand management, and better employing economies of scale. In FY2018, there was over \$188 million in addressable non-payroll spending (excluding any hospital expenses) across all agencies. This measure to reduce non-payroll spend through procurement efficiency could amount to \$22 million run-rate savings by FY2023.

Hospital management transformation

In addition to other agencies' non-payroll savings, hospital transformation will likewise seek to improve procurement savings specifically for hospitals and health systems, which will focus on commodity standardization and sourcing, indirect spending (analyzing insourcing vs. outsourcing opportunities), and physician preference item optimization.

Holistic hospital transformation efforts should also reduce payroll spend through clinical labor optimization, which is captured in the "personnel optimization" measure. For example, wages should be optimized to fair market value to reduce turnover and therefore temporary/overtime spend; and role/responsibilities should be optimized to skill level and wage rate. This measure would result in \$11 million in run-rate savings by FY2023.

Restructuring ASEM and Revenue Cycle Management

ASEM is a public corporation originally created to serve as a central procurement office for government hospitals to create economies of scale for medical supplies, devices, and services. Throughout the years, rates, salaries, and services have increased at a higher rate than within the broader industry, and procurement processes have decentralized across the hospitals ASEM was created to serve.

The focus areas of this measure include: 1) Establishing a centralized Medical Center including ASEM, University, Pediatric and Cardiovascular hospitals; 2) Identifying and establishing key hospitals across the Island; 3) Designing and implementing a referral system among key hospitals and clinics; and 4) Establishing a physician network. Improvements will be made to personnel, process, and technology. This measure would result in \$12 million of run-rate savings by FY2023.

12.6 Department of Public Safety (DPS)

12.6.1 Current state and future vision for DPS

The Department of Public Safety (DPS) is an agency grouping which was approved by Puerto Rico's Legislature in 2017 (Act 20) and includes six agencies responsible for **ensuring the safety and security for all residents of the Island**. The grouping includes the following agencies:

EXHIBIT 39: LIST OF AGENCIES IN DPS GROUPING

1 Puerto Rico Police Department (PRPD)	4 Emergency Management and Disaster Administration Agency
2 Firefighters Corps	5 9-1-1 Services Governing Board
3 Emergency Medical Services Corps	6 Institute of Forensic Sciences

The largest agency by spend and personnel is the Police Department (~85% of total DPS spend). As a result, most of measures identified within the grouping apply to the Puerto Rico Police Department (PRPD).

The process of calculating right-sizing savings for DPS entailed an analysis of starting headcount versus targeted headcount based on industry benchmarks. The starting headcount was overstated resulting in overstated savings. As a result, monies will be re-apportioned from other agencies with excess budget to DPS. This will ensure the safety and well-being of the residents of Puerto Rico. The total amount of monies that will be re-apportioned from other agency budgets to the DPS will be \$32.8m in FY19.

One of the PRPD's main responsibilities is to manage violent crime, defined by the FBI as "murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault."⁷² **Puerto Rico currently spends more on police per violent crime than most U.S. states**, even after adjusting for differences in PPP; while the PRPD spends \$97,939 per violent crime, the U.S. 50-state median level of spend is only \$88,905.

This elevated spend is partially because **the rate of violent crime in Puerto Rico has been decreasing for the past 10 years without a simultaneous decrease in police officers**. While there was an average of 258 incidences of violent crime per 100,000 citizens between 2007 and 2011, the rate of crime decreased to 242 per 100,000 between 2012 and 2016. This decline continues into 2018⁷³.

It is thus the time to take a closer look at the PRPD, not only due to the elevated spend and diminished violent crime rate, but also in conjunction with a 2013 consent decree agreement with the U.S. Department of Justice on reform measures, which compelled the PRPD to conduct a staffing allocation and resources study to assess the proper size of the police force. **The Department is currently undergoing a transformative process to address the requirements under the agreement**, and the measures within the Fiscal Plan will complement these efforts.

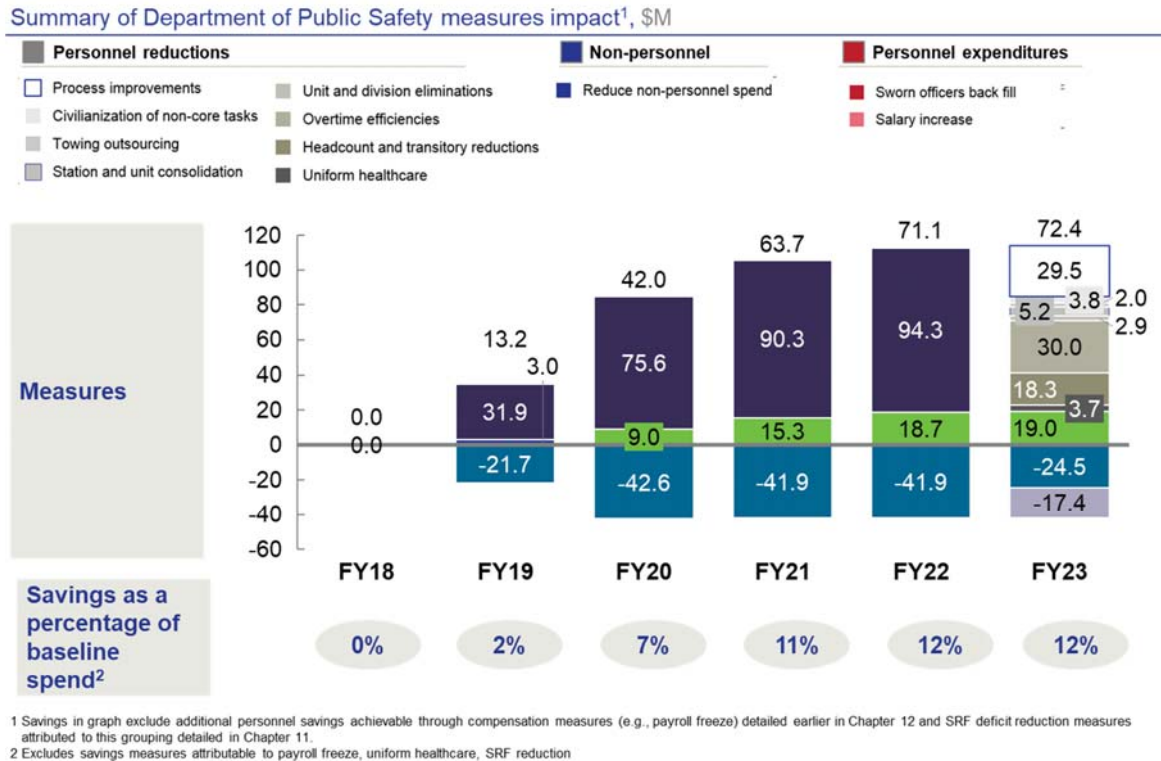
12.6.2 Efficiency measures for DPS

DPS must achieve \$10.3 million in net personnel savings and \$3.0 million in non-personnel savings in FY2019, excluding any savings accrued from the elimination of the Special Revenue Fund deficit. Refer to **Exhibit 39** for annual personnel and non-personnel savings that must be achieved through FY2023.

⁷² <https://ucr.fbi.gov/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/violent-crime>

⁷³ "Natural Disasters and Social Order", International Journal of Mass Emergencies and Disasters

EXHIBIT 39: DPS SUMMARY OF MEASURES IMPACT



Process improvements

DPS should **reduce administrative tasks and activities** by leveraging modernization, including digitization of incidence reporting, automation of time and attendance, and consolidation of statistical reporting. Furthermore, DPS will streamline vehicle maintenance processes through superior scheduling and procurement protocols, which can reduce the need for vehicle maintenance staff. Process improvements would lead to \$29.5 million in run-rate savings by FY2023.

Civilianization of non-core tasks, including outsourcing towing

DPS should replace sworn officers currently performing civilian duties—such as mechanics, radio operators, records and report keepers, area command statistics compilers, and maintenance workers—with **less expensive civilian personnel**. Additionally, DPS can outsource towing services to a third-party vendor to cover approximately ~93% of towing needs. These initiatives would lead to \$5.8 million in run-rate savings by FY2023.

Station, unit, and division consolidation and eliminations

DPS should **consolidate police stations, transit units, and specialized units** to reduce the amount of administrative personnel required (e.g., station desk officers, station commanders and directors, stations auxiliary commanders and directors, and vehicle managers). Simultaneously, DPS should **eliminate units and divisions** which perform duplicative services already provided by other agencies within the Government (e.g., the Divers Unit, the

Rescue Squad Division, and Mounted Divisions). These initiatives should jointly lead to \$8.0 million run-rate savings by FY2023.

Overtime efficiencies

The Government spent approximately ~\$50 million on overtime last year (excluding the outsized overtime needs resulting from Hurricane Maria). This level of overtime is considerably higher than the PPP-adjusted overtime for comparable police forces in U.S. mainland states. For instance, Connecticut, which has a similar population to Puerto Rico and a slightly-higher number of violent crimes (273 per 100,000 inhabitants vs. 224 per 100,000 inhabitants in Puerto Rico), had PPP-adjusted overtime spend of only ~\$28 million in 2017. This gap comes even though Connecticut's total police spend per capita is ~\$140 less than in Puerto Rico⁷⁴.

Through the levers identified in the above measures, in addition to general efficiencies in scheduling and overtime management, DPS can **reduce paid overtime by 60%**. Overtime efficiency efforts should lead to \$30.0 million run-rate savings by FY2023.

Sworn officers back fill and headcount/transitory reductions

According to a Government analysis conducted in response to the PRPD's ongoing consent decree adjudication under the U.S. Department of Justice, there is a need to **redeploy sworn officers to fill capacity deficiencies in operational functions**⁷⁵. This redeployment will lead to a need for 644 additional officers to be deployed to the field. This measure will lead to \$24.5 million run-rate additional costs by FY2023. Simultaneously, attrition and headcount reductions among non-sworn, regular DPS employees (~162 employees), as well as facilitating the departure of 50% of DPS transitory employees, can create \$18.3 million in annual savings by FY2023.

Salary increase

To ensure that DPS continues to **retain police officers**, despite the presence of significantly higher-paying positions within police departments on the U.S. mainland⁷⁶, DPS should institute a \$1,500 annual raise for all sworn personnel by FY2019. This measure is expected to lead to \$17.4 million run-rate additional costs by FY2023.

Uniform healthcare and non-personnel spend

As detailed earlier in this Chapter, these measures to **standardize employee healthcare and decrease non-personnel spend** through procurement optimization (e.g., police fleet vehicles) should lead to \$3.7 million and \$19.0 million in annual savings by FY2023 for uniform healthcare and non-personnel spend, respectively.

⁷⁴ Connecticut Office of the State Comptroller; census data 2014; FBI Crime Justice Information Services

⁷⁵ The report is expected to be completed mid-2018

⁷⁶ Current average salary for a sworn officer in Puerto Rico is \$34,600, which is ~45% of U.S. median according to the Bureau of Labor Statistics (Police and Detectives)

12.7 Department of Corrections and Rehabilitation (DCR)

12.7.1 Current state and future vision for DCR

DCR manages the functions and policies of the Puerto Rican correctional system, including penal institutions and rehabilitation facilities, for men, women, and juveniles. Population served consists of 10,504 inmates at prison and detention facilities, and approximately 7,831 adults under the jurisdiction of DCR in a community program. The Correctional Health agency provides healthcare to the adult imprisoned population. The combined FY2018 budgets were \$438 million, and it includes a total of 7,081 employees of the DCR and 564 of the Correctional Health agency.

EXHIBIT 40: LIST OF AGENCIES IN DCR GROUPING

1 Department of Corrections and Rehabilitation

2 Correctional Health Department

DCR's daily cost ("per diem") per imprisoned, community and juvenile individual served is substantially higher than the peer prison systems within mainland U.S.

The adult imprisoned program is dependent on an outdated, maintenance deferred network of 35 low capacity prisons and detention centers. Per diem of adult imprisoned population varies substantially among facilities ranging from \$66.26 to \$205.10. This per diem is significantly affected by a \$20.62 per diem for correctional health services for this population. Occupancy of facilities utilized to serve the adult imprisoned population is approximately 87%.

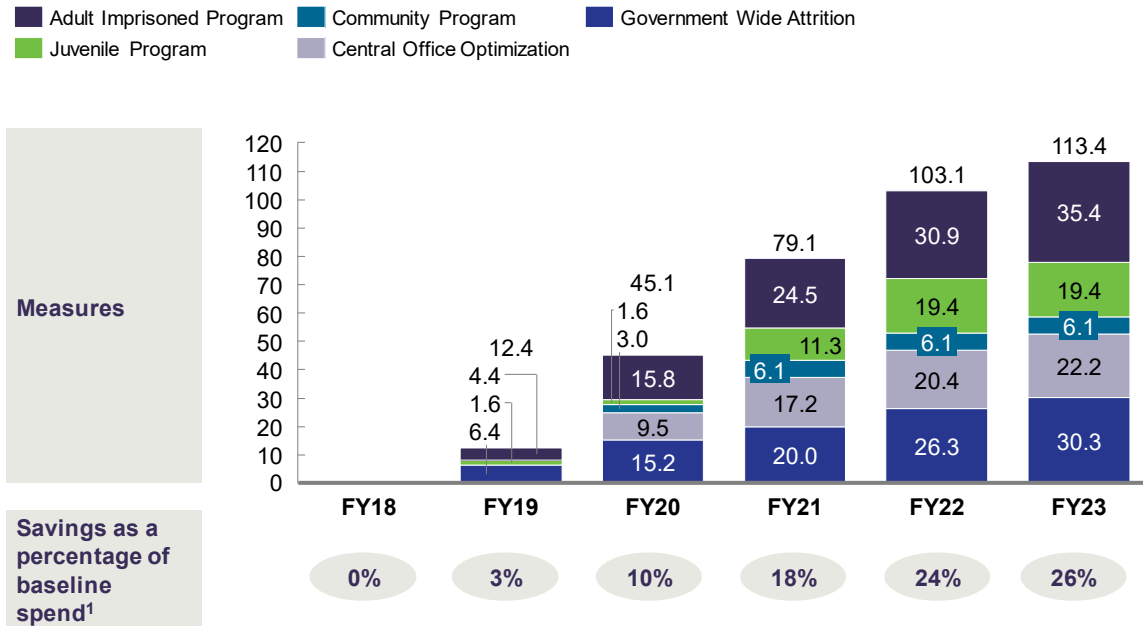
The community population is served by 12 regional offices throughout the Island. Per diem of the community population is \$7.01.

Juvenile population is housed at three facilities with an average per diem of \$691.40, as compared to mainland facilities of \$280.

By **rightsizing Puerto Rico's correctional facilities and footprint** to reflect changes in the prison population and improving procurement effectiveness on all corrections categories, the Government will achieve five-year cost savings of \$353 million.

EXHIBIT 41: DCR SUMMARY OF MEASURES IMPACT

Summary of Department of Corrections measures impact, \$M



¹ Baseline of \$438 MM includes overtime expense

Outsourcing of Prison Services for Adult Population

The externalization of prison services to approximately 30% of the adult male population will enable DCR to consolidate eleven facilities with a range of per diem from \$66.26 to \$199.92, DCR estimates that the externalization process will be executed in four stages within the next four fiscal years with a target population of 3,200 inmates. A proposal was already received from one private prison operator offering savings of \$35.4 million by FY23.

DCR will realize further efficiencies through the improved procurement process for the acquisition of correctional health, food and other services required to serve the imprisoned population remaining in Puerto Rico. Presently, DCR spends annually approximately \$77 million in correctional health services for the adult population and \$21 million in food services, including commissary and laundry services. The consolidation of facilities and the improved procurement of goods and services will reduce the per diem of the imprisoned adult population to \$82.40 at the end of the five-year plan resulting in run-rate savings of \$22.2 million by FY23.

Consolidation of community programs

DCR will consolidate 7 regional offices dedicated primarily to the population serving its sentence in one or various community programs. Through this consolidation, DCR anticipates run-rate savings of \$6.1 million will be achieved by FY23. Notwithstanding, DCR is also presently

considering the partial or full externalization of the direct services offered to this population. Under this alternative, savings may potentially be accelerated to prior fiscal years. The potential savings from this initiative are not yet fully analyzed.

Externalization of Services to Juvenile Population

DCR spends \$42 million in services offered to the juvenile population in three facilities currently in use. DCR will gain efficiencies through the consolidation of facilities in FY2020. Feasibility studies will be conducted for the construction or rehabilitation and operation of a consolidated facility through the modality of a private-public partnership. Annual savings of \$19.4 million will be achieved starting on FY2022. Nonetheless, DCR is presently considering the externalization of the services rendered to the juvenile population through an operational agreement. Under this externalization mode, savings may be accelerated to FY2020. A request for proposal document is in process of revision and intended for distribution in mid FY2019.

To further enable savings from consolidations and reduced FTEs, DCR may contemplate initiatives to actively reduce prison population as appropriate, such as early release with electronic

Non-personnel optimization – Additional Opportunities

DCR currently spends \$64 million on **procurement**, costs that can be reduced through a variety of means, including leveraging the Federal General Services Administration, utilizing e-auctions, launching competitive Requests for Proposal (RFPs), centralizing purchasing to the greatest extent possible, and outsourcing/contracting responsibilities. Using benchmark savings percentages for major spend areas would result in ~\$8 million potential savings opportunity, excluding correctional healthcare.

For **correctional healthcare**, the Government currently spends ~\$6,000 per inmate based on the terms of the Correctional Health Services Corporation contract. By comparison, the 50th percentile of U.S. states spend \$3,800 per inmate.⁷⁷ Bringing this per-inmate spend in line with the 50th percentile of U.S. states would generate annual savings of ~\$23 million by FY2023.⁷⁸ DCR can unlock these savings by renegotiating existing contracts, launching competitive RFPs for other correctional healthcare providers that will provide terms more in-line with mainland spending practices, reconsidering level of service due to the currently declining prison population, and strategically evaluating insourcing options.

12.8 Office of the CFO (OCFO)

12.8.1 Current state and future vision for Office of the CFO

Currently, the financial management functions—as well as basic administrative functions—of the Government are spread across several entities; for instance, the Office of Management and Budget is responsible for administering the Annual Budget of Puerto Rico, the General Services Administration is responsible for procurement processes, and ownership of other fiscal and payroll responsibilities are distributed across another four agencies. This distribution has led to historical problems for the Government, as the number of bank accounts, special revenue funds,

⁷⁷ Source: Pew data 2011, normalized for GDP PPP and inflated to 2017 dollars based on CPI data (2011-2017 compounded inflation rate of 10%)

⁷⁸ Pew data, 2011

and other untracked funding and expenditure streams have proliferated. Indeed, the lack of one office that has authority over all revenues and expenditures—and is also accountable for balancing the budget—has been a **major barrier for the Commonwealth’s ability to regain its fiscal sustainability and publish accurate and timely financial reporting.**

As discussed above, the Government is **consolidating all financial management, HR and procurement activities under the OCFO.** The OCFO will have authority and accountability over the following agencies, which could be consolidated, reorganized or eliminated:

EXHIBIT 42: LIST OF AGENCIES IN HACIENDA / OCFO GROUPING

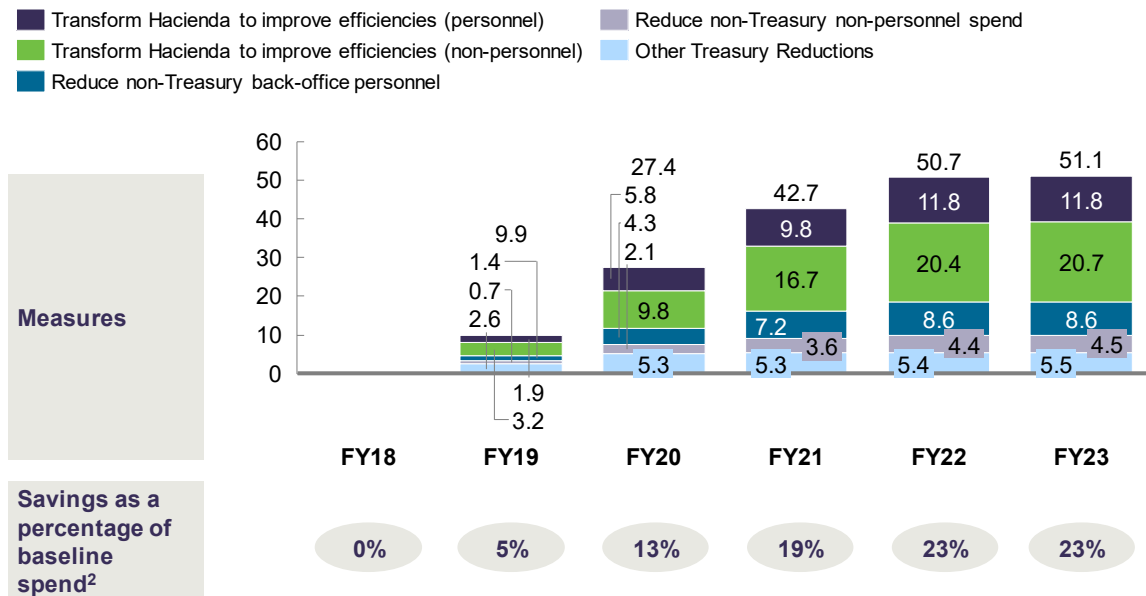
1 Department of Treasury (Hacienda)	4 General Services Administration
2 Office of Management and Budget	5 Financial Advisory Authority and Tax Agency of Puerto Rico (AAFAF)
3 Office of Administration and Transformation of HR	

12.8.2 Efficiency measures for Hacienda / Office of the CFO

Hacienda / OCFO will achieve \$3.7 million in personnel savings and \$6.3 million in non-personnel savings in FY2019, excluding any savings accrued from the elimination of the Special Revenue Fund deficit and implementation of the uniform healthcare measure. Refer to **Exhibit 43** for annual personnel and non-personnel savings that must be achieved through FY2023.

EXHIBIT 43: OFFICE OF THE CFO SUMMARY OF MEASURES IMPACT

Summary of OCFO measures impact¹, \$M



¹ Savings in graph exclude additional personnel savings achievable through compensation measures (e.g., payroll freeze, uniform healthcare) detailed earlier in Chapter 12 and SRF deficit reduction measures attributed to this grouping detailed in Chapter 11.

² Excludes savings measures attributable to payroll freeze, uniform healthcare, SRF reduction

Transform Hacienda to improve efficiencies

Hacienda itself will attain an overall **15% net reduction in costs (approximately \$33 million), which is 25% gross (approximately \$54 million)** which is in line with the level of cuts seen in other Treasury Department transformations. For instance, a transformation within Her Majesty's Revenue and Customs agency in the UK successfully cut costs by 25% over a five-year period through a series of management initiatives, including reducing IT costs, increasing operational efficiency, reducing the real estate footprint, and overall process improvement.⁷⁹ Many of initiatives can be leveraged by Hacienda, in addition to reforms unique to Puerto Rico, including but not limited to:

- Partnerships with private banks to reduce real estate and personnel footprint (estimated to save approximately ~\$20 million per year)
- Non-personnel spend (e.g., support service consolidation) and procurement optimization (estimated to save approximately ~\$12 million per year)
- Initiatives related to digitization and general process and efficiency improvements

While Hacienda must target gross reductions of 25%, 40% of these reductions (~\$16 million) should be **reinvested in compliance activities**, providing the budget for hiring additional Hacienda employees needed to implement new compliance activities, as well as for technology investment. After subtracting the ~\$22 million to be reinvested in compliance activities, this measure amounts to \$32.6 million in annual net savings by FY2023.

Right-sizing savings for Hacienda were based on high-level consolidation assumptions. In order to properly carry out the goals of the OFCO, monies will be re-apportioned from other agencies with excess budget to the OCFO budget. The total amount of monies that will be re-apportioned from other agency budgets to the budget of OCFO will be \$14m in FY19.

Reduce non-Treasury back-office and non-personnel

Overall **back office and non-personnel savings** targets are detailed in *Section 12.2*, and include levers such as procurement optimization, consolidation of support functions, and similar initiatives. Back office savings must lead to \$9 million run-rate savings by FY2023, and non-personnel savings must lead to \$5 million in annual savings by FY2023.

12.9 Department of Economic Development (DDEC)

12.9.1 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** following recent seismic changes to the marketplace, including the removal of Federal corporate tax incentives and the debilitating impact of Hurricanes Irma and Maria. To promote growth, DDEC is driven by a strategic economic plan to promote high-impact projects, reenergize existing industries, and promote new strategic initiatives. In addition, DDEC manages a variety of programs on the Island intended to promote Puerto Rican entrepreneurship, youth employment, and other critical economic development functions. In the aftermath of Hurricane Irma and Maria, these programs will be

⁷⁹ National Audit Office, "Reducing Costs in HM Revenue & Customs," 2011

crucial for the vitality of the Puerto Rican economy through increasing participation in the job market and attracting new business to the Island.

The agencies consolidated are as shown below (**Exhibit 44**).

EXHIBIT 44: LIST OF AGENCIES IN DDEC 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

The agencies within the grouping are responsible for a variety of efforts to maintain a robust economic marketplace within Puerto Rico, including supervising public policy, creating and retaining jobs, attracting capital investment, and promoting tourism. However, the diffusion of these weighty responsibilities across so many agencies has led to an **inconsistent approach to overall economic development**.

Under the new grouping construct, 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 reducing the back-office operations of the newly-consolidated agencies, pursuing digitization, procurement centralization and other efforts to reduce non-personnel spend, and reducing the number of front-line personnel to better reflect mainland standards for a right-sized economic development operation.

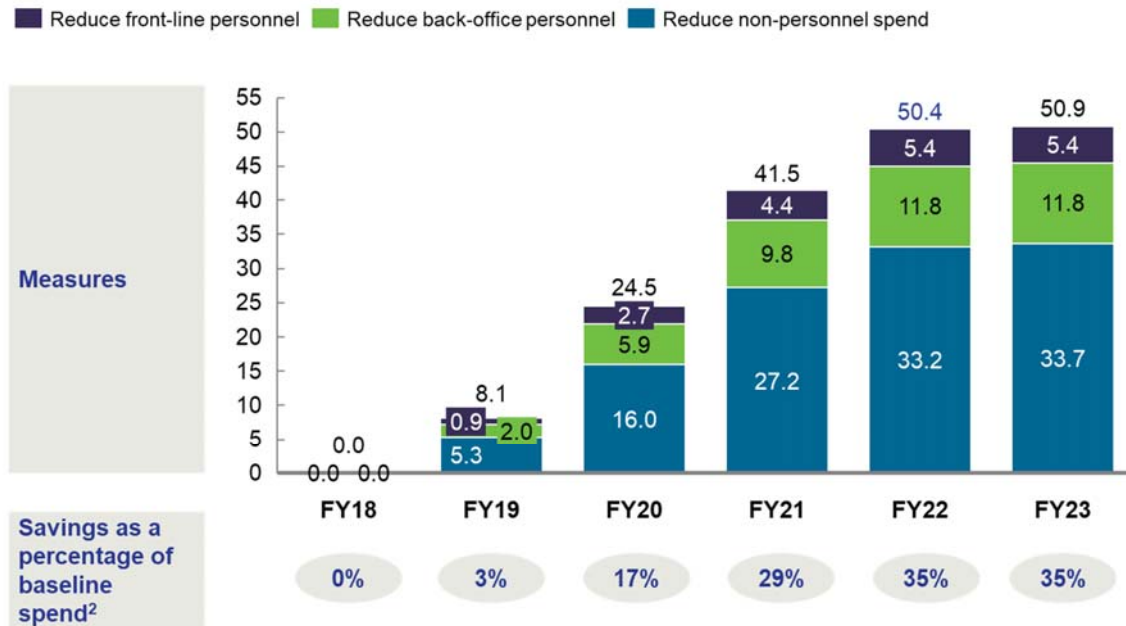
12.9.2 Efficiency measures for DDEC

- The DDEC budget will include **carve outs for the Destination Marketing Organization and Invest Puerto Rico**, as these institutions will perform complementary functions to DDEC.
- Each entity within DDEC grouping should have **clearly defined responsibilities and governance structures** that limit costs moving forward and prevent overlapping duties among agencies in the grouping (e.g., specific marketing / promotion agency mission should be separate from the corporate development / retention agency)

DDEC will achieve \$2.8 million in personnel savings and \$5.3 million in non-personnel savings in FY2019, excluding any savings accrued from the elimination of the Special Revenue Fund deficit and implementation of the uniform healthcare measure. Refer to **Exhibit 45** for annual personnel and non-personnel savings that must be achieved through FY2023.

EXHIBIT 45: DDEC SUMMARY OF MEASURES IMPACT

Summary of Department of Economic Development measures impact¹, \$M



¹ Savings in graph exclude additional personnel savings achievable through compensation measures (e.g., payroll freeze, uniform healthcare) detailed earlier in Chapter 12 and SRF deficit reduction measures attributable to this grouping detailed in Chapter 11.

² Excludes savings measures attributable to payroll freeze, uniform healthcare, SRF reduction

Right-size the number of front-line employees

DDEC will **reduce front-line personnel** by 20% to ensure a streamlined, efficient organization, leading to \$5.4 million in annual savings by FY2023.

Right-size the number of back-office employees

A government analysis identified a redundancy in service of back-office personnel across DDEC.⁸⁰ DDEC will **consolidate back-office operations** of the newly-merged agencies as detailed in *Section 12.2*, leading to \$11.8 million run-rate savings by FY2023.

Optimize non-personnel spend

DDEC must pursue a variety of initiatives to **reduce non-personnel spend**, primarily centered on procurement optimization and digitization of operations (e.g., digitizing the permit application process), as detailed earlier in Chapter 12. These initiatives will lead to \$33.7 million run-rate savings by FY2023.

12.10 All other agencies

Additional agency groupings were evaluated using a top-down approach which primarily relied on the levers and initiatives highlighted earlier in Chapter 12.

⁸⁰ DDEC analysis, 2018

The summary of the savings for this group of agencies is as follows:

- **FY18:** \$0.0
- **FY19:** \$75.9 million
- **FY20:** \$195.1 million
- **FY21:** \$292.2 million
- **FY22:** \$346.5 million
- **FY23:** \$356.1 million

12.10.1 Importance of enabling agencies that promote public integrity and transparency

There is wide agreement that to drive a successful fiscal transformation within the Government of Puerto Rico, it will be important to promote public integrity and transparency at every turn. Within the Government, several agencies are dedicated to maintaining oversight and fiscal responsibility. The functioning of these agencies is critical to achieving the goals and ensuring the long-term sustainability of the fiscal plan. Accordingly, the budgets for the Office of the Comptroller and the Office of Government Ethics will not be affected by agency-specific right-sizing measures.

Chapter 13. HEALTHCARE REFORM

13.1 Current State of Puerto Rico's Medicaid program

Prior to Maria, 46% of Puerto Ricans 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 only 29% of its population under public plans.⁸¹ In addition to its large coverage population, Puerto Rico lags mainland states in both health outcomes and access. Puerto Ricans 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).⁸² 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,⁸³ and higher rates of adults reporting fair or poor health.⁸⁴ At the same time, 72 of Puerto Rico's 78 municipalities are deemed "medically underserved areas,"⁸⁵ with 500 doctors leaving

⁸¹ Kaiser Family Foundation, "Medicaid State Fact Sheets: Percent of People Covered by Medicaid/CHIP, 2015"

⁸² CDC (Centers for Disease Control and Prevention), "BRFSS Prevalence and Trends Data," 2015-2016. Behavioral Risk Factor Surveillance System

⁸³ 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)

⁸⁴ 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"

⁸⁵ 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

per year (pre-Maria). Puerto Rico has half the rate of specialists as compared to the mainland in critical fields (e.g., emergency physicians, neurosurgeons).⁸⁶

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 \$2.89 billion (as of FY2018), with the Commonwealth responsible for the clear majority of costs due to caps on Federal matching (see Section 5.1.3 for more information on Medicaid Federal funds). Puerto Rico faces real and growing challenges with rising healthcare costs, with premiums growing significantly faster than inflation. Even with some cost containment measures in place, per-member per-month (PMPM) disbursements rose 6.3% from FY2017 to FY2018. And based on national healthcare cost inflation trends plus increased post-hurricane need, Mi Salud PMPMs are projected to rise by nearly 40% over the next 6 years in the absence of additional measures.

The Bipartisan Budget Act of 2018 (BBA 2018) provides the Commonwealth temporary relief from raising healthcare costs by expanding the amount of Federal reimbursement over the next 13 months. Starting in September 2019, however, the Commonwealth will hit a "Medicaid cliff" whereby it will be responsible for multi-billion-dollar annual healthcare expenditures unseen since before the passage of the Affordable Care Act provided additional Federal funding in 2011. It is crucial, therefore, that ASES take advantage of the additional runway provided by the BBA funding to put in place reforms that reduce long-term health expenditure growth rates.

13.2 Future vision for healthcare reform

The future vision for the Puerto Rican healthcare system is to promote an overall healthier population through provision of high-quality services to all citizens in need. To do so, the Government has proposed 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
4. **Coordinate healthcare initiatives in the community** to promote efficiency of services and a community-wide focus on health

⁸⁶ 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)

13.3 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).

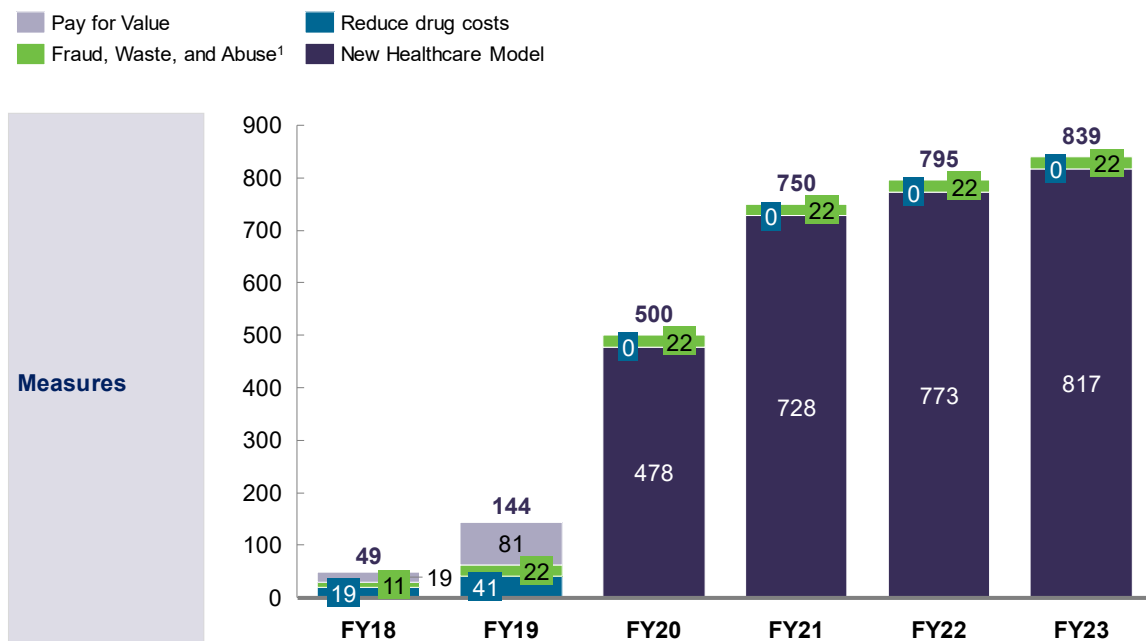
In early FY2018, ASES began efforts to reduce healthcare costs, including implementation of preliminary enrollment verification efforts with DCR and private insurers; standardization of fee schedules for providers; and prescription drug cost controls such as increased pharmacy discounts on branded drugs,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

Beginning in FY2020, the Government must implement a new healthcare model, currently in development, through changes to how the Island's managed care organizations (MCOs), are contracted and incentivized as the third-party administrators of Mi Salud. The new model's savings must reach a run-rate annual savings of ~\$839 million by FY2023 (off the FY2022 baseline of approximately \$3.4 billion), a measure run-rate which is then projected to increase as the baseline expenditures increase at long-term healthcare inflation rate of 4-6%.

Exhibit 46 provides an overview of the core savings measures.

EXHIBIT 46: MI SALUD BASELINE SPEND AND MEASURES

Summary of Healthcare (Medicaid) reform measures impact, \$M



¹ Includes MFCU and MMIS

² Includes only premium-related expenditures for Mi Salud and Platino costs

13.3.1 Pursue value-based reforms to improve quality relative to cost of care

Pursuing value-based improvement initiatives with demonstrated success can help reduce Mi Salud's per-member per-month (PMPM) rates. Similar value-based programs have been piloted in other states, and typically save between 2-10% of costs. In Puerto Rico, value-based reforms may result in somewhat lower than average savings due to the breadth of other savings measures being implemented simultaneously in Mi Salud, and unique post-Hurricane challenges such as a potential increase in behavioral health needs. Value-based reforms will be combined with a portfolio of other initiatives in the "new healthcare model" to achieve savings targets. This measure includes:

Improved coordination of care. New approaches that emphasize care coordination and align incentives between patients, providers, and payors can produce improvements in health outcomes while lowering costs. Given the preponderance of chronic conditions and potential rising behavioral and mental health needs in the wake of Hurricane Maria,⁸⁷ better access and coordination of mental health services will become increasingly important. Care coordination models like patient centered medical homes – which empower patients to work closely with a primary care provider to manage treatment plans across multiple care providers – have been quite effective at improving outcomes for members with chronic conditions.⁸⁸ ASES can serve as a coordination point for care organizations throughout the community, ranging from managed care organizations to education and faith-based community organizations. The new RFP issued by ASES is focused on developing such managed care programs for high cost, high need populations.

Reduced Emergency Room (ER) visits. Puerto Rican's utilize the ER 3 times as often as peers on the U.S. mainland,⁸⁹ with estimates as high as 90% of ER visits occurring for non-emergency care that could be treated in lower cost settings. Successfully shifting unnecessary ER visits to lower-cost settings, such as primary care offices or urgent care, could save roughly \$70-75 million annually, or 3% of total Mi Salud costs. Mi Salud could reduce ER utilization through several means, including patient education, increased ER co-pays, or changes to reimbursement policies.⁹⁰

Reduce inpatient length of stay. Puerto Rico's inpatient length of stay is 1.5 times the U.S. average.⁹¹ MCOs can incentivize reduced hospital readmissions and length of stay through improved discharge planning and increased staffing to manage weekend discharges. Some MCOs have already implemented such reforms in Puerto Rico.

Adjusting MCO payment models. ASES is already considering many changes to MCO – provider payment models to promote greater accountability and better align care delivery to outcomes amongst providers. Best practice value-based payment models from other managed care settings include direct pay-for-performance quality bonuses, providing fixed payments for a

⁸⁷ Thomas Huelskoetter, Center for American Progress, "Hurricane Katrina's Health Care Legacy" (August 15, 2015)

⁸⁸ Patient-Centered Primary Care Collaborative, "Benefits of Implementing the Primary Care Medical Home A Review of Cost & Quality Results, 2012" (Sept 2012)

⁸⁹ JEL Consulting analysis (Dec 30, 2106) of ASES data and Puerto Rico Community Survey, Public Use Microdata, 2014. Estimates exclude Platino beneficiaries

⁹⁰ See, e.g., Schwartz et al. Copayment levels and their influence on patient behavior in the emergency room utilization in an HMO population. *Journal of Managed Care Medicine*. 2012; Wallace et al. How effective are copayments in reducing expenditures for low-income adult Medicaid beneficiaries? experience from the Oregon health plan. *Health Services Research* 2008; Lesley et al. Reducing frequent visits to the emergency department: a systematic review of interventions. *PLOS*. 2015

⁹¹ As of 2014. JEL Consulting analysis (Dec 30, 2106) of ASES data and Puerto Rico Community Survey, Public Use Microdata, 2014. Estimates exclude Platino beneficiaries

‘bundle’ of services required to treat a specific condition, and providing special incentives to care for members with high-cost needs, such as behavioral health.

13.3.2 Reduce pharmacy spend

Prescription drug coverage is the largest category of spend in Mi Salud, contributing 26% of the total cost in treating the average patient. Nearly half of this spend comes from specialty drugs. Even after ASES-negotiated some prescription drug cost reduction measures,⁹² pharmacy costs grew 14% annually from FY2016 to FY2018 in Puerto Rico,⁹³ compared to 6% per year in U.S. Medicaid programs.⁹⁴

Puerto Rico faces structurally higher prices than the mainland because, unlike U.S. states, it cannot participate in the Federal Medicaid Drug Rebate Program (MDRP) and may only seek voluntary or supplemental rebates. That said, ASES can lower the cost of prescription drug coverage by replacing higher cost drugs with cheaper, equally effective alternatives, driving increased use of generics and imposing utilization controls. These initiatives resulted in negotiated savings of \$4.31 PMPM in Mi Salud’s FY2018 contracts. However, to sustain these savings, MCOs must engage in ongoing monitoring and enforcement of policy changes to further refine drug coverage lists and utilization management policies due to changing prescription patterns.

13.3.3 Reduce fraud, waste, and abuse (FWA)

The U.S. Government Accountability Office found evidence that MCOs have not consistently reported improper payments to providers billing to the system. Further, it found that many MCOs face conflicts of interest in finding and eliminating fraud.⁹⁵ Typical waste, fraud, and abuse reduction programs in other state Medicaid programs and health insurers have been able to achieve 1-3% cost savings. These savings have been reached through: pre-payment review (e.g., reviewing claims before payment to identify outliers / issues); auditing and enforcement units to investigate suspicious behavior; advanced analytics capabilities to review many actions to identify inefficient or fraudulent activities in post-payment review, such as identification of “impossibility” coding (e.g., billing for over 24 hours of service in one day), or frequently repeated or high value procedures; and long term policy or organizational transformation.

To combat FWA, ASES shall:

- Fully operationalize a Medicaid Fraud Control Unit (MFCU)—which it has already launched—outside of the MCOs to identify and prosecute fraudulent charges
- Establish a functional Medicaid Management Information System (MMIS) to track utilization, claims, and provide the data inputs for advanced analytics assessments to identify inappropriate spending; and
- Use data to obtain reimbursement for improper payments and to identify and eliminate the systematic causes that enabled the problematic activities in the first place.

⁹² FY2018 Milliman Actuarial Certification

⁹³ Ibid

⁹⁴ Express Scripts 2016 Drug Trend Report

⁹⁵ GAO “Medicaid and CHIP Increased Funding in U.S. Territories Merits Improved Program Integrity Efforts,” April 2016

Puerto Rico does not currently have an operational MMIS or MFCU but is in the process of developing and shall develop both programs. Successful operationalization of the MMIS will enable ASES to receive \$1.2 billion of the BBA 2018 allocated funding, contingent upon establishment of methods to lower FWA and collect/report reliable information to the Transformed Medicaid Statistical Information System (T-MSIS).⁹⁶

13.3.4 Enrollment verification

In addition to overpayment for eligible beneficiaries, ASES faces a challenge in ensuring it is serving the proper beneficiaries—and preventing those who are ineligible from receiving benefits. Over-enrollment typically occurs when residents have private insurance, are in the corrections system, have moved to other states, or are deceased. Data system limitations (e.g., limited data sharing with other systems; manual dis-enrollment after eligibility expiration) mean that it often takes years to dis-enroll ineligible members, and many are never removed. Over enrollment could be identified through coordination of benefits, interagency data sharing, state-specific MOUs, and the national Public Assistance Reporting Information System (PARIS) and T-MSIS Medicaid interstate match.

Pre-Maria, Mi Salud had an estimated 5% over-enrollment rate, translating to Mi Salud improperly paying for roughly 62,000 beneficiaries.⁹⁷ Maria is likely to augment these challenges. Due to the hurricane, 12% of Puerto Rico's population is expected to emigrate by FY2023, and it is estimated that a roughly proportionate number of Mi Salud members will also leave the Island. Given the limited data capabilities at present, without active efforts to dis-enroll those who leave and do not return, it is expected that ASES will continue to pay for these departing beneficiaries for a full year after they leave, resulting in Mi Salud reaching 10% over-enrollment in FY2018.

13.3.5 Implement a uniform fee schedule for providers

One-way ASES has been able to put controls on spend growth is working with MCOs to implement a new fee schedule for providers. The updated schedule, which went into effect on July 1, 2017, provides 70% of Medicare reimbursement rates for each category of services, a sharp reduction for some specialty services on the Island (laboratory and radiology in particular), reducing PMPM by an estimated \$3.52 in FY2018.⁹⁸

13.3.6 Reduce administrative MCO costs through a single region model

ASES can reduce MCO administrative costs by switching from the current system of nine regions, each with a single MCO provider, to a geographically unconstrained competitive system with multiple MCOs serving the entire Island. This new single region MCO model should produce increased economies of scale for administrative operations and will lower costs through greater competition and incentives to enforce efforts to lower the cost of care.

ASES has already been moving the MCOs towards improved Medical Loss Ratios (MLRs), constraining the share of their PMPM costs not used for medical services. In the FY2016 contract, 10% of the PMPM went to administrative costs and profits; in the FY2018 negotiated rates,

⁹⁶ MACPAC, "Medicaid and CHIP in Puerto Rico," report, February 2018

⁹⁷ Ballori Group estimate

⁹⁸ FY2018 Milliman Actuarial Certification

administrative costs and profits fell to 8.6%.⁹⁹ In FY2019, ASES plans to improve this MLR to 92% (8% leftover for administration and profits).¹⁰⁰

13.3.7 Stop-gap levers to ensure achievement of savings targets

As an extreme measure in cases where target run-rate savings are unachievable with the above measures, the following additional measures could be implemented to hit expenditure reduction targets.

Require cost-sharing for the Medicaid and Commonwealth populations

ASES could reduce healthcare spending by imposing cost sharing on specific services to disincentivize high-cost, low-impact behavior, such as visiting an ER for non-emergency services or using certain non-preferred drugs. Co-pays have been shown to reduce use of affected services, and therefore should not apply to preventive care or other areas that reduce net health system costs, such as family planning services. Any required co-pay shall be determined on a service-by-service basis to selectively disincentivize high-cost, low-impact activities; further, co-pays will be implemented progressively, scaled to member income while exempting those without income and CHIP members.

Reduce coverage for select optional benefits

Medicaid requires all states to cover certain services, such as hospital stays, physician visits, preventive health services, family planning, and pregnancy-related care. Other benefits are considered optional, including: prescription drugs; physical, occupational, and speech therapy; dental; podiatry; optometry and glasses; prosthetics; chiropractor services; private duty nursing; hospice; and respiratory care services. Some of these optional benefits are provided by every state (such as prescription drug coverage), while others are covered by fewer than half of states. 4.3% of total Mi Salud payments¹⁰¹ are related to the following categories of benefits coverage that at least one other state or territory does not cover:¹⁰²

As a result, another second stop-gap measure could be to reduce Mi Salud coverage for select optional benefits, either by eliminating some optional benefits, imposing various levels of cost-sharing for remaining benefits, or restricting access. Optional benefit coverage reductions would affect Medicaid and Commonwealth MiSalud members, but not CHIP members.

Chapter 14. TAX REFORM

14.1.1 Future vision for tax environment

Prior to the hurricane, the Government was evaluating options for a reformed tax regime and had taken steps to improve tax compliance and increase certain taxes and fees. In the wake of the hurricane, Puerto

⁹⁹ FY2016 rate analysis; FY2018 Milliman Actuarial Certification

¹⁰⁰ Communication with ASES, Nov 21, 2017

¹⁰¹ When adding back in the \$0.59 PMPM attributable to CHIP coverage that would not be subject to reductions or cost sharing

¹⁰² Kaiser Family Foundation Medicaid Benefits Data Collection, Oct 1, 2012 data (latest available as of Nov 2017). 2 states do not cover prosthetics, while every state covers durable medical equipment and supplies. 33 states do not cover private duty nursing, while every state covers home health services. 20 states do not cover occupational therapy; data was not available on outpatient PT/OT/ST specifically. Puerto Rico data from FY2018 Milliman Actuarial Certification

Rico will need to drive more formality and increased compliance within the tax base without losing revenues. Therefore, Puerto Rico should broaden the tax base while maintaining revenue neutrality to ensure that revenues are not unintentionally foregone.

14.1.2 Proposed Tax Reform

The Fiscal Plan includes a revenue-neutral tax reform that is focused on reducing income tax rates while broadening the tax base via the expansion of alternative minimum taxes (AMTs) and reduction of incentives to raise taxes on others as described below:

- Reduces the corporate base tax from 20% to 19%, and the top rate from 39% to 31%
- Lowers individual income tax rates, including the top marginal rate to 31%, while reducing a series of exemptions and deductions such as the mortgage interest deduction
- Eliminates the B2B SUT by FY2020
- Reduces the tax rate on prepared foods transactions (e.g., at restaurants) paid for via electronic means from 11.5% to 7%

These initiatives will be financed by a variety of offsets, including:

- The creation of a minimum flat tax withholding at source regime for self-employed individuals and service-based companies
- Expanded usage of corporate and individual alternative minimum taxes to broaden the tax base and combat excessive usage of deductions to lower tax liability
- Reduction in a series of deductions, credits, and cash grants

These tax reform initiatives do not address incentive corporations or the need to shift away from the Act 154-2010 tax to a broader, more progressive tax regime. The incentives also do not address the Government's need to reform its broader tax structure in response to the Federal Tax Reform legislation that was recently enacted. Both topics will be addressed in the future.

The projected value of tax reductions and offsets are shown below (**Exhibit 47**).

EXHIBIT 47: DETAILED TAX REFORM INITIATIVES AND OFFSETS

Revenue Impact, \$M						
	FY19	FY20	FY21	FY22	FY23	Total
Tax Cuts/Revenue Reductions						
Individual Income Tax Reductions and Pension Exclusions	(257)	(575)	(582)	(585)	(585)	(2,584)
Corporate Income Tax Reductions	(65)	(152)	(157)	(159)	(159)	(692)
Reduction of SUT on Prepared Foods	(79)	(87)	(87)	(87)	(87)	(427)
Phase Out of B2B Tax	(19)	(101)	(169)	(172)	(172)	(633)
Other Measures Behavioral Adjustment Discount	(420)	(915)	(995)	(1,003)	(1,003)	(4,336)
Subtotal						
Tax Initiative Offsets						
Individual Income Tax Deduction and Exemption Adjustments	160	347	348	351	353	1,559
Tax Credits	109	128	128	128	128	621
Cash Grants	-	23	23	23	23	92
Corporate AMT & Withholding at Source Revenue	126	286	312	316	314	1,354
Individual AMT & Withholding at Source Revenue	69	156	158	158	158	699
Other Measures	16	22	26	27	28	119
Subtotal						
Total	60	47	-	-	1	108

Chapter 15. TAX COMPLIANCE AND FEES ENHANCEMENT

15.1 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.**

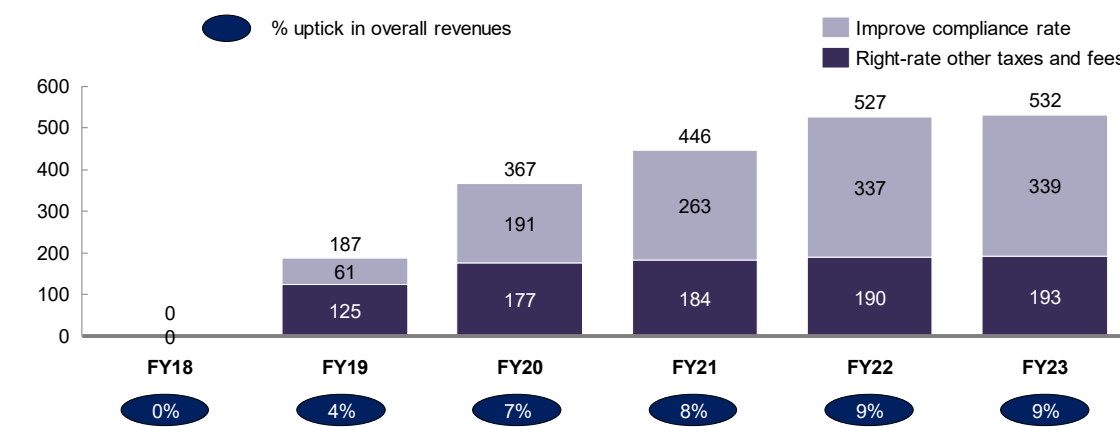
In response to these challenges, the Government has already started implementing compliance-related changes. It is driving improvements in its culture and organization to boost enforcement capabilities, streamlining the process of filing taxes and reducing complexity in the system to lighten the burden 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.¹⁰³ Administrative tax initiatives to increase revenue collections

By driving administrative reform, the Commonwealth must increase revenues by \$2,236 million over six years, as shown below (**Exhibit 48**).

¹⁰³ Departamento de Hacienda, November 2016

EXHIBIT 48: REVENUE MEASURES SUMMARY OF IMPACT

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



15.1.1 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*” (see Chapter 11) – 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.¹⁰⁴

Recent compliance efforts have largely focused on collections outreach activities, obtaining one-time back taxes owed through a collections 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 should shift towards **initiatives that promote a culture of compliance** to boost voluntary payment. The goal should 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.¹⁰⁵

- **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.

¹⁰⁴ 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

¹⁰⁵ Xenia Velez presentation to the Oversight Board (Nov. 30, 2017), 3

- **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.¹⁰⁶ 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),¹⁰⁷ with half of those responding to the letters agreeing to pay the proposed penalty amount.¹⁰⁸ 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%,¹⁰⁹ while nearly 80% of Americans shop online.¹¹⁰ Through legislation combining click-through nexus, affiliate nexus, and economic nexus, 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.¹¹¹ In fact, Hacienda has already announced an agreement with a large online retailer to charge Puerto Rico sales tax on sales of goods¹¹². 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 beginning in 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 (Law 8, 2017), establishment of new offices and processes, and gradual shift in public perception and voluntary compliance as a result of enforcement activities.

¹⁰⁶ IRS Enforcement Results, TIGTA Filing Season Audit, IRS Taxpayer Advocate, Team Analysis, GAO

¹⁰⁷ Hacienda, Fiscal Reforms August 2017 reporting

¹⁰⁸ Conversation with Hacienda, Dec 13, 2017

¹⁰⁹ <http://www.house.leg.state.mn.us/hrd/pubs/usetax.pdf> at 7

¹¹⁰ Tech Crunch, 2016

¹¹¹ 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

¹¹² Caribbean Business, "Amazon to charge Puerto Rico sales tax"

15.1.2 Right-rate other taxes and fees

Prior to Hurricane Maria, the Government reports it 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 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.¹¹³ 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 ~\$50 million per year by FY2023.

Licenses and other fees. 2017 legislation enabled fee increases in miscellaneous categories. Hacienda will determine which exact fees are to be increased to meet these minimum thresholds, achieving an overall revenue increase of ~\$62 million by FY2023.¹¹⁴ Categories are as follows: 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 price-related elasticities after the new fees went into place,¹¹⁵ a ~\$55 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 ~\$14 million per year in additional revenue through this initiative.¹¹⁶

Airbnb Tax. The Government has passed a law to apply a 7% hotel room tax to Airbnb rentals, resulting in a projected ~\$4 million of annual revenue increases, based on annualization of the actual Airbnb tax receipts from before the hurricane.¹¹⁷

¹¹³ 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>)

¹¹⁴ Assumes an 80% capture rate on the \$73M potential to account for potential elasticities in demand based on fee increases

¹¹⁵ Based on an 18% decline, per Hacienda (April 5, 2017 calculations)

¹¹⁶ \$15M projected receipts, minus \$1.5M of dedicated revenues for the medical marijuana council established in 2017-Act 42 and controlled substances monitoring in 2017-Act 70

¹¹⁷ Hacienda August 2017 Revenue Scorecard, submitted Sept 15, 2017

Chapter 16. REDUCTION IN APPROPRIATIONS TO UPR AND MUNICIPALITIES

16.1 Current state and vision for 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 70% subsidized (~\$708 million in annual appropriations) by state and local funds, compared to 25% average level of state/local subsidization of U.S. public universities¹¹⁸. 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 \$220 million in annual appropriations from the Commonwealth, but despite this aid many municipalities are operating significant deficits.¹¹⁹ With more 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.

16.2 Key initiatives to reduce appropriations

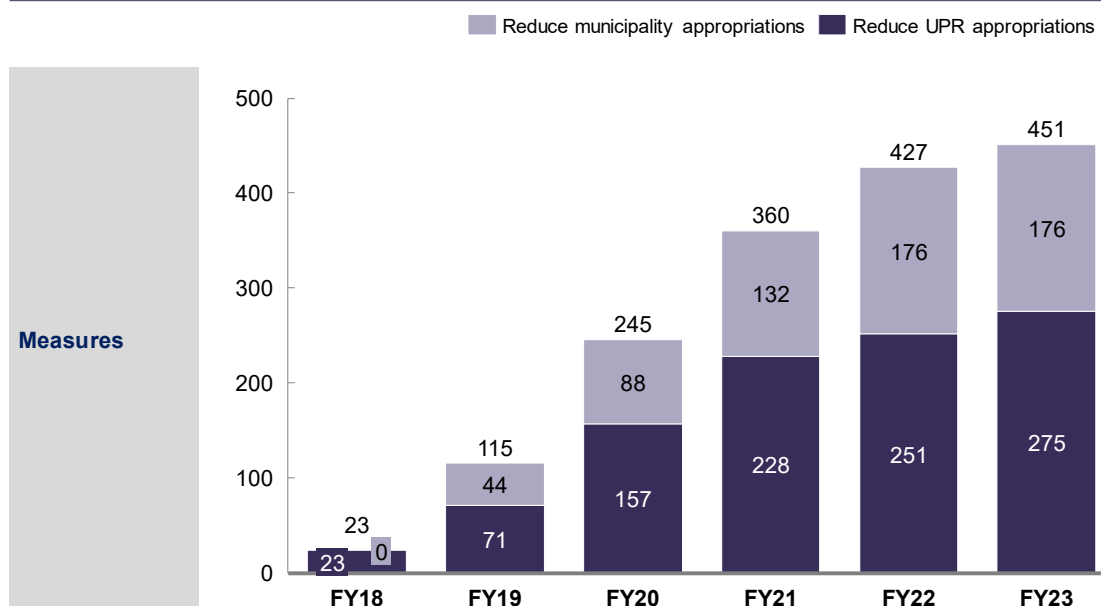
Reducing Commonwealth subsidies to municipalities and UPR will lead to annual savings of \$1,622 million by FY2023.

¹¹⁸ UPR, IPEDs, College Board

¹¹⁹ Draft Report prepared by V2A November 2016

EXHIBIT 49: REDUCTION IN APPROPRIATIONS SUMMARY OF MEASURES IMPACT

Summary of appropriations measures impact, \$M



¹ Inclusive of all savings measures over baseline, i.e. savings measures attributable Christmas bonus, payroll freeze, uniform healthcare, SRF reduction

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

The Fiscal Plan has maintained the March 2017 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 from the latest plan include consolidating campuses, 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, reducing UPR employee pensions in a manner similar to the Commonwealth (e.g., highest marginal cut is 25%), and multiplying this amount by the

unfunded portion,¹²⁰ 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.

16.2.2 Reduce municipal appropriations & support through service consolidation and property registry / tax reform

Already in FY2018, the total municipal appropriation was reduced, bringing the new baseline appropriations to ~\$220 million per year. Going forward from this current baseline, there would be a reduction in each successive year, holding appropriations constant at roughly 55-60% of current levels starting in FY2022 before ultimately phasing out all subsidies in FY2024.

The slow ramp in reductions will allow the remaining funds to be used to fund shared service consolidations. Two levers in particular will enable municipalities to deal with this reduction: municipal service consolidations and institution of property tax reform.

Municipal service consolidations

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., Estudios Técnicos estimated that operating expense reduction measures, in part from municipal service sharing, could result in a potential combined fiscal impact of ~\$150-\$450M.¹²¹

The Government will 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 will evaluate passing legislation like New Jersey's 2007 Uniform Shared Services and Consolidation Act to formalize accountability for pursuing shared services by placing the onus on local leadership¹²²

¹²⁰ Additionally, the UPR Fiscal Plan includes a 50% employer match (by UPR) on up to 2% of employee contribution

¹²¹ "Estudio para evaluar la estructura municipal de Puerto Rico", Estudios Técnicos (2016)

¹²² New Jersey Department of Community Affairs, *Shared Services – Working Together*. April 2011
http://www.nj.gov/dca/divisions/dlgs/programs/shared_docs/sharedsvcsrefguide.pdf

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,¹²³ 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. Based on implementation planning discussions in August 2017, CRIM estimated these initiatives could produce:¹²⁴

- \$150 million of increased revenue from raising property tax compliance from 68% to 85%
- \$150-200 million from registering properties not on the rolls
- \$500 million of capturable back property taxes owed (from \$1.3 billion total owed)
- Lastly there is an additional, not yet sized, opportunity from reclassifying commercial properties incorrectly listed as residential and updating property valuations

Chapter 17. IMPLEMENTATION

Historically, the Government has suffered from inconsistent execution. It has historically operated in silos, suffered staffing and coordination challenges, and has been limited by weak technology to report and keep track of expenses. To mitigate implementation risk, the Governor has established a centralized PMO structure.

17.1 Governor's Fiscal and Economic Working Group (GFEWG)

Developing a centrally-run PMO is an important step toward ensuring the implementation and tracking of the core operational transformation and right-sizing measures that will achieve savings targets under the Fiscal Plan. The GFEWG is the central PMO with defined reporting to the Governor of all economic and transformation measures. It is comprised of senior leadership, oversees Agency PMOs, and reports directly to the Governor. At the time of writing, the GFEWG has already been established and was formalized by an AAFAF Administrative Order as the Fiscal and Economic Policy Advisory Council.

17.2 Agency Program Management Offices (PMOs)

Individual Agency PMOs should be established with direct reporting to the Governor, and supplemental reporting to the GFEWG. Each agency head shall be responsible for developing and implementing a PMO structure that best fits their respective agency while still meeting their agency grouping savings targets. Through this PMO structure, the Government is positioned to effectively manage and implement the Fiscal Plan.

- The Agency PMOs are generally led by designated Agency Heads and report directly to the Governor, and supplemental reporting to the GFEWG

¹²³ 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)

¹²⁴ Meetings with CRIM leadership on July 19, 2017

- Agency PMOs undertake the required work to implement initiatives
- The daily activities of PMOs are managed and undertaken by staff knowledgeable in the relevant subject matter areas, and assigned members meet regularly with PMO leadership to report on progress and facilitate necessary decision-making
- Agency PMOs shall be responsible for assembling a taskforce to: complete validation and definition of full scope of projects and priorities; finalize reporting tools and tracking responsibilities; and, perform ongoing weekly tracking and reporting.

The PMOs should ensure continued implementation progress through robust tracking and reporting tools that foster growth in transparency and ownership, including:

- **Project charters** that establish the goals / structures of measures, identifies risks and obstacles, and establishes metrics and KPIs
- **Implementation plans** with detailed layouts of each activity required for accomplishing sub-measures, risks / mitigants for each activity, clear leaders and owners for each activity, and metric and KPIs. These should include a “live” calendar of updates and status of each measure. If an activity goes behind schedule, the workplan will reflect that the activity is still in progress.
- **Implementation dashboard / tracker** that provides a single snapshot of the entire transformation plan; allows management to know the status of each initiative in a distinct status: Complete; In Progress; Delays; Major Issues. Tracker will allow to monitor progress and ensure enforcement of measures/ reforms in the Fiscal Plan.
- **Sub-measure dashboards** that provide “zoomed in” views of a specific sub-measure, display progress with details / commentary on project status, include agreed upon milestones / dates to track progress, and provides mitigation plans

PART V. Conclusion

The Fiscal Plan is the result of many months of work-sessions, dialogue, stakeholder engagement, research, and in-depth analysis. Across these activities, the Government and the Oversight Board collaborated to create a deep and rich fact base to underpinning this plan and remained focused on creating an integrated approach to restoring fiscal sustainability and economic opportunity for future generations of Puerto Ricans. The starting point for this plan involved numerous structural inhibitors to growth, over \$120 billion in outstanding debt and unfunded pension obligations, and the devastating impact from a historically destructive natural disaster.

Yet in the aftermath of Hurricane Maria, Puerto Rico now has a unique economic growth opportunity. Federal disaster reconstruction activity will provide economic buoyancy in the short term. PROMESA and Title III provide a temporary stay on Puerto Rico's unsustainable debt service. The Fiscal Plan lays out a series of practical, proven growth-inducing structural reforms and investments, with a responsible set of fiscal measures to right-size Government to the appropriate level.

But the next step – implementation of the reforms and measures – will always be the most critical one. Implementation of the Fiscal Plan can turn around Puerto Rico's economy and drive sustained growth coupled with a restructuring of Puerto Rico's debt under PROMESA. In the end, growth and expansion of opportunity are the keys to restoring fiscal sustainability, access to capital markets, and a brighter future for Puerto Rico.