Fiscal Plan for the Municipal Revenue Collection Center

Improving Property Tax Collections

Fiscal Years 2021 to 2025

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

June 26, 2020

Disclaimer

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List of Acronyms and Key Terms

A/R Accounts Receivable

AAFAF Fiscal Agency and Financial Advisory Authority

ACS American Community Survey

Act 80-1991 Act No. 80 of August 30, 1991, as amended Act 83-1991 Act No. 83 of August 30, 1991, as amended Basic Municipal Contributions Base tax rate on property (4% personal, 6% real)

BPPR Banco Popular de Puerto Rico

CAE Special Additional Tax

CDBG-MIT Community Development Block Grant for Mitigation

CDPR Digital Cadaster of Puerto Rico

Central Government Central Government of the Commonwealth of Puerto Rico

Commonwealth Commonwealth of Puerto Rico
CRIM Municipal Revenue Collection Center

CRIM 360 CRIM's unified billing system Electronic Lottery Additional Lottery System

ERS Retirement System for Employees of the Government of Puerto Rico

Fiscal Plan CRIM Fiscal Plan

FEMA Federal Emergency Management Agency

FOMB Financial Oversight and Management Board for Puerto Rico

FTE Full-Time Equivalent

F.Y. Fiscal Year

GDB Government Development Bank

GNP Gross National Product G.O. General Obligation

Government Commonwealth of Puerto Rico

Hacienda Department of Treasury of Puerto Rico HANSEN CRIM's existing billing application

HUD U.S. Department of Housing and Urban Development

MFA Municipal Finance Authority
MOU Memorandum of understanding

Municipalities Collectively, the 78 Municipalities of Puerto Rico

Oversight Board Financial Oversight and Management Board for Puerto Rico

PayGo Pay-as-you-go pension contributions to the Commonwealth's system

PRASA Puerto Rico Aqueduct and Sewer Authority
PREPA Puerto Rico Electric Power Authority

PROMESA Puerto Rico Oversight, Management, and Economic Stability Act

Regulation 9094 Regulation Number 9094 of June 18, 2019

State Redemption Fund Fund in which a 1.03% property tax levied pursuant to Act 83-1991

and collected by CRIM is deposited

SKALA CRIM's new property appraisal system

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Executive Summary

The Municipal Revenue Collection Center ("CRIM" for its Spanish acronym, or "Agency"), plays an important role in supporting Puerto Rico's 78 Municipalities ("Municipalities") in their economic and social development by ensuring an efficient process to collect and distribute municipal tax revenues. It is essential that CRIM seize all opportunities to maximize property tax collections and ensure the effective distribution of these funds to Municipalities and their obligations.

In accordance with Puerto Rico Oversight, Management, and Economic Stability Act ("PROMESA"), this Fiscal Plan projects a baseline forecast of CRIM's sources and uses of funds for the next five fiscal years based on historical trends and discussions with CRIM management. In order to provide a greater revenue base for municipalities and ensure greater fairness in property tax collections, certain measures have been developed to improve operations and increase tax collections at CRIM. These measures are incremental to the baseline projections and must be adopted and successfully implemented to achieve the targets of this Fiscal Plan.

The measures outlined in this Fiscal Plan center around improving the competitiveness of Puerto Rico's property tax regime and the enhancement of collections to reduce reliance on less optimal taxes, such as the inventory tax charged to businesses. The measures focus on:

- Operational efficiencies CRIM is undergoing an operational transformation centered around the replacement of outdated and inefficient applications and hardware; implementation of best practices for business continuity; decentralization of services and re-engineering of processes to improve services to Municipalities and taxpayers; along with the establishment of a data-driven culture. These initiatives should serve as the foundation that will enable CRIM to implement strategies for the successful enhancement of tax revenue collections.
- Tax revenue collection enhancement This Fiscal Plan outlines measures that CRIM will undertake to better capture unrealized tax revenues by increasing tax compliance and improving overall collection rates. This will help reduce Puerto Rico's reliance on other undesirable taxes, such as the inventory tax, which would improve its competitiveness and attractiveness for local and foreign investment.

Success will come from CRIM's ability to effectively collaborate with Municipalities, other government agencies, and the Financial Oversight and Management Board for Puerto Rico ("Oversight Board") in the implementation of the initiatives outlined in this Fiscal Plan.

Part I. Context

Chapter 1. History of CRIM

CRIM was created as part of the municipal reform process through Act No. 80 of August 30, 1991 (as amended, "Act 80-1991") and was delegated the administration of the Municipal Property Tax Law. Pursuant to Act No. 83 of August 30, 1991 (as amended, "Act 83-1991"), all powers, faculties, and functions related to tax collections on real and personal property were transferred from the Department of Treasury of Puerto Rico ("Hacienda") to CRIM.

CRIM renders fiscal services on behalf of the Municipalities and has the responsibility to notify, assess, collect, receive, and distribute the public funds from property tax, Central Government transfers, and any other funds that are determined by law for the benefit of the Municipalities. CRIM is also responsible for paying statutory and some contractual debt on behalf of the Municipalities. In addition, it maintains and updates the registry of real property in each Municipality (known as the Digital Cadaster of Puerto Rico).

CRIM has a governing board composed of nine (9) Mayors, representing the Municipalities, and two (2) members of the Central Government: the executive director of the Fiscal Agency and Financial Advisory Authority ("AAFAF" for its Spanish acronym) and a public official with experience in municipal affairs appointed by the Governor. The agency is headed by an executive director, who is appointed by the governing board. Elected officials comprise a majority of the governing board, which has resulted in relatively frequent changes of CRIM's leadership, including its executive director, over the agency's 29-year history.

CRIM has one (1) central office and nine (9) regional offices, as shown in **Exhibit 1** below. The offices are located in Aguada, Arecibo, Bayamón, Caguas, Carolina, Humacao, Mayagüez, Ponce, and San Juan. These offices serve taxpayers, in addition to carrying out technical functions, such as real and personal property appraisals. CRIM provides fiscal services to all the municipalities, including notification, assessment, and collection of personal and real property taxes.

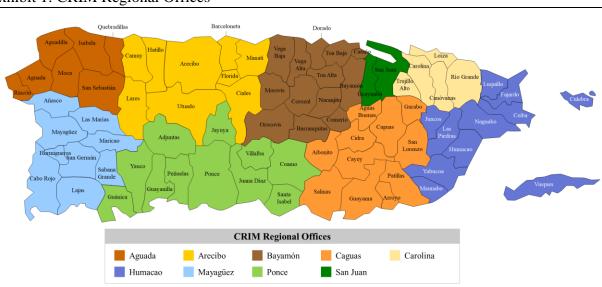


Exhibit 1: CRIM Regional Offices

CRIM recently launched a call center to provide a faster and more reliable service to taxpayers and to facilitate access to certain services. With this new call center, taxpayers can complete certain transactions, including paying property taxes, without having to visit one of the regional offices.

CRIM also delegates services to Municipalities via collaborative agreements. As of FY2019, 73 municipalities have been delegated functions such as appraisals, collections, verifications, and investigations. Furthermore, 55 municipalities can issue map certifications, and 18 municipalities can process foreclosures.

Before delegating these services, CRIM must review and approve applications completed by Municipalities. CRIM evaluates the working conditions, infrastructure, and knowledge and experience of each Municipality to determine if the applications should be accepted. These responsibilities may be dissolved at the request of the Municipality or by CRIM if, through quality control and audits, irregularities are found.

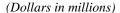
Most recently, on June 18, 2019, Regulation Number 9094 ("Regulation 9094") was approved to provide the framework through which Municipalities and CRIM will coordinate the collection of property taxes. The Oversight Board recently amended its policy on the review of rules, regulations, and orders, with the goal of increasing transparency and ensuring compliance with the certified Commonwealth Fiscal Plan. As such, going forward, CRIM will be required to provide certain proposed regulation amendments to the Oversight Board for review and approval as part of the regulatory amendment process. This extra step is designed to ensure fiscal alignment and visibility to the people of Puerto Rico.

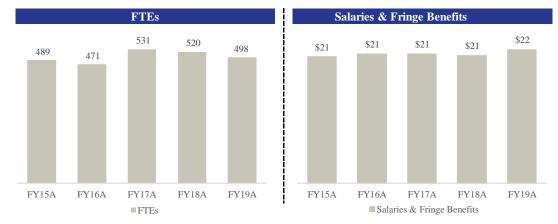
Chapter 2. CRIM Operations

CRIM's staff primarily facilitate the valuation, billing, and collection of real property taxes and personal property taxes, which are then distributed, along with other funds, to the Municipalities.

As depicted in **Exhibit 2** below, CRIM had 498 total full-time employees ("FTEs") and \$22 million in payroll expenses in FY2019, which has remained fairly consistent over the last five years.

Exhibit 2: CRIM FTEs and Payroll

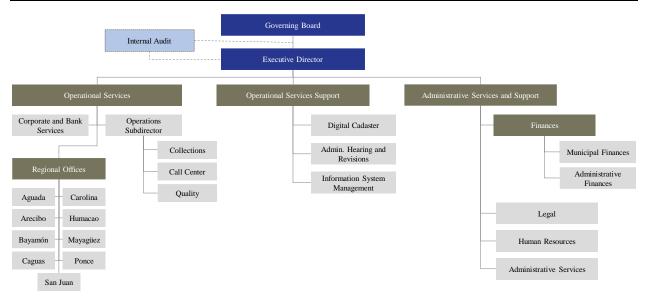




CRIM recently restructured its organization to deliver better services and improve collections. Functions are currently grouped into three main areas, as shown in **Exhibit 3** and detailed below:

- Operational Services delivers direct services to taxpayers, municipalities, financial institutions, and corporations to collect real and personal property taxes. Much of the personnel in this function are located in regional offices to provide localized support.
- Operational Services Support maintains systems and applications that support operational services.
- Administrative Services and Support advises the Executive Director and supports operational areas. Administrative units include Municipal and Administrative Finance, Legal, Human Resources, and Administrative Services.

Exhibit 3: CRIM Organization Structure



Within Operational Services, the bulk of CRIM's employees work in the Regional Offices as appraisers. In FY2019, CRIM had 104 employees tasked with appraisal type work, of which 65 were valuation technicians, 30 were research specialists, and 9 were licensed appraisers. These employees were responsible for approximately 1.3 million parcels of property. This equates to 12,583 parcels per employee, which is approximately 2.6 times the national average for large jurisdictions, suggesting this department may be understaffed. This is discussed further in **Part V: Measures.**

As part of Operational Services Support, CRIM's staff also maintains a digital cadaster, which is an inventory of all properties in Puerto Rico (parcels and structures) used for all purposes: tax, legal, economic, and administrative. CRIM is responsible, by law, for the creation and preservation of the cadaster, which organizes the valuation data and appraisals of properties and is critical for the imposition of respective taxes. In 2016, CRIM engaged a third-party company to complete a

Planimetric Project¹ to digitally map all properties in the Commonwealth, which allowed CRIM to update the cadaster registry. The project used high-resolution digital imaging to create maps of Puerto Rico from which updated property information was extracted to identify new construction and home improvements, such as newly added swimming pools and property expansions.

Certain other Commonwealth agencies, such as the Department of Justice, maintain comparable databases; however, information sharing has not historically taken place, and the data in each database for properties is not always aligned. The sharing of government-wide data sources will be instrumental for the achievement of certain measures. **Part V: Measures** discusses efforts to extract and align all these data sources.

In February 2018, CRIM commissioned an operational assessment to identify potential areas to begin enhancing property tax collections. During June and July 2018, an external company completed the commissioned operational assessment. **Exhibit 4** gives an overview of this assessment. Of the initiatives developed from the assessment findings, some have been completed while some remain ongoing. These initiatives have been incorporated into the measures of this Fiscal Plan.

Exhibit 4: 2018 Operational Assessment

Objective Results Assessment To improve the collection A. Assessment method process of the agency through: 126 findings and Evaluation of the process Process by analyzing processes recommendations of action standardization and interviewing the to be taken Identification of "quick personnel Implementation of wins" and implementation performance measures B. Operational area with well-defined KPI's identification **Definition of further** 9 Regional Offices analysis and needs to Empowering regional Central Office implement more complex offices to boost their initiatives Administrative service agility and support effectiveness

¹ A Planimetric Project involves the creation of maps through the process of recording, measuring, and interpreting photographic images to identify roads, buildings, and other physical objects in an area.

Part II. Sources of Funds

CRIM receives funds from revenue sources established by Act 80-1991 and Act 82-1991. The four main revenues are real property taxes, personal property taxes, Central Government transfers, and other operating revenues. An overview can be found in **Exhibit 5.**

Exhibit 5: Overview of CRIM Revenues

So	ource	Details	FY2019 (Actual) ²	FY2020 (Projected)
Real Property Tax		 Immovable property 6% basic rate 1.03% State Redemption Fund Tax 1.2% - 5.5% Special Additional Tax ("CAE") (varies by Municipality) (0.2%) discount from state 	\$695 million	\$688 million
Personal Prop	erty Tax	 Movable property, including inventory 4% Basic rate 1.03% State Redemption Fund Tax 1.0% - 5.5% CAE (varies by Municipality) (0.2%) discount from state 	\$422 million	\$384 million
Central Government Transfers	Commonwealth Transfer	 2.5% of net internal revenue from the Central Government's General Fund ("Commonwealth transfer") In FY2018, this amount was capped at \$219.7 million, and it was further reduced by \$43.7 million to \$176 million in FY2019 (a 20% reduction). The certified Commonwealth Fiscal Plan gradually reduces the transfer until it is fully eliminated in FY2025 	\$176 million	\$132 million
	Electronic Lottery	35% of the net annual income derived from the operations of the Additional Lottery System ("Electronic Lottery")	\$55 million	\$20 million
	Exoneration Fund	 Exonerated CAE reimbursement Exonerated property reimbursement 0.20% subsidy reimbursement 	\$0 million eliminated in FY2018	\$0 million

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 $^{^2\,\}mathrm{FY}2019$ collections include delinquent collections

Other CRIM Operating Revenue

- Sales of certifications and maps
- Service charges to banks
- Interest and miscellaneous income

Federal grants

\$2 million \$

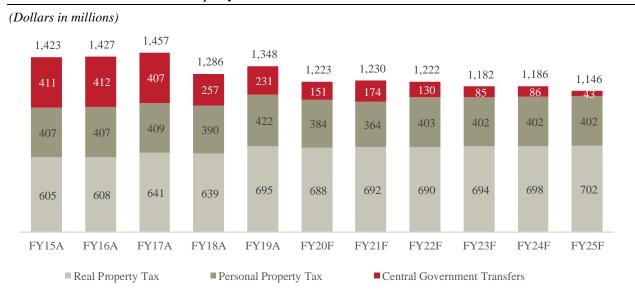
\$2 million

Note: CRIM is supposed to collect 2% of collections from Act 22-2000 fines/infractions; however, Hacienda collects and sends these funds directly to the Municipalities. According to the CRIM management team, this is a de minimis amount of funds.

Total revenue collection at CRIM, consisting of property tax collections, Central Government transfers, and other sources, was \$1,350 million in FY2019, which is approximately 4.8% higher than in FY2018. This increase was primarily driven by higher property tax collections as a result of the several initiatives and projects that the agency began during this period.

In accordance with the certified Commonwealth Fiscal Plan, the Commonwealth transfer will be gradually phased out by FY2025. This will decrease the overall Central Government transfers. The gradual step down of the Commonwealth transfer over several years allows municipalities to plan accordingly and implement the necessary action plans to address the funding reductions. **Exhibit** 6 presents CRIM's historical and projected baseline property tax collections (excluding measures) and Central Government transfers over time.

Exhibit 6: CRIM Baseline Property Tax Collections and Central Government Transfers



As part of the measures described herein, CRIM must work with the municipalities to increase tax collections, which will provide additional funds for essential services. In addition, municipalities should develop and implement efficiency improvements and cost reduction plans, which may include shared services, centralization of certain functions, automation implementation, and other actions to ensure that services provided to the people of Puerto Rico are minimally impacted. **Appendix 1** identifies additional temporary support that the Commonwealth will provide to municipalities to incentivize service consolidation.

Impact of Natural Disasters

In the fall of 2017 (FY2018), Hurricanes Maria and Irma inflicted unprecedented damage on the physical infrastructure of Puerto Rico, leaving large segments of the population without power for weeks and in many cases months. Thousands died, many of them due not to the direct effects of the storm but rather its aftereffects. There was widespread economic dislocation in the aftermath as the scale of the damage became evident. Impact on the housing stock, power, and water infrastructure, and inland transportation infrastructure, created extremely challenging conditions for residents, while the small business sector was badly damaged as inventories were destroyed and the economy suffered an abrupt negative shock. As a result, CRIM's property tax collections were lower by approximately 2% or \$21 million (\$19.6 million in personal property taxes and \$1.5 million in real property taxes) in FY2018 compared to FY2017.

The Federal Government has supported post-hurricane reconstruction in the municipalities primarily through FEMA's Permanent Work (Categories C-G) Small Projects and Community Disaster Loans ("CDLs"). Small Projects are defined as those with total project costs of up to \$123,100 for Permanent Work Categories C-G. As of May 18, 2020, 1,224 projects have been obligated to municipalities, totaling approximately \$48.9 million, of which roughly \$33.5 million has been disbursed. In addition, 3,285 Small Projects are currently in the project formulation stage, with a total approximate cost of \$152 million. CDLs are provided to municipalities that have suffered a substantial loss of revenues as a result of a disaster, and that can demonstrate a need for federal financial assistance to perform critical functions such as payroll, supplies, and maintenance materials related to disaster operations. 76 of the 78 municipalities have received nearly \$300 million from the Federal Government to make up for lost revenues due to the Hurricanes in the form of CDLs. Municipalities and the people of Puerto Rico have also received disaster funding through Individual Assistance programs, Small Business Administration Loans, Department of Housing CDBG-DR programs, and Department of Transportation funding.

Beginning on December 28, 2019, the first of many earthquakes struck Puerto Rico and caused significant damage to real and personal properties, mostly located in the west and southwest part of the island. On January 6, 2020, Puerto Rico experienced a 5.8 magnitude earthquake on the Richter scale, followed by a magnitude 6.4 earthquake on January 7, 2020.

A major disaster declaration was issued on January 16, 2020. As part of this declaration, the Federal Emergency Management Agency ("FEMA") has designated, as of May 2020, 33 municipalities as eligible for the Individual Assistance Program including Adjuntas, Aguada, Añasco, Arecibo, Barceloneta, Cabo Rojo, Ciales, Coamo, Corozal, Guanica, Guayanilla, Hormigueros, Jayuya, Juana Diaz, Lajas, Lares, Las Marias, Maricao, Mayaguez, Moca, Morovis, Naranjito, Orocovis, Peñuelas, Ponce, Sabana Grande, Salinas, San German, San Sebastian, Santa Isabel, Utuado, Villalba, and Yauco. Of these 33 municipalities, 14 municipalities were also approved for the Public Assistance Program.³

³ FEMA. Puerto Rico Earthquake. [https://www.fema.gov/disaster/4473]

The 14 municipalities approved for the Public Assistance Program include: Adjuntas, Jayuya, Juana Díaz, Lajas, Las Marías, Mayagüez, Sabana Grande, Utuado, Guánica, Guayanilla, Peñuelas, Ponce, San Germán and Yauco.

In addition, 18 municipalities impacted by the earthquakes received Commonwealth support of approximately \$14.9 million, as outlined in **Appendix 2**. Similarly, in May 2020, the Oversight Board approved the use of \$9 million requested for the required first steps of demolition and debris removal in Guayanilla, Guánica, and Peñuelas, which are a prerequisite for the redevelopment of the Southwestern region. In June 2020, the Oversight Board approved the use of an additional \$13.4 million to fund demolition and debris removal projects for Yauco and Ponce. These projects are FEMA reimbursable in a 75/25 percent cost share, so it is important to ensure all documentation, procurement, and other federal reimbursement requirements are ensured in the process. **Exhibit 7** outlines the support provided to the redevelopment of the Southwest region by municipality.

Exhibit 7: Support for the Redevelopment of the Southwest Region

Municipality	Amount	Approval date
Guánica	4,176,000	May 19,2020
Guayanilla	1,000,000	May 19,2020
Peñuelas	3,824,000	May 19,2020
Yauco	4,000,000	June 5,2020
Ponce	9,350,000	June 5,2020
Total	\$22,350,000	

An additional \$2 million was approved for a debris and demolition Program for 11 municipalities, including Adjuntas, Jayuya, Juana Díaz, Lajas, Las Marías, Mayagüez, Ponce, Sabana Grande, San German, Utuado and Yauco.

Beyond the first steps of demolition and debris removal, the next step must be the development of an integrated and comprehensive plan providing for capital expenditures and investments necessary for the long-term economic reconstruction of the southwest region, focusing on rebuilding with resiliency and taking into account the changes in the economy in a post-COVID world, the patterns of migration from the area, and the potentially-permanent risks to populations from the earthquakes and erosion after the hurricane, among other factors. This plan must be developed in coordination with FEMA and other relevant agencies.

Historically, property taxes have been resilient to natural disasters. For example, as mentioned above, property taxes in FY2018 after Hurricanes Irma and Maria were lower by only approximately 2% compared to FY2017. Nevertheless, 63 municipalities had higher collections compared to what was estimated and advanced by CRIM in FY2018. In addition, given the high levels of exonerations and exemptions, especially for residential properties, CRIM does not foresee

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⁴ Municipalities include: Adjuntas, Cabo Rojo, Guanica, Guayanilla, Hormigueros, Jayuya, Juana Diaz, Lajas, Lares, Las Marias, Maricao, Peñuelas, Ponce, Sabana Grande, San German, Utuado, Villalba, and Yauco

property tax collections being materially impacted by the earthquakes. Therefore, CRIM does not anticipate any material deterioration in property tax receipts from the earthquakes.

Impact of COVID-19 Pandemic

On March 12, 2020, Governor Vázquez declared a state of emergency across the island due to the COVID-19 global pandemic. Furthermore, on March 15, 2020, the Governor signed an executive order (EO 2020-023), which established the closure of all private and government operations, except for those related to essential services. This order was extended through June 30, 2020, by the signing of a new executive order (EO 2020-44). Executive Order 2020-44 eased the COVID-19 lockdown restrictions, reduced the curfew hours, allowed some businesses to operate at 50% capacity, and authorized the opening of the majority of businesses and activities (except nightclubs, game rooms, and casinos) including on Sundays. The new order also called on government management employees to return to work on June 16. CRIM's central and regional offices remained closed during the lockdown period, and, as a result, tax collections for the month of March, April, May, and June were significantly lower than originally projected. Even though property taxes can still be paid through the website, many taxpayers still pay their taxes at the regional offices but have not been able to do so because of the office closures. In addition, the personal property tax filing date for FY2020 was extended from May 15, 2020, to August 1, 2020. Therefore, CRIM is expecting delayed collections for the months of May, June, and July. Similarly, the date for the payment of the first quarterly installment of personal property taxes for FY2021 was extended from August 15, 2020, to September 15, 2020.

Even after accounting for a decline in collections due to COVID-19, as of April 2020, CRIM reported higher year-to-date collections compared to what was originally estimated. Nevertheless, collections for the remainder of FY2020 may continue to be affected by COVID-19, and as a result, CRIM is completing an analysis to identify any adjustments that must be made to the municipal remittances of May and June to account for the tax deferral. To the extent a municipality experiences lower collection than what was advanced by CRIM, this would be adjusted as part of the year-end reconciliation process. The year-end reconciliation process is completed by CRIM after the end of the fiscal year to reconcile property tax advances to municipalities, which are based on projections, with actual collections. To the extent a municipality has higher collections than what has been advanced, CRIM transfers the excess amount to the corresponding municipality. On the other hand, if collections are lower than what has been advanced, municipalities would have an account payable to CRIM that is repaid from property tax advances from the subsequent fiscal year.

Similarly, as a result of COVID-19, CRIM projects electronic lottery proceeds, which are distributed as part of the Equalization Fund, will be reduced by approximately \$27.7 million (from \$47.3 million to \$19.6 million). CRIM is completing an analysis to identify the adjustments needed to the municipal remittances for May and June to account for the lower Equalization Fund as a result of the projected decline in lottery proceeds. However, given that the year-to-date remittances were advanced at the beginning of the fiscal year based on the projected \$47.3 million of proceeds, a reconciliation process will be required. Any variance between actual and projected proceeds must be adjusted to achieve fiscal accountability and allow for the projection of accurate revenues for the fiscal year.

Additionally, as part of the COVID-19 Emergency Measures Support Package, municipalities received approximately \$100 million from the Commonwealth in FY2020. Municipalities were distributed \$50 million per month for two months based on a 3-tier division of population by municipality. Municipalities with a population of fewer than 25,000 people received \$1 million in total, those with a population greater than 25,000, but less than 50,000 received \$1.35 million, and those with a population greater than 50,000 received \$1.75 million. **Appendix 3** outlines the distribution of the Emergency Measure Support Package by municipality. Similarly, an additional \$100 million is being distributed to municipalities from the \$2,241 million appropriated to Puerto Rico under the Coronavirus Aid, Relief and Economic Relief Act (the "CARES Act"). These funds are to be used to reimburse costs related to COVID-19, which had not been previously budgeted for by the municipalities. Municipalities are responsible for tracking, reporting, and submitting these incremental expenses for reimbursements. It is important to note that these funds cannot be used to replace lost revenue as a result of the decline in business activities.

Short-term Liquidity Facility

In response to COVID-19, the Central Government deferred the personal property tax return due date. This extension created a short-term liquidity challenge for CRIM and the municipalities for the remainder of FY2020 (May and June) and the first month of FY2021 (July). The Oversight Board proposed the establishment of a short-term delayed-draw liquidity facility of \$185 million, so CRIM could continue advancing monthly tax remittances to municipalities. The proposal contemplated monthly draws of \$50 million each for May, June, and July 2020, plus an initial deemed advance of \$34 million on account of net remittances from CRIM to the Municipalities from funds that were to be returned to the Commonwealth as a result of the Law 29 ruling (described below).

Repayment of the proposed loan would be collateralized by the basic property tax revenues received from CRIM with receipts expected in August, September, and October 2020. Under the proposal, the liquidity facility would be repaid in full on or before November 30, 2020. The creation of a lockbox account would be required to protect the Commonwealth's collateral. In addition, CRIM would be required to provide both weekly and monthly financial reports regarding tax collection activity and financial statements, including income statements, balance sheets, and cash flow statements.

As of the date of this Fiscal Plan, CRIM has not agreed to accept the proposed liquidity facility. By a letter to the Oversight Board dated May 29, 2020, CRIM indicated it could not accept the terms of the facility as proposed and would be analyzing adjustments to remittances to municipalities for May and June as a result of the tax deferral. CRIM has not yet shared the results of this analysis with the Oversight Board.

Chapter 3. Real Property

3.1. Values and Exemptions

In Puerto Rico, real (immovable) property consists of land, buildings, and any property that is adhered to the ground and cannot be moved. CRIM maintains a digital cadaster of approximately 1.3 million immovable properties with a total value, as of FY2019, of approximately \$19.3 billion

and a net taxable value of \$8.0 billion. Recent census data indicates CRIM tax rolls may be missing approximately 215,000 properties; taxation of these properties to improve revenue is discussed further in **Part V: Measures.**

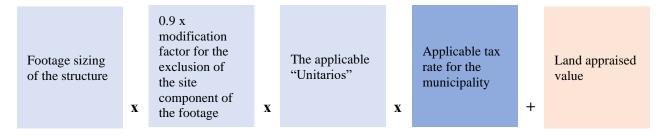
Exhibit 8 provides a breakdown of the 1.3 million parcels on CRIM's tax rolls in FY2018 by land use and further depicts the implied exemption rates by category as identified in a recently published report by the U.S. Treasury.⁵ **Appendix 4** presents this same information by detailed land use category.

Exhibit 8: Real Property Tax Exemptions by Land Use Categories (FY2018)⁵

		% of Total	% of Total	% of Value	Average
Land Use Category	Total Properties	Properties	Value	Exempted	Exemption Rate
Residential	1,065,375	81.4%	59.4%	64.4%	94.0%
Commercial	38,689	3.0%	15.2%	15.8%	77.7%
Industrial	3,098	0.2%	17.2%	77.7%	88.6%
Vacant	190,527	14.6%	5.0%	49.8%	97.1%
Other	10,364	0.8%	3.2%	na	na
Total	1,308,053	100.0%	100.0%		

Real property valuations for tax assessments are based on the replacement cost value of the property as if it were constructed in 1957, which was the last time a valuation assessment was performed on the real property in Puerto Rico. Structures built after 1957 are assessed for tax purposes as if they were built in 1957. This adjustment is made through construction estimates per square foot of a similar property built in 1957. This basic unit valuation is known as "Unitarios." The "Unitarios" were established for 150 sub-classes of different types of structures and became the basic unit value to assess all real property, and are still used by CRIM.

A typical real property tax assessment imposition is computed as shown:



Land is valued by January 1st of each year based on land area, land characteristics, and prices that existed in 1957. The value calculation is agnostic to the property location. According to the World Bank, area-based assessments are often used when the absence of developed property markets makes it difficult to determine market value, such as in Eastern Europe during the transition from the Soviet Union.

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⁵ Property Taxes in Puerto Rico: Assessment and Recommendations, March 2019.

The majority of the U.S states value land and structures separately. However, no states use an area-based system for valuing land (with some exceptions for agricultural properties).⁶ In the mainland U.S., residential properties are commonly valued using a comparable sales approach, whereby recent sales of similar properties determine the taxable value of residential properties. In the case of industrial properties, most U.S. states use the cost or replacement value approach. The income approach (based on net annual income generated by the property) is most commonly used for commercial property valuation.

Puerto Rico also differs from other U.S. jurisdictions in that it offers considerably more tax breaks both in terms of number and notional value. These tax exemptions and exonerations reduce taxable values. Exemptions are granted by a State Law or Municipal Ordinance, while exonerations are granted under Act 83-1991. Per Article 2.02 of Act 83-1991, residential property taxpayers are granted a tax exoneration on real property for the first \$15,000 of the 1957 assessed value on one residence (this represents more than \$215,000 in current assessed value). By comparison, only 23 U.S. states (including the District of Columbia) provide a broad-based homestead exemption, and an additional 22 states provide homestead exemptions for specific categories of homeowners. **Exhibit 9** provides an overview of U.S. homestead exemptions, and **Appendix 5** provides a detailed breakdown by state.

Exhibit 9: Property Tax Exemptions by Type⁷

Туре	Number of states	Puerto Rico Exemptions
General	23	✓
Senior	18	✓
Disability-related	21	✓
Disabled	17	✓
Blind	10	
Deaf	1	
Military service related	36	✓
Veteran	14	✓
Veteran widow	8	✓
Disabled veteran	26	✓
Active-duty Military	4	
Other	14	✓
None	5	

Note: Disability-related and military service-related exemptions do not equal the sum of their respective subcategories because of overlap.

Additionally, under Puerto Rico law, special tax exemptions may be granted to veterans, agricultural properties, cooperatives, non-profit entities, hospitals, government properties, properties within historic areas/free trade zones, and properties leased to elders, and on an ad hoc basis. To be granted these additional exemptions, taxpayers must file an application and meet the established requirements for each category.

⁶ Some states use a graded (banded system) for agricultural properties, assessing these lands based on assumed relative differences in productivity in their current use (rather than their best market use).

⁷ Derived from https://www.lincolninst.edu/research-data/data-toolkits/significant-features-property-tax/topics/residential-property-tax-relief-programs.

As shown in **Exhibit 10**, the number of appraised properties, total real property values, as well as tax breaks have remained relatively flat over the last five years (less than 1.0% annual growth). However, given the methods used to value real property, this pattern does not reflect the real change in the economic value of property over the period. Net taxable values have remained steady at approximately 40% of the total appraised value because of significant exemptions and exonerations. See **Appendix 6** for detailed figures by municipality.

(Dollars in millions) 1,317 1,308 1,297 30,000 1,286 1,400 1,274 1,200 25,000 1,000 19,276 19,141 18,750 18,951 18,609 20,000 4,086 4.139 800 4,138 3,976 4,095 15,000 600 7,065 7,121 7,026 6,931 6,989 10,000 400 5,000 200 7,787 7,990 8,016 7,702 7,666 FY18A FY15A FY16A FY17A FY19A

Exhibit 10: Real Property Tax Exemptions, Exonerations, and Net Valuations

Exonerations

Total tax exonerations and exemptions equated to \$7.1 billion and \$4.1 billion, respectively, of real property value in FY2019, which is primarily the result of exonerations on residential properties. Economic incentive laws accounted for approximately \$376 million reduction of taxable values, primarily driven by industrial companies and businesses. **Exhibit 11** presents these tax abatements by industry, and **Appendix 7** summarizes these economic incentive laws, as presented in CRIM's annual financials.

Exemptions

appraised properties (000s)

Exhibit 11: Foregone Real Property Tax Base from Industrial Tax Exemptions in FY2019⁸

(Dollars in thousands)

Net Valuation

	Real Property
Industry / Business	Tax Base
Buildings used for warehouses	\$63,559
Pharmaceutical companies	90,382
Hotels and related businesses	20,621
Industrial companies and businesses	151,634
Other industries and businesses	49,494
Total foregone base	\$375,690

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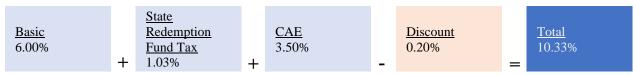
⁸ CRIM FY2019 Financial Statements

3.2. Real Property Tax Rates

There are four components to the real property tax rate, which is applied to the net taxable values discussed above. They are:

- (1) The Basic Municipal Contribution tax rate for real property of up to 6%.
- (2) The State Redemption Fund Tax adds 1.03%.
- (3) CAE tax rates varying by Municipality, ranging from 1.2% to 5.5%.
- (4) Act No. 16 of May 1960 ("Act 16-1960") authorizes Hacienda to grant a discount of 0.20% on the basic tax rate.

For example, the calculation for the real property tax rate in San Juan for FY2020, which has a CAE rate of 3.5%, is as follows:



In total, as shown in **Exhibit 12**, the combined real property tax rates range from 8.0% to 12.3% of net taxable value for all municipalities. See **Appendix 8** for detailed calculations by Municipality.

Exhibit 12: Real Property Nominal Rates for FY2020 (Post-discount)

Real Property (post-discount)		
	Number of	
Rate Range	Municipalities	
8.0%-8.99%	12	
9.0%-9.99%	19	
10.0%-10.99%	37	
11.0%-11.9%	7	
12.0%-12.99%	3	

Deal Duananty (nest discount)

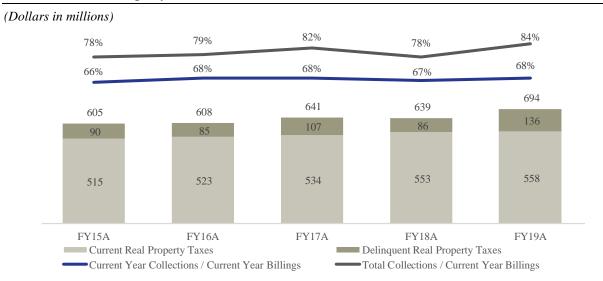
3.3. Collection Rates

Current year real property tax collections have remained relatively flat over the last five years, with a minimal decline in FY2018 as the result of Hurricanes Irma and Maria.

Tax payments are due on July 1 and January 1, with a 90-day grace period. There is a discount matrix for real property tax payments within the 90-day grace period. Collections fall into two categories, current and delinquent, depending on the year of collection, as shown in **Exhibit 13**.

⁹ Up to 30 days: -10%, 31 to 60 days: -5% and 60 to 90 days: no discount is granted, 90 days < implies fees, charges and interests. This matrix applies for the two payments datelines of the tax year.

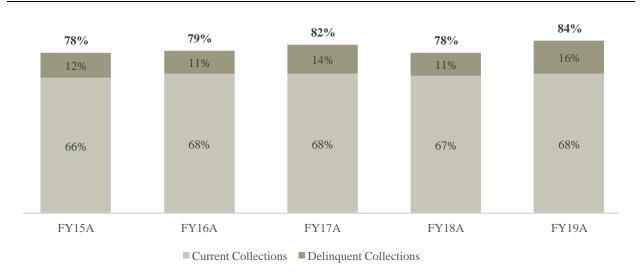
Exhibit 13: Real Property Tax Baseline Collections



Current year collections have averaged approximately 68% in recent years, which is well below comparable U.S. jurisdictions. For example, the current year collection rates for the City of Detroit, MI is approximately 82%, Cleveland, OH is approximately 90%, St Louis, MO is approximately 93%, and Philadelphia, PA is approximately 91%. Low collection rates are primarily caused by outdated technology (i.e., siloed systems) and lack of enforcement (i.e., inefficient staffing and limited annual foreclosures).

Exhibit 14 depicts the historical collection rates as a percentage of current year billings, and **Appendix 9** identifies the current year collection rates by municipality. **Part V: Measures** further discuss opportunities for Puerto Rico to improve its subpar collection rates.

Exhibit 14: Historical Real Property Tax Billings and Collection Rates



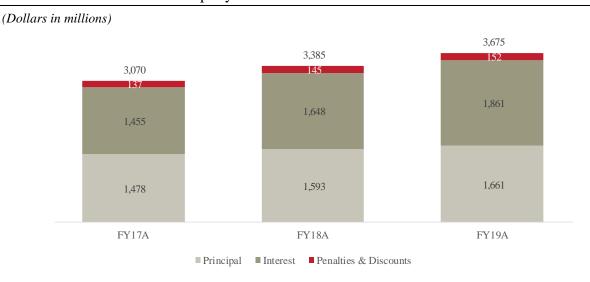
Municipalities vary greatly in their collection rates. While nearly all municipalities have a current year collection rate that is below comparable U.S. jurisdictions, significant variances exist within Puerto Rico. As **Exhibit 15** below shows, in FY2019, Municipal current year collection rates range from 84% for Cataño to only 42% for Guanica.

Exhibit 15: Highest and Lowest Current Year Collection Rates by Municipalities (FY2019)

10 Highest Collections Rates		10 Lowest Collections Rates	
Cataño	84%	Patillas	54%
Guaynabo	81%	Guayanilla	54%
Dorado	75%	Arecibo	53%
Caguas	74%	Las Marias	53%
Cayey	72%	Yabucoa	52%
San Juan	72%	Las Piedras	50%
Carolina	72%	Salinas	49%
Peñuelas	72%	Florida	49%
Toa Alta	71%	Ciales	46%
Hormigueros	71%	Guanica	42%

Exhibit 16 below suggests that low real property collection rates have generated a large gross accounts receivable balance amounting to \$1.7 billion in principal and \$1.9 billion in interest and penalties (net of discounts) at the end of FY2019. By the end of FY2019, after applying a reserve against the \$3.7 billion gross accounts receivable balance, the net figure falls to approximately \$660 million. The outright sale of outstanding receivables has been considered in recent years. A third party was originally contracted to assess the value of this portfolio as a first step, but the contract was canceled, and no preliminary valuation was received. Additional discussion of CRIM's accounts receivable opportunities can be found in **Part V: Measures.**

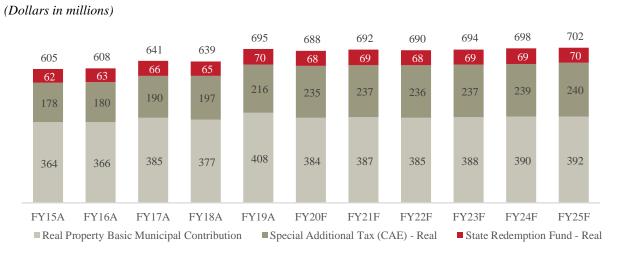
Exhibit 16: Historical Real Property Tax Account Receivable Balance



3.4. Real Property Tax Revenues Over Time

Exhibit 17 presents these baseline revenues over a 10-year period, broken into three categories corresponding to the types of tax rates: Basic Municipal Contribution, CAE, and State Redemption Fund.

Exhibit 17: Historical and Projected Baseline Real Property Tax Revenues



Chapter 4. Personal Property

4.1. Values and Exemptions

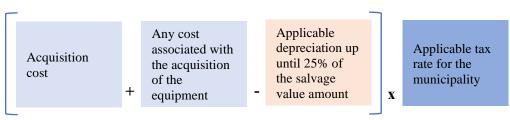
The personal (moveable) property consists of tangible and intangible property in industrial or business applications that can be moved from one place to another, including inventory, machinery and equipment, and other moveable assets.

In FY2019, personal property filings totaled 89,173, with a total valuation of approximately \$11.6 billion and a net taxable value of \$4.9 billion. Unlike real property tax revenues, CRIM does not rely on a registry for personal property taxes. Personal property is self-assessed by taxpayers annually, making compliance the key area of focus for improved revenues; this opportunity is discussed further in **Part V: Measures.**

Inventory taxable value, excluding finished goods, is based on the lesser of book value or fair market value on January 1st of each year. Finished goods inventory taxable value, on the other hand, is assessed on the monthly average balance for the year preceding January 1st. These amounts are calculated by individual taxpayers and reported on their tax return filings on May 15th.

A typical personal property tax assessment imposition is computed as shown:

• For equipment:



For inventories (excluding finished goods):

Average balance of inventory values at acquisition costs at the end of the year

X

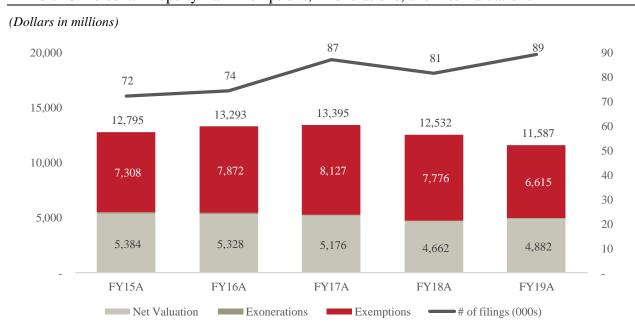
Applicable tax rate for the municipality

The cost approach is in-line with the approach of most other US jurisdictions. As a result, the valuation of personal property is much closer to the current market value than that of real property. This fundamental mismatch between the valuation methods used in personal property and real property may cause tax burden inequities among taxpayers in Puerto Rico. Presently business machinery and equipment are valued at acquisition cost (minus depreciation) with a residual value not less than 10% - 20% of its purchase price (depending on property class).

A significant portion of the personal property tax is made up of the tax on inventories held by businesses. In FY2019, inventory represented approximately 55% of the total billable personal property taxes. For Cataño, Hatillo, and Bayamon, inventory represented 82%, 71%, and 68% of the total billable personal property taxes, respectively, which is the highest for any municipality. There has been significant pressure from local business groups to repeal this tax as it incentivizes companies to maintain as little inventory on hand as possible. This practice has contributed to increased levels of recurring stockouts in Puerto Rico when compared with US levels, and recently, severe supply shortages following Hurricanes Irma and Maria.

As shown in **Exhibit 18**, the number of filings in FY2019 increased to 89,173 total filings, and the net taxable value of the personal property increased to \$4.9 billion. In FY2019, \$6.7 billion of the total personal property taxable value (roughly 58% of the total) was exempted or exonerated from paying taxes. Appendix 10 presents detailed valuation and exemption figures by Municipality.

Exhibit 18: Personal Property Tax Exemptions, Exonerations, and Net Valuations



In May 2018, CRIM performed a study of tax returns and identified 3,887 different exemptions, of which 3,751 (97%) were granted by the Central Government. Approximately 63% of the total exemptions were granted under i) Act 225-1995 (for agriculture), ii) Economic Incentives Act of 2008, iii) Economic Incentives Act of 1997, and iv) Article 5.01(e) of Act 83-1991 (for non-profit organizations). **Appendix 11** details the findings of the study conducted by CRIM. Additionally, certain exonerations are available to qualifying smaller businesses. For additional context, a recently published report by the U.S. Treasury¹⁰ found that "two-thirds of firms required to complete the filing process reported total personal property value for their firm at less than \$5,000. At the other extreme, 50 percent of the revenue billed came from just 178 companies, and 80 percent came from fewer than 1,000 companies."

CRIM also reports total industrial tax value exemptions of approximately \$540 million, as identified in **Exhibit 19.** These economic incentive laws are summarized in **Appendix 7**.

Exhibit 19: Foregone Personal Property Tax Base from Industrial Tax Exemptions in FY2019¹¹

(Dollars in thousands)

	Personal Property
Industry / Business	Tax Base
Pharmaceutical companies	\$79,981
Industrial companies and businesses	212,272
Professional services	72,232
Commercial companies and businesses	20,636
Other industries and businesses	155,039
Total foregone base	\$540,160

Puerto Rico's personal property tax collections as a percentage of total property tax collections (approximately 40%) are a substantially larger portion than in the 50 states and the District of Columbia. For example, the personal property comprised only 3.3% of the county taxable property base in Maryland. This disparity partially results from personal property exemptions widespread throughout the largest metropolitan areas in each of the 50 states and the District of Columbia, which are summarized in **Exhibit 20.** Perhaps most notable is inventory exemptions: 45 states provide preferential treatment, including 41 that provide a full exemption.

Exhibit 20: Personal Property Tax Exemption and Preferential Treatment in the US

	Number of States
Machinery & Equipment	
Full Exemption	20
Preferential Treatment	30
Manufacturer's Inventories	
Full Exemption	41
Preferential Treatment	45
Fixtures	
Full Exemption	14
Preferential Treatment	22

¹⁰ Property Taxes in Puerto Rico: Assessment and Recommendations, March 2019.

¹¹ CRIM FY2019 Financial Statements

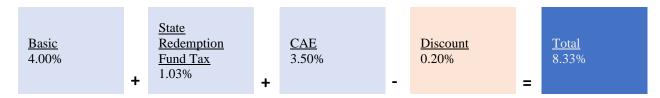
¹² Maryland Department of Assessment, Seventy-Fourth Annual Report, FY2018.

4.2. Personal Property Tax Rates

There are four components to the personal property tax rate applied to the net taxable values. These elements are:

- (1) The Basic Municipal Contribution tax rate for real property of up to 4%.
- (2) The State Redemption Fund Tax adds 1.03%.
- (3) CAE tax rates varying by Municipality, ranging from 1.0% to 5.5%.
- (4) Act 16-1960 authorizes Hacienda to grant a discount of 0.20% on the basic tax rate.

For example, the calculation for San Juan's personal property tax rate for FY2020, which has a CAE rate of 3.5%, is as follows:



In total, as shown in **Exhibit 21**, the combined personal property tax rates range from 5.8% to 10.3% of net taxable value for all municipalities. See **Appendix 12** for detailed calculations by Municipality. Inventory tax rates are significantly higher than any state in the U.S., and they are estimated to be 20 times the effective tax rate on residential properties.

Exhibit 21: Personal Property Nominal Rates for FY2020 (Post-discount)

Personal Property (post-discount)	
	Number of
Rate Range	Municipalities
5.0%-5.99%	3
6.0%-6.99%	21
7.0%-7.99%	14
8.0%-8.99%	33
9.0%-9.9%	4
10.0%-10.99%	3

4.3. Collection Rates

As mentioned above, taxes for personal property values are self-assessed by taxpayers on their personal property tax returns filed annually on May 15. In FY2020, however, as a response to the COVID-19 pandemic, the personal property tax filing date was extended to August 1, 2020. If the personal property tax liability exceeds \$1,000, the taxpayer pays estimated amounts in four equal quarterly installments due on or before the 15th day of the months of August, November, February, and March of every year. Estimated personal property tax payments are the lesser of 90% of the

current year's tax or 100% of the prior year's tax. Any tax not covered by the estimated tax payments needs to be paid by May 15th. For FY2021, CRIM delayed the first quarterly installment from August 15th to September 15th as a result of COVID-19.

Not paying the tax on the due date can result in a penalty of 5% of the unpaid amount for a delay in payment in excess of 30 days, but not more than 60 days; 10% of the unpaid amount for a delay in payment in excess of 60 days, but not more than 90 days; and 15% of the unpaid amount for a delay in payment in excess of 90 days.

As one may expect with self-assessed taxes, total collection rates are close to 100%. CRIM's operational efforts to date have focused on improving the electronic filing system to streamline and simplify the process for taxpayers, eliminate payment delays, and address other issues resulting from outdated technology. Starting in FY2018, CRIM required personal property filings to be submitted electronically through the Personal Property Portal. Future opportunities for personal property tax improvement rely primarily on increased compliance (i.e., ensuring appropriate valuation, application of exemptions, and filings).

4.4. Personal Property Tax Revenues Over Time

Despite a 4.6% decrease in FY2018 due to the effects of Hurricanes Irma and María, recent compliance improvement efforts resulted in a \$32 million revenue increase in FY2019. **Exhibit 22** presents baseline revenues over a 10-year period, broken into three groups corresponding to the three types of tax rates.

(Dollars in millions) FY18A FY19A FY20F FY21F FY22F FY23F FY15A FY16A FY17A ■ Personal Property Basic Muni Contribution ■ Special Additional Tax (CAE) - Personal ■ State Redemption Fund - Personal

Exhibit 22: Historical and Projected Baseline Personal Property Tax Revenues

Chapter 5. Central Government Transfers

Historically, the Central Government transferred funds to CRIM through General Fund appropriations, which were then distributed to Municipalities. These include a) Equalization Funds per Article 16 of Act 80-1991, and b) Exoneration Funds of Article 2.06 of Act 83-1991.

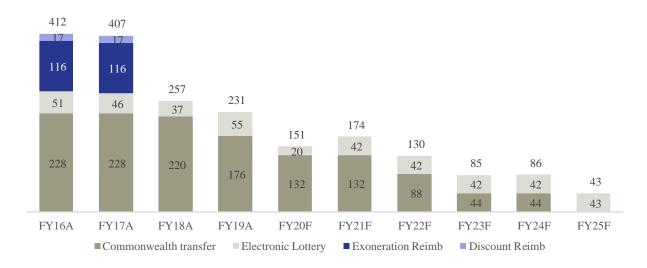
Act No. 80 of August 30, 1991, as amended, established a special fund known as the Equalization Fund for the purpose of ensuring that all municipalities receive at least the same amount of

revenues as they received on the prior year from these sources. The Equalization Fund currently includes Commonwealth transfer and 35% of Electronic Lottery net annual income.

Exhibit 23 depicts both historical and projected total Central Government transfers. As part of the certified Commonwealth Fiscal Plan, most of the Central Government transfers will be eliminated. By FY2025, the end of the forecast period, only the Electronic Lottery funds will remain.

Exhibit 23: Central Government Transfers

(Dollars in millions)



5.1. Commonwealth transfer

Commonwealth transfer represents 2.5% of the net internal revenue of the Commonwealth's General Fund. In FY2018, this amount was capped at \$219.7 million, and the 2020 Commonwealth Fiscal Plan gradually eliminates this transfer by FY2025. The Commonwealth transfer was \$175.8 million in FY2019 (a 20% reduction from FY2018), and \$131.8 million in FY2020 (a 40% reduction from FY2018).

For FY2021, the Commonwealth transfer was originally projected to be \$87.9 million (a 60% reduction from FY2018) per the 2019 certified Commonwealth Fiscal Plan. However, due to the COVID-19 pandemic, the transfer will remain at \$131.8 million, in accordance with the updated certified Commonwealth Fiscal Plan. These additional funds will further support the municipalities during this crisis. The phase-out elimination will resume in FY2022 and will be fully eliminated by FY2025.

5.2. Electronic Lottery Funds

Electronic Lottery funding equals to CRIM 35% of the net annual income derived from the operations of the Electronic Lottery. In FY2018, this amount totaled \$36.6 million, a 20% reduction from the previous year due, in part to the impact of Hurricanes Irma and María. In FY2019, Electronic Lottery funds increased by approximately 50% to \$55.1 million. CRIM is further evaluating the potential impact that Video Lottery Terminals may have on Electronic Lottery funds during the fiscal plan period.

For FY2020, CRIM estimated electronic lottery proceeds at approximately \$47.3 million. However, due to the earthquakes and COVID-19 pandemic during the second half of the fiscal year, electronic lottery proceeds are projected to decline by approximately \$27.7 million (from \$47.3 million to \$19.6 million). CRIM is completing an analysis to identify the adjustments that need to be made to the municipal remittances for May and June to account for the lower Equalization Fund as a result of the projected decline in lottery proceeds. However, given that the year-to-date remittances were advanced based on the projected \$47.3 million of proceeds, any shortfalls from lower lottery proceeds will be accounted for during the year-end reconciliation process, which also accounts for incremental current-year tax collections, prior year collections, and other adjustments incurred over the course of FY2020.

5.3. Exoneration Funds

Each primary residence is exonerated from paying the tax burden for the first \$15,000 appraisal value, as established by Act 83-1991. Prior to FY2018, the Commonwealth reimbursed the municipalities for the exonerated portion of the property tax, including \$86 million for the exonerated basic tax and \$30 million for the exonerated CAE.

In addition, Act 16-1960 authorizes Hacienda to grant a discount of 0.2% of the annual basic tax over the assessed value of all real and personal property not exempt from taxes. Until FY2018, Hacienda reimbursed the discount to the municipalities. For the fiscal year ended June 30, 2017, the discount totaled approximately \$17 million. The Exoneration Fund was eliminated in FY2018 in accordance with the certified Commonwealth Fiscal Plan.

Chapter 6: Other Revenues

In addition to property taxes, CRIM records other de minimis operating revenues, including:

- Sales and certifications of maps, which amounted to \$0.8 million in FY2019; both the Office of Digital Cadaster and the nine (9) regional offices offer a variety of mapping products available to the taxpayer or agency at a set cost.
- Service charges to banks, which amounted to \$1.1 million in FY2019.
- Interest and miscellaneous income, which amounted to \$0.2 million in FY2019.
- Federal grants (FY2018 and FY2019 only), which amounted to \$0.01 million in FY2019.

CRIM is supposed to collect 2% of collections from Act 22-2000 fines/infractions; however, Hacienda collects and sends these funds directly to the Municipalities. According to the CRIM management team, this is a de minimis amount of funds.

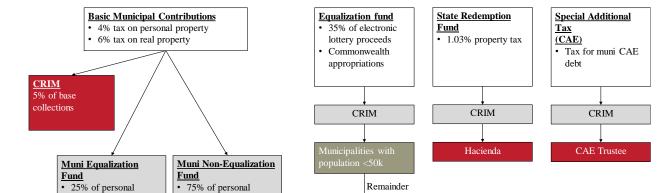
Part III. Uses of Funds

property tax

50% of real property tax collections

collections

In addition to overseeing the collection of property taxes from citizens and businesses, CRIM manages the redistribution of such funds in three major categories: advances to municipalities, transfers of the State Redemption Funds to the Central Government;¹³ and transfer of the CAE to the trustee to pay the municipal CAE debt service. In order to support CRIM operating expenses, CRIM retains 5% of the total basic municipal tax ("CRIM Admin Fee"). **Exhibit 24** presents the uses of funds in greater detail.



Legend:

Revenue stream
Pass-through
Muni recipient
CRIM/other recipient

Exhibit 24: CRIM Uses of Funds Overview

property tax collections

tax collections

50% of real property

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¹³ The taxes deposited in the State Redemption Fund have been used in the past for GO Bond debt service. Some holders of GO bond claims and Commonwealth-guaranteed bond claims have asserted their bonds are secured by the 1.03% tax on real and personal property collected in the State Redemption Fund. The Commonwealth and the Oversight Board disagree with that position and assert the GO bonds and Commonwealth-guaranteed bonds are unsecured obligations of the Commonwealth. Nevertheless, since money is fungible, the joint plan of adjustment filed on February 28, 2020 [ECF No. 11946] provides the 1.03% tax on real and personal property collected in the State Redemption Fund would be used to pay GO bond claims recovery.

CRIM Flow of Funds

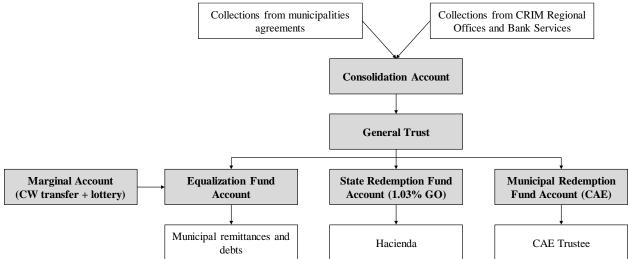
Property taxes are collected from CRIM regional offices, bank services (including mailbox, call centers, and online payments), and from municipalities that have collaborative agreements with the agency. These tax collections are deposited in two bank accounts at Banco Popular de Puerto Rico ("BPPR"). BPPR consolidates the funds from the two accounts in an intermediary passthrough account and transfers the full amount to a General Trust account. The General Trust account is an account under the trust established by AAFAF, as trustee and CRIM, as settlor pursuant to the terms of Deed No. 58 of Amendment and Restatement of Trust executed on November 29, 2018.

The General Trust account holds CAE, State Redemption Fund, and basic tax collection. Prior to the beginning of the Fiscal Year, CRIM, as settlor, and AAFAF, the trustee of the General Fund, inform BPPR, the custodian of the account, how the funds will be distributed (i.e., 52% basic tax, 11% State Redemption tax, 37% CAE). BPPR then distributes the funds according to the calculated distribution percentages into the corresponding account. CAE funds are distributed into the CAE subaccount at the end of the month, and State Redemption funds are deposited into the State Redemption Fund Subaccount, as instructed. CRIM has no control over these funds, which ensures that tax collections are not diverted from their original statutory use.

Basic tax collections are transferred from the General Trust account to the "Equalization Fund" account daily. The Equalization Fund account also receives funds from Hacienda from a marginal account, including Commonwealth transfer and Electronic Lottery proceeds. Under the proposed liquidity facility, which CRIM has not accepted to date, CRIM would receive the funds from the liquidity facility through this marginal account as well. However, as noted above, CRIM has not accepted this loan. Exhibit 25 illustrates the current flow of funds.

Collections from municipalities agreements

Exhibit 25: CRIM Flow of Funds



Remittances to Municipalities

CRIM controls the Equalization Fund account, and it is used to advance monthly municipal remittances and to pay the statutory and contractual debt on behalf of the municipalities.

Statutory debts are recognized as an expense by the municipalities and are paid by CRIM on their behalf. These debts include:

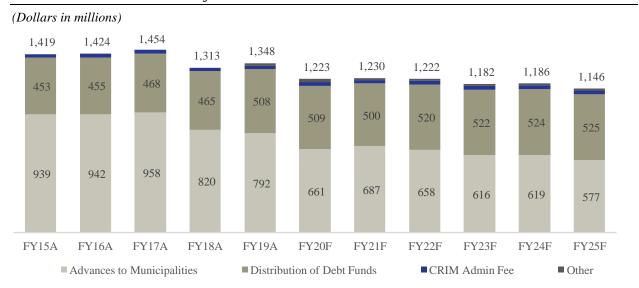
- CRIM Admin Fee, which equals 5% of basic tax collections and it is used to fund the daily operations of the agency
- Government Development Bank ("GDB") line of credit agreements
 - GDB granted two loans to CRIM totaling \$271.5 million in principal: (i) loan dated June 28, 2001 ("2001 CRIM Loan"), pursuant to Act No. 42-2000, as amended; and (ii) loan dated March 18, 2002 ("2002 CRIM loan"), pursuant to Act No. 146-2001, as amended.
 - The 2001 CRIM Loan amounted to \$166.5 million and was used to cover distributions made by CRIM to municipalities based on projected tax collections that later resulted to be greater than the actual tax collections. Municipalities are indebted to CRIM for the excess remittances received, and CRIM withholds funds from the municipalities' remittances for the payment of the loan. The loan is payable on January 1 and July 1 of each year and matures on July 1, 2032.
 - The 2002 CRIM Loan amounted to \$105 million and was used to repurchase the tax liens sold to Puerto Rico Public Finance Corporation on June 30, 1998. Interest on the loan is payable on March 31 and September 30 of each year, and the principal is payable on March 31 of each year. CRIM withholds funds from the municipalities' remittances for the payment of the loan.
 - On March 31, 2020, as a result of the liquidity shortfall experienced due to COVID-19, CRIM requested the deferment of all payments due under these two loans until September 15, 2020, commencing with payments that became due on March 31, 2020. This deferment has been approved by all parties, and CRIM will be responsible for completing the deferred payments on September 15, 2020.
- Other operating loans that municipalities have with commercial banks. AAFAF informs CRIM of the amount that must be retained for each municipality from their remittances to repay these loans.

Similarly, contractual debts are obligations that municipalities have with private or public entities, including waste management services, municipal insurance policies, and amounts due to other governmental entities under payment plans subscribed by the municipalities such as the Puerto Rico Aqueduct and Sewer Authority ("PRASA"), and the Puerto Rico Electric Power Authority ("PREPA"). These contractual debts are also recognized as an expense by the municipalities and paid by CRIM on their behalf.

The remaining funds, net of statutory and contractual debt, are advanced to municipalities, which are used to fund other municipal operations.

Exhibit 26 presents CRIM's historical and projected uses of funds.

Exhibit 26: Historical and Projected Uses of Funds



Chapter 7. Advances to Municipalities

Municipalities are funded by the Basic Municipal Contribution and the Equalization Fund, as shown in **Exhibit 24**. The distribution of these funds, shown in **Exhibit 26** as "Advances to Municipalities" totaled \$792 million in FY2019, a decrease of \$28 million or 3.4% from FY2018. **Appendix 13** provides the advances by municipality for FY2021. **Appendix 14** projects the advances to Municipalities for FY2022 – FY2025.

Basic Municipal Contribution

Municipalities are funded by the Basic Municipal Contribution consisting of the 6% tax on real property and the 4% tax on the personal property per Article 2.01 of Act 83-1991, as amended. While these Basic Municipal Contributions are divided into the Municipal Non-Equalization Fund and the Municipal Equalization Fund, currently, all collections are remitted to the municipality that assessed the tax.

- The Municipal Non-Equalization Fund distributes the basic non-exempt portion, which consists of 75% of personal property tax collections and 50% of real property tax collections, directly to the respective municipalities that assessed the property taxes.
- The Municipal Equalization Fund distributes the remaining 25% of personal property tax collections and 50% of real property tax collections to the relevant municipalities that assessed the property taxes.

Equalization Fund

Because of substantial disparities in municipalities' capacities to raise revenue, an Equalization Fund was established by Article 15 of Act 80-1991 to provide additional funds to municipalities with insufficient tax base to ensure a comparable level of funding year-over-year. For FY2017, aggregate funding was approximately 23% ¹⁴ of municipal general fund revenue and ranged from more than 75% of the revenue for some jurisdictions to less than 10% for others (including San Juan). Additionally, spending levels vary significantly across municipalities, all of which provide key services to their citizens. For FY2017, the average per capita general fund budgets for municipalities was \$554, with significant variability as indicated by a high of \$2,638 per person in Culebra to a low of \$249 in Toa Alta. See **Appendix 15** for more detail.

The Equalization Fund is disbursed on the basis of the municipal population with municipalities with a population of less than 50,000 receiving first priority. If there are sufficient funds to equalize each municipality with less than 50,000 residents to their base equalization amount (currently their FY2017 levels), then remaining funds are distributed among the larger municipalities. If there are insufficient funds to equalize the smaller municipalities, then each smaller municipality receives a pro-rata portion of the Equalization Fund, and the larger municipalities receive nothing. Any changes to the Equalization Fund distribution formula must be agreed by the Oversight Board in accordance with the recently amended policy on the review of rules, regulations, and orders.

To ensure the fiscal targets contained in this Fiscal Plan are met, as shown in **Exhibit 23**, the Commonwealth transfer must be phased out by FY2025, and only the Electronic Lottery proceeds will remain in the Equalization Fund. As part of the measures described in this Fiscal Plan, CRIM must work with the municipalities to increase tax collections, which will provide additional funds to help offset the reduction in the Equalization Fund. Nevertheless, the increase in property tax collections will not be shared equally among the municipalities, as the municipalities with the highest number of properties will most likely be the ones that benefit the most. To ensure that the smaller municipalities also benefit from these measures, CRIM must work closely with the municipalities, AAFAF, and the Oversight Board to investigate a funding strategy where the municipalities with the higher number of properties would contribute a portion of their collections to the Equalization Fund, which would be disbursed to the smaller municipalities to ensure essential services are adequately funded. CRIM must establish an Equalization Fund distribution formula that is most beneficial to these smaller municipalities. CRIM must work with municipalities and AAFAF to develop a funding strategy, and the distribution formula must be agreed on between all parties. Any funding strategy and distribution formula must be agreed to by the Oversight Board before it is implemented.

Law 29 nullification

The Puerto Rico Legislature enacted Law 29-2019 ("Law 29"), which transferred the primary obligation of municipal pension pay-as-you-go ("PayGo") and Health Insurance Administration ("ASES") payments from the 78 municipalities to the Commonwealth. Law 29 exempted the municipalities from making healthcare payments to ASES and required that CRIM retain up to 50% of such amount in the Equalization Fund and remit the remaining 50% directly to the

¹⁴ In FY2018 this was reduced to 12%.

municipalities. Law 29 also exempted municipalities from paying their PayGo obligations. Law 29 required that CRIM retain in the Equalization Fund up to 90% of the PayGo amount municipalities would otherwise have to pay and transfer the remaining 10% directly to the municipalities. CRIM took the position that it would follow Law 29 until overturned or revoked, and retained the amounts required by Law 29 to fund the Equalization Fund. The Oversight Board determined that Law 29 would undermine the government's ability to pay pensions to all municipal retirees whenever Puerto Rico's government faces fiscal distress. In its compliance certification regarding Law 29 submitted to the Oversight Board pursuant to Section 204(a) of PROMESA, the Governor provided only a partial formal estimate of the financial impact of Law 29. The Oversight Board determined Law 29 impaired and/or defeated the purposes of PROMESA, unlawfully reprogrammed funds without consent from the Oversight Board, and unlawfully modified the municipalities' debt and the Commonwealth's debt without prior approval of the Oversight Board as required by PROMESA. The Oversight Board filed an adversary proceeding in the Title III court seeking, among other things, a court order declaring Law 29 unenforceable and of no effect.

On April 15, 2020, the Title III court issued a decision granting summary judgment to the Oversight Board on several of its claims against the Governor and AAFAF. The court issued a mandatory permanent injunction precluding the enforcement of Law 29 and declared Law 29 a nullity because it violated various provisions of PROMESA. The Title III court's order became effective on May 7, 2020. The effect of this nullification requires municipalities to reimburse the Commonwealth for monies received under Law 29 to which the municipalities were not entitled pursuant to PROMESA and to cover their own employees' health care and PayGo costs going forward. For FY2020, the PayGo and health care obligations are approximately \$166 million and \$32 million, respectively. Note that the final amount of PayGo liability by municipality will require final adjustments once the Retirement System for Employees of the Government of Puerto Rico ("ERS") completes the final June pension payments and summarizes the actual FY2020 PayGo liability to be invoiced to each municipality. The ruling provided a three-week period, at the Government's request, to explore a solution to establish a stable economic future for the municipalities. During this three-week period, the Oversight Board participated in an open and collaborative dialogue with the Government, CRIM, and the representatives from both mayoral associations to outline a responsible approach for repaying the outstanding obligation.

The Oversight Board, the Government, and CRIM agreed that the combined amount due, \$198 million, will be partially offset by the Commonwealth transfer of \$132 million that was transferred to CRIM in accordance with the certified Commonwealth Fiscal Plan and certified Budget. Under Law 29, CRIM was retaining these funds but remitted approximately \$34 million to municipalities in lieu of property taxes as part of the monthly remittances. CRIM's approach was not consistent with the certified Commonwealth Fiscal Plan and certified Budget, and the Oversight Board has proposed the Commonwealth must identify and transfer this amount to ERS.

After accounting for the various transfers of funds, the nullification of Law 29 results in the Municipalities currently owing approximately \$66 million to the Commonwealth for their employees' FY2020 PayGo and healthcare contributions. This amount equates to approximately 3% of the total approximate \$1.97 billion municipal General Fund budgets in FY2020, although the impact varies on a municipality by municipality basis.

CRIM proposed, and the Oversight Board accepted the allocation formula for the \$132 million in direct proportion to each municipality's individual balance as part of the total projected obligation of \$198 million (\$132 million / \$198 million = 67%). Under this option, every municipality will have an outstanding obligation equivalent to its FY2020 PayGo and ASES, which will be offset by approximately 67% of the total due, leaving a 33% outstanding obligation balance that each municipality will be responsible for paying in accordance with the repayment waterfall. **Appendix 16** illustrates the allocation of the \$132 million by municipality and quantifies the estimated outstanding obligation for each municipality.

On June 8, 2020, the Oversight Board sent a letter to CRIM instructing CRIM to take two actions no later than June 12, 2020, to correct overdue municipal PayGo balances due to ERS. Firstly, CRIM was requested to transfer the \$98,313,406 remaining Commonwealth General Fund transfer balance to ERS in accordance with Article 3.5(2) of Act 106-2017. CRIM subsequently indicated it was only \$96,587,185.54 and agreed to transfer that amount. Hacienda has yet to transfer the final \$1,726,220.46 to CRIM for FY2020, which will subsequently be transferred to ERS. The \$1,726,220.46 has not been transferred to CRIM, as it was retained by Hacienda to cover CRIM's Pay-Go debt, in accordance with a debt certification issued by the Retirement Board on March 3, 2020. Secondly, CRIM was requested to identify and remit other funds to make the remaining \$33,524,594 payment, remitted to municipalities, to ERS. If the \$33,524,594 is not identified and promptly transferred by CRIM, then this amount must be recovered through the repayment waterfall previously agreed to by all parties for the repayment of the remaining FY2020 PayGo and ASES balances due in **Exhibit 27** to ensure the adequate funding of the public pension system.

The municipalities must repay the remaining \$66 million balance and, if necessary, the \$33.5 million payment described in the previous paragraph according to the repayment waterfall in **Exhibit 27**. This repayment waterfall focuses on incremental revenues that municipalities have not considered in their FY2020 budgets. Therefore, the financial impact on municipalities should be minimized, as debt repayment is primarily through unbudgeted revenues.

Exhibit 27: Repayment Waterfall

Repayment waterfall	Description
Step 1 – Offset outstanding obligation against electronic lottery funds true-up	 CRIM identified \$17.6 million of Electronic Lottery proceeds from FY2016 & FY2017 previously not remitted to CRIM as required by Law Use these funds to offset a portion of the remaining obligation of \$66 million
Step 2 – Offset outstanding obligation against excess CAE rebate	 If tax collections exceed the amount needed to cover annual debt service on CAE loans, municipalities receive this excess at the end of the year Use these funds to further offset remaining obligations after Step 1
Step 3 – Offset outstanding obligation against the final FY20 liquidation	 CRIM projects annual municipal advances at the beginning of each fiscal year and remits funds based on projections monthly After the fiscal year ends, CRIM reconciles actual collections to remittances and liquidates any excess to the corresponding municipality Use these funds to further offset remaining obligations after Steps 1 and 2

Step 4 – Offset outstanding obligation against the collection of aged Accounts Receivable	 CRIM will value and plan to monetize its portfolio of accounts receivable by the end of FY2021. This is projected to result in up to \$400 million in proceeds Proceeds from the sale of this portfolio shall be paid to the Commonwealth to further offset remaining obligations after Steps 1, 2 and 3
Step 5 – Offset outstanding obligation against municipal advances	 If FY2020 PayGo and health care obligations are not fully repaid after Steps 1, 2, 3 and 4, CRIM must offset the municipality's monthly advances until the remaining obligation is repaid in full To minimize the impact of offsets, CRIM must undertake revenue-enhancing measures to secure additional revenues that could then offset the remaining liability due If CRIM does not achieve its revenue-enhancing measures by the end of FY2022, a series of collection measures will be enacted. These measures include the establishment of a lockbox mechanism to control all cash receipts and disbursements and an immediate offset of 25% of the outstanding obligation from property tax advances These offsets will continue in varying amounts until the obligation is fully repaid If the balance of the FY2020 health care and PayGo obligations is not paid down by the end of FY2022, the budgeted monthly Commonwealth transfer will be placed on hold until such time as the requirement is met

PayGo Pension Offset

Municipalities are responsible for budgeting and paying their annual PayGo fee invoiced as determined by ERS. However, historically, many municipalities have not paid their annual PayGo, which is inconsistent with this Fiscal Plan and the certified Commonwealth Fiscal Plan. Many municipalities have established payment plans with ERS to ensure timely repayment of these outstanding obligations. CRIM can also offset PayGo obligations from each municipalities' property tax distributions and remit these funds directly to ERS. Pursuant to Article 3.5(2)(a)(iii) of Act 106-2017, CRIM must "remit within seven (7) days after [receiving] the written notice, to the New Defined Contribution Plan and/or Accumulated Pension Benefits Payment Account, the amounts of the Contributions Owed by the Municipal employer, of the unencumbered balance of the property tax and other revenues the Municipalities are entitled to receive in accordance with Act No. 80-1991." Accordingly, for those municipalities that have not established a payment plan with ERS, and to ensure the adequate funding of public pension systems, CRIM must offset each municipality's PayGo obligations from their corresponding revenues and withhold and remit such funds to the Commonwealth in accordance with Act 106-2017, this Fiscal Plan, the certified Commonwealth Fiscal Plan, and the certified Commonwealth budget. Outstanding PayGo obligations for FY2018 and FY2019, as of March 2020, are shown in Appendix 17. Appendix 18 illustrates the projected municipal PayGo obligations for FY2021 to FY2025

In addition, following the nullification of Law 29, municipalities must repay their FY2020 PayGo obligations, as determined by ERS, pursuant to the repayment waterfall agreed to with the Oversight Board. Each municipality shall pay newly accruing obligations immediately as they come due.

Similarly, CRIM must offset each municipality's outstanding contributions to the New Defined Contribution Plan to be deposited in the Defined Contribution Account in accordance with Act 106-2017.

ASES Payment Offset

CRIM is responsible for remitting the Municipalities' payment to the Health Insurance Administration ("ASES" for its Spanish acronym), in accordance with Act 72-1993 ("Act 72"). CRIM must collect and remit these funds to ASES in accordance with this Fiscal Plan and the certified Commonwealth Fiscal Plan, no later than 30 days after they become due, to ensure that ASES is adequately funded.

Following the nullification of Law 29, municipalities must pay their FY2020 ASES obligation, pursuant to the repayment waterfall agreed to with the Oversight Board. In addition, the certified Commonwealth Fiscal Plan assumes that municipalities fund their respective ASES obligations going forward. The certified Commonwealth Fiscal Plan includes a temporary relief for municipal ASES contributions, given the additional federal funding made available through the 2020 Further Consolidated Appropriations Act and the Families First Coronavirus Response Act. Once this funding stream expires in FY2022, the certified Commonwealth Fiscal Plan assumes that contributions from municipalities will return to statutory levels under Act 72-1993.

The Oversight Board has agreed to provide relief to municipalities for incremental FMAP funding above the base level of 55%. The formula utilized to incorporate the relief and calculate the adjusted municipal obligation is:

• Statutory ASES obligation / ((1 - 55% FMAP) / (1 - current Fiscal Year FMAP))

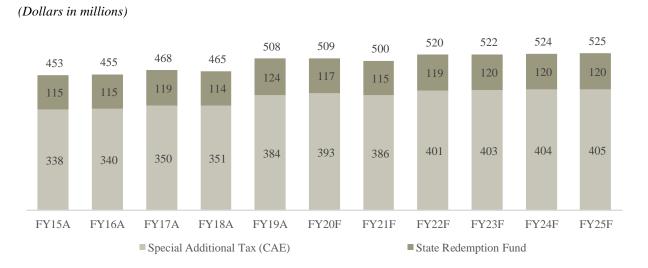
For FY2021, for example, the certified Commonwealth Fiscal Plan is projecting municipal ASES obligations to be \$161.6 million and an FMAP of 82.2%. Because FMAP is higher than the 55% base, municipalities would receive additional relief in their obligation. This relief decreases the municipal ASES obligations by approximately \$97.7 million, resulting in net municipal ASES obligations of approximately \$63.9 million, as calculated below:

• \$161.6 million / ((1 - 55%) / (1 - 82.2%)) = \$63.9 million

Chapter 8. Other Transfers

Along with the Basic Municipal Contributions, CRIM collects taxes related to CAE and the State Redemption Fund, which are transferred to the CAE trustee and Hacienda, respectively.

Exhibit 28: CRIM Debt Transfers



Special Additional Tax (CAE)

CRIM collects CAE, which, as provided by Act 83-1991, may be imposed by a municipality without limitation as to rate or amount on all taxable real and personal property.

Under Act 64-1996, each municipality is required to levy the CAE in such amounts as will be required for the payment of all its outstanding CAE Loans.

CAE rates vary between 1.0% and 5.5% on personal property and 1.2% to 5.5% on real property. In 57 out of the 78 municipalities, the CAE rate is the same for both real and personal property. In 18 jurisdictions, the CAE rate is lower on personal property than on real property. In the remaining three municipalities, the CAE rate is higher on personal property than on real property.

CAE collections are required by law to be deposited in the CAE Redemption Fund and used for the payment of CAE Loans. To the extent a municipality's funds in the CAE Redemption Fund exceed the amount needed to cover 12 months debt service on CAE Loans, as determined by AAFAF, and such municipality's debts, Act 64-1996 (as amended pursuant to the GDB Restructuring Act) requires the disbursement of such excess to the municipality, at its request, once during each fiscal year. Such excess is generally referred to as "Excess CAE." AAFAF requires municipalities to obtain certifications demonstrating that they have no outstanding obligations with other government agencies. If municipalities have outstanding obligations (i.e., PayGo), AAFAF requires that excess CAE be used to repay these obligations. To the extent municipalities have outstanding obligations with different agencies and the excess CAE is not sufficient to repay all of them in full, the municipalities can choose which obligation(s) to pay with these funds. Municipalities will not receive any excess CAE until all outstanding obligations are paid.

In November 2015, CRIM and GDB executed a deed of trust with respect to the CAE Redemption Fund, pursuant to which the CAE Redemption Fund was divided into two separate sub-funds, one of which would be invested in deposits at GDB and used for the payment of CAE Loans held by GDB; the other would be invested in certain qualified instruments and used for the payment of CAE Loans held by private banks and the Municipal Finance Authority ("MFA") (the "Private Sub-Fund"). The Private Sub-Fund is invested in deposits at BPPR.

In April 2016, upon the imposition of restrictions on the withdrawal of funds on deposit at GDB, no additional CAE revenues were transferred to GDB. Thereafter, all CAE revenues have been deposited by CRIM at BPPR and kept in two accounts: (i) in the Private Sub-Fund, an amount based on the debt service on the CAE Loans held by private banks and MFA and (ii) in a separate account at BPPR, an amount based on the debt service payable on CAE Loans held by GDB.

Prior to the GDB restructuring, GDB (i) adjusted loan balances by undisbursed deposits consisting of municipal loan proceeds applied against corresponding loans, (ii) adjusted municipal loan balances by all remaining municipal deposits applied against corresponding loan types, and (iii) provided the accelerated application of non-municipal public entity deposits to non-performing loans of such entities where applicable and pursuant to the GDB Restructuring Act.

Pursuant to the GDB Restructuring Act and the GDB restructuring, GDB paid, in cash, on or before the closing of the GDB restructuring, to each municipality that had deposit claims against GDB for Excess CAE prior to January 2017 corresponding to fiscal years 2015, 2016, and 2017 (such Excess CAE, "2015-17 Excess CAE"), an amount equal to 55% of such municipality's undisbursed 2015-17 Excess CAE. Any remainder Excess CAE deposited at GDB was deemed fully discharged. For the avoidance of any doubt, 2015-17 Excess CAE does not include, and the GDB Restructuring Act does not address, those proceeds of the special additional tax which AAFAF has certified as surplus from the Municipal Debt Redemption Fund (as defined in the Municipal Financing Act) after January 1, 2017, pursuant to Article 20(e) of the Municipal Financing Act, corresponding to fiscal years 2017 and beyond and which are deposited in the Municipal Financing Act accounts created in financial institutions outside of GDB in the name or for the benefit of each municipality.

As shown in **Exhibit 28** above, transfers to the CAE trustee totaled \$384 million in FY2019. Total debt service payments amounted to \$312 million. Of such amount, principal and interest amounted to \$179 million and \$133 million, respectively.

State Redemption Fund

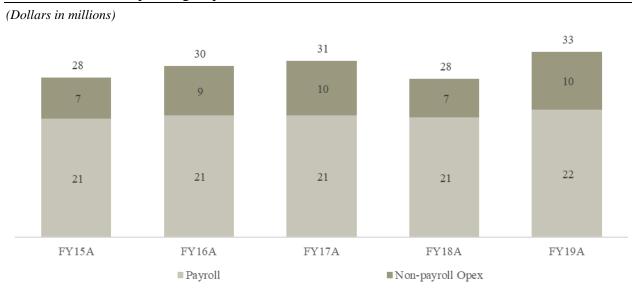
In accordance with Section 2.02 of Act 83-1991, CRIM collects the State Redemption Fund on behalf of the Central Government alongside the other property taxes. The State Redemption Fund holds a 1.03% tax that is instituted on both real and personal property. The proceeds are collected by CRIM and transferred to Hacienda. As shown in **Exhibit 28** above, this amount totaled approximately \$124 million in FY2019.

¹⁵ As noted above, some holders of GO bond claims and Commonwealth-guaranteed bond claims have asserted their bonds are secured by the 1.03% tax on real and personal property collected in the State Redemption Fund. The Commonwealth and the

Chapter 9. CRIM Operating Expenses

CRIM's operations are funded from its 5% withholding from the Basic Municipal Tax. CRIM's operating expenses have remained stable in recent years. In FY2019, salaries and fringe benefits represent approximately 67% of total operating expenses. Other non-payroll operating expenses consist primarily of rent, professional and consulting services, utilities, and repairs and maintenance, as represented in **Exhibit 29.** Note that CRIM does not have any outstanding debt, nor does it have a separate capital expenditure budget.

Exhibit 29: CRIM Operating Expenses



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Oversight Board disagree with that position and assert the GO bonds and Commonwealth-guaranteed bonds are unsecured obligations of the Commonwealth. Nevertheless, since money is fungible, the joint plan of adjustment filed on February 28, 2020 [ECF No. 11946] provides the 1.03% tax on real and personal property collected in the State Redemption Fund would be used to pay GO bond claims recovery.

Part IV. 2020 Fiscal Plan Baseline Forecast

Chapter 10. Demographics Macro Assumptions

CRIM does not believe the real and personal property taxes are significantly correlated with the underlying economic trends of the Commonwealth. As discussed further in the following section, the forecast was developed using economic and demographic indicators for each municipality.

Chapter 11. Methodologies and Assumptions

Property tax revenues methodology

FOMB developed three sets of models for both personal and real property. These models forecasted the tax base, the uncollected portion of the base, and prior year collections. The tax rate for each municipality for the personal and real property was multiplied by each respective municipal base to estimate tax collections.

For each model, FOMB followed a two-stage estimation process. The first stage forecasts the economic and demographic indicators for each municipality. The second stage forecasts three base models for each municipality using demographic and economic indicators from the first stage as explanatory variables. Additional details are provided below:

Stage 1: FOMB forecasted the near-term impact of COVID-19 for each municipality's economic activity in each industry at the 2-digit NAICS sector level. This produced an estimation of the magnitude and trajectory of potential employment loss (and the resulting loss of personal income) for the remaining part of FY2020 and FY2021. Population and its distribution are also forecasted through FY2025 based on population trends in accordance with the certified Commonwealth Fiscal Plan. FOMB used the population projection as an explanatory variable to project the long-term employment trend between FY2022 and FY2025. Other demographic and economic indicators, such as population dependency ratios and total housing units as a function of the population, are also projected.

Stage 2: FY2022 to FY2025 projections are, in turn, based on the estimated effects of COVID-19 on employment (by selected major sector) and income, as well as other explanatory variables during this period, including population density, population dependency ratios, and total housing units.

Additional assumptions relied upon in the Fiscal Plan are further detailed in **Exhibits 30 and 31.** The resulting forecasts are presented in **Exhibits 32 and 33**. The Fiscal Plan targets include measures that are incremental to these baseline projections. These measures are further discussed in **Part V: Measures**.

Exhibit 30: CRIM Detailed Assumptions Excluding CRIM Operations

Line Item	Assumption
Sources	
Central Government Transfers	 Commonwealth transfer – base of \$220m per year declining in line with certified Commonwealth Fiscal Plan reduction of municipal subsidy, phased out by FY2025 Electronic Lottery - \$42 million in FY2021 based on certified Commonwealth Fiscal Plan projections, grown annually at nominal GNP growth rate
Uses	
Advances to Municipalities	Residual revenues once all other expenses have been disbursed
State Redemption Fund	Pass through a portion of property tax collections based on State Redemption Fund tax rate
Special Additional Tax	Pass through part of property tax collections based on CAE tax
Net Interest Expense	 Forecasted at \$4 million per year based on a historical run rate. Interest is paid by CRIM on behalf of the Municipalities and is netted from the advances to Municipalities.
Adjustments	 Forecasted based upon current CRIM projected liquidation analysis for FY2020 and historical averages for FY2021-FY2025
CRIM Property Tax Admin Fee	5% of basic municipal contributions

Exhibit 31: CRIM Operations Detailed Assumptions

Line Item	Assumption		
Inflows			
CRIM Property Tax Admin Fee	5% of basic municipal contributions		
Sales of Certifications and Maps	-16.4% average annual growth based on historical trends		
Service Charges to Banks	-23.5% average annual growth based on historical trends		
Interest and Miscellaneous Income	32.5% average annual growth based on historical trends		
Federal Grants	No federal grants are assumed during the forecast period		

Exhibit 32: CRIM Forecast Excluding CRIM Operations

	Forecast						
Dollars in thousands	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Base case							
Revenues:							
Property Taxes							
Real Property Taxes	\$687,922	\$691,922	\$689,813	\$693,986	\$698,036	\$701,900	
Personal Property Taxes	383,686	364,134	402,510	402,295	402,049	401,781	
Total Property Taxes	1,071,608	1,056,057	1,092,323	1,096,281	1,100,084	1,103,681	
Central Government Transfers	151,438	173,934	129,814	85,498	86,190	42,703	
Total Revenues	\$1,223,046	\$1,229,991	\$1,222,138	\$1,181,779	\$1,186,274	\$1,146,383	
Expenses:							
Advances to Municipalities	(660,802)	(686,836)	(658,173)	(615,965)	(618,686)	(577,123)	
Distribution of Debt Funds							
State Redemption Fund	(116,621)	(114,602)	(119,121)	(119,505)	(119,873)	(120,221)	
Special Additional Tax (CAE)	(392,541)	(385,691)	(401,169)	(402,524)	(403,822)	(405,046)	
Net Interest Expense	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)	
Adjustments	(20,960)	(11,073)	(11,073)	(11,073)	(11,073)	(11,073)	
CRIM Property Taxes Administrative Fees	(28,122)	(27,788)	(28,602)	(28,713)	(28,819)	(28,921)	
Total Expenses	(\$1,223,046)	(\$1,229,991)	(\$1,222,138)	(\$1,181,779)	(\$1,186,274)	(\$1,146,383)	

Exhibit 33: CRIM Operations Forecast

	Forecast						
Dollars in thousands	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Consolidated CRIM							
Revenues:							
Property Taxes Administrative Fees	\$28,122	\$27,788	\$28,602	\$28,713	\$28,819	\$28,921	
Sales of certifications and maps	763	685	383	331	286	286	
Service charges to banks	1,087	1,100	382	280	205	205	
Interest and miscellaneous income	208	263	414	783	700	700	
Federal Grants	-	-	-	-	-	-	
Total Revenues	\$30,180	\$29,836	\$29,781	\$30,106	\$30,010	\$30,112	
Total Expenses	(\$30,180)	(\$29,836)	(\$29,781)	(\$30,106)	(\$30,010)	(\$30,112)	

Part V. Measures

In June 2019, CRIM performed an assessment of its current operations in order to identify improvement initiatives to maximize collection rates and compliance. Additional agency efficiency measures will be adopted to be compliant with the certified Commonwealth Fiscal Plan. The adoption and successful implementation of these measures, which are summarized in **Exhibit** 34 and detailed in the following pages, are instrumental in achieving the targets set forth in this Fiscal Plan, which are incremental to the baseline forecast.

Exhibit 34: CRIM Measures Forecast

			F	Forecast		
Dollars in thousands	FY2021	FY2022		FY2023	FY2024	FY2025
Measures						
1 Sale of Accounts Receivable	400,000	-		-	-	-
2 Incorrect Mailing Addresses	44,400	66,700		88,900	88,900	88,900
3 Identification and Appraisal of New Properties	22,600	67,800		90,400	90,400	90,400
4 Improvement in Current Year Real Property Tax Collection Rates	13,800	27,600		41,400	55,200	69,000
5 Home Improvements New to the Tax Rolls	10,400	20,700		31,100	41,400	41,400
6 FY2019 Accounts Receivables Collection	22,400	22,400		-	-	-
7 Appraisal of Non-Appraised Properties	-	1,500		6,200	6,200	6,200
8 Swimming Pools New to the Tax Rolls	500	1,000		1,600	2,100	2,100
9 Personal Property Self-Reporting Compliance	-	-		-	-	-
10 Operational and Organizational Initiatives	-	-		-	-	-
11 Commonwealth Agency Efficiencies (savings reinvested in CRIM)	-	-		-	-	-
Annual Net Impact	\$ 514,100	\$ 207,700	\$	259,600	\$ 284,200	\$ 298,000

Collections are a function of the size of the tax base and the subsequent collection rate. The measures CRIM identified focus primarily on increasing the size of the tax base either by reappraising properties or adding new properties to the tax rolls. Additionally, a key challenge will be the improvement of collection rates, as described in more detail below. Finally, data sharing with municipalities and the Oversight Board through the development of a data warehouse should help provide additional information on each municipality's year-to-date tax collections and forecasts.

Chapter 12. CRIM Measures

The goal of CRIM is to increase the collection of real property and personal property taxes in order to maximize the Municipalities' revenues and increase its own administrative fees.

1. Sale of accounts receivable

CRIM previously received an offer from a third party to purchase the portfolio for \$400 million in 2017. This sale was not consummated. In 2019, CRIM entered into an agreement with another third-party vendor to evaluate the accounts receivable portfolio and provide a final valuation report by January 2020. However, this contract was canceled, and no valuation report was received. As mentioned above, the net accounts receivable as of FY2019 were approximately \$660 million, including interest, penalties, and discounts. Therefore, this supports an estimate of approximately \$400 million in proceeds from a sale of the portfolio of receivables, when factoring in additional discounts and fees.

CRIM must work to resume the portfolio sale project and to identify experts for the evaluation of the portfolio by Q2 FY2021. CRIM must target to sell the portfolio by the end of FY2021. A conservative incremental tax revenue of \$400 million has been projected in this Fiscal Plan. This is a one-time revenue and is only projected to occur in FY2021. The proceeds from the sale must be first used to offset any remaining FY2020 PayGo and ASES obligation, in accordance with the repayment waterfall. As a result, the sale will ensure the funding of the public pension system and essential public services and will enable the achievement of the fiscal targets contained in this Fiscal Plan.

2. Incorrect mailing address

CRIM has identified 197,782 accounts in HANSEN, CRIM's existing billing application, with a billing address issue flag. **Appendix 19** identifies these incorrect mailing addresses by municipality. CRIM began actively collaborating with PRASA in mid-January 2020 to compare the addresses in HANSEN with those in PRASA's database to increase the accuracy of the billing information. As of February 2020, with the data received from PRASA and the tax roll, approximately 75,800 mailing addresses were identified with a possible correct address. As of June 2020, CRIM has replaced the incorrect addresses for 45,371 accounts, which will be included in the billing period starting July 2020. CRIM will continue its efforts to corroborate and identify the correct addresses for the remaining accounts.

Assuming an 80% collection rate and based on the location of each account as well as the average net taxable value in each Municipality, the agency estimates a tax increase of approximately \$89 million a year. The estimated potential tax revenue is \$44.4 million in FY2021, \$66.7 million in FY2022, and \$88.9 million each year thereafter, enabling the achievement of the fiscal targets in this Fiscal Plan and improving fiscal governance and accountability. There are no incremental costs associated with this initiative, as it is currently budgeted as part of the data warehouse project. While updating billing address issues will likely generate additional revenue, it is possible that not all accounts will generate property tax revenue because of exemptions, exonerations, and other factors, which may impact these preliminary estimates.

3. Identification and appraisal of new properties

CRIM identified a gap of 215,859 properties in its tax roll with respect to the US Census Bureau's American Community Survey ("ACS") 2017 data. This figure was corroborated by the recent Planimetric Project, which identified approximately 239,525 new properties. **Appendix 19** identifies these missing properties by municipality. CRIM estimates a potential of \$113 million per year from the identification of these new properties, based on the location of each property as well as the average net taxable value in each Municipality. At an estimated collection rate of 80%, ¹⁶ the projected tax revenues total \$90 million. Collection of tax revenues from the owners of these newly identified properties will enable the achievement of the fiscal targets contained in this Fiscal Plan, as well as improve fiscal governance by ensuring that all taxable properties are, in fact, taxed. As of February 2020, with the data received from PRASA and the tax roll, approximately 171,694 contacts and addresses were matched to these newly identified properties as possible debtors.

¹⁶ 80% collection rate assumed in these measures is based on historical collection rates of current and prior year taxes.

CRIM must conduct field investigations to further corroborate the number of new properties, which may impact these preliminary estimates.

There are no incremental costs associated with this initiative as CRIM will use virtual appraisals and automatically send bills to the identified properties. CRIM estimates a net tax increase of \$22.6 million in FY2021, \$67.8 million in FY2022, and \$90.4 million in FY2023 and thereafter. Furthermore, under Act 83-1991, CRIM may collect up to five years of back taxes, which, if implemented, will generate additional revenue. Article 3.08 of Act 83-1991 establishes the requirement to levy and collect real property taxes retroactive for five years from the date the assessment is. The language of the Municipal Code provides that the assessment of improvements, other than the principal residence of the taxpayer, will be retroactive to five years since the date the assessment is made.

There is an ongoing initiative by the Commonwealth to streamline property registration. This is critical because Puerto Rico's current set of disjointed registries, including CRIM's Digital Cadaster, do not comprehensively map all land ownership, complicating Government disaster relief efforts. As such, property registration reforms must enable the Government to verify the ownership of every property in Puerto Rico in order to (a) ensure the implementation of accurate fiscal governance and ensure all taxes are collected, and (b) comply with the U.S. Department of Housing and Urban Development ("HUD") guidelines for unlocking \$8.3 billion in Community Development Block Grant for Mitigation ("CDBG-MIT") funds, which will fund essential services for the people of Puerto Rico.

As part of this initiative, CRIM must work closely with other government agencies, including the Department of Justice. CRIM must update its tax roll to incorporate any new properties or updated ownership information identified by this initiative.

4. Improvement in current year real property tax collection rates

Historically, CRIM only collects approximately 68% of current year real property tax billings. By analyzing a set of comparable jurisdictions that experienced economic decline and/or financial distress, CRIM must target an improvement of 840 basis points (8.40%), the average of the noted five-year improvement in **Exhibit 35**.

Exhibit 35: Benchmark Collection Rate Improvement

	Collection	5 Year	
Jurisdiction	Recent Minimum	5 Years Later	Improvement
Detroit	68.3%	82.0%	13.7%
Cleveland	76.9%	90.2%	13.4%
St Louis	88.2%	92.1%	3.9%
Harrisburg	83.5%	85.9%	2.5%
Toledo	86.4%	87.4%	1.0%
Philadelphia	79.5%	93.5%	14.0%
Washington DC	83.7%	98.5%	14.8%
Flint	65.4%	69.2%	3.8%
Average	79.0%	87.4%	8.4%
Median	81.5%	88.8%	8.6%

If this benchmark is met, collection of current year real property tax billings will improve to approximately 76% by the end of the forecast period, resulting in a potential \$69 million per year of additional collections, as shown in **Exhibit 36**, enabling the achievement of the fiscal targets contained in this Fiscal Plan. It will take Puerto Rico several years to realize the full benefit of this measure. Therefore, the benefit was ramped into the projections with an estimated total incremental revenue of \$13.8 million in FY2021, \$27.6 million in FY2022, \$41.4 million in FY2023, \$55.2 million in FY2024, and \$69.0 million in FY2025.

Operational and technological initiatives are underway. Coupled with an updated tax roll and integrated billing system, these initiatives will improve collection rates. However, it will be necessary to hire additional staff to realize the potential benefits of these improved fiscal governance and accountability measures. The cost of additional staff is covered through reinvestment from the agency efficiency measures noted above.

Exhibit 36: Targeted Puerto Rico Collection Rate Improvement

(Dollars in millions)

Targeted Puerto Rico Collection Rate Improvement				
FY2019 Billings	\$824.9			
FY2019 Current Collections	558.3			
Puerto Rico Collection Rate*	67.7%			
5 Year Comparable Improvements	8.4%			
Adjusted Puerto Rico Collection Rate	76.1%			
Adjusted Collections	627.3			
Incremental Improvement	\$69.0			

^{*}FY2015 to FY2018 collections ranged from 66.4% to 68.4%

5. Home improvements new to the tax roll

The Planimetric Project preliminarily identified 547,207 homes that appear to have been substantially improved; however, the value of these improvements is not currently reflected on the tax rolls. Based on a detailed review of the high-resolution digital images of the Planimetric Project results, CRIM adjusted the number of home improvements new to the tax roll to 517,824. **Appendix 19** identifies these home improvements by municipality.

If properly assessed, CRIM estimates incremental tax revenue of \$51.8 million annually, enabling the achievement of the fiscal targets contained in this Fiscal Plan. At an estimated collection rate of 80%, projected tax revenues total \$41.4 million. There are no incremental costs associated with this initiative as CRIM will use virtual appraisals and send bills to the identified properties. CRIM estimates a net tax increase of \$10.4 million in FY2021, \$20.7 million in FY2022, \$31.1 million in FY2023, and \$41.4 million in FY2024 and thereafter. As of February 2020, with the data received from PRASA and the tax roll, approximately 499,065 contacts and addresses were matched to these newly identified home improvements as possible debtors.

6. FY2019 accounts receivables collection

CRIM must transition from the HANSEN tax roll system to a unified system, which must provide increased visibility into delinquent tax accounts to improve CRIM's fiscal governance and accountability. As of FY2019, CRIM's gross real property tax receivables using the HANSEN system totaled \$1.7 billion (principal only). Given the aging of certain receivables, it is more appropriate to focus on receivables that are less aged, and therefore more likely to be collected.

As of May 2019, CRIM identified \$56 million in tax revenue, represented by 32,963 taxpayers who paid taxes in FY2016 and FY2017 but not in FY2019. At an estimated collection rate of 80%, the projected tax revenues total \$44.8 million. There are no incremental costs associated with this initiative. CRIM estimates net tax increases of \$22.4 million in FY2021 and FY2022. CRIM must leverage the newly launched call center to follow up with these taxpayers to expedite collection.

7. Appraisal of non-appraised properties

In May 2019, CRIM identified 49,166 properties awaiting appraisal; however, as of June 2020, this number has decreased to 17,505. CRIM will provide reporting to confirm that the other 31,661 properties have been appraised and taxed. CRIM must continue to ensure the remaining properties are appraised and taxed, in order to improve CRIM's fiscal governance and accountability and ensure CRIM meets the fiscal targets contained in this Fiscal Plan.

As noted above, CRIM's 104 appraisal-focused employees average 2.6 times¹⁷ more parcels than the national average and likely cannot remediate the backlog in an expedited timeframe with current staffing and technology available. However, SKALA I and SKALA II are expected to provide additional technological and process improvements that should further reduce turnaround time. This initiative includes contracting external appraisers to perform the appraisals using the SKALA application. The estimated cost associated with this initiative ranges from \$200 to \$350 per appraisal, with a pilot project that will initially target 2,000 appraisals (\$500,000 to \$700,000 total).

To potentially offset costs associated with the implementation of SKALA while achieving the measure, CRIM must use the savings from the Commonwealth Agency Efficiencies measure to hire additional appraisal staff and appoint certain individuals to focus on reducing this backlog.

Assuming an 80% collection rate and based on the location of these non-appraised properties as well as the average net taxable value in each Municipality, CRIM estimates a potential \$6.2 million per year from this initiative. **Appendix 19** provides municipal level detail of the non-appraised properties.

If all the appropriate dedicated staff is identified and begins working in FY2021, real property taxes could increase by an estimated \$1.5 million in FY2022 and \$6.2 million annually thereafter.

¹⁷ Calculation based on survey from the International Association of Assessing Officers (IAAO)

8. Swimming pools new to the tax roll

The Planimetric Project identified 27,773 swimming pools that are not in CRIM's database. Based on a detailed review of the high-resolution digital images of the Planimetric Project results, CRIM adjusted the number of pools new to the tax roll to 25,951. **Appendix 19** provides municipal level detail. If properly assessed, CRIM estimates approximately \$100 of additional tax per pool, resulting in potential tax revenue of \$2.6 million annually. At an estimated collection rate of 80%, the projected tax revenues total \$2.1 million. There are no incremental costs associated with this initiative as CRIM will use virtual appraisals and automatically send bills to the identified properties beginning in mid-FY2021. CRIM estimates a net tax increase of \$500,000 in FY2021, \$1.0 million in FY2022, \$1.6 million in FY2022, and \$2.1 million in FY2024 and thereafter. CRIM must implement measures to collect applicable taxes on these pools, to ensure the fiscal targets of this Fiscal Plan are met.

9. Personal property self-reporting compliance

Personal property is self-assessed by taxpayers annually, making compliance the key area of focus for improving revenue collection.

CRIM must work with Hacienda to implement reforms to meaningfully simplify paying taxes through digitalization and increase revenue collections using data and analytics to address non-compliance. Doing so will allow CRIM to corroborate the self-assessed value of the personal property that is reported to the agency with what is reported to Hacienda.

CRIM must establish a memorandum of understanding ("MOU") with Hacienda to gain access to their systems to start corroborating this information by Q2 FY2021. This will guarantee transparency, accountability, and fiscal governance across the government and will address potential delinquencies. At this time, it is unclear how much additional personal property taxes could be captured through this initiative.

10. Operational and organizational development initiatives

Following the 2018 assessment, CRIM operational areas have also been working and integrating new systems and processes throughout multiple initiatives that impact CRIM's efficiency in collecting real and personal property tax revenues. These fall into operational and organizational development initiatives.

10a. Operational improvements

Some of the most critical areas negatively affecting CRIM operations included obsolete hardware, outdated applications, and insufficient data bandwidth to support communications. Specific CRIM services are impacted by outdated applications including customer service, billing and collections, appraisals, digitalization, and workflow systems, resulting in both inefficiencies and duplication of services. The most critical systems improvements that CRIM must implement to improve fiscal accountability and transparency are detailed below:

Data warehouse

A new data warehouse, known as "True North," is under development, and will serve as a central repository of information that was previously spread throughout several systems. This portal will allow for increased data sharing with several entities, including each of the 78 municipalities, the Oversight Board, PRASA, and other governmental agencies. Through this portal, municipalities will have access to important historical data on tax payments, delinquencies, and forecasts. Furthermore, data collaboration with other governmental entities and agencies will allow CRIM to address data deficiencies that previously hindered its tax appraisal, billing, and collection efforts. CRIM must continue to develop and then implement the "True North" system to improve fiscal transparency, accountability, and governance.

In addition, CRIM must establish an MOU with Hacienda to improve compliance for personal property and ensure that the amounts being self-reported are accurate, as described above.

Billing system update

CRIM's previous billing system, known as HANSEN, is over 20 years old and has not been updated since 2007. CRIM is now moving (and must continue to move) to a unified system known as "CRIM 360", which will represent a technological upgrade from the current HANSEN system. CRIM 360's ability to be updated and interface with True North will likely result in a more robust and efficient billing system that reduces errors and omissions currently experienced with the HANSEN system.

Appraisal system

CRIM's appraisal system was outdated and was replaced by SKALA I in October 2019, with phase two (SKALA II) scheduled to roll out in June 2020. Through technological improvements, SKALA will allow for virtual appraisals, reducing the time it takes for new appraisals from days to hours. It will also allow for more efficient allocation of appraisal staff and will likely be used by third-party appraisers given CRIM's current understaffing of its appraisal department. SKALA's main limitation at this point is that it is limited to residential properties only. CRIM must continue to roll out and use SKALA II.

While the aforementioned technology and systems improvements represent the three biggest priorities for successful implementation of measures, **Exhibit 37 and Exhibit 38** provide a more detailed view of all operational initiatives recently completed or currently underway.

Exhibit 37: CRIM Current Operational Initiatives (Systems Hardware and Services)

Area	Initiatives	Time frame
Systems Hardware	Upgrade the data bandwidth from a 70bps from a single provider to a concurrent service with two carriers with over 300 bps each to A. Improve the transfer of data from within the regions and Central Office as well as to provide a reliable service to the public, municipalities, and government agencies through the use of the Digital Cadaster B. Guarantee successful submittals of the electronic personal tax returns through the application eMueble that had many issues in May 2018 due to outdated hardware	October 2018 through July 2019 (Completed)
	Data migration to new hardware and a cloud environment with a hyper- convergence system with micro-segmentation ensures data security as well as efficiency in data communication	Oct 2018 through February 2019 (Completed)
	Backup and recovery plan for business continuity	July – October 2019 (Completed)
Services	Reorganization of the operations department as well as the nine (9) regional offices including: A. Regional offices report directly to the Executive Director B. New departments and offices • Administrative Review • Corporate and Financial Services, to serve financial institutions and corporations with a dedicated analyst assigned Taskforce CRIM AL DIA, to eliminate service backlog starting with the regional office of Bayamon and finish all regions by the end of 2019	July 2018 through January 2019 (Completed)
	2016 process flow charts were reviewed and streamlined to minimize process time, as well as new essential processes were identified and integrated for development	January – August 2019 (Completed)
	Decentralization of processes from the central office to the regions including: Review and approval of appraisals is now completed at the region, as well as other service requests Tasks that were assigned to the central cadaster unit Restructuring of the procedures of the Committee of Final Agreements	July – October 2019 (Completed)

Exhibit 38: CRIM Current Operational Initiatives (Applications)

Areas	Initiatives	Time frame	
	Design and creation of a robust data warehouse and validation system, through collaborative agreements currently under discussion with other government agencies to correlate data such as billing addresses which can result in additional tax evasion fighting mechanisms and update of correct addresses in HANSEN, CRIM's billing application	September 2019 through September 2020	
	Upgrade of the Digital Cadaster of Puerto Rico (CDPR) includes the purchase of new licenses and the migration of the platform ESRI & ArcGIS, which are required to allow the system to integrate the new layers that will show the changes in the properties	January - May 2019 (Completed)	
Applications	Photogrammetry & Planimetry project to update the photography of the CDPR that was already almost 20 years old to have available A. Recent changes in properties and identify new construction, improvements, pools, etc., B. New tools and dashboards for decision making and C. Provide municipalities with updated information	January - May 2019 (Completed)	
	Upgrade satellite appraisal application SATAS to a new application SKALA to A. Reduce the time required to process a new appraisal from days to hours B. Distribute the appraisals more efficiently by type, availability, distance, and revenue for CRIM C. Allow for virtual appraisals that do not require a field visit as it will compare the location to an Appraisals database that relies on new geolocated data Allow certified EPAs to work for CRIM complying with CRIMs appraisal process using the same system than the rest of CRIMs appraisals	Phase 1: October 2019 (Completed) Phase 2: June 2020	
	Upgrade eMueble front end application after performance and user interface were evaluated through controlled trials in May 2018	April 2019 (Completed)	

In 2019 the U.S. Department of the Treasury assessed Puerto Rico's property tax system, at the request of Hacienda, against a set of criteria developed by economists and tax policy experts that should inform and guide effective tax design. Detailed criteria to guide the property tax system identified in the report are listed in **Appendix 20.**

10b. Organizational development

Addressing employee performance is the key to improving CRIM's performance. CRIM is working to implement three main initiatives to change CRIM's culture towards one that is more data and performance-driven, which will better align with the organization's strategy. **Exhibit 39** presents an overview of these organizational initiatives. CRIM must continue to implement these measures.

Exhibit 39: Organizational Development Initiatives

Areas	Initiatives	Timeframe
Human Capital Management	 A. Transforming HR from a transactional approach to a strategic and people approach, where the department becomes a business partner and its efforts are focused on our employees B. Implementing a new competency-based performance evaluation method C. Synchronizing all employee evaluation cycles during the month of October 	October 2019 (Completed)
Management Development	Implementing a Supervisory and Leadership Academy for all employees with supervisory roles comprised of 8 modules with varied topics	April through August 2019 (Completed)
Quality Unit	Create a department of Quality Unit with the responsibility of detecting and measuring service deficiencies, streamlining processes, and monitoring of oversight adherence to processes	TBD in planning stage

11. Commonwealth agency efficiencies

To align with the agency efficiency measures identified in the certified Commonwealth Fiscal Plan and otherwise eliminate deficits and meet the fiscal targets contained in this Fiscal Plan, CRIM must: (1) standardize health insurance so that each employee receives a \$125 employer contribution per month towards the cost of health insurance or \$1,500 per year, or any other amount as established in the certified Commonwealth Fiscal Plan; (2) implement and maintain a payroll freeze throughout the Fiscal Plan forecast period; and (3) eliminate the 13th month payment.

The estimated savings of these measures average approximately \$2.7 million annually. These savings will be reinvested to hire additional employees or third-party appraisers to help decrease the backlog of non-appraised properties. Assuming an average personnel cost of \$40,000 to \$50,000 per employee, these savings could fund an additional 50 to 62 operating services positions (i.e., appraisers and collectors) in FY2021, with a cumulative total of 67 additional staff supported by reinvestment through FY2025.

Additionally, assuming an annual PayGo obligation for CRIM of approximately \$5 million, and the pension cut taking effect mid FY2022, CRIM would save approximately \$0.1 million in FY2022 and approximately \$0.3 million starting in FY2023. These funds will be reinvested.

Chapter 13. Measure Timeline and Reporting

Below is a proposed summary that details a timeline and certain assumptions as it relates to the implementation of the proposed CRIM measures, along with the estimated incremental tax revenues generated by these measures:

Exhibit 40: Description, Action Items, and Timing of CRIM Measures

Area of Focus	Description	Deadline
1. Sale of A/R	 Identify experts for the evaluation of the portfolio Collect \$400 million in receivables by FY 2021 	November 1, 2020FYE 2021
2. Incorrect Mailing Addresses	 Address 50% of incorrect addresses (for FY2021 collections) Address cumulative 75% of incorrect addresses (for FY2022 collections) Address cumulative 100% of incorrect addresses (for FY2023 collections) 	 December 31, 2020 June 30, 2021 June 30, 2022
3. Identification and appraisal of new properties	 Utilize bulk appraisal method to appraise all properties Bill initial 25% of the backlog (for FY2021 collections) Bill cumulative 75% of the backlog (for FY2022 collections) Bill cumulative 100% of the backlog (for FY2023 collections) 	 December 31, 2020 January 1, 2021 July 1, 2021 July 1, 2022
4. Improvement in Real Property Tax Collection Rates	 Hire additional collections staff to assist with compliance efforts by January 2021 in order to increase collection rates by 170 basis points (1.7%) per year, resulting in an annual incremental revenue of \$13.8 million in FY2021, gradually increasing to \$69.0 million by FY2025 	• FYE 2025
5. Home Improvements New to Tax Rolls	 Address initial 25% of home improvements Address cumulative 50% of home improvements Address cumulative 75% of home improvements Address cumulative 100% of home improvements 	 December 31, 2020 June 30, 2021 June 30, 2022 June 30, 2023
6. FY 2019 A/R Collection	Collect \$22.4 million of outstanding balances in FY2021 and FY2022	• June 30, 2021 June 30, 2022
7. Appraisal of non-appraised properties	 Hire 23 staff, and train in time to begin sending out invoices in April 2021 Hire an additional 38 appraisal staff to continue work on backlog and new appraisals Appraise initial 25% of the backlog (for FY2022 collections) Appraise 100% of the backlog (for FY2023 collections) 	 January 31, 2021 April 30, 2021 April 30, 2021 April 30, 2022

Area of Focus	Description	Deadline
8. Swimming Pools New to Tax Rolls	 Address initial 25% of new pools by June 2020 (for FY2021 collections) Address cumulative 50% of pools (for FY2022 collections) Address cumulative 75% of pools (for FY2023 collections) Address cumulative 100% of pools (for FY2024 collections) 	 December 31, 2020 June 30, 2020 June 30, 2021 June 30, 2022
9. Improve personal property self-reporting compliance	Establish an MOU between CRIM and Hacienda	• December 31, 2020
10. Operational improvements	Implement systems hardware upgrades	• December 31, 2020
11. Commonwealth agency initiatives	 Eliminate 13th payment or identify alternative savings Align employer healthcare contributions with certified Commonwealth Fiscal Plan Implement payroll freeze 	• July 2020 – June 2021

Monitoring and Reporting

The fiscal and structural measures described in the Fiscal Plan represent a significant and transformative effort for CRIM and the Municipalities. As such, there are strict reporting requirements needed to ensure these measures are being achieved on time and to identify any risks to address them at an early stage.

To ensure that the fiscal targets contained in this Fiscal Plan are achieved, and to allow the Oversight Board to make accurate estimates of revenues and expenses, CRIM must produce monthly performance reports, which shall be submitted to the Oversight Board on the 15th of each month, demonstrating the progress made on all key measures. Progress realized must be displayed against the projections as set forth herein. **Exhibit 41** provides additional details for the reporting requirements.

Exhibit 41: Reporting Requirements

	Reporting requirements	Cadence for FOMB reporting	Reporting requirement source
Actuals reporting	Monthly reports of actual cash revenues, actual cash expenses, and cash flow	Monthly	Fiscal Plan
	Headcount and payroll - including fringe benefits expenses	Monthly	Fiscal Plan
	Monthly and quarterly reports detailing actual versus projected budget	Monthly, quarterly	Fiscal Plan

	Reporting requirements	Cadence for FOMB reporting	Reporting requirement source
	Sale of A/R	Monthly	Fiscal Plan
	Incorrect mailing addresses	Monthly	Fiscal Plan
	Identification and appraisal of new properties	Monthly	Fiscal Plan
	Improvement in real property tax collection rates	Monthly	Fiscal Plan
Measures	Home improvement new to tax rolls	Monthly	Fiscal Plan
progress	FY2019 A/R collection	Monthly	Fiscal Plan
reports	Appraisal of non-appraised properties	Monthly	Fiscal Plan
	Swimming pool new to tax rolls	Monthly	Fiscal Plan
	Personal Property Self-Reporting Compliance	Monthly	Fiscal Plan
	Operational improvement efforts	Monthly	Fiscal Plan
	Commonwealth agency initiatives	Monthly	Fiscal Plan

Measures Progress reports must include: (a) Monthly monitoring by each key performance indicators for each of the measures; (b) Monthly self-reported realized savings achieved year to date for each the measures; and (c) Implementation dashboard/tracker that provides the status of each measure. If, after any fiscal quarter, the projected progress for any measure is not realized, the Oversight Board may use any of its powers to correct the corresponding shortfall.

Part VI. Forecast with Measures

Targets set forth in this Fiscal Plan are incremental to any baseline projections as it includes improved collections and cost-savings achieved by the successful implementation of the certified Fiscal Plan measures. As identified in **Exhibit 42 and 43**, the impact of the measures results in an estimated revenue increase of 19% to 49% from the base case for each year of projected results. These funds will be redistributed to municipalities according to the applicable law.

Exhibit 42: Property Tax Baseline and Measures

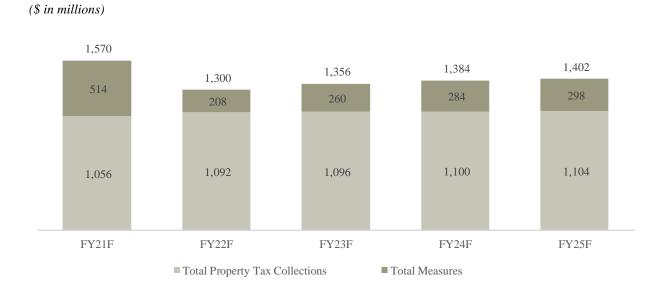


Exhibit 43: Property Tax Baseline and Measures Breakdown

(\$ in millions)

		Forec	ast		
	FY2021	FY2022	FY2023	FY2024	FY2025
Baseline Revenue	1,056.1	1,092.3	1,096.3	1,100.1	1,103.7
Measures					
Sale of Accounts Receivable	400.0	-	-	-	-
Incorrect Mailing Addresses	44.4	66.7	88.9	88.9	88.9
Identification and Appraisal of New Properties	22.6	67.8	90.4	90.4	90.4
Improvement in Current Year Real Property Tax Collection Rates	13.8	27.6	41.4	55.2	69.0
Home Improvements New to the Tax Rolls	10.4	20.7	31.1	41.4	41.4
FY2019 Accounts Receivables Collection	22.4	22.4	-	-	-
Appraisal of Non-Appraised Properties	-	1.5	6.2	6.2	6.2
Swimming Pools New to the Tax Rolls	0.5	1.0	1.6	2.1	2.1
Personal Property Self-Reporting Compliance	-	-	-	-	-
Operational and Organizational Initiatives	-	-	-	-	-
Commonwealth Agency Efficiencies (savings reinvested in CRIM)	-	-	-	-	-
Total Measures	514.1	207.7	259.6	284.2	298.0
Total Revenue (baseline + measures)	\$1,570.2	\$1,300.0	\$1,355.9	\$1,384.3	\$1,401.7

As mentioned above, the increase in property tax collections as a result of the measures will not be shared equally among the municipalities, as the municipalities with the highest number of properties will most likely be the ones that benefit the most. To ensure that the smaller municipalities also benefit from these measures and adequate funding is provided to essential services, CRIM must work closely with the municipalities, AAFAF and the Oversight Board to investigate a funding strategy where the municipalities with the higher number of properties would contribute a portion of their collections to the Equalization Fund, which would be disbursed to the smaller municipalities.

Part VII. Appendix

Appendix 1: Commonwealth Support to Incentivize Municipal Service Consolidation

Vision and reform needed to transform municipal services

Given the lack of meaningful progress to date in achieving municipal government services reform and municipalities' financial challenges, particularly in the context of the Hurricanes, earthquakes, and COVID-19, the Government will need to develop a solution to streamline and consolidate municipal services throughout Puerto Rico. Otherwise, the Government faces the prospect of expanding municipal operating deficits, further deteriorating infrastructure, and worsening service delivery.

Since municipalities provide services that are, in most cases, complementary to those of the Government, the Commonwealth should take this opportunity to rethink the entire governmental structure, not just that of municipal governments. This will allow the Government to deliver better services across agencies in coordination with municipalities, and to do so more cost-effectively. A centralized approach has proven, repeatedly, to be inadequate for the management of various government programs in Puerto Rico. A new decentralized model could remove the bottleneck of centralized Commonwealth agencies, dramatically increasing the capacity to respond to a crisis and improving service delivery at a local level. Unfortunately, the vast majority of municipalities do not (individually) have the administrative or financial capacity to operate Commonwealth programs. Many also lack the economies of scale necessary to be efficient with programs such as ASUME, ADFAN, or Vivienda. However, a consolidated municipal service structure could enable the delegation of certain Commonwealth responsibilities to local governments. Such a model could yield municipal, and Commonwealth savings and a portion of those savings could be reinvested back into the municipalities where savings are realized.

In addition, a more integrated government structure could help implement locally-based economic development strategies, which are more viable at a regional level than on an individual municipality basis. On the revenue side, service consolidation could further enhance the coordination of property tax collection by standardizing and automating processes and integrating data and information systems.

Incentivizing consolidation of services

To further incentivize service consolidation, the 2020 Commonwealth Fiscal Plan lays out a set of voluntary options for municipalities to consider. By consolidating services, municipalities will be able to reduce costs significantly. Under this approach, municipalities that voluntarily choose to consolidate services will be eligible to receive a one-time financial incentive upon certification of such action by the Oversight Board. To fund this initiative, the 2020 Fiscal Plan sets aside \$22 million in each fiscal year through FY2025 for distribution among municipalities that complete service consolidations, as confirmed by the Oversight Board. The amount distributed will be determined in coordination between AAFAF and the Oversight Board and will depend on the size of the municipality and the scale of service consolidation. The 2020 Fiscal Plan otherwise maintains the overall approach of phasing-out the entirety of municipal appropriations, which will reach zero by FY2025.

Appendix 2: Commonwealth Earthquake Support Transfer by Municipality (*Dollars in actuals*)

	:	\$ Amount				
Municipality	Received from					
		CW				
Total	\$	14,861,000				
Adjuntas	\$	250,000				
Cabo Rojo	\$	250,000				
Guánica	\$	2,000,000				
Guayanilla	\$	2,000,000				
Hormigueros	\$	111,000				
Jayuya	\$	250,000				
Juana Díaz	\$	250,000				
Lajas	\$	250,000				
Lares	\$	250,000				
Las Marías	\$	250,000				
Maricao	\$	250,000				
Peñuelas	\$	2,000,000				
Ponce	\$	2,000,000				
Sabana Grande	\$	250,000				
San Germán	\$	250,000				
Utuado	\$	2,000,000				
Villalba	\$	250,000				
Yauco	\$	2,000,000				

Appendix 3: Emergency Measure Support Package by Municipality

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_	Popul	ation % distrib	ution		Equitative + Po	pulation	
		% of total	Support by	Uniform			
Municipality	Pop. ¹	Population	Muni	Support	Pop. Adjustm	ents	Total
San German	30,229	0.9%	946,089	1,000,000	350,000	-	1,350,000
Camuy	30,503	1.0%	954,665	1,000,000	350,000	-	1,350,000
Yabucoa	32,158	1.0%	1,006,462	1,000,000	350,000	-	1,350,000
Corozal	32,320	1.0%	1,011,532	1,000,000	350,000	-	1,350,000
Yauco	33,860	1.1%	1,059,730	1,000,000	350,000	-	1,350,000
Moca	34,909	1.1%	1,092,561	1,000,000	350,000	-	1,350,000
San Sebastian	35,652	1.1%	1,115,815	1,000,000	350,000	-	1,350,000
Dorado	35,779	1.1%	1,119,790	1,000,000	350,000	-	1,350,000
Vega Alta	35,806	1.1%	1,120,635	1,000,000	350,000	-	1,350,000
San Lorenzo	35,900	1.1%	1,123,577	1,000,000	350,000	-	1,350,000
Las Piedras	36,458	1.1%	1,141,041	1,000,000	350,000	-	1,350,000
Aguada	36,621	1.1%	1,146,142	1,000,000	350,000	-	1,350,000
Manati	37,393	1.2%	1,170,304	1,000,000	350,000	-	1,350,000
Juncos	37,723	1.2%	1,180,632	1,000,000	350,000	-	1,350,000
Coamo	37,845	1.2%	1,184,450	1,000,000	350,000	-	1,350,000
Cidra	38,288	1.2%	1,198,315	1,000,000	350,000	-	1,350,000
Hatillo	38,826	1.2%	1,215,153	1,000,000	350,000	-	1,350,000
Guayama	39,521	1.2%	1,236,905	1,000,000	350,000	-	1,350,000
Isabela	40,268	1.3%	1,260,284	1,000,000	350,000	-	1,350,000
Cayey	42,349	1.3%	1,325,414	1,000,000	350,000	-	1,350,000
Canovanas	44,296	1.4%	1,386,350	1,000,000	350,000	-	1,350,000
Juana Diaz	44,510	1.4%	1,393,048	1,000,000	350,000	-	1,350,000
Gurabo	46,068	1.4%	1,441,809	1,000,000	350,000	-	1,350,000
Cabo Rojo	47,117	1.5%	1,474,640	1,000,000	350,000	-	1,350,000
Rio Grande	47,889	1.5%	1,498,801	1,000,000	350,000	-	1,350,000
Vega Baja	50,185	1.6%	1,570,660	1,000,000	350,000	400,000	1,750,000
Humacao	50,532	1.6%	1,581,521	1,000,000	350,000	400,000	1,750,000
Aguadilla	50,598	1.6%	1,583,586	1,000,000	350,000	400,000	1,750,000
Trujillo Alto	63,746	2.0%	1,995,084	1,000,000	350,000	400,000	1,750,000
Toa Alta	71,094	2.2%	2,225,058	1,000,000	350,000	400,000	1,750,000
Mayaguez	71,986	2.3%	2,252,975	1,000,000	350,000	400,000	1,750,000
Toa Baja	74,623	2.3%	2,335,506	1,000,000	350,000	400,000	1,750,000
Arecibo	82,114	2.6%	2,569,955	1,000,000	350,000	400,000	1,750,000
Guaynabo	83,787	2.6%	2,622,316	1,000,000	350,000	400,000	1,750,000
Caguas	124,434	3.9%	3,894,461	1,000,000	350,000	400,000	1,750,000
Ponce	133,191	4.2%	4,168,533	1,000,000	350,000	400,000	1,750,000
Carolina	147,661	4.6%	4,621,406	1,000,000	350,000	400,000	1,750,000
Bayamon	170,480	5.3%	5,335,582	1,000,000	350,000	400,000	1,750,000
San Juan	320,967	10.0%	10,045,434	1,000,000	350,000	400,000	1,750,000
Total	3,195,153	100%	\$100,000,000	\$78,000,000	\$16,450,000	\$5,600,000	\$100,050,000

Note:

^{1.} AAFAF used population estimates from US Census Bureau (2018 estimate) for the allocation of the funds

Appendix 4: FY2018 Real property Tax Exemptions by Land Use Categories¹⁸

			_	Properties Receiving Some Exemption			Properties Receiv	ing No Exemption
	Total	% of Total	% of Total	% of Value	Average	Effective Tax		
Land Use Category	Properties	Properties	Value	Exempted	Exemption Rate	Rate	Percent of Value	Effective Tax Rate
Single-family	931,340	71.2%	49.2%	67.4%	95.0%	1.2%	23.9%	10.3%
Residential, Vacant	189,572	14.5%	4.7%	52.3%	97.1%	0.8%	43.6%	10.2%
Condominiums	77,438	5.9%	5.8%	53.2%	92.9%	1.5%	38.1%	10.3%
Residential, other	56,597	4.3%	4.4%	45.2%	74.9%	3.0%	36.7%	10.3%
Retail stores	21,426	1.6%	4.1%	13.4%	88.3%	0.8%	85.3%	10.3%
Office and office buildings	7,671	0.6%	2.0%	12.9%	90.5%	1.4%	85.2%	10.3%
Mixed use	6,224	0.5%	0.7%	18.3%	61.7%	4.5%	66.9%	9.6%
Institutional, all	3,534	0.3%	2.3%	89.7%	98.8%	0.2%	8.3%	10.1%
Motor vehicle-related	2,813	0.2%	0.6%	2.7%	82.5%	1.9%	96.6%	10.3%
Warehouse & distribution cent	2,147	0.2%	6.0%	59.6%	88.3%	1.0%	33.7%	10.2%
Commercial, All other	2,045	0.2%	4.4%	11.8%	34.7%	8.6%	30.6%	10.3%
Entertainment	1,874	0.1%	0.6%	19.8%	88.2%	0.8%	78.5%	10.4%
Parking buildings	1,788	0.1%	0.2%	16.6%	93.9%	0.6%	82.5%	10.2%
Industrial, All other	870	0.1%	6.3%	79.2%	88.5%	0.9%	13.1%	10.2%
Commercial, vacant	730	0.1%	0.2%	8.5%	96.3%	0.7%	90.8%	10.4%
Agricultural, all	606	0.0%	0.2%	57.3%	93.2%	0.3%	41.2%	10.5%
Shopping mall	436	0.0%	1.6%	0.6%	89.3%	5.8%	98.2%	9.6%
Hotels, motels, guesthouses, ho	290	0.0%	1.2%	76.4%	90.5%	1.1%	14.4%	10.4%
Industrial, vacant	225	0.0%	0.1%	26.6%	97.5%	0.8%	71.4%	9.5%
Supermarkets	207	0.0%	0.2%	2.5%	100.0%	0.0%	97.5%	10.2%
Department stores	139	0.0%	0.4%	0.6%	98.6%	0.5%	99.3%	10.1%
Pharmaceutical	81	0.0%	4.9%	88.3%	91.6%	0.7%	5.5%	10.3%
Total	1,308,053	100.0%	100.0%	58.3%	93.9%	1.5%	31.8%	10.2%

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¹⁸ Source: Property Taxes in Puerto Rico: Assessment and Recommendations, March 2019.

Appendix 5: Real Property Tax Exemptions by State and Type¹⁹

State	General	Senior	Disability- related /1	Military duty- related /2	Other /3	None
Alabama	X	X	X	X		
Alaska		X		X		
Arizona			X		X	
Arkansas				X		
California	X			X		
Colorado		X		X		
Connecticut			X	X		
Delaware		X				
District of Columbia	X					
Florida	X		X	X	X	
Georgia	X	X		X		
Hawaii	X	X	X	X	X	
Idaho	X					
Illinois	X	X	X	X	X	
Indiana	X	X	X	X	X	
Iowa	Λ	Α	Α	X	Α	
Kansas	X			Λ		
Kentucky	λ					X
Louisiana	X			X	X	
Maine	X		v	Α	Α	
Maryland	X		X	X		
			X			
Massachusetts	X	X	X	X	X	
Michigan	X				X	
Minnesota	X			X		
Mississippi	X	X		X		
Missouri						X
Montana						X
Nebraska				X		
Nevada			X	X	X	
New Hampshire		X	X			
New Jersey				X		
New Mexico				X	X	
New York	X	X	X	X	X	
North Carolina		X	X	X		
North Dakota			X	X		
Ohio		X	X	X		
Oklahoma	X			X	X	
Oregon				X		
Pennsylvania	X			X		
Rhode Island						X
South Carolina	Х	Х	X	X	X	
South Dakota				X		
Tennessee						X
Texas	X			X		
Utah	X		X	X		
Vermont				X		
Virginia		X	X	X	X	
Washington		X	X	X		
West Virginia		X	X			
Wisconsin	X					
Wyoming				X		
Total	23	18	21	36	14	5

^{/1} General disability; blind; deaf /2 Veterans; disabled veterans; widow of the veteran; active duty military /3 Includes Widows, low income; law enforcement and firefighter related; and others

¹⁹ Source: Lincoln Institute of Land Policy, Residential Property Tax Relief Programs database

Appendix 6: FY2019 Real Property Counts and Values by Municipality (Dollars in thousands)

		Qualifying Pr	roperty Counts				Property Value	FY2019				
Municipality	Total	Exemptions	Exonerations	Taxable	Total	Exemptions	Exonerations	Net Taxable	% Taxable	Billing	Current Collections	Collection Rate
Total	1,316,860	56,123	759,589	685,293	\$19,276,026	(\$4,139,071)	(\$7,120,740)	\$8,016,215	42%	\$824,877	\$558,271	68%
Adjuntas	6,296	287	2,808	4,224	\$39,211	(\$1,728)	(\$19,075)	\$18,408	47%	\$1,533	\$843	55%
Aguada	16,008	3 299	7,405	9,979	122,775	(7,866)			44%	4,770	2,660	56%
Aguadilla	26,029	615	5 13,077	14,942	325,228	(85,144)	(113,166)	126,918	39%	13,111	7,922	60%
Aguas Buenas	9,202	. 175	5 4,488	5,912	70,003	(2,177)	(36,923)	30,903	44%	3,192	1,804	57%
Aibonito	9,277	329	5,304	4,524	89,395	(17,114)	(42,401)	29,880	33%	2,788	1,738	62%
Añasco	10,105	5 202	2 5,322	5,749	106,942	(16,603)	(45,139)	45,200	42%	4,375	2,527	58%
Arecibo	34,591	1,111	1 18,335	17,827	404,658	(80,990)	(159,243)	164,425	41%	19,031	10,176	53%
Arroyo	7,637	350) 4,735	2,828	61,992	(3,610)	(37,089)	21,292	34%	2,200	1,303	59%
Barceloneta	9,132	. 433	3 5,855	3,466	650,323	(515,879)	(48,352)	86,091	13%	8,139	4,568	56%
Barranquitas	5,579	203	3 2,652	3,289	48,188	(6,488)	(21,494)	20,206	42%	1,885	1,142	61%
Bayamón	70,899	1,549	9 48,480	29,773	1,050,324	(74,666)	(491,687)	483,970	46%	46,151	32,571	71%
Cabo Rojo	30,351	725	5 12,681	19,617	261,392	(10,339)	(113,579)	137,473	53%	13,857	9,230	67%
Caguas	49,040	1,412	2 33,648	22,979	734,238	(65,413)	(331,887)	336,938	46%	34,557	25,720	74%
Camuy	12,434	349	9 6,068	6,980	87,589	(2,665)	(49,544)	35,380	40%	3,655	2,085	57%
Canóvanas	15,793	1,212	2 9,311	8,058	192,862	(17,586)	(89,472)	85,804	44%	8,817	5,480	62%
Carolina	64,834	2,058	8 43,520	30,839	1,335,551	(355,366)	(470,225)	509,960	38%	57,778	41,565	72%
Cataño	6,437	192	2 4,709	3,015	151,023	(25,133)	(45,837)	80,054	53%	7,586	6,389	84%
Cayey	17,223	654	4 9,747	9,751	214,281	(31,122)	(85,382)	97,778	46%	10,345	7,469	72%
Ceiba	6,127	370	3,448	2,898	57,504	(4,205)	(29,656)	23,643	41%	2,206	1,491	68%
Ciales	6,424	201	1 2,894	3,937	43,262	(2,906)	(20,442)	19,915	46%	2,057	955	46%
Cidra	14,552	288	8 8,108	8,204	210,226	(67,349)	(71,761)	71,116	34%	8,746	5,493	63%
Coamo	14,809	627	7 9,005	6,622	123,898	(11,021)	(72,950)	39,926	32%	4,124	2,517	61%
Comerío	3,968	3 223	3 1,976	2,135	30,550	(2,588)	(14,691)	13,272	43%	1,205	710	59%
Corozal	8,110	147	7 4,223	4,553	65,331	(2,785)	(32,489)	30,057	46%	2,955	1,627	55%
Culebra	1,479	····		····	13,299	(881)			81%	956	603	63%
Dorado	13,418	3 1,048	8 8,227	7,449	290,686	(46,732)	(88,388)	155,566	54%	16,425	12,316	75%
Fajardo	17,710	~~~~~	·····	8,203	252,354	(22,467)	(92,490)	137,396	54%	14,193	7,697	54%
Florida	3,952	143	3 2,371	1,710	29,728	(1,055)	(18,471)	10,203	34%	1,054	512	49%
Guánica	7,977	841	1 4,478	3,173	71,471	(8,382)	(33,281)	29,808	42%	3,154	1,336	42%
Guayama	17,722		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	7,379	598,197	(398,845)	(83,847)	115,506	19%	11,643	7,815	67%
Guayanilla	6,453	~~~~~		2,860	55,126	(9,629)	(26,712)	18,785	34%	2,034	1,089	54%
Guaynabo	33,294	1,33	7 20,910	23,858	821,020	(56,847)	(263,125)	501,049	61%	50,465	40,707	81%
Gurabo	16,237		5 11,156		291,344	(80,005)	(116,681)		32%	11,198	7,694	69%
Hatillo	13,323	343	3 7,308	6,962	134,815	(6,790)	(63,526)	64,499	48%	5,837	3,833	66%
Hormigueros	6,797	165	5 4,300	2,901	72,673	(4,672)	(38,677)	29,324	40%	2,883	2,035	71%
Humacao	23,781	985	5 13,224	13,124	406,239	(96,018)	(128,741)	181,481	45%	16,025	11,172	70%
Isabela	21,895	574	4 10,612	12,487	426,613	(264,923)	(85,062)	76,628	18%	7,149	4,576	64%
Jayuya	4,582	225	5 2,383	2,566	37,563	(5,558)	(18,217)	13,788	37%	1,114	649	58%
Juana Díaz	18,057	1,26	1 11,941	6,341	246,111	(93,502)	(98,901)	53,708	22%	5,011	3,016	60%

	Qualifying Property Counts					Property Values					FY2019			
Municipality	Total	Exemptions	Exonerations	Taxable	Total	Exemptions	Exonerations	Net Taxable	% Taxable	Billing	Current Collections	Collection Rate		
Total	1,316,860	56,123	759,589	685,293	\$19,276,026	(\$4,139,071)	(\$7,120,740)	\$8,016,215	42%	\$824,877	\$558,271	68%		
Juncos	14,579	1,009	9,27	5,552	602,073	(455,090)	(81,500)	65,484	11%	7,419	5,063	68%		
Lajas	12,066	296			90,838	(5,332)	(45,942)	39,565	44%	4,878	2,840	58%		
Lares	8,979	207	7 4,232	5,727	66,730	(3,845)	(33,401)	29,484	44%	2,972	1,710	58%		
Las Marías	3,378	103	3 1,37	2,474	21,384	(712)	(9,877)	10,796	50%	883	470	53%		
Las Piedras	13,417	493	3 8,57	7 6,670	197,264	(44,851)	(82,153)	70,261	36%	7,161	3,575	50%		
Loíza	8,222	848	3 4,425	3,492	78,936	(7,679)	(38,104)	33,152	42%	3,889	2,325	60%		
Luquillo	9,678	484	4 5,079	5,576	108,901	(7,953)	(49,277)	51,672	47%	4,563	3,208	70%		
Manatí	15,112	318	8,619	7,587	272,528	(106,399)	(76,275)	89,854	33%	8,302	5,288	64%		
Maricao	1,786	92	2 61	1,302	12,444	(2,226)	(3,811)	6,407	51%	662	426	64%		
Maunabo	4,614	465	5 2,419	2,102	33,684	(2,460)	(18,604)	12,619	37%	1,240	775	63%		
Mayaguez	35,264	822	2 16,184	1 22,793	429,609	(44,435)	(146,697)	238,477	56%	25,231	16,997	67%		
Moca	14,818	212	2 6,918	9,255	102,308	(4,342)	(55,476)	42,491	42%	4,071	2,378	58%		
Morovis	7,631	244	4 4,632	3,582	66,511	(1,804)	(38,605)	26,102	39%	2,827	1,631	58%		
Naguabo	10,274	555	5 6,155	4,647	99,720	(9,194)	(54,666)	35,860	36%	3,525	2,005	57%		
Naranjito	6,689	150	5 3,473	3,977	54,088	(1,529)	(28,257)	24,302	45%	2,389	1,526	64%		
Orocovis	5,804	95	5 2,499	3,951	41,580	(1,891)	(19,424)	20,265	49%	1,627	1,026	63%		
Patillas	7,254	25	7 4,07	7 3,454	52,358	(2,245)	(30,664)	19,448	37%	2,009	1,080	54%		
Peñuelas	7,704	66	7 4,305	3,334	298,853	(220,229)	(30,019)	48,606	16%	4,170	2,997	72%		
Ponce	57,771	4,049	9 35,27	7 24,138	790,442	(148,934)	(309,459)	332,049	42%	40,715	27,063	66%		
Quebradillas	10,712	218	5,558	5,846	78,776	(3,079)	(44,535)	31,162	40%	2,752	1,537	56%		
Rincón	8,599	157	7 3,375	5,928	73,140	(6,633)	(27,446)	39,060	53%	4,230	2,829	67%		
Río Grande	22,752	1,259	9 11,883	3 12,214	305,582	(54,862)	(118,671)	132,049	43%	13,641	8,669	64%		
Sabana Grande	9,443	330	5,643	3 4,341	78,346	(7,462)	(46,298)	24,586	31%	2,540	1,599	63%		
Salinas	12,228	989	9 6,934	4,947	106,873	(15,198)	(53,599)	38,076	36%	3,933	1,944	49%		
San Germán	13,662	331	7,017	7,911	126,023	(12,082)	(62,665)	51,277	41%	5,169	3,307	64%		
San Juan	142,019	6,310	5 79,018	86,288	2,853,106	(319,172)	(878,302)	1,655,632	58%	167,590	120,960	72%		
San Lorenzo	13,853	396	5 8,306	5 7,180	123,077	(10,080)	(71,171)	41,826	34%	4,279	2,834	66%		
San Sebastían	19,163	368	9,035	5 12,000	149,606	(11,374)	(74,520)	63,712	43%	5,785	3,597	62%		
Santa Isabel	8,895	688	5,503	3,108	86,219	(14,577)	(43,880)	27,763	32%	3,007	1,746	58%		
Toa Alta	21,769	1,017	7 15,349	10,679	258,061	(13,014)	(163,131)	81,916	32%	9,281	6,593	71%		
Toa Baja	25,662	1,530	18,696	5 8,585	316,466	(17,064)	(174,111)	125,292	40%	14,668	9,587	65%		
Trujillo Alto	23,163	623	3 15,838	3 11,977	318,659	(13,141)	(175,652)	129,867	41%	13,740	9,173	67%		
Utuado	9,544	254	4,252	6,193	64,356	(1,572)	(31,837)	30,947	48%	2,681	1,513	56%		
Vega Alta	11,589	1,160	6,505	5,954	153,267	(13,168)	(62,098)	78,001	51%	6,771	4,291	63%		
Vega Baja	20,776	1,524	4 14,038	7,751	214,397	(10,497)	(117,186)	86,715	40%	8,958	4,883	55%		
Vieques	5,152	1,746	5 1,55	7 2,325	38,385	(9,318)	(10,681)	18,386	48%	1,991	1,219	61%		
Villalba	5,995	278	3,522	2 2,746	49,622	(3,883)	(27,894)	17,845	36%	1,710	990	58%		
Yabucoa	11,150	57(0 6,37	5,348	101,292	(12,353)	(51,871)	37,068	37%	4,014	2,099	52%		
Yauco	14,160	60′	7 8,328	6,599	136,534	(12,346)	(71,892)	52,296	38%	5,402	3,483	64%		

Appendix 7: Incentive Laws

The Central Government has enacted various laws that provide economic incentives to eligible businesses and companies to encourage job creation and investment. Tax exemptions may be granted on income taxes, real and personal property taxes, municipal licenses taxes, construction excise taxes, and other municipal income taxes levied by municipal ordinances.

The table below summarizes the most significant incentive laws enacted by the Central Government, as identified in CRIM's 2018 Financial Statements.

Act No.	Purpose	Exemptions impacting Municipalities
Act 362-1992	Promote the film industry and other related activities by incentivizing investment that creates an adequate infrastructure for the development of the industry	 Properties devoted to a film project or infrastructure project are entitled to a 90% exemption of municipal and Commonwealth taxes on real or personal property, for a 10-year period Film entities are not subject to municipal license taxes, construction excise taxes, and other municipal income taxes levied by a municipal ordinance
Act 73-2008	Offers an attractive tax structure to attract direct foreign investment to promote the economic development and social betterment of Puerto Rico	 Businesses that hold a decree under this act are entitled to a 90% exemption on municipal and Commonwealth taxes on real and personal property Businesses are also entitled to a 60% exemption on municipal license fees, municipal construction excise taxes, and other municipal income taxes levied by a municipal ordinance
Act 74-2010	Reduce construction and operation costs, and facilitate the investment of tourism-related businesses to make Puerto Rico a world-class tourist destination	 Any property devoted to tourism activity is entitled to a 90% exemption on municipal and Commonwealth taxes on real and personal property, for a 10-year period Eligible new businesses are not subject to the payment of license fees, construction excise taxes, and other municipal taxes. Existing businesses are entitled to a 90% exemption Eligible businesses and their contractors or subcontractors are entitled to 100% exemption on any tax, levy, fee, license, excise tax, rate, or charge for the construction of tourism-related works imposed by a municipal ordinance
Act 118-2010	Foster the economic development of municipalities	- Any tourist facility that operates games of chances are entitled to an exemption of 90% of the preferential tax on real and personal property used
Act 27-2011	Provide an adequate framework for the continued development of the film industry and other related activities by fostering economic development and investments	 Personal and real properties devoted to activities covered under this act are entitled to a 90% exemption on municipal and Commonwealth taxes Eligible businesses are not subject to municipal license taxes, construction excise taxes, and other municipal income taxes imposed by municipal ordinance

Act 20-2012	Develop Puerto Rico as an international service center, encourage local professionals to stay and return, and attract foreign capital	-	Personal and real properties used in the operation of the activity covered by a decree under this act is entitled to 90% of the exemption on municipal and Commonwealth taxes
Act 168-1968	Grant tax incentives to Hospitals and other applicable health provider's facilities to promote development and investment	-	Personal and real properties used to provide health services are entitled to a 100% exemption on municipal and Commonwealth taxes Hospitals or eligible health service facilities are not subject to municipal license taxes, excise taxes, and other municipal income taxes levied by a municipal ordinance
Act 225-1995	Provide "bona fide farmers" with exemptions to promote agricultural development	-	Personal and real properties used for agricultural businesses and purposes are entitled to a 100% exemption on municipal and Commonwealth taxes "Bona fide farmer" is not subject to municipal license taxes, excise taxes, and other municipal income taxes levied by a municipal ordinance
Act 83-2010	Establish measures aimed at fostering the development of sustainable energy systems	-	Eligible businesses and companies under this Act are entitled to a 90% exemption on municipal and Commonwealth taxes on real and personal property Eligible businesses and companies are entitled to a 60% exemption on municipal license taxes, excise taxes, and other municipal income taxes levied by a municipal ordinance

Appendix 8: Real Property Tax Rates by Municipality

	Real Property					
	Basic Municipal	State Redemption	Special Additional	Total		Total
	Contribution	Fund (GO)	Tax (CAE)	Pre-discount	Discount	Post-discount
	(A)	(B)	(C)	D=A+B+C	(E)	F=D+E
Adjuntas	6.00%	1.03%	1.50%	8.53%	(0.20%)	8.33%
Aguada	6.00%	1.03%	2.00%	9.03%	(0.20%)	8.83%
Aguadilla	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Aguas Buenas	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Aibonito	6.00%	1.03%	2.50%	9.53%	(0.20%)	9.33%
Añasco	6.00%	1.03%	2.85%	9.88%	(0.20%)	9.68%
Arecibo	6.00%	1.03%	4.80%	11.83%	(0.20%)	11.63%
Arroyo	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Barceloneta	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Barranquitas	6.00%	1.03%	2.50%	9.53%	(0.20%)	9.33%
Bayamón	6.00%	1.03%	2.75%	9.78%	(0.20%)	9.58%
Cabo Rojo	6.00%	1.03%	3.25%	10.28%	(0.20%)	10.08%
Caguas	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Camuy	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Canóvanas	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Carolina	6.00%	1.03%	4.50%	11.53%	(0.20%)	11.33%
Cataño	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Cayey	6.00%	1.03%	3.75%	10.78%	(0.20%)	10.58%
Ceiba	6.00%	1.03%	2.50%	9.53%	(0.20%)	9.33%
Ciales	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Cidra	6.00%	1.03%	5.50%	12.53%	(0.20%)	12.33%
Coamo	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Comerío	6.00%	1.03%	2.25%	9.28%	(0.20%)	9.08%
Corozal	6.00%	1.03%	3.00%	10.03%	(0.20%)	9.83%
Culebra	6.00%	1.03%	2.00%	9.03%	(0.20%)	8.83%
Dorado	6.00%	1.03%	3.75%	10.78%	(0.20%)	10.58%
Fajardo	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Florida	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Guánica	6.00%	1.03%	3.75%	10.78%	(0.20%)	10.58%
Guayama	6.00%	1.03%	3.25%	10.28%	(0.20%)	10.08%
Guayanilla	6.00%	1.03%	4.00%	11.03%	(0.20%)	10.83%
Guaynabo	6.00%	1.03%	5.00%	12.03%	(0.20%)	11.83%
Gurabo	6.00%	1.03%	3.00%	10.03%	(0.20%)	9.83%
Hatillo	5.72%	1.03%	2.50%	9.25%	(0.20%)	9.05%
Hormigueros	6.00%	1.03%	3.00%	10.03%	(0.20%)	9.83%
Humacao	6.00%	1.03%	2.00%	9.03%	(0.20%)	8.83%
Isabela	6.00%	1.03%	2.50%	9.53%	(0.20%)	9.33%
Jayuya	6.00%	1.03%	1.25%	8.28%	(0.20%)	8.08%
Juana Díaz	6.00%	1.03%	2.50%	9.53%	(0.20%)	9.33%

	Basic Municipal	State Redemption	Special Additional Tax (CAE) (C)	Total	Discount (E)	Total Post-discount F=D+E
	Contribution	Fund (GO)		Pre-discount D=A+B+C		
	(A)					
Juncos	6.00%	1.03%	4.50%	11.53%	(0.20%)	11.33%
Lajas	6.00%	1.03%	5.50%	12.53%	(0.20%)	12.33%
Lares	6.00%	1.03%	3.25%	10.28%	(0.20%)	10.08%
Las Marías	6.00%	1.03%	1.35%	8.38%	(0.20%)	8.18%
Las Piedras	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Loíza	6.00%	1.03%	4.90%	11.93%	(0.20%)	11.73%
Luquillo	6.00%	1.03%	2.00%	9.03%	(0.20%)	8.83%
Manatí	6.00%	1.03%	2.75%	9.78%	(0.20%)	9.58%
Maricao	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Maunabo	6.00%	1.03%	3.00%	10.03%	(0.20%)	9.83%
Mayagüez	6.00%	1.03%	3.75%	10.78%	(0.20%)	10.58%
Moca	6.00%	1.03%	2.75%	9.78%	(0.20%)	9.58%
Morovis	6.00%	1.03%	4.00%	11.03%	(0.20%)	10.83%
Naguabo	6.00%	1.03%	3.00%	10.03%	(0.20%)	9.83%
Naranjito	6.00%	1.03%	3.00%	10.03%	(0.20%)	9.83%
Orocovis	6.00%	1.03%	1.20%	8.23%	(0.20%)	8.03%
Patillas	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Peñuelas	6.00%	1.03%	1.75%	8.78%	(0.20%)	8.58%
Ponce	6.00%	1.03%	5.50%	12.53%	(0.20%)	12.33%
Quebradillas	6.00%	1.03%	2.00%	9.03%	(0.20%)	8.83%
Rincón	6.00%	1.03%	4.00%	11.03%	(0.20%)	10.83%
Río Grande	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Sabana Grande	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Salinas	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
San Germán	6.00%	1.03%	3.25%	10.28%	(0.20%)	10.08%
San Juan	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
San Lorenzo	6.00%	1.03%	3.40%	10.43%	(0.20%)	10.23%
San Sebastián	6.00%	1.03%	2.25%	9.28%	(0.20%)	9.08%
Santa Isabel	6.00%	1.03%	4.00%	11.03%	(0.20%)	10.83%
Toa Alta	6.00%	1.03%	4.50%	11.53%	(0.20%)	11.33%
Toa Baja	6.00%	1.03%	5.00%	12.03%	(0.20%)	11.83%
Trujillo Alto	6.00%	1.03%	3.75%	10.78%	(0.20%)	10.58%
Utuado	6.00%	1.03%	2.00%	9.03%	(0.20%)	8.83%
Vega Alta	6.00%	1.03%	1.85%	8.88%	(0.20%)	8.68%
Vega Baja	6.00%	1.03%	3.50%	10.53%	(0.20%)	10.33%
Vieques	6.00%	1.03%	4.00%	11.03%	(0.20%)	10.83%
Villalba	6.00%	1.03%	2.75%	9.78%	(0.20%)	9.58%
Yabucoa	6.00%	1.03%	4.00%	11.03%	(0.20%)	10.83%
Vauco	6.00%	1.03%	3 50%	10.53%	(0.20%)	10 33%

3.50%

10.53%

(0.20%)

10.33%

Yauco

6.00%

1.03%

Appendix 9: Current Year Real Property Collection Rates by Municipality

Real Property Tax Collection Rate (Current Year) FY2015 FY2019 FY2016 FY2017 FY2018 54% 54% 55% 53% 55% Adjuntas Aguada 57% 55% 55% 53% 56% Aguadilla 59% 60% 62% 62% 63% Aguas Buenas 51% 53% 54% 54% 57% Aibonito 56% 61% 59% 63% 62% 58% Añasco 60% 58% 61% 58% 42% 55% 58% 54% 53% Arecibo 59% Arroyo 56% 57% 57% 55% Barceloneta 67% 69% 55% 56% Barranquitas 62% 59% 63% 60% 61% 74% 71% 71% Bayamón 72% 73% Cabo Rojo 66% 62% 66% 64% 67% Caguas 72% 71% 72% 76% 74% Camuy 54% 55% 57% Canóvanas 55% 61% 64% 62% Carolina 73% 73% 75% 73% 72% Cataño 80% 73% 77% 77% 84% Cayey 67% 71% 69% 66% 72% Ceiba 67% 69% 67% 68% 67% Ciales 47% 54% 48% 45% Cidra 43% 62% 63% 63% 63% Coamo 57% 59% 61% 61% 61% Comerío 60% 59% 60% 58% 59% 55% Corozal 51% 56% 56% 54% Culebra 54% 63% 55% 58% 61% 72% 75% 75% Dorado 73% 72% Fajardo 71% 67% 68% 69% 54% Florida 47% 48% 53% 49% 49% Guánica 44% 44% 43% 42% 42% Guayama 70% 70% 66% 67% 68% Guayanilla 52% 49% 47% 46% 54% Guaynabo 76% 79% 81% 80% 81% Gurabo 67% 70% 69% 68% 64% 67% Hatillo 66% 68% 64% 66% Hormigueros 68% 70% 71% 70% 72%

70%

61%

60%

57%

71%

62%

58%

52%

69%

62%

58%

57%

67%

60%

60%

57%

70%

64%

58%

60%

Humacao

Isabela

Jayuya

Juana Díaz

	I	Real Property Tax Co	ollection Rate (Curre	ent Year)	
	FY2015	FY2016	FY2017	FY2018	FY2019
Juncos	56%	44%	67%	66%	68%
Lajas	62%	58%	58%	59%	58%
Lares	53%	56%	58%	54%	58%
Las Marías	54%	51%	51%	56%	53%
Las Piedras	36%	38%	46%	49%	50%
Loíza	58%	58%	60%	59%	60%
Luquillo	70%	70%	71%	68%	70%
Manatí	52%	68%	65%	66%	64%
Maricao	52%	50%	49%	56%	64%
Maunabo	64%	65%	64%	62%	63%
Mayagüez	69%	70%	69%	68%	67%
Moca	59%	59%	60%	56%	58%
Morovis	50%	51%	57%	60%	58%
Naguabo	64%	62%	61%	60%	57%
Naranjito	67%	65%	65%	70%	64%
Orocovis	68%	68%	67%	63%	63%
Patillas	52%	56%	56%	55%	54%
Peñuelas	78%	76%	74%	75%	72%
Ponce	68%	68%	65%	64%	66%
Quebradillas	54%	55%	56%	54%	56%
Rincón	66%	66%	68%	64%	67%
Río Grande	62%	60%	59%	60%	64%
Sabana Grande	59%	62%	67%	63%	63%
Salinas	47%	47%	47%	48%	49%
San Germán	64%	63%	65%	61%	64%
San Juan	73%	74%	72%	73%	72%
San Lorenzo	61%	63%	65%	65%	66%
San Sebastián	59%	62%	61%	59%	62%
Santa Isabel	62%	62%	61%	63%	58%
Toa Alta	63%	64%	68%	66%	71%
Toa Baja	66%	65%	66%	63%	65%
Trujillo Alto	68%	66%	67%	66%	67%
Utuado	52%	56%	56%	54%	56%
Vega Alta	66%	67%	67%	65%	63%
Vega Baja	53%	53%	54%	53%	55%
Vieques	63%	63%	63%	61%	61%
Villalba	56%	59%	58%	55%	58%
Yabucoa	55%	56%	53%	53%	52%
Yauco	61%	61%	60%	60%	64%
Average	66%	68%	68%	67%	68%

Appendix 10: FY2019 Personal Property Counts and Values by Municipality (Dollars in thousands)

	Qualifying Property Counts					Property Value	s		FY2019			
Municipality	Total	Exemptions	Exonerations	Taxable	Total	Exemptions	Exonerations	Net Taxable	% Taxable	Billing	Current Collections	Collection Rate
Total	68,865	3,641	19,369	47,859	\$11,587,124	(\$6,615,436)	(\$89,565)	\$4,882,123	42%	\$398,067	7 \$390,448	8 98%
Adjuntas	278	20	123	143	\$6,244	(\$2,387)	(\$725)	\$3,132	50%	\$198	\$197	100%
Aguada	1.184	29	····	619	24,586	(3,996)			72%	1.203	1,221	
Aguadilla	1,671	81	552	1,100	145,261	(75,473)			46%	4,590	4,507	
Aguas Buenas	263	~~~~~~	~~~~~	155	7,861	(2,373)	·····	·····	65%	425	~~~~	~~~~~
Aibonito	558			294	134,881	(120,175)			10%	974		
Añasco	565		242	304	106,916	(82,725)		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	22%	1,776	1,776	
Arecibo	1.796	118	~~~~~~	1,131	220,341	(150,470)	~~~~		30%	5,585	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Arroyo	132			86	51,590	(41,669)			19%	809		
Barceloneta	506	35		343	539,443	(475,773)	(613)	63,057	12%	5,253	5,152	98%
Barranquitas	620	20	307	297	16,904	(2,953)	(1,496)	12,454	74%	913	828	91%
Bayamón	3,795	124	710	3,057	766,874	(287,561)			62%	35,930		
Cabo Rojo	1,021	47	399	598	46,165	(17,666)			58%	1,827	~~~~	~~~~~
Caguas	2,646	155	524	2,077	420,787	(161,439)	(2,937)	256,411	61%	21,149	21,468	102%
Camuy	717	63	277	389	19,775	(6,716)			60%	805		
Canóvanas	549			406	86,776	(53,808)			37%	2,688	2,677	
Carolina	3,083	113	528	2,532	894,202	(563,633)		~~~~	37%	30,582		~~~~~~~~~
Cataño	504				369,778	(172,136)			53%	16,397		
Cayey	801	34	231	556	177,798	(94,356)	(1,340)	82,102	46%	7,044	7,383	105%
Ceiba	205	14	75	126	6,716	(3,155)	(332)		48%	187	461	246%
Ciales	267	20	114	141	5,435	(1,778)	(586)	3,071	57%	256	271	106%
Cidra	617	36	234	372	139,604	(95,571)			31%	4,427		
Coamo	553	29	241	292	24,773	(11,411)			49%	1,007		
Comerío	228	19	····	121	6,011	(1,552)			64%	273	259	95%
Corozal	588	25	209	362	23,332	(9,995)	~~~~~		55%	1,002		
Culebra	107	4	24	84	1,641	(107)	(132)	1,403	85%	96	100	104%
Dorado	737	70	113	596	122,692	(73,576)	(454)	48,663	40%	4,297	4,327	101%
Fajardo	954	51	273	662	144,878	(86,390)	(1,148)	57,340	40%	3,916	3,728	95%
Florida	208	12	117	82	5,291	(2,391)	(493)	2,407	45%	201	185	92%
Guánica	254	21	119	122	12,059	(6,615)	(466)	4,978	41%	427	458	107%
Guayama	715	28	227	478	235,468	(184,271)	(1,351)	49,847	21%	4,028	3,962	98%
Guayanilla	260	17	124	131	23,714	(18,767)	(332)	4,615	19%	408	457	112%
Guaynabo	2,238	153	191	1,996	794,977	(373,509)	(1,208)	420,260	53%	33,957	31,613	93%
Gurabo	457	30	112	336	186,648	(153,356)			18%	2,566	2,409	94%
Hatillo	1,016	83	314	638	97,822	(12,531)	(1,361)	83,930	86%	5,917	6,064	102%
Hormigueros	411	29	133	261	22,181	(2,103)			89%	1,544		
Humacao	1,123	62		767	210,257	(114,723)		-	45%	6,430		
Isabela	1,138	60			38,875	(6,488)		····	77%	2,208		
Jayuya	249	20	110		91,101	(84,178)			7%	389		
Juana Díaz	637	31	281	339	309,480	(285,458)	(1,397)	22,625	7%	1,885	1,758	3 93%

	Qualifying Property Counts]	Property Value	s		FY2019		
Municipality	Total	Exemptions	Exonerations	Taxable	Total	Exemptions	Exonerations	Net Taxable	% Taxable	Billing	Current Collections	Collection Rate
Total	68,865	3,641	19,369	47,859	\$11,587,124	(\$6,615,436)	(\$89,565)	\$4,882,123	42%	\$398,067	\$390,448	98%
Juncos	461	34	155	289	150,887	(123,987)	(668)	26,232	17%	2,447	2,601	106%
Lajas	437	49		215	18,057	(10,280)			38%	714	800	112%
Lares	517	73	214	240	16,433	(7,231)	(985)	8,217	50%	664	662	100%
Las Marías	135	14		66	2,850	(915)		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	63%	110	122	110%
Las Piedras	592	33	201	372	515,172	(488,076)	(839)	26,257	5%	1,793	1,540	86%
Loíza	232	13	92	135	5,679	(1,391)	(289)	3,999	70%	389	410	105%
Luquillo	342	17	115	221	16,278	(2,585)	(569)	13,124	81%	896	922	103%
Manatí	1,183	56	266	890	245,931	(186,762)	(975)	58,193	24%	4,405	4,100	93%
Maricao	86	19	26	46	17,923	(14,788)	(74)	3,061	17%	178	183	102%
Maunabo	132	7	57	71	1,657	(60)	(202)	1,395	84%	95	154	162%
Mayaguez	2,086	85	498	1,555	192,558	(42,070)	(2,188)	148,301	77%	12,724	12,138	
Moca	905	45	416	467	45,313	(27,801)	(1,810)	15,703	35%	1,033	987	96%
Morovis	391	21	165	210	13,580	(4,194)	(500)	8,886	65%	629	589	94%
Naguabo	336	34	129	185	23,510	(13,084)	(536)	9,890	42%	646	669	104%
Naranjito	725	11	321	401	15,393	(1,344)	(1,301)	12,748	83%	998	980	98%
Orocovis	444	13	240	194	6,582	(683)	(855)	5,044	77%	304	311	102%
Patillas	231	9	121	105	4,562	(343)	(427)	3,793	83%	316	394	125%
Peñuelas	323	16	128	189	139,199	(122,637)	(373)	16,189	12%	1,065	1,009	95%
Ponce	3,035	146	850	2,115	411,184	(138,842)	(4,075)	268,267	65%	22,347	20,273	91%
Quebradillas	596	29	264	315	11,930	(1,711)	(1,168)	9,051	76%	618	636	103%
Rincón	424	19		275	11,071	(3,849)	(868)	6,354	57%	561	542	97%
Río Grande	568	29		390	62,655	(28,290)	(830)	33,535	54%	2,290	2,046	89%
Sabana Grande	400	22	183	207	27,878	(19,353)			28%	657	840	128%
Salinas	420	29	181	221	45,398	(32,104)	(941)		27%	1,029	747	73%
San Germán	722	38	····	427	55,361	(28,846)		25,468	46%	1,930	1,942	
San Juan	10,706	482		9,280	1,920,883	(834,399)		1,079,565	56%	89,840	90,449	
San Lorenzo	436	23		268	103,922	(77,913)	~~~~	~~~~~~~~~~	24%	2,089	1,829	
San Sebastían	1,154	115		557	39,064	(9,682)			70%	1,597	1,892	
Santa Isabel	368	40		249	77,974	(50,062)			35%	2,430	2,386	
Toa Alta	717	15		480	18,333	(1,361)		16,007	87%	1,333	1,348	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Toa Baja	1,417	59	~~~~~~	1,067	257,264	(117,492)			54%	13,526	14,491	107%
Trujillo Alto	728	23		581	48,483	(2,672)	·····		93%	3,858	3,591	93%
Utuado	549	33		274	13,946	(5,527)		····	54%	517	503	97%
Vega Alta	606	23		420	66,599	(36,700)			44%	1,945	1,774	
Vega Baja	1,125	44	336	772	280,038	(221,419)	~~~~	~~~~~~~~~~	20%	4,479	4,072	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Vieques	188	12		149	4,906	(1,907)	(193)		57%	248	233	94%
Villalba	374	12		161	31,983	(24,262)	·····		21%	565	591	105%
Yabucoa	408	37		205	76,309	(65,376)		····	14%	912	1,111	122%
Yauco	715	16	264	443	51,242	(22,204)	(1,219)	27,819	54%	2,317	2,190	94%

Appendix 11: Decrees Identified by CRIM

Ide	ntified Decrees by Origin	
Total	, U	3,887
Central Government		
Act. No. 225-1995	Agriculture	973
Act. No. 73-2008	Economic Incentives Act. of 2008	662
Act. No. 135-1997	Economic Incentives Act. of 1997	498
Article 5.01 (e) Act. No. 83-1991	Non-profit Organizations	315
Act. No. 255-1995	Cooperatives	183
Act. No. 74-2010	Tourism Development	143
Others Municipal Tax Grants	Foreign Trade Zone	143
Act. No. 168-1968	For-profit Hospital	129
Act. No. 20-2012	Law to Promote the Export of Services	103
Act. No. 83-2010	Incentives Law for Green Energy	33
Act. No. 273-2012	Regulatory Law for the International Financial Center	23
Article 5.01 (f) Act. No. 83-1991	Non-profit Hospital	17
Other Exemptions	Other	529
	Total decrees originating in the Central	3,751
	Government	
	% of the total	97%
<u>Municipalities</u>		
Others Municipal Tax Grant (Part 1)		52
Others Municipal Tax Grant (Part 2)		84
	Total decrees originating in the Municipalities	136
	% of the total	3%

Appendix 12: Personal Property Tax Rates by Municipality Personal Property

			Personal Pro	· · ·		
	Basic Municipal	State Redemption	Special Additional	Total		Total
	Contribution	Fund (GO)	Tax (CAE)	Pre-discount	Discount	Post-discount
	(A)	(B)	(C)	D=A+B+C	(E)	F=D+E
Adjuntas	4.00%	1.03%	1.50%	6.53%	(0.20%)	6.33%
Aguada	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Aguadilla	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Aguas Buenas	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Aibonito	4.00%	1.03%	2.50%	7.53%	(0.20%)	7.33%
Añasco	4.00%	1.03%	2.85%	7.88%	(0.20%)	7.68%
Arecibo	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Arroyo	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Barceloneta	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Barranquitas	4.00%	1.03%	2.50%	7.53%	(0.20%)	7.33%
Bayamón	4.00%	1.03%	2.75%	7.78%	(0.20%)	7.58%
Cabo Rojo	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Caguas	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Camuy	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Canóvanas	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Carolina	4.00%	1.03%	4.50%	9.53%	(0.20%)	9.33%
Cataño	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Cayey	4.00%	1.03%	3.75%	8.78%	(0.20%)	8.58%
Ceiba	3.72%	1.03%	1.25%	6.00%	(0.20%)	5.80%
Ciales	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Cidra	4.00%	1.03%	5.50%	10.53%	(0.20%)	10.33%
Coamo	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Comerío	4.00%	1.03%	2.25%	7.28%	(0.20%)	7.08%
Corozal	4.00%	1.03%	3.00%	8.03%	(0.20%)	7.83%
Culebra	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Dorado	4.00%	1.03%	4.00%	9.03%	(0.20%)	8.83%
Fajardo	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Florida	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Guánica	4.00%	1.03%	3.75%	8.78%	(0.20%)	8.58%
Guayama	4.00%	1.03%	3.25%	8.28%	(0.20%)	8.08%
Guayanilla	4.00%	1.03%	4.00%	9.03%	(0.20%)	8.83%
Guaynabo	4.00%	1.03%	3.25%	8.28%	(0.20%)	8.08%
Gurabo	4.00%	1.03%	3.00%	8.03%	(0.20%)	7.83%
Hatillo	3.72%	1.03%	2.50%	7.25%	(0.20%)	7.05%
Hormigueros	4.00%	1.03%	3.00%	8.03%	(0.20%)	7.83%
Humacao	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Isabela	4.00%	1.03%	2.50%	7.53%	(0.20%)	7.33%
Jayuya	4.00%	1.03%	1.25%	6.28%	(0.20%)	6.08%
Juana Díaz	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%

			Personal Pro	perty		
	Basic Municipal	•	Special Additional	Total		Total
	Contribution	Fund (GO)	Tax (CAE)	Pre-discount	Discount	Post-discount
	(A)	(B)	(C)	D=A+B+C	(E)	F=D+E
Juncos	4.00%	1.03%	4.50%	9.53%	(0.20%)	9.33%
Lajas	4.00%	1.03%	5.50%	10.53%	(0.20%)	10.33%
Lares	4.00%	1.03%	3.25%	8.28%	(0.20%)	8.08%
Las Marías	4.00%	1.03%	1.35%	6.38%	(0.20%)	6.18%
Las Piedras	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Loíza	4.00%	1.03%	4.90%	9.93%	(0.20%)	9.73%
Luquillo	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Manatí	4.00%	1.03%	2.75%	7.78%	(0.20%)	7.58%
Maricao	4.00%	1.03%	1.00%	6.03%	(0.20%)	5.83%
Maunabo	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Mayagüez	4.00%	1.03%	3.75%	8.78%	(0.20%)	8.58%
Moca	4.00%	1.03%	1.75%	6.78%	(0.20%)	6.58%
Morovis	4.00%	1.03%	2.25%	7.28%	(0.20%)	7.08%
Naguabo	4.00%	1.03%	1.70%	6.73%	(0.20%)	6.53%
Naranjito	4.00%	1.03%	3.00%	8.03%	(0.20%)	7.83%
Orocovis	4.00%	1.03%	1.20%	6.23%	(0.20%)	6.03%
Patillas	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Peñuelas	4.00%	1.03%	1.75%	6.78%	(0.20%)	6.58%
Ponce	4.00%	1.03%	5.50%	10.53%	(0.20%)	10.33%
Quebradillas	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Rincón	4.00%	1.03%	4.00%	9.03%	(0.20%)	8.83%
Río Grande	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Sabana Grande	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Salinas	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
San Germán	4.00%	1.03%	2.75%	7.78%	(0.20%)	7.58%
San Juan	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
San Lorenzo	4.00%	1.03%	3.40%	8.43%	(0.20%)	8.23%
San Sebastián	3.00%	1.03%	2.00%	6.03%	(0.20%)	5.83%
Santa Isabel	4.00%	1.03%	4.00%	9.03%	(0.20%)	8.83%
Toa Alta	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Toa Baja	4.00%	1.03%	5.00%	10.03%	(0.20%)	9.83%
Trujillo Alto	4.00%	1.03%	3.75%	8.78%	(0.20%)	8.58%
Utuado	4.00%	1.03%	2.00%	7.03%	(0.20%)	6.83%
Vega Alta	4.00%	1.03%	1.85%	6.88%	(0.20%)	6.68%
Vega Baja	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Vieques	4.00%	1.03%	4.00%	9.03%	(0.20%)	8.83%
Villalba	4.00%	1.03%	3.50%	8.53%	(0.20%)	8.33%
Yabucoa	4.00%	1.03%	4.00%	9.03%	(0.20%)	8.83%
1404004	4.000/0	1.03/0	7.00/0	7.03/0	(0.2070)	0.03/0

8.33%

Yauco

4.00%

1.03%

3.50%

8.53%

(0.20%)

Appendix 13: Advances to Municipalities (FY2021)

Tippellam 13. Tia vallees t	*	·	Less:		A 11.				
(Dollars in thousands)	Total Property Taxes	Less: CAE Collections	Redemption Fund Collections	Total Base Taxes	Add: Equalization Fund	Less: CRIM Admin Fee	Less: Net Interest	Less: Adjustments	Advances to Munis
Total	1,056,057	(385,691)	(114,602)	555,763	173,934	(27,788)	(4,000)	(11,073)	686,836
Adjuntas	1,287	(244)	(167)	877	3,555	(44)	(6)	(140)	4,242
Aguada	5,013	(1,217)	(627)	3,169	3,165	(158)	(23)	(12)	6,141
Aguadilla	14,625	(4,742)	(1,695)	8,188	-	(409)	(59)	(14)	7,706
Aguas Buenas	2,687	(943)	(277)	1,467	3,624	(73)	(11)	(14)	4,993
Aibonito	3,116	(903)	(372)	1,841	3,023	(92)	(13)	(0)	4,759
Añasco	5,222	(1,666)	(602)	2,954	2,454	(148)	(21)	(14)	5,225
Arecibo	20,649	(8,565)	(2,027)	10,058	-	(503)	(72)	(157)	9,326
Arroyo	2,498	(912)	(268)	1,317	3,188	(66)	(9)	(216)	4,214
Barceloneta	11,426	(4,304)	(1,267)	5,855	1,944	(293)	(42)	(212)	7,252
Barranquitas	2,255	(668)	(275)	1,311	4,403	(66)	(9)	(11)	5,628
Bayamón	71,539	(22,929)	(8,588)	40,021	-	(2,001)	(288)	(261)	37,471
Cabo Rojo	12,927	(4,109)	(1,418)	7,400	-	(370)	(53)	(19)	6,958
Caguas	50,121	(18,649)	(5,488)	25,984	-	(1,299)	(187)	(138)	24,360
Camuy	3,691	(1,213)	(410)	2,068	3,531	(103)	(15)	(83)	5,398
Canóvanas	9,451	(3,407)	(1,003)	5,042	2,439	(252)	(36)	(18)	7,174
Carolina	77,524	(33,032)	(7,561)	36,932	-	(1,847)	(266)	(776)	34,043
Cataño	19,753	(7,778)	(2,289)	9,687	3,955	(484)	(70)	(523)	12,565
Cayey	15,296	(5,976)	(1,641)	7,679	845	(384)	(55)	(346)	7,739
Ceiba	2,022	(528)	(241)	1,253	2,764	(63)	(9)	(63)	3,882
Ciales	1,696	(596)	(175)	925	3,071	(46)	(7)	(99)	3,844
Cidra	11,213	(5,383)	(1,008)	4,821	1,929	(241)	(35)	0	6,475
Coamo	4,257	(1,525)	(449)	2,284	3,179	(114)	(16)	(81)	5,251
Comerío	1,148	(305)	(140)	703	4,629	(35)	(5)	(61)	5,230
Corozal	3,231	(1,065)	(366)	1,800	4,127	(90)	(13)	(99)	5,725
Culebra	896	(209)	(107)	580	1,297	(29)	(4)	(193)	1,651
Dorado	19,333	(7,291)	(1,968)	10,073	288	(504)	(73)	(20)	9,765
Fajardo	13,100	(4,276)	(1,487)	7,337	1,220	(367)	(53)	(17)	8,120
Florida	925	(331)	(97)	497	3,472	(25)	(4)	(236)	3,705
Guánica	2,163	(801)	(220)	1,141	3,230	(57)	(8)	(78)	4,227
Guayama	13,305	(4,610)	(1,461)	7,234	646	(362)	(52)	(10)	7,456
Guayanilla	2,029	(783)	(202)	1,044	2,920	(52)	(8)	(281)	3,624
Guaynabo	75,034	(26,329)	(8,344)	40,360	_	(2,018)	(290)	(692)	37,360
Gurabo	11,394	(4,714)	(1,106)	5,573	1,654	(279)	(40)	(0)	6,909
Hatillo	10,573	(3,392)	(1,398)	5,783	1,888	(289)	(42)	0	7,340
Hormigueros	3,856	(1,302)	(447)	2,108	2,078	(105)	(15)	(0)	4,065
Humacao	19,180	(4,747)	(2,445)	11,989	-	(599)	(86)	(78)	11,225
Isabela	7,967	(2,304)	(949)	4,714	2,331	(236)	(34)	(4)	6,771
Jayuya	1,204	(205)	(169)	830	3,096	(41)	(6)	(52)	3,827
Juana Díaz	5,878	(1,860)	(674)	3,344	-	(167)	(24)	(14)	3,139

(Dollars in thousands)	Total Property Taxes	Less: CAE Collections	Less: Redemption Fund Collections	Total Base Taxes	Add: Equalization Fund	Less: CRIM Admin Fee	Less: Net Interest	Less: Adjustments	Advances to Munis
Total	1,056,057	(385,691)	(114,602)	555,763	173,934	(27,788)	(4,000)	(11,073)	686,836
Juncos	8,246	(3,473)	(795)	3,979	2,427	(199)	(29)	(60)	6,119
Lajas	4,610	(2,119)	(397)	2,094	2,717	(105)	(15)	(33)	4,658
Lares	3,040	(1,033)	(328)	1,679	3,847	(84)	(12)	(72)	5,358
Las Marías	792	(136)	(104)	551	3,256	(28)	(4)	(259)	3,516
Las Piedras	6,219	(2,029)	(707)	3,483	1,921	(174)	(25)	(74)	5,131
Loíza	3,427	(1,465)	(308)	1,653	4,092	(83)	(12)	(76)	5,575
Luquillo	4,414	(1,203)	(521)	2,689	2,016	(134)	(19)	(55)	4,495
Manatí	11,378	(3,600)	(1,349)	6,429	1,849	(321)	(46)	0	7,911
Maricao	695	(206)	(83)	406	2,571	(20)	(3)	(281)	2,673
Maunabo	1,071	(325)	(117)	628	3,465	(31)	(5)	(106)	3,951
Mayagüez	31,919	(12,361)	(3,395)	16,163	-	(808)	(116)	(100)	15,138
Moca	4,317	(1,216)	(518)	2,583	3,346	(129)	(19)	(12)	5,769
Morovis	2,723	(971)	(293)	1,459	4,186	(73)	(11)	(58)	5,504
Naguabo	3,296	(979)	(377)	1,940	2,873	(97)	(14)	(22)	4,680
Naranjito	3,085	(1,025)	(352)	1,709	4,305	(85)	(12)	(60)	5,855
Orocovis	1,626	(258)	(221)	1,147	4,527	(57)	(8)	(82)	5,526
Patillas	1,933	(684)	(201)	1,047	3,215	(52)	(8)	(119)	4,083
Peñuelas	4,376	(955)	(562)	2,859	2,361	(143)	(21)	(124)	4,933
Ponce	56,055	(24,429)	(5,573)	26,053	-	(1,303)	(188)	(163)	24,400
Quebradillas	2,840	(685)	(353)	1,802	3,081	(90)	(13)	(15)	4,764
Rincón	3,878	(1,479)	(381)	2,018	2,580	(101)	(15)	(38)	4,445
Río Grande	13,126	(4,348)	(1,419)	7,359	-	(368)	(53)	(58)	6,880
Sabana Grande	2,768	(998)	(294)	1,476	2,974	(74)	(11)	(33)	4,333
Salinas	3,573	(1,294)	(381)	1,898	3,063	(95)	(14)	(98)	4,754
San Germán	5,905	(1,980)	(667)	3,258	2,374	(163)	(23)	(7)	5,438
San Juan	229,351	(84,049)	(24,734)	120,568	-	(6,028)	(868)	(2,888)	110,783
San Lorenzo	5,342	(1,937)	(587)	2,818	3,173	(141)	(20)	(67)	5,763
San Sebastián	6,247	(1,703)	(754)	3,790	2,738	(189)	(27)	(92)	6,219
Santa Isabel	4,526	(1,870)	(482)	2,175	2,404	(109)	(16)	(71)	4,383
Toa Alta	9,781	(3,917)	(935)	4,928	-	(246)	(35)	(112)	4,535
Toa Baja	24,708	(11,486)	(2,366)	10,856	-	(543)	(78)	(260)	9,975
Trujillo Alto	15,212	(5,677)	(1,559)	7,975	-	(399)	(57)	(69)	7,450
Utuado	2,501	(600)	(309)	1,591	4,000	(80)	(11)	(20)	5,481
Vega Alta	7,556	(1,739)	(968)	4,850	2,156	(242)	(35)	(15)	6,714
Vega Baja	11,349	(4,218)	(1,241)	5,889	_	(294)	(42)	(30)	5,522
Vieques	1,865	(707)	(182)	976	2,314	(49)	(7)	(197)	3,037
Villalba	1,892	(616)	(212)	1,064	4,212	(53)	(8)	(150)	5,064
Yabucoa	4,177	(1,624)	(418)	2,134	3,245	(107)	(15)	(56)	5,201
Yauco	6,756	(2,483)	(731)	3,543	2,703	(177)	(25)	(8)	6,036

Appendix 14: Advances to Municipalities (FY2022 – FY2025)

_		Advances to Mu			
Dollars in thousands	FY2022	FY2023	FY2024	FY2025	
Total	658,173	615,965	618,686	577,123	
Adjuntas	3,323	2,417	2,431	1,543	
Aguada	5,325	4,528	4,549	3,768	
Aguadilla	7,626	7,641	7,655	7,666	
Aguas Buenas	4,012	3,067	3,066	2,136	
Aibonito	3,964	3,177	3,175	2,400	
Añasco	4,571	3,945	3,956	3,340	
Arecibo	9,221	9,236	9,248	9,258	
Arroyo	3,392	2,577	2,586	1,785	
Barceloneta	6,704	6,210	6,232	5,757	
Barranquitas	4,502	3,378	3,394	2,293	
Bayamón	40,192	40,438	40,672	40,890	
Cabo Rojo	6,903	6,912	6,919	6,923	
Caguas	24,971	25,001	25,027	25,047	
Camuy	4,462	3,546	3,549	2,647	
Canóvanas	6,604	5,985	5,994	5,383	
Carolina	36,407	36,623	36,827	37,016	
Cataño	12,752	11,829	11,861	10,953	
Cayey	7,511	7,262	7,246	7,008	
Ceiba	3,189	2,502	2,527	1,857	
Ciales	3,033	2,237	2,239	1,455	
Cidra	5,929	5,381	5,347	4,803	
Coamo	4,404	3,592	3,604	2,806	
Comerío	4,042	2,865	2,885	1,730	
Corozal	4,645	3,578	3,584	2,535	
Culebra	1,329	1,008	1,022	711	
Dorado	9,563	9,483	9,502	9,438	
Fajardo	7,953	7,710	7,770	7,550	
Florida	2,804	1,911	1,917	1,039	
Guánica	3,395	2,583	2,607	1,813	
Guayama	7,236	7,072	7,080	6,919	
Guayanilla	2,864	2,123	2,138	1,412	
Guaynabo	39,707	39,906	40,091	40,258	
Gurabo	6,530	6,098	6,092	5,661	
Hatillo	6,860	6,371	6,375	5,896	
Hormigueros	3,518	2,990	3,000	2,482	
Humacao	11,442	11,474	11,504	11,530	
Isabela	6,156	5,568	5,584	5,008	
Jayuya	3,021	2,222	2,225	1,438	
Juana Díaz	3,088	3,093	3,098	3,102	

		Advances to Mu	nicipalities	
Dollars in thousands	FY2022	FY2023	FY2024	FY2025
Total	658,173	615,965	618,686	577,123
Juncos	5,549	4,935	4,944	4,339
Lajas	3,955	3,271	3,288	2,618
Lares	4,376	3,410	3,435	2,489
Las Marías	2,687	1,864	1,881	1,075
Las Piedras	4,681	4,194	4,202	3,722
Loíza	4,541	3,511	3,536	2,527
Luquillo	4,002	3,495	3,507	3,009
Manatí	7,371	6,852	6,823	6,304
Maricao	2,013	1,360	1,370	728
Maunabo	3,069	2,190	2,206	1,344
Mayagüez	14,946	14,953	14,958	14,960
Moca	4,906	4,061	4,081	3,254
Morovis	4,423	3,355	3,371	2,325
Naguabo	3,955	3,221	3,229	2,506
Naranjito	4,752	3,652	3,668	2,590
Orocovis	4,346	3,183	3,193	2,050
Patillas	3,252	2,436	2,451	1,650
Peñuelas	4,300	3,709	3,732	3,157
Ponce	24,204	24,288	24,368	24,446
Quebradillas	3,971	3,192	3,209	2,445
Rincón	3,773	3,121	3,136	2,497
Río Grande	6,927	6,943	6,958	6,969
Sabana Grande	3,567	2,814	2,831	2,093
Salinas	3,947	3,169	3,184	2,420
San Germán	4,815	4,216	4,230	3,643
San Juan	117,235	118,345	119,422	120,451
San Lorenzo	5,005	4,208	4,227	3,445
San Sebastián	5,511	4,827	4,851	4,183
Santa Isabel	3,742	3,127	3,137	2,534
Toa Alta	4,452	4,445	4,440	4,437
Toa Baja	10,944	11,004	11,060	11,112
Trujillo Alto	7,695	7,755	7,813	7,868
Utuado	4,433	3,396	3,396	2,375
Vega Alta	6,092	5,528	5,534	4,983
Vega Baja	5,429	5,393	5,359	5,327
Vieques	2,448	1,860	1,870	1,293
Villalba	3,982	2,914	2,935	1,888
Yabucoa	4,392	3,574	3,594	2,793
Yauco	5,333	4,657	4,680	4,019
1 auco	3,333	4,037	4,080	4,0

Appendix 15: Disparity in Revenue Capacity Between Municipalities (FY2017)

Municipality	General Fund Revenue (Millions)	Transfers (Millions)	Transfers share of Aggregate expenditures	Per capita general fu budş
Adjuntas	\$7.60	\$5.49	72%	\$4
guada	\$13.47	\$5.53	41%	\$3
guadilla	\$21.97	\$3.02	14%	\$4
guas Buenas	\$8.59	\$5.78	67%	\$3
ibonito	\$9.17	\$4.91	53%	\$3
ñasco	\$10.86	\$4.28	39%	\$4
			10%	\$3
Arecibo	\$33.89	\$3.45		
Arroyo	\$9.28	\$5.16	56%	\$5
arceloneta	\$25.57	\$3.61	14%	\$1,0
Barranquitas	\$9.37	\$6.58	70%	\$3
Bayamon	\$119.00	\$10.92	9%	\$6
Cabo Rojo	\$18.38	\$1.73	9%	\$3
Caguas	\$91.58	\$7.04	8%	\$7
Camuy	\$11.76	\$5.83	50%	\$3
Canovanas	\$11.70	\$4.44	22%	\$4
arolina	\$84.65	\$11.01	13%	\$5
ataño	\$36.07	\$5.98	17%	\$1,4
Cayey	\$28.96	\$2.71	9%	\$6
Ceiba	\$7.83	\$4.50	57%	\$6
iales	\$8.78	\$5.48	62%	\$5
Cidra	\$18.62	\$3.67	20%	\$4
Coamo	\$11.81	\$5.38	46%	\$3
Comerio	\$9.04	\$6.88	76%	\$4
orozal	\$11.48	\$6.47	56%	\$3
ulebra	\$4.67	\$2.49	53%	\$2,0
orado	\$21.16	\$1.86	9%	\$:
ajardo	\$18.94	\$3.22	17%	\$
lorida	\$6.94	\$5.33	77%	\$:
uanica	\$9.83	\$4.98	51%	\$(
uayama	\$22.69	\$2.11	9%	\$:
uayanilla	\$9.37	\$4.61	49%	\$5
uaynabo	\$130.13	\$6.29	5%	\$1,4
urabo	\$19.12	\$3.15	16%	\$4
atillo	\$18.98	\$3.31	17%	\$4
ormigueros	\$9.19	\$3.52	38%	\$5
lumacao	\$39.35	\$2.18	6%	\$7
abela	\$12.76	\$4.57	36%	\$3
ayuya	\$7.25	\$4.76	66%	\$4
uana Diaz	\$12.08	\$3.95	33%	\$2
uana Diaz	Ψ12.00		3370	92
uncos	\$30.29	\$4.17	14%	\$7
ajas	\$9.35	\$4.50	48%	\$4
ares	\$12.23	\$6.19	51%	\$4
as Marias	\$6.58	\$4.90	75%	\$
as Piedras	\$13.92	\$3.44	25%	\$:
oiza	\$8.82	\$6.50	74%	\$
uquillo	\$7.70	\$3.34	43%	\$
Ianati	\$22.68	\$4.30	19%	\$
[aricao	\$5.23	\$3.86	74%	\$
launabo	\$7.86	\$5.77	73%	\$
layaguez	\$69.09	\$5.24	8%	\$
loca	\$11.32	\$5.62	50%	\$
orovis	\$9.78	\$6.39	65%	\$
aguabo	\$9.81	\$4.61	47%	\$
aranjito	\$10.43	\$6.56	63%	\$
rocovis	\$8.75	\$6.83	78%	\$
ntillas	\$8.18	\$5.11	62%	\$
eñuelas	\$14.68	\$3.73	25%	\$
once	\$82.73	\$6.75	8%	\$
uebradillas	\$8.99	\$5.22	58%	\$
ncon	\$8.37	\$3.99	48%	\$
io Grande	\$16.77	\$2.22	13%	\$
bana Grande	\$10.12	\$5.00	49%	\$
alinas	\$9.24	\$5.03	54%	\$
n German	\$16.21	\$4.39	27%	\$
ın Juan	\$447.77	\$143.63	32%	\$1,
an Lorenzo	\$14.94	\$5.41	36%	\$
n Sebastian	\$13.57	\$5.17	38%	\$
anta Isabel	\$10.13	\$3.83	38%	\$-
oa Alta	\$18.25	\$4.40	24%	\$
oa Baja	\$30.54	\$4.88	16%	\$
ujillo Alto	\$23.78	\$4.53	19%	\$
tuado	\$10.26	\$6.31	61%	\$
ega Alta	\$12.98	\$3.60	28%	\$
ega Baja	\$14.14	\$3.84	27%	\$2
ieques	\$9.96	\$7.38	74%	\$1,
'illalba	\$11.84	\$6.62	56%	\$5
abucoa	\$13.67	\$5.38	39%	\$-
		\$4.80	41%	\$3
auco	\$11.78			

Appendix 16. Allocation of the Commonwealth Transfer and Outstanding Obligation for FY2020 PayGo and ASES

		A	В	С	$\mathbf{B} + \mathbf{C} = \mathbf{D}$	E	D + E = F	F/A
Municipality	Population	FY20 Budget	FY20 ASES Cost	FY20 PayGo Cost	Total FY20 ASES and PayGO	CW Transfer allocation	ASES and PayGo Shortfall	Shortfall as % of FY20 budget
Total	3,195,153	1,972,388,531	(31,562,835)	(165,995,181)	(197,558,015)	131,838,000	(65,720,015)	-3.3%
Adjuntas	17,302	7,790,913	(59,774)	(642,307)	(702,081)	468,526	(233,556)	-3.0%
Aguada	36,621	10,978,750	(97,499)	(1,127,032)	(1,224,531)	817,176	(407,355)	-3.7%
Aguadilla	50,598	18,632,447	(172,717)	(2,364,833)	(2,537,550)	1,693,404	(844,146)	-4.5%
Aguas Buenas	24,848	8,505,557	(65,665)	(483,782)	(549,447)	366,667	(182,780)	-2.1%
Aibonito	22,143	9,735,213	(71,073)	(424,389)	(495,462)	330,641	(164,821)	-1.7%
Añasco	26,031	11,987,584	(59,333)	(500,414)	(559,747)	373,540	(186,206)	-1.6%
Arecibo	82,114	30,529,905	(424,323)	(3,515,184)	(3,939,508)	2,628,984	(1,310,524)	-4.3%
Arroyo	17,169	9,579,987	(72,627)	(309,401)	(382,028)	254,942	(127,086)	-1.3%
Barceloneta	23,504	27,537,631	(227,224)	(563,229)	(790,453)	527,500	(262,954)	-1.0%
Barranquitas	27,476	9,141,733	(67,579)	(926,000)	(993,579)	663,053	(330,526)	-3.6%
Bayamon	170,480	117,967,981	(2,109,893)	(8,854,827)	(10,964,721)	7,317,176	(3,647,544)	-3.1%
Cabo Rojo	47,117	16,397,187	(158,319)	(1,224,698)	(1,383,017)	922,940	(460,077)	-2.8%
Caguas	124,434	82,552,482	(1,541,509)	(6,819,443)	(8,360,952)	5,579,582	(2,781,370)	-3.4%
Camuy	30,503	11,976,692	(79,447)	(865,599)	(945,046)	630,665	(314,381)	-2.6%
Canovanas	44,296	19,594,686	(69,205)	(1,443,521)	(1,512,727)	1,009,500	(503,227)	-2.6%
Carolina	147,661	79,968,926	(1,560,273)	(9,220,717)	(10,780,990)	7,194,566	(3,586,424)	-4.5%
Cataño	23,244	34,089,368	(429,911)	(1,614,524)	(2,044,435)	1,364,330	(680,106)	-2.0%
Cayey	42,349	28,037,410	(164,542)	(1,652,219)	(1,816,762)	1,212,394	(604,367)	-2.2%
Ceiba	11,018	7,645,703	(65,400)	(671,112)	(736,512)	491,503	(245,009)	-3.2%
Ciales	15,918	7,578,178	(77,425)	(572,456)	(649,881)	433,690	(216,190)	-2.9%
Cidra	38,288	15,126,232	(177,073)	(1,310,781)	(1,487,853)	992,901	(494,952)	-3.3%
Coamo	37,845	11,717,286	(98,754)	(710,751)	(809,505)	540,213	(269,291)	-2.3%
Comerio	18,598	9,838,134	(78,005)	(730,620)	(808,625)	539,626	(268,999)	-2.7%
Corozal	32,320	10,592,848	(90,648)	(684,631)	(775,278)	517,373	(257,906)	-2.4%
Culebra	1,710	4,422,056	(21,601)	(189,564)	(211,164)	140,918	(70,246)	-1.6%
Dorado	35,779	19,940,738	(185,524)	(1,322,459)	(1,507,983)	1,006,335	(501,648)	-2.5%
Fajardo	29,699	18,967,736	(201,972)	(1,058,700)	(1,260,673)	841,295	(419,378)	-2.2%
Florida	11,329	6,761,053	(52,221)	(257,935)	(310,157)	206,979	(103,177)	-1.5%
Guanica	15,551	7,871,358	(70,319)	(152,958)	(223,278)	149,002	(74,276)	-0.9%
Guayama	39,521	19,428,049	(219,954)	(387,603)	(607,557)	405,446	(202,111)	-1.0%
Guayanilla	17,719	8,522,617	(78,539)	(793,869)	(872,408)	582,191	(290,217)	-3.4%
Guaynabo	83,787	128,418,168	(2,704,203)	(8,240,014)	(10,944,217)	7,303,493	(3,640,723)	-2.8%
Gurabo	46,068	18,395,393	(159,736)	(631,395)	(791,131)	527,952	(263,179)	-1.4%
Hatillo	38,826	19,915,983	(133,007)	(777,565)	(910,572)	607,660	(302,913)	-1.5%
Hormigueros	15,462	8,929,342	(70,315)	(797,262)	(867,577)	578,968	(288,610)	-3.2%
Humacao	50,532	41,993,656	(339,210)	(2,010,705)	(2,349,914)	1,568,188	(781,727)	-1.9%
Isabela	40,268	12,598,876	(66,958)	(1,053,616)	(1,120,574)	747,802	(372,772)	-3.0%
Jayuya	13,947	7,061,045	(65,041)	(388,397)	(453,439)	302,597	(150,842)	-2.1%
Juana Diaz	44,510	14,031,379	(146,563)	(727,630)	(874,193)	583,382	(290,811)	-2.1%
Juncos	37,723	28,957,858	(212,244)	(776,967)	(989,211)	660,138	(329,073)	-1.1%

		A	В	C	$\mathbf{B} + \mathbf{C} = \mathbf{D}$	E	D + E = F	F/A
			FY20	FY20	Total FY20 ASES and	CW Transfer	ASES and PayGo	Shortfall as % of
Municipality	Population	FY20 Budget	ASES Cost	PayGo Cost	PayGO	allocation		
Total	3,195,153	1,972,388,531	(31,562,835)	(165,995,181)	(197,558,015)	131,838,000	(65,720,015)	-3.3%
Lajas	21,991	9,313,604	(71,096)	(799,849)	(870,945)	581,215	(289,730)	-3.1%
Lares	24,484	11,519,214	(94,933)	(920,905)	(1,015,839)	677,908	(337,931)	-2.9%
Las Marias	7,961	5,908,523	(57,739)	(631,062)	(688,801)	459,663	(229,138)	-3.9%
Las Piedras	36,458	13,794,415	-	(719,890)	(719,890)	480,410	(239,480)	-1.7%
Loiza	24,686	9,907,406	(89,743)	(447,203)	(536,946)	358,324	(178,621)	-1.8%
Luquillo	17,594	8,009,244	-	(734,343)	(734,343)	490,055	(244,288)	-3.1%
Manati	37,393	29,974,153	(182,575)	(667,287)	(849,862)	567,145	(282,717)	-0.9%
Maricao	5,426	4,992,260	(48,867)	(484,005)	(532,871)	355,605	(177,266)	-3.6%
Maunabo	10,370	7,805,251	(40,558)	(539,710)	(580,268)	387,235	(193,033)	-2.5%
Mayaguez	71,986	54,536,093	(626,646)	(4,609,589)	(5,236,235)	3,494,339	(1,741,896)	-3.2%
Moca	34,909	10,197,060	(92,302)	(423,999)	(516,301)	344,547	(171,754)	-1.7%
Morovis	30,068	11,052,754	(79,624)	(1,043,622)	(1,123,246)	749,585	(373,661)	-3.4%
Naguabo	25,376	8,308,475	(50,618)	(298,850)	(349,468)	233,213	(116,255)	-1.4%
Naranjito	27,209	10,233,835	(75,337)	(850,991)	(926,328)	618,174	(308,154)	-3.0%
Orocovis	20,221	9,018,491	(71,005)	(376,773)	(447,778)	298,819	(148,959)	-1.7%
Patillas	16,310	8,172,017	(58,358)	(680,628)	(738,986)	493,153	(245,832)	-3.0%
Peñuelas	19,402	15,633,890	(98,874)	(1,140,566)	(1,239,440)	827,125	(412,314)	-2.6%
Ponce	133,191	80,646,448	(1,956,495)	(7,575,422)	(9,531,918)	6,361,012	(3,170,905)	-3.9%
Quebradillas	22,828	8,111,245	(76,200)	(692,725)	(768,924)	513,133	(255,792)	-3.2%
Rincon	13,627	8,360,000	(63,362)	(469,141)	(532,503)	355,359	(177,143)	-2.1%
Rio Grande	47,889	16,394,390	(165,128)	(1,375,700)	(1,540,828)	1,028,253	(512,575)	-3.1%
Sabana Grande	21,741	8,758,337	(51,601)	(767,257)	(818,858)	546,455	(272,403)	-3.1%
Salinas	27,083	9,869,020	(93,048)	(738,468)	(831,516)	554,902	(276,614)	-2.8%
San German	30,229	13,396,345	(155,604)	(1,328,464)	(1,484,069)	990,376	(493,693)	-3.7%
San Juan	320,967	428,760,777	(12,743,846)	(55,608,605)	(68,352,451)	45,614,198	(22,738,253)	-5.3%
San Lorenzo	35,900	14,671,829	(123,421)	(202,796)	(326,216)	217,697	(108,520)	-0.7%
San Sebastian	35,652	16,723,670	(140,053)	(1,612,667)	(1,752,720)	1,169,657	(583,063)	-3.5%
Santa Isabel	21,037	10,661,367	(58,906)	(869,993)	(928,899)	619,890	(309,009)	-2.9%
Toa Alta	71,094	14,497,835	(156,315)	(817,257)	(973,572)	649,702	(323,870)	-2.2%
Toa Baja	74,623	37,068,344	(323,496)	(3,734,866)	(4,058,362)	2,708,300	(1,350,062)	-3.6%
Trujillo Alto	63,746	22,443,639	(169,059)	(1,819,106)	(1,988,164)	1,326,778	(661,386)	-2.9%
Utuado	27,545	8,520,855	(94,906)	(1,187,132)	(1,282,038)	855,553	(426,485)	-5.0%
Vega Alta	35,806	13,372,211	(144,488)	(784,146)	(928,634)	619,713	(308,921)	-2.3%
Vega Baja	50,185	14,029,274	(161,346)	(1,535,826)	(1,697,172)	1,132,587	(564,584)	-4.0%
Vieques	8,364	11,402,895	(78,383)	(685,067)	(763,451)	509,480	(253,971)	-2.2%
Villalba	21,476	14,252,623	(82,288)	(153,041)	(235,330)	157,044	(78,285)	-0.5%
Yabucoa	32,158	15,516,745	(84,731)	(620,527)	(705,258)	470,646	(234,612)	-1.5%
Yauco	33,860	12,835,855	(156,258)	(1,248,589)	(1,404,847)	937,508	(467,339)	-3.6%

Notes: Population estimates from US Census Bureau (2018 estimate) as provided by AAFAF FY20 budgets as reported by OMB

Appendix 17: FY2018 and FY2019 PayGo Debt by Municipality 20

Outstanding PayGo Debt (FY2018 and FY2019)

(Dollars in thousands)	FY2018	FY2019	Total Debt	Pmt Plan Executed
Total	\$26,048	\$82,790	\$108,838	
Adjuntas	-	-	-	
Aguada	_	_	_	
Aguadilla	_	_	_	
Aguas Buenas	_	_	_	
Aibonito	_	_	_	
Añasco	-	-	-	
Arecibo	2,947	3,526	6,473	
Arroyo	_	_	_	
Barceloneta	_	_	_	
Barranquitas	_	_	_	
Bayamón	-	-	-	
Cabo Rojo	525	722	1,248	Yes
Caguas	1,975	_	1,975	Yes
Camuy	_	_	-	
Canóvanas	159	_	159	Yes
Carolina	_	3,957	3,957	an a
Cataño	_	-	_	
Cayey	258	1,395	1,653	Yes
Ceiba	47	617	663	Yes
Ciales	_	_	_	an a
Cidra	_	_	_	
Coamo	_	_	_	
Comerío	_	_	_	
Corozal	_	_	-	~~~~~~~~~~~~~~~~~~~~~~~
Culebra	_	_	_	
Dorado	_	-	_	
Fajardo	_		_	
Florida	_	_	_	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Guánica	_	_	-	********************
Guayama	_	_	_	
Guayanilla	432	_	432	Yes
Guaynabo	_	_	_	
Gurabo			_	
Hatillo	_	_	_	
Hormigueros	_		_	
Humacao	_	-	_	
Isabela	_			
Jayuya	_	_	_	********************
Juana Díaz	_	_		
v waite 1/10/2				

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 $^{^{\}rm 20}$ AAFAF. PayGo and Individual Contribution Debt by Entity For the month of March FY20 85

Outstanding PayGo Debt (FY2018 and FY2019)

(Dollars in thousands)	FY2018	FY2019	Total Debt	Pmt Plan Executed
Total	\$26,048	\$82,790	\$108,838	
Juncos	-	_	-	an in an
Lajas	_	_	_	
Lares	_	_	_	
Las Marías	372	-	372	Yes
Las Piedras	_	_	_	
Loíza	-	-	-	
Luquillo	-	60	60	
Manatí	-	-	-	
Maricao	285	495	780	
Maunabo	297	364	662	Yes
Mayagüez	801	4,582	5,383	Yes
Moca	_	_	_	
Morovis	_	_		nn nn na n
Naguabo	-	5	5	
Naranjito	-	_	_	
Orocovis	_	_	_	
Patillas	191	511	702	Yes
Peñuelas	739	_	739	Yes
Ponce	_	4,618	4,618	Yes
Quebradillas	_	_	_	
Rincón	_	_	_	
Río Grande	281	558	839	Yes
Sabana Grande	237	-	237	Yes
Salinas	_	_	_	
San Germán	_	_	_	
San Juan	12,389	56,026	68,415	
San Lorenzo	_	_	-	
San Sebastián	_	_	_	
Santa Isabel	727	899	1,626	Yes*
Toa Alta	_	_		
Toa Baja	3,388	3,459	6,847	
Trujillo Alto	_	_	-	
Utuado	_	_	_	
Vega Alta	_	_	_	
Vega Baja	_	127	127	Yes
Vieques	-	_	-	
Villalba	-	_	-	
Yabucoa	-	165	165	Yes
Yauco		704	704	

^{*} Payment Plan is currently being negotiated but not yet final

Appendix 18: Projected PayGo by Municipality (FY2021 – FY2025)

Projected Municipal PayGo Obligations

		1 Tojecteu Mun	iicipai i ay Go Obligatio	UIIS .	
(Dollars in thousands)	FY2021	FY2022	FY2023	FY2024	FY2025
Total	\$165,995	\$162,607	\$164,239	\$168,330	\$172,005
Adjuntas	642	629	636	651	666
Aguada	1,127	1,104	1,115	1,143	1,168
Aguadilla	2,365	2,317	2,340	2,398	2,450
Aguas Buenas	484	474	479	491	501
Aibonito	424	416	420	430	440
Añasco	500	490	495	507	519
Arecibo	3,515	3,443	3,478	3,565	3,642
Arroyo	309	303	306	314	321
Barceloneta	563	552	557	571	584
Barranquitas	926	907	916	939	960
Bayamon	8,855	8,674	8,761	8,979	9,175
Cabo Rojo	1,225	1,200	1,212	1,242	1,269
Caguas	6,819	6,680	6,747	6,915	7,066
Camuy	866	848	856	878	897
Canovanas	1,444	1,414	1,428	1,464	1,496
Carolina	9,221	9,032	9,123	9,350	9,555
Cataño	1,615	1,582	1,597	1,637	1,673
Cayey	1,652	1,618	1,635	1,675	1,712
Ceiba	671	657	664	681	695
Ciales	572	561	566	581	593
Cidra	1,311	1,284	1,297	1,329	1,358
Coamo	711	696	703	721	736
Comerio	731	716	723	741	757
Corozal	685	671	677	694	709
Culebra	190	186	188	192	196
Dorado	1,322	1,295	1,308	1,341	1,370
Fajardo	1,059	1,037	1,048	1,074	1,097
Florida	258	253	255	262	267
Guanica	153	150	151	155	158
Guayama	388	380	384	393	402
Guayanilla	794	778	785	805	823
Guaynabo	8,240	8,072	8,153	8,356	8,538
Gurabo	631	619	625	640	654
Hatillo	778	762	769	789	806
Hormigueros	797	781	789	808	826
Humacao	2,011	1,970	1,989	2,039	2,083
Isabela	1,054	1,032	1,042	1,068	1,092
Jayuya	388	380	384	394	402
Juana Diaz	728	713	720	738	754

Projected Municipal PayGo Obligations

(Dollars in thousands)	FY2021	FY2022	FY2023	FY2024	FY2025
Total	\$165,995	\$162,607	\$164,239	\$168,330	\$172,005
Juncos	777	761	769	788	805
Lajas	800	784	791	811	829
Lares	921	902	911	934	954
Las Marias	631	618	624	640	654
Las Piedras	720	705	712	730	746
Loiza	447	438	442	453	463
Luquillo	734	719	727	745	761
Manati	667	654	660	677	691
Maricao	484	474	479	491	502
Maunabo	540	529	534	547	559
Mayaguez	4,610	4,515	4,561	4,674	4,776
Moca	424	415	420	430	439
Morovis	1,044	1,022	1,033	1,058	1,081
Naguabo	299	293	296	303	310
Naranjito	851	834	842	863	882
Orocovis	377	369	373	382	390
Patillas	681	667	673	690	705
Peñuelas	1,141	1,117	1,129	1,157	1,182
Ponce	7,575	7,421	7,495	7,682	7,850
Quebradillas	693	679	685	702	718
Rincon	469	460	464	476	486
Rio Grande	1,376	1,348	1,361	1,395	1,426
Sabana Grande	767	752	759	778	795
Salinas	738	723	731	749	765
San German	1,328	1,301	1,314	1,347	1,377
San Juan	55,609	54,473	55,020	56,391	57,622
San Lorenzo	203	199	201	206	210
San Sebastian	1,613	1,580	1,596	1,635	1,671
Santa Isabel	870	852	861	882	901
Toa Alta	817	801	809	829	847
Toa Baja	3,735	3,659	3,695	3,787	3,870
Trujillo Alto	1,819	1,782	1,800	1,845	1,885
Utuado	1,187	1,163	1,175	1,204	1,230
Vega Alta	784	768	776	795	813
Vega Baja	1,536	1,504	1,520	1,557	1,591
Vieques	685	671	678	695	710
Villalba	153	150	151	155	159
Yabucoa	621	608	614	629	643
Yauco	1,249	1,223	1,235	1,266	1,294

Appendix 19: Measures Detail Breakdown by Municipalities

				Incorrect Mailing Address		Identification and Prope	• •	Home Improvements New to the Tax Roll	Appraisal of Non-ap	ppraised Properties	Swimming Pools New to Tax Rolls
	Average Taxable Value of Property	Tax Rate	Average Tax Payable	Number of Properties	Potential Value (\$000's)	Number of Properties	Potential Value (\$000's)	Number of Properties	Number of Properties	Potential Value (\$000's)	Number of Properties
Adjuntas	\$2,595	8.33%	\$ 216	835	\$180	1,943	\$420	2,643	541	\$117	44
Aguada	3,027	8.83%	267	1,746	467	3,970	1,061	5,910	427	114	178
Aguadilla	4,555	10.33%	471	5,814	2,736	3,419	1,609	10,363	72	34	308
Aguas Buenas	3,059	10.33%	316	1,270	401	1,544	488	3,532	57	18	131
Aibonito	3,431	9.33%	320	884	283	1,904	609	4,425	137	44	130
Añasco	4,088	9.68%	396	1,668	660	2,393	947	4,605	518	205	86
Arecibo	4,279	11.63%	498	7,937	3,950	9,316	4,636	14,621	155	77	514
Arroyo	2,406	10.33%	249	1,315	327	1,505	374	4,369	1,092	271	66
Barceloneta	1,355	10.33%	140	1,239	173	2,772	388	4,701	959	134	72
Barranquitas	2,711	9.33%	253	606	153	3,888	983	2,364	139	35	175
Bayamón	5,923	9.58%	567	6,940	3,938	6,911	3,921	22,463	69	39	1,157
Cabo Rojo	4,325	10.08%	436	2,998	1,307	4,605	2,008	12,682	2	1	681
Caguas	6,729	10.33%	695	5,400	3,754	4,631	3,219	21,342	4	3	1,471
Camuy	2,574	10.33%	266	1,297	345	4,015	1,068	5,486	147	39	227
Canóvanas	5,158	10.33%	533	1,916	1,021	1,941	1,034	7,885	-	-	438
Carolina	7,380	11.33%	836	7,287	6,093	3,133	2,620	16,216	469	392	845
Cataño	5,958	10.33%	615	1,122	691	1,806	1,112	1,991	175	108	265
Cayey	5,404	10.58%	572	1,964	1,123	2,426	1,387	7,505	60	34	233
Ceiba	3,408	9.33%	318	896	285	909	289	2,384	15	5	70
Ciales	2,672	10.33%	276	801	221	2,235	617	2,682	22	6	100
Cidra	6,163	12.33%	760	1,542	1,172	2,322	1,764	7,401	221	168	284
Coamo	2,448	10.33%	253	1,581	400	3,534	894	7,636	119	30	224
Comerío	2,471	9.08%	224	479	107	2,246	504	1,677	43	10	72
Corozal	2,918	9.83%	287	996	286	4,444	1,275	3,524	39	11	153
Culebra	6,736	8.83%	595	160	95	471	280	481	2	1	57
Dorado	9,154	10.58%	968	1,721	1,667	2,268	2,197	7,294	1,416	1,371	1,093
Fajardo	7,546	10.33%	780	2,291	1,786	2,252	1,755	6,034	155	121	217
Florida	2,219	10.33%	229	429	98	1,401	321	2,061	157	36	43
Guánica	3,394	10.58%	359	728	261	1,473	529	3,447	66	24	67
Guayama	7,198	10.08%	726	2,996	2,174	3,193	2,317	9,230	822	596	228
Guayanilla	2,662	10.83%	288	843	243	1,927	556	3,020	15	4	55
Guaynabo	11,509	10.08%	1,160	9,351	10,848	4,167	4,834	7,967	171	198	1,632
Gurabo	5,164	11.83%	611	1,756	1,073	1,842	1,125	9,082	3	2	687
Hatillo	4,512	9.05%	408	1,527	624	4,002	1,634	6,591	151	62	319
Hormigueros	4,898	9.83%	481	505	243	1,037	499	3,138	273	131	52
Humacao	7,109	8.83%	628	2,980	1,871	3,239	2,033	10,439	=	-	485
Isabela	3,474	9,33%	324	6,311	2,046	4,338	1,406	9,294	79	26	247
Jayuya	3,305	8.08%	267	332	89	1,366	365	2,162	303	81	81
Juana Díaz	3,326	9.33%	310	2,060	639	3,014	935	10,461	40	12	276

Average Taxable Value of Property Tax Rate Juncos 4,190 11.33% Lajas 3,104 12.33% Lares 2,811 10.08% Las Marías 2,628 8.18% Las Piedras 4,009 10.33% Loíza 3,682 11.73% Laquillo 5,042 8.83% Maricao 3,304 10.33% Maricao 3,304 10.33% Maricao 3,502 9.83% Moca 2,652 9.58% Moco 2,628 10.83% Naguabo 3,139 9.83% Naranjito 2,983 9.83% Orocovis 3,085 2,628 Patillas 2,457 10.33% Peñuelas 2,457 10.33% Peñuelas 2,457 10.33% Rincón 4,442 10.83% Rincón 4,442 10.83% Rincór 4,442 10.83% Sabana Grande		Incorrect Mailing Address		Identification and Prope	• •	Home Improvements New to the Tax Roll	Appraisal of Non-ap	praised Properties	Swimming Pools New to Tax Rolls
Lajas 3,104 12.33% Lares 2,811 10.08% Las Marías 2,628 8.18% Las Piedras 4,009 10.33% Loíza 3,682 11.73% Luquillo 5,042 8.83% Manatí 6,168 9,58% Maricao 3,304 10.33% Maunabo 2,530 9,83% Morca 2,692 9,58% Morovis 2,628 10.83% Naguabo 3,139 9,83% Naranjito 2,983 9,83% Naranjito 2,983 9,83% Orocovis 3,085 8,03% Patillas 2,457 10,33% Peñuelas 2,388 8,58% Ponce 5,438 12,33% Quebradillas 2,754 8,83% Rincón 4,442 10,83% Rio Grande 5,722 10,33% Sabana Grande 2,400 10,33% Salinas	Average Tax Payable	Number of Properties	Potential Value (\$000's)	Number of Properties	Potential Value (\$000's)	Number of Properties	Number of Properties	Potential Value (\$000's)	Number of Properties
Lares 2,811 10.08% Las Marías 2,628 8.18% Las Piedras 4,009 10.33% Loíza 3,682 11.73% Luquillo 5,042 8.83% Manatí 6,168 9.58% Maricao 3,304 10.33% Maunabo 2,530 9.83% Mayagüez 6,377 10.58% Mocoa 2,692 9.58% Morovis 2,628 10.83% Naguabo 3,139 9.83% Naranjito 2,983 8.3% Orocovis 3,085 8.03% Patillas 2,457 10.33% Peñuelas 2,388 8.58% Ponce 5,438 12.33% Quebradillas 2,754 8.83% Quebradillas 2,754 8.83% Rirocón 4,442 10.83% Kio Grande 5,722 10.33% Sabana Grande 2,400 10.33% San Loren		3,574	1,697	2,281	1,083	8,199	813	386	217
Las Marías 2,628 8.18% Las Piedras 4,009 10,33% Lofza 3,682 11,73% Luquillo 5,042 8.83% Manatí 6,168 9.58% Maricao 3,304 10,33% Maricao 3,304 10,33% Maunabo 2,530 9.83% Moca 2,692 9.58% Morovis 2,628 10,83% Naguabo 3,139 9.83% Naranjito 2,983 9.83% Orocovis 3,085 8.03% Patillas 2,457 10,33% Penuelas 2,388 8.58% Ponce 5,438 12,33% Quebradillas 2,754 8.83% Rincón 4,442 10,83% Río Grande 5,722 10,33% Sabana Grande 2,400 10,33% San Germán 3,483 10,08% San Juan 11,027 10,33% San Lore	383	1,271	486	2,548	975	4,693	170	65	140
Las Piedras 4,009 10.33% Lofza 3,682 11.73% Luquillo 5,042 8.83% Manatí 6,168 9,58% Maricao 3,304 10,33% Maunabo 2,530 9,83% Moca 2,692 9,58% Mora 2,692 9,58% Morovis 2,628 10,83% Naguabo 3,139 9,83% Naranjito 2,983 9,83% Orocovis 3,085 8,03% Patillas 2,457 10,33% Peñuelas 2,388 8,58% Ponce 5,438 12,33% Quebradillas 2,754 8,83% Rincón 4,442 10,83% Kío Grande 5,722 10,33% Sabana Grande 2,400 10,33% Salinas 3,160 10,33% San Lorenzo 2,954 10,23% San Sebastián 3,151 9,08% San Lorenz	283	1,102	312	4,098	1,161	3,755	31	9	74
Lofza 3,682 11.73% Luquillo 5,042 8.83% Manatí 6.168 9.58% Maricao 3,304 10.33% Maunabo 2,530 9.83% Moca 2,692 9.58% Morovis 2,628 10.83% Naguabo 3,139 9.83% Orocovis 3,085 8.03% Patillas 2,457 10.33% Peñuelas 2,388 8.58% Ponce 5,438 12.33% Quebradillas 2,754 8.83% Rincón 4,442 10.83% Sabana Grande 2,400 10.33% Salinas 3,160 10.33% Salinas 3,160 10.33% San Juan 11,027 10.33% San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% San Sebastián 3,151 9.08% San Lorenzo 2,954 10.23% San	215	317	68	1,464	315	1,415	39	8	15
Luquillo 5,042 8.83% Manatí 6,168 9.58% Maricao 3,304 10.33% Maunabo 2,530 9.83% Mayagüez 6,377 10.58% Moca 2,692 9.58% Morovis 2,628 10.83% Naguabo 3,139 9.83% Naranjito 2,983 9.83% Orocovis 3,085 8.03% Petüllas 2,457 10.33% Penuelas 2,388 8.58% Ponce 5,438 12.33% Quebradillas 2,754 8.83% Río Grande 5,722 10.33% Sabna Grande 2,400 10.33% Salinas 3,160 10.33% San Germán 3,483 10.08% San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% San Lorenzo 2,954 10.23% San Lorenzo 2,954 10.23%	414	1,443	598	2,327	964	7,622	51	21	196
Manatí 6,168 9.58% Maricao 3,304 10.33% Maunabo 2,530 9.83% Mayagiez 6,377 10.58% Moca 2,692 9.58% Morovis 2,628 10.83% Naguabo 3,139 9.83% Naranjito 2,983 9.83% Orocovis 3,085 8.03% Patillas 2,457 10.33% Peñuelas 2,388 8.58% Ponce 5,438 12.33% Rincón 4,442 10.83% Río Grande 5,722 10.33% Salinas 3,160 10.33% Salinas 3,160 10.33% San Germán 3,483 10.08% San Juan 11.027 10.33% San Sebastián 3,151 9.08% San Sebastián 3,151 9.08% San Sebastián 3,151 9.08% Toa Alta 3,249 11.33% Toa B	432	1,249	539	1,284	555	3,802	-	-	62
Maricao 3,304 10.33% Maunabo 2,530 9,83% Mayagüez 6,377 10.58% Moca 2,692 9,58% Morovis 2,628 10.83% Naguabo 3,139 9.83% Orocovis 3,085 8,03% Patillas 2,457 10.33% Peñuelas 2,388 8,58% Ponce 5,438 12.33% Quebradillas 2,754 8,83% Rincón 4,442 10.83% Río Grande 5,722 10.33% Salinas 3,160 10.33% Salinas 3,160 10.33% San Germán 3,483 10.88% San Juan 11,027 10.33% San Sebastián 3,151 9,08%	445	1,270	565	1,148	511	3,613	220	98	199
Maunabo 2,530 9.83% Mayagüez 6,377 10.58% Moca 2,692 9.58% Morovis 2,628 10.83% Naguabo 3,139 9.83% Orocovis 3,085 8.03% Patillas 2,457 10.33% Peñuelas 2,388 8.58% Ponce 5,438 12.33% Quebradillas 2,754 8.83% Rincón 4,442 10.83% Río Grande 5,722 10.33% Sabana Grande 2,400 10.33% Sain Gerrán 3,483 10.08% San Juan 11,027 10.33% San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% San Sebastián 3,151 9.08% San Sana Baja 4,347 11.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Utuado 2,660 8.83%	591	2,094	1,237	4,179	2,469	6,767	21	12	368
Mayagüez 6,377 10.58% Moca 2,692 9,58% Morovis 2,628 10.83% Naguabo 3,139 9,83% Naranjito 2,983 9,83% Orocovis 3,085 8,03% Patillas 2,457 10,33% Peñuelas 2,388 8,58% Ponce 5,438 12,33% Quebradillas 2,754 8,83% Río Grande 5,722 10,33% Río Grande 2,400 10,33% Salinas 3,160 10,33% Salinas 3,160 10,33% San Juan 11,027 10,33% San Juan 11,027 10,33% San Sebastián 3,151 9,08% San Sebastián 3,151 9,08% Santa Isabel 2,978 10,83% Toa Baja 4,347 11,83% Toa Baja 4,347 11,83% Trujillo Alto 4,887 10,58%		163	56	804	274	680	157	54	8
Moca 2,692 9.58% Morovis 2,628 10.83% Morovis 2,628 10.83% Naguabo 3,139 9.83% Naranjito 2,983 9.83% Orocovis 3,085 8.03% Patillas 2,457 10.33% Peñuelas 2,388 8.58% Ponce 5,438 12.33% Quebradillas 2,754 8.83% Rincón 4,42 10.83% Rincón 4,442 10.33% Sabana Grande 2,400 10.33% Salinas 3,160 10.33% San Germán 3,483 10.08% San Juan 11,027 10.33% San Sehastián 3,151 9.98% San Sebastián 3,151 9.8% Santa Isabel 2,978 10.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Utuado 2,660 8.83%		481	120	1,373	341	2,105	293	73	19
Morovis 2,628 10.83% Naguabo 3,139 9.83% Naranjito 2,983 9.83% Orocovis 3,085 8.03% Patillas 2,457 10.33% Peñuelas 2,388 8.58% Ponce 5,438 12.33% Quebradillas 2,754 8.83% Rincón 4,442 10.83% Río Grande 5,722 10.33% Sabana Grande 2,400 10.33% Salinas 3,160 10.33% San Germán 3,483 10.08% San Juan 11,027 10.33% San Sebastián 3,151 9.08% San Sebastián 3,151 9.08% Santa Isabel 2,978 10.33% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Tou Alto 2,660 8.83% Vega Alta 5,956 8.86% Vega Baja 3,941 10.33% <t< td=""><td>675</td><td>4,490</td><td>3,029</td><td>5,601</td><td>3,779</td><td>9,947</td><td>3</td><td>2</td><td>353</td></t<>	675	4,490	3,029	5,601	3,779	9,947	3	2	353
Naguabo 3,139 9.83% Naranjito 2,983 9.83% Orocovis 3,085 8.03% Petillas 2,457 10.33% Peñuelas 2,388 8.58% Ponce 5,438 12.33% Quebradillas 2,754 8.83% Rincón 4,442 10.83% Río Grande 5,722 10.33% Sabana Grande 2,400 10.33% Sain Germán 3,483 10.08% San Juan 11,027 10.33% San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% San Sebastián 3,151 9.08% Santa Isabel 2,978 10.83% Toa Baja 4,347 11.83% Toa Baja 4,347 11.83% Tujillo Alto 4,887 10.85% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% <td></td> <td>1,547</td> <td>399</td> <td>3,625</td> <td>935</td> <td>5,670</td> <td>4</td> <td>1</td> <td>150</td>		1,547	399	3,625	935	5,670	4	1	150
Naranjito 2,983 9.83% Orocovis 3,085 8.03% Patillas 2,457 10.33% Peñuelas 2,388 8.85% Ponce 5,438 12.33% Rincón 4,42 10.83% Río Grande 5,722 10.33% Sabana Grande 2,400 10.33% Salinas 3,160 10.33% San Juan 11.027 10.33% San Juan 11.027 10.33% San Sebastián 3,151 9.08% San San Sebastián 3,151 9.08% Santa Isabel 2,978 10.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Trujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.08% Vega Baja 3,941 10.33% Viegues 3,077 10.83%	285	811	231	2,640	751	4,386	17	5	155
Orocovis 3,085 8,03% Patillas 2,457 10,33% Peñuelas 2,388 8,58% Ponce 5,438 12,33% Quebradrillas 2,754 8,83% Rincón 4,442 10,83% Río Grande 5,722 10,33% Sabana Grande 2,400 10,33% Sain Germán 3,483 10,08% San Juan 11,027 10,33% San Sebastián 3,151 9,08% San Sebastián 3,151 9,08% Santa Isabel 2,978 10,83% Toa Alta 3,249 11,33% Toa Baja 4,347 11,83% Toa Baja 4,347 11,83% Utuado 2,660 8,83% Vega Alta 5,956 8,88% Vega Baja 3,941 10,33% Vieques 3,077 10,83%		4,170	1,287	2,049	632	5,474	262	81	132
Patillas 2,457 10.33% Peñuelas 2,388 8.58% Ponce 5,438 12.33% Ponce 5,438 12.33% Quebradillas 2,754 8.83% Rincón 4,442 10.83% Río Grande 5,722 10.33% Sabana Grande 2,400 10.33% San Juan 11,027 10.33% San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% Santa kabel 2,978 10.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Trujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%	293	4,452	1,305	2,528	741	2,825	-	-	115
Peñuelas 2,388 8.58% Ponce 5,438 12.33% Quebradillas 2,754 8.83% Ríncón 4,442 10.83% Río Grande 5,722 10.33% Sabana Grande 2,400 10.33% Salinas 3,160 10.33% San Germán 3,483 10.08% San Juan 11,027 10.33% San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% Santa Isabel 2,978 10.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Trujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%	248	360	89	2,833	702	2,809	22	5	135
Ponce 5,438 12.33% Quebradillas 2,754 8.83% Rincón 4,442 10.83% Rio Grande 5,722 10.33% Sabana Grande 2,400 10.33% Salinas 3,160 10.33% San Germán 3,483 10.08% San Juan 11,027 10.33% San Sebastián 3,151 9.08% Santa Isabel 2,978 10.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Tujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%		1,785	453	2,110	536	3,738	102	26	96
Quebradillas 2,754 8.83% Rincón 4,442 10.83% Río Grande 5,722 10.33% Sabana Grande 2,400 10.33% Salinas 3,160 10.33% San Germán 3,483 10.08% San Juan 11,027 10.33% San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% Santa Sabel 2,978 10.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Tujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%	205	966	198	2,201	451	3,721	36	7	129
Rincón 4,442 10.83% Río Grande 5,722 10.33% Sabana Grande 2,400 10.33% Salinas 3,160 10.33% San Germán 3,483 10.08% San Juan 11,027 10.33% San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% Santa Isabel 2,978 10.83% Toa Alta 3,249 11.53% Toa Baja 4,347 11.83% Trujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%		7,737	5,188	7,530	5,049	23,120	46	31	731
Río Grande 5,722 10.33% Sabana Grande 2,400 10.33% Salinas 3,160 10.33% San Germán 3,483 10.08% San Juan 11,027 10.33% San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% Santa Isabel 2,978 10.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Trujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.08% Vega Baja 3,941 10.33% Vieques 3,077 10.83%		1,730	421	1,739	423	4,569	170	41	111
Sabana Grande 2,400 10.33% Salinas 3,160 10.33% San Germán 3,483 10.08% San Juan 11,027 10.33% San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% Santa Isabel 2,978 10.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Trujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.08% Vega Baja 3,941 10.33% Vieques 3,077 10.83%		829	399	1,356	652	2,807	207	100	272
Salinas 3,160 10.33% San Germán 3,483 10.08% San Juan 11,027 10.33% San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% Santa Isabel 2,978 10.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Tujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%		2,287	1,352	1,651	976	8,812	151	89	468
San Germán 3,483 10,08% San Juan 11,027 10,33% San Lorenzo 2,954 10,23% San Sebastián 3,151 9,08% Santa Isabel 2,978 10,83% Toa Alta 3,249 11,33% Toa Baja 4,347 11,83% Trujillo Alto 4,887 10,58% Utuado 2,660 8,83% Vega Alta 5,956 8,68% Vega Baja 3,941 10,33% Vieques 3,077 10,83%		896	222	2,064	512	4,182	69	17	77
San Juan 11,027 10,33% San Lorenzo 2,954 10,23% San Sebastián 3,151 9,08% Santa Isabel 2,978 10,83% Toa Alta 3,249 11,33% Toa Baja 4,347 11,83% Trujillo Alto 4,887 10,58% Utuado 2,660 8.83% Vega Alta 5,956 8.08% Vega Baja 3,941 10,33% Vieques 3,077 10,83%		2,106	687	3,244	1,059	6,421	29	9	157
San Lorenzo 2,954 10.23% San Sebastián 3,151 9.08% Santa Isabel 2,978 10.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Trujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%	351	1,468	515	3,281	1,152	5,409	485	170	128
San Sebastián 3,151 9,08% Santa Isabel 2,978 10,83% Toa Alta 3,249 11,33% Toa Baja 4,347 11,83% Trujillo Alto 4,887 10,58% Utuado 2,660 8,83% Vega Alta 5,956 8,68% Vega Baja 3,941 10,33% Vieques 3,077 10,83%		18,245	20,783	13,003	14,812	28,162	65	74	3,109
Santa Isabel 2,978 10.83% Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Trujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%		1,387	419	3,216	972	6,566	-	-	209
Toa Alta 3,249 11.33% Toa Baja 4,347 11.83% Tujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%	286	2,068	592	4,619	1,322	7,500	61	17	130
Toa Baja 4,347 11.83% Trujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%	323	1,261	407	1,316	424	5,294	1,340	432	142
Trujillo Alto 4,887 10.58% Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%		8,670	3,192	4,469	1,645	12,224	259	95	1,195
Utuado 2,660 8.83% Vega Alta 5,956 8.68% Vega Baja 3,941 10,33% Vieques 3,077 10.83%		3,404	1,751	5,170	2,659	10,279	417	214	568
Vega Alta 5,956 8.68% Vega Baja 3,941 10.33% Vieques 3,077 10.83%	517	2,436	1,260	1,944	1,005	8,633	148	77	942
Vega Baja 3,941 10.33% Vieques 3,077 10.83%		1,314	309	5,786	1,359	4,029	121	28	123
Vieques 3,077 10.83%	517	1,792	926	4,387	2,268	4,651	393	203	361
	407	12,140	4,942	5,446	2,217	8,643	265	108	560
Villalba 2,586 9.58%	333	627	209	1,552	517	1,879	769	256	219
	248	428	106	1,784	442	2,936	89	22	136
Yabucoa 2,902 10.83%		1,263	397	3,302	1,038	5,248	462	145	110
Yauco 3,210 10.33% \$4,164 10.09%	332 \$423	1,626 197,782	539 \$111,112	3,771 239,525	1,250 \$112,941	6,131 517,824	583 17,505	193 \$7,739	25,951

Appendix 20: Detailed US Treasury Report Criteria

Criteria 1: Stable revenue

In general, tax revenues should track the overall economy, but with greater stability. In Puerto Rico, tax revenue is generally stable year over year.

Criteria 2: Revenue buoyancy

In general, tax revenues ought to grow at about the same rate (or slightly less) than the economy, without the need for increases in tax rates. The tax on real property is not buoyant, as the appraisal level is set at 1957 levels and does not account for increases in property values. Therefore, any revenue increases are only accomplished by increases in the tax rate or expansion to the tax base. Similarly, personal property tax, excluding taxes on inventory, is based on the lesser of the book value or fair market value. This value does not follow changes in the economy to some extent. Inventory tax, on the other hand, is based on current prices and is buoyant.

Criteria 3: Broad base

A broad base will have lower elasticity with respect to income and will, therefore, be more economically neutral. It is also more likely to capture the inherent growth associated with a growing economy. Puerto Rico's tax base is narrow, given that over 200,000 properties are not included in the tax roll, and multiple classes of properties and businesses are exempted from paying taxes.

Criteria 4: Compliance costs

The compliance costs associated with the real property in Puerto Rico are fairly low. However, the compliance costs associated with the personal property are relatively high because the burden of determining the taxable value is placed on the owner.

Criteria 5: Cost of administration

The cost to the tax agency to administer the tax must be kept as low as possible while still maintaining service quality levels. CRIM retains 5% of revenues collected to cover their costs. In the long run, this level appears appropriate. However, given the challenges facing the current system, it is likely additional resources will be required in the short- to medium-term.

Criteria 6: Economic neutrality

The current Puerto Rico property tax system fosters economic inefficiency. For example:

- Taxpayers actively solicit government agencies for property tax relief
- Tangible personal property tax incentivizes firms to employ less efficient equipment and processes for operations
- Inventory tax incentivizes companies to minimize inventories for retail and business-tobusiness firms
- Current appraisal practices for real property may distort investment decisions
- Some industrial and commercial taxpayers receive preferential treatment.

Criteria 7: Equity

Tax systems should treat taxpayers of equal means in a similar manner. Tax fairness implies that the tax burden for taxpayers with generally identical taxable assets should be equal. The current Puerto Rico property tax system creates substantial equity concerns. For example, multiple large industrial categories are currently exempt from the property tax. Similarly, current appraisal practices for real property and improvements undermine the fairness in the property tax system as recently constructed residential or business buildings are taxed at the same level as older buildings suffering from functional inadequacies.

The combined result is that the property tax in Puerto Rico badly underperforms relative to its potential. The table below provides an overview of how the current system performs on each of the criteria discussed above.

Criteria	Real Property	Personal Property
1. Stable Revenue	Good	Fair
2. Revenue Buoyancy	Very Poor	Fair
3. Broad Base	Poor	Poor
4. Compliance Costs	Fair	Poor
5. Cost of Administration	Good	Fair
6. Economic Neutrality	Poor	Very Poor
7. Equity	Poor	Very Poor