

Basic Financial Statements and Required Supplementary Information June 30, 2017 and 2016



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Basic Financial Statements and Required Supplementary Information June 30, 2017 and 2016

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### INDEPENDENT AUDITORS' REPORT

To: The Board of Trustees of The University of Puerto Rico Retirement System

We have audited the accompanying financial statements of the University of Puerto Rico Retirement System (the System) as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in conformity with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error.

### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2017, and the changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

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### **Emphasis of Matters**

### Significant Uncertainties

The accompanying financial statements have been prepared assuming the System will continue as a going concern.

As further described in Note 3 to these financial statements, the System is highly dependent on funding from the University of Puerto Rico (the University), which receives its funding from the Commonwealth of Puerto Rico (the Commonwealth) appropriations to finance its operations. The financial difficulties experienced by the Commonwealth, including uncertainty as to its ability to fully satisfy its obligations, also raises substantial doubt about its ability to continue funding of the System and paying the required contributions.

As further described in Note 3 to these financial statements, the University's Fiscal Plan, as certified by the Fiscal Oversight Management Board for Puerto Rico, includes a Pension Reform that proposes a freeze in the pension and a transition from a defined benefit to a defined contribution pension plan with a 50% match on member contributions up to 2%.

All these events together create a high level of uncertainty about the System's ability to continue as a going concern in the form it is currently structured. The financial statements do not include any adjustments that may result from these uncertainties.

### 2016 Financial Statement Restatement

As discussed in Note 4 to the financial statements, the 2016 financial statements have been restated to correct a misstatement. Our opinion is not modified with respect to this matter.

### Other Matters

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 4 to 14, the Schedule of Changes in Net Pension Liability, the Schedule of Net Pension Liability, the Schedule of Employer Contributions and the Schedule of Annual Money-Weighted Rate of Return on Investments on pages 39 to 42, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance. Although our opinion on the basic financial statements is not affected, the results of the limited procedures have raised doubts about whether material modifications should be made to the required supplementary information for it to be presented considering a reduced SEIR to determine the net pension liability.

### 2016 Financial Statements

The financial statements of the University of Puerto Rico Retirement System as of and for the year ended June 30, 2016, were audited by other auditors whose report thereon, dated April 27, 2018, expressed an unmodified opinion.



### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated February 21, 2019, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

San Juan, Puerto Rico February 21, 2019, except for Note 10 and the Required Supplementary Information included in Exhibit A to Exhibit C that are dated April 16, 2019.

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Stamp No. E373362 was affixed to the original of this report.

Management's Discussion and Analysis (Unaudited) As of June 30, 2017

### Introduction

The University of Puerto Rico (the "University") was organized through Law No. 135 of May 7, 1942, known as the Act of the University (superseded by Act Number 1 of January 20, 1966 as amended (the "Act No. 1")), as a public corporation and governmental instrumentality of the Commonwealth of Puerto Rico (the "Commonwealth"). On February 16, 1945, the University's Council on Higher Education, with the University's endorsement and consent, enacted a resolution to create, maintain, finance and manage the University of Puerto Rico Retirement Plan (the "System") effective January 1, 1945 in order to provide pension benefits to all university employees. The Act No. 1 designated the Governing Board as Trustee with the faculty to govern the System. In addition, the Governing Board appointed the System's Board to oversee the System administration and an Executive Director to manage its everyday affairs in accordance with the faculties and provisions of Certification Number 27 (1973-74), as amended. The System has functioned pursuant to the terms and conditions of Act No. 1 and Certification Number 27.

Our discussion and analysis of the System's financial performance provides an overview of the System's financial activities for the fiscal years ended June 30, 2017 and 2016.

### Financial Highlights

- During fiscal year 2017, the System reflected a return on investments of 11.08% when compared to fiscal year 2016 which reflected a 4.24% return.
- Sustainability ratio increased from 40.8% in fiscal year 2013, to 43.9% in fiscal year 2014, 46.6% in fiscal year 2015, 47.80% in fiscal year 2016, and 48.90% in fiscal year 2017 demonstrating continued progress in the financial position.
- Fund performance ranked 2nd and 4th during the last 36 and 60 months against the Callan Associates peer comparison nationwide Callan Associates Public Fund database for Fiscal Year June 2017. Database consists of approximately 300+ public funds in the past 24 months.
- System's assets are \$1,391,500,020, \$1,332,667,782, \$1,342,996,274, and \$1,324,028,384 at the close of fiscal years 2017, 2016, 2015 and 2014, respectively (reported as net position). Marketable securities are held in a separate account to meet future benefit payments.
- The component of Additions to Fiduciary Net Position in the year 2017 is comprised of contributions of \$118,533,094, and net investments income of \$132,950,015.

Management's Discussion and Analysis (Unaudited) As of June 30, 2017

- The System administered \$9,845,192 in reimbursements from the University of Puerto Rico for retirees' medical insurance (maximum reimbursed amount of \$125 per retiree per month).
- Total additions to Fiduciary Net Position in fiscal year 2017 were \$251,483,109 compared to \$176,361,081 in fiscal year 2016, \$211,428,495 in fiscal year 2015 and \$343,958,751 in fiscal year 2014. The increase in additions in fiscal year 2017 is thanks to a net increase in investments income of \$136,597,507 in fiscal year 2017 compared to \$63,430,339 in fiscal year 2016, which helped counteract the negative effect of the employer contribution insufficiency of \$6,326,462 (Gob. Board Cert.146 2014-2015, 40 year Unfunded Accrued Employer Liability Schedule) for fiscal year 2017.
- Deductions to Fiduciary Net Position in fiscal year 2017 were \$192,650,871 compared to \$186,689,573 in fiscal year 2016 and \$192,460,605 in fiscal year 2015. The increase was mainly caused by benefits paid to participants of \$188,310,782 in fiscal year 2017, compared to \$182,614,074 in fiscal year 2016. Retirees receiving benefits increased to \$,596 at the end of Fiscal year 2017, vs. 8,418 at the end of fiscal year 2016, while. 8,247 at the end of fiscal year 2015 and 8,082 in fiscal year 2014.

# The Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position

These statements include all assets and liabilities using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis of accounting, all revenues and expenses are taken into account regardless of when cash is received or paid. The Statement of Fiduciary Net Position presents plan assets and liabilities, with the difference between the two reported as net position. Over time, increases and decreases in net position measure whether the System's financial position is improving or deteriorating. The statement of Changes in Fiduciary Net Position presents how the System's net position changed during the period to determine whether the System is becoming financially stronger or weaker and to understand changes over time in the funded status of the System.

Management's Discussion and Analysis (Unaudited) As of June 30, 2017

### **Financial Analysis**

The net assets of the System during the year ended June 30, 2017 increased by approximately \$58.83 million a 4.41% increase over prior year (see Statements of Changes in Fiduciary Net Position for details). For fiscal year 2017 total assets increased \$61.74 million or 4.27% from prior year thanks to the increase in fair value of investments. For fiscal year 2016 total assets decreased \$79.6 million or -.77% from prior year.

#### Statements of Fiduciary Net Position

	June 30, 2015	June 30, 2016	June 30, 2017	2015-2016 Percentage Change	2016-2017 Percentage Change
Assets					
Cash	\$ 22,329,050	\$ 21,455,730	\$ 24,039,199	-3.91%	12.04%
Receivables	51,810,197	37,111,826	57,973,406	-28.37%	56.21%
Investments	1,230,353,693	1,112,522,115	1,175,218,142	-9.58%	5.64%
Alternative investment	18,653,369	89,323,115	94,796,295	378.86%	6.13%
Securities lending cash collateral	59,665,343	41,192,853	22,101,269	-30.96%	-46.35%
Loans to plan members	123,400,063	127,624,233	119,008,846	3.42%	-6.75%
Other net of allowances	15,505,688	13,119,934	11,037,091	-15.39%	-15.88%
Capital assets-net	3,548,760	3,326,222	3,240,420	-6.27%	-2.58%
Total assets	\$ 1,525,266,163	\$ 1,445,676,028	\$ 1,507,414,668	-5.22%	4.27%
Liabilities					
Accounts payable and accrued expenses	\$ 45,086,870	\$ 6,086,875	\$ 6,734,706	-86.50%	10.64%
Obligations under securities lending	60,946,003	42,416,315	23,301,612	-30.40%	-45.06%
Escrow deposits on mortgage loans	362,327	327,086	353,698	-9.73%	8.14%
Other deposits	3,584,486	3,797,540	4,283,473	5.94%	12.80%
Payables for acquisition of investments	72,290,203	60,380,430	81,241,159	-16.47%	34.55%
Total liabilities	 182,269,889	113,008,246	115,914,648	-38.00%	2.57%
Net assets	\$ 1,342,996,274	\$ 1,332,667,782	\$ 1,391,500,020	-0.77%	4.41%

### **Contributions and Net Investment Income**

The funds needed to finance retirement benefits are obtained through employer and employee contributions and through net investment income. Contributions and net investment income for fiscal year 2017 amounted to approximately \$251.5 million compared to \$176.37 million for fiscal year 2016. The increase was due to the increase in net income from investments net of the decrease in employer contributions during fiscal year 2017 and net of actuarial deficit employer contributions of \$6,326,462.

#### Statements of Changes in Fiduciary Net Position

				2014-2015	2015-2016	2016-2017
	June 30,	June 30,	June 30,	Percentage	Percentage	Percentage
	2015	2016	2017	Change	Change	Change
Additions:						
Contributions	\$ 123,844,673	\$ 116,643,497	\$ 118,533,094	-4.43%	-5.81%	1.62%
Net Investment income	76,179,857	59,717,584	132,950,015	-63.03%	-21.61%	122.63%
Total additions	200,024,530	176,361,081	251,483,109	-40.41%	-11.83%	42.60%
Deductions:						
Benefits paid to participants	176,871,770	182,614,074	188,310,782	4.56%	3.25%	3.12%
General and administrative expenses	4,184,870	4,075,499	4,340,089	3.33%	-2.61%	6.49%
Total deductions	181,056,640	186,689,573	192,650,871	4.53%	3.11%	3.19%
Net increase (decrease) in net position						
restricted for pension	\$ 18,967,890	\$ (10,328,492)	\$ 58,832,238	-88.32%	-154.45%	-669.61%

Contributions paid by employees approximated \$39.04 million, \$38.6 million, and \$35.6 million for the years ended June 30, 2017, 2016, and 2015, respectively. This represented an increase of approximately \$402.5 thousand dollars for 2017 or 0.34%, and \$3.0 million dollars or 8.56% for 2016.



**Total Additions to Fiduciary Net Position** 

### General and Administrative Expenses

General expenses for the administration of the System are budgeted and approved as part of the annual budget process and are paid from the assets of the System. Expenses for some professional services, including outside legal counsel, auditor, investment managers, investment advisor, and actuarial services are paid directly from the System. In addition, the Board reviews and approves proposals for one-time, special projects as they arise.

Total general and administrative expenses for the System during fiscal year 2017, 2016 and 2015, amounted to \$4,340,089, \$4,075,499, and \$4,184,870 respectively. Included in the fiscal year 2017 administrative expenses in a non-recurring investment of \$356 thousand corresponding to the implementation of a new information technology software. Excluding this investment, there is a net decrease of (\$91,409) or 2.24% in administrative expenses when compared to previous fiscal year 2016.

### Actuarial Standards

Actuarial calculations are based on the current provisions of the System and on actuarial assumptions that are as of June 30, 2017 and internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System. The actuary is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to determine the actuarial amounts contained in this report.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The following table summarizes the membership of the System as of June 30:

Membership	2017	2016	2015
Inactive members or their beneficiaries currently			
receiving benefits	8,598	8,417	8,247
Inactive members entitled to but not yet receiving benefits	8,829	8,588	8,428
Active members	10,204	10,438	10,644
Total	27,631	27,443	27,319

The long-term expected rate of return of the System investments was determined using a lognormal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) which are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of arithmetic real rates of return for each major asset class provided by the System's investment consultant.

The discount rate used to measure the total pension liability was 3.92% as of June 30, 2017, compared to 5.89% on June 30, 2016, and 6.37% on June 30, 2015. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that employer contributions will be made at rates equal to the difference between the total contribution rates and the member rate. The total contribution rates are projected based on a 40-year closed amortization of the System's unfunded accrued liability beginning on June 30, 2015 in accordance with Certification No. 146 adopted by the Governing Board of the University during the 2015 fiscal year. Based on those assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the plan year ending June 30, 2032. Therefore, the long-term expected rate of return on pension plan investments of 6.75% was applied to all periods of projected benefit payments through June 30, 2032 and the applicable municipal bond index rate of 3.13%, based on the S&P Municipal Bond 20-year High Grade Index Rate as of June 30, 2017, was applied to all periods of projected benefit payments after June 30, 2032. The Single Equivalent Interest Rate (SEIR) of 3.92% that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability as of June 30, 2017. The SEIR at the beginning of the measurement period was 5.89% based on the long-term expected rate of return on pension plan investments of 7.75% applied to all periods of projected benefit payments through June 30, 2045 and the applicable municipal bond index rate of 3.01% as of June 30, 2016 applied to all periods of projected benefit payments after June 30, 2045.

Required Supplementary Information includes four required schedules of historical trend information as follows:

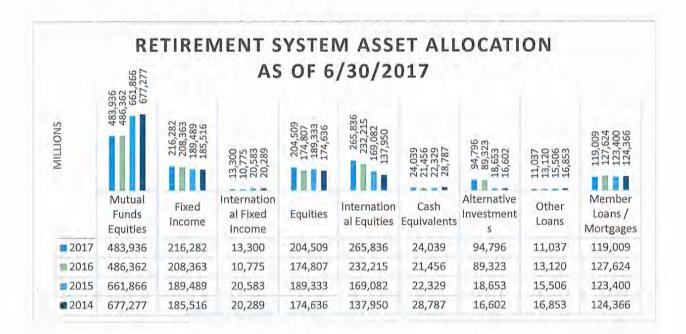
- 1. The Schedule of Changes in the University of Puerto Rico's Net Pension Liability (page 39) presents sources of changes in the net pension liability.
- 2. The Schedule of the University of Puerto Rico's Net Pension Liability (page 40) includes historical information about the components of the net pension liability and related ratios, including fiduciary net position as a percentage of the total pension liability, and the net pension liability as a percentage of covered-employee payroll.
- 3. The Schedule of the University of Puerto Rico's Contributions (page 41) includes information about the actuarially determined contribution, contributions to the pension plan, and related ratios. Additionally, significant methods and assumptions used in calculating the actuarially determined contributions are presented in the notes to required supplementary information.
- 4. The Schedule of Investment Returns (page 42) includes the annual money-weighted rate of return on pension plan investments for each year.

### Investments

The System's investment portfolio appreciated in fair value by approximately \$112.33 million during fiscal year 2017, as compared to fiscal year 2016 when it appreciated by approximately \$38.99 million and approximately \$58.45 million in 2015. The net investment income for fiscal year 2017 amounted to approximately \$132.95 million an increase of approximately \$73.23 million compared to a net investment income of approximately \$59.72 million in fiscal year 2016. Total investment expenses during fiscal year 2017 of \$3,647,492 decreased by \$65,263 or 1.75 % as compared to fiscal year 2016 and a decrease of \$67,750 or 1.86% as compared to fiscal year 2015.

### Asset Allocation of the University of Puerto Rico Retirement System

Most of the System's assets are invested in marketable securities. The investment fund has 66.61% of its assets in stocks and 15.10% in fixed income investments, 9.08% loans to participants, .93% in international fixed income, and 6.62% in private equity investments for the year ended June 30, 2017. Equity investments are diversified between domestic and foreign markets and among companies with small, medium and large capitalization. The table below shows the asset allocation as of June 30, 2017, 2016, 2015 and 2014:



### **Benefits Paid and Liabilities**

For the fiscal year 2017, pension benefits paid to retirees and beneficiaries were **\$188.31** million, which represents an increase of approximately **\$5.70** million or **3.12%** when compared to the prior year. For the fiscal year 2016, pension benefits paid to retirees and beneficiaries were **\$182.61** million, which represents an increase of approximately **\$5.74** million or **3.25%** when compared to the fiscal year 2015.

As of June 30, 2017, the Active members and Retired members were **10,204** and **8,598** respectively, as compared to 10,438 and 8,417 as of June 30, 2016.

During fiscal year 2017, total liabilities were approximately \$115.92 million, which represents an increase of approximately \$2.91 million or 2.57% when compared to prior year. 20% of our total liabilities consist of unsettled transactions. During fiscal year 2016, total liabilities were approximately \$113.01 million, which represents a decrease of approximately \$69.29 million or 38% when compared to prior year. 40% of our total liabilities consisted of unsettled investment transactions. Overall, liabilities represents accounts payable to agencies, deposits for distribution to employee's contributions and accounts payables for acquisition of investments.

### The System as a Whole

Fiscal year 2016, reported a negative net position of approximately \$10.32 million due to a decrease in employer contributions. These investments presented positive returns that amounted to approximately \$59.72 million compared to approximately \$76.70 the previous year.

Fiscal year 2017, reported a positive in net position of **\$58.8** million due to the return of investments held by the Plan as these investments presented positive returns that amounted to approximately \$132.95 million helping offset the \$6 million dollars decrease in employer contributions.

### **Economic Factors**

The Puerto Rico economy has been in a recession since 2006. There has been an overall contraction in sectors of Puerto Rico's economy, principally within the manufacturing and construction sectors, coupled with declines in retail sales, budget shortfalls and diminished consumer buying power resulting in higher costs of living.

The Commonwealth's recurring deficits, negative financial position, further deterioration of its economic condition (a prolonged economic recession which commenced in 2006), and inability to access the credit markets raise substantial doubt about the Commonwealth's ability to continue as a going concern. The significant financial difficulties being experienced by the Commonwealth has a significant adverse impact on the University, given its reliance on Commonwealth appropriations.

The Commonwealth's very high level of debt and unfunded pension liabilities and the resulting required allocation of revenues to service debt and pension obligations have contributed to significant budget deficits during the past several years, which deficits the Commonwealth has financed, further increasing the amount of its debt. These matters and the Commonwealth's liquidity constraints, among other factors, have adversely affected its credit ratings and its ability to obtain financing at reasonable interest rates, if at all. As a result, the Commonwealth had relied more heavily on short-term financings and interim loans from the GDB, and other instrumentalities of the Commonwealth, which reliance has constrained the liquidity of the Commonwealth in general and the GDB, and increased near-term refinancing risk. These factors, among others, have also resulted in the non-payment by the Commonwealth and its instrumentalities of most of their outstanding debt obligations, including the outstanding GDB lines of credit which caused the discontinuance of GDB to provide liquidity to the Commonwealth and instrumentalities, such as the University, and have caused the default of GDB's debt obligations.

On January 29, 2017, the Commonwealth enacted Act No. 5, the Puerto Rico Financial Emergency and Fiscal Responsibility Act ("Act No. 5"). Act No. 5 is intended to facilitate and encourage a voluntary negotiation process under PROMESA between the Governor of Puerto Rico and/or the Puerto Rico Fiscal Agency and Financial Advisory Authority (FAFAA), on behalf of the Government of Puerto Rico, and the creditors of the Government of Puerto Rico and its instrumentalities. Act No. 5 authorizes the Government of Puerto Rico, within the parameters established by PROMESA, to designate certain services necessary for the health, safety and welfare of the residents of Puerto Rico and provided by the Government of Puerto Rico. Act No. 5 amended and repealed portions of the Act No. 21, as amended by Act 40-2016 and Act 68-2016 (the "Moratorium Act"). The Moratorium Act, and executive orders issued by the Government of Puerto Rico to withhold the timely payment of its obligations at a point in time before the enactment of PROMESA.

Management's Discussion and Analysis (Unaudited) As of June 30, 2017

On May 2, 2017, the legal shield granted by PROMESA protecting the Commonwealth from debtrelated lawsuits expired. On May 3, 2017, the Oversight Board of PROMESA approved and certified the filing in the U.S. District Court for the District of Puerto Rico of a voluntary petition under Title III of PROMESA (a court-supervised debt-adjustment process) for Commonwealth to ensure the essential services to the public, the payment of the government payroll and the suppliers. This voluntary petition under Title III of PROMESA operates as an automatic stay of actions against the Commonwealth.

As mentioned above, the fiscal year ended June 30, 2017 continued to present significant economic challenges and difficulties for the University. As a result, the System's management focused hard on initiatives aimed at protecting the System of the University. On June 29, 2016 the University confirmed, restated and acknowledged in a public deed (the "Trust Deed") all acts and faculties as applied and lawfully enforced by the Governing Board in relation to the System and its trust fund from its inception to the present-day. Thus, through the execution of the Trust Deed, the University affirmed the public and governmental nature of the System founded in the year 1945 and its organization as a de facto trust. Pursuant to the Trust Deed, the System's assets remain completely autonomous and separate of the assets of the University, the Trustee and its members and continue to be exempt from the individual or collective action of their respective creditors.

As part of their Certified Fiscal Plan for the University of Puerto Rico, The Fiscal Oversight and Management Board for Puerto Rico includes a freeze in the pension, and continuation of a Defined Contribution plan similar to those of other Commonwealth plans, but with a 50% match on member contributions of up to 2%. Also includes a reduction in accrued benefits, using the same mechanism as for other plans, but with recognition of the partially funded status of the UPR retirement system.

### **Contacting System Financial Management**

This financial report is designed to provide the Government Board, Retirement Board, participants, taxpayers, investors, and creditors with a general overview of the System's finances and to demonstrate the University of Puerto Rico accountability for the money it receives. If you have any questions about this report or need additional financial information, contact the University of Puerto Rico Retirement System at P.O. Box 21769, San Juan, Puerto Rico 00931-1769 and (787) 751-4550.



### STATEMENTS OF FIDUCIARY NET POSITION June 30, 2017 and 2016

		2017		2016
ASSETS:				
Cash and cash equivalents	\$	24,039,199	\$	21,455,730
Investment at fair value:				
U.S. Government and Agencies' obligations		72,111,583		67,225,694
Foreign bonds		13,299,629		10,774,681
Corporate common stocks		66,367,475		72,779,176
Foreign common stocks		265,835,582		232,215,315
Common stocks		204,508,791		174,806,616
Mortgage-backed securities		67,384,378		65,561,087
Municipal bonds		835,393		1,817,419
Sovereign debt		939,385		979,936
Commingled funds equity		483,935,926		486,362,191
Alternative investments		94,796,295		89,323,115
Invested securities lending cash collateral		22,101,269		41,192,853
Loans to System's members:				
First mortgages		38,219,863		44,381,362
Personal installments		80,788,983		83,242,871
Other, net of allowance for doubtful accounts of \$84,611				
and \$123,414		11,037,091		13,119,934
Other receivables		217,568		211,749
Accrued interest receivable on investments		2,348,405		2,039,246
Receivables from sale of investments		44,217,463		31,729,150
Contributions receivable from Puerto Rico				
Treasury Department		2,292,798		1,894,378
Accounts receivable from University of Puerto Rico		8,897,172		1,237,303
Capital assets, net of accumulated depreciation of \$1,343,188				
and \$1,155,077	_	3,240,420	_	3,326,222
		1,507,414,668	_	1,445,676,028
LIABILITIES:				
Accounts payable and accrued expenses		6,734,706		6,086,875
Obligations under securities lending		23,301,612		42,416,315
Escrow deposits on mortgage loans		353,698		327,086
Other deposits and pending distribution funds		4,283,473		3,797,540
Payable for acquisition of investments		81,241,159	-	60,380,430
	_	115,914,648	_	113,008,246
NET POSITION RESTRICTED FOR PENSIONS	\$	1,391,500,020	\$	1,332,667,782
			-	

The accompanying notes are an integral part of these statements.



### STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION For the Years Ended June 30, 2017 an 2016

	2017	2016
ADDITIONS:		
Contributions-		
Employer	\$ 79,490,663	<b>3 \$</b> 78,003,607
Members	39,042,43	138,639,890
	118,533,094	116,643,497
Investment income-		
Net appreciation in fair value of investments	112,330,054	
Interest	15,835,757	
Dividends	8,431,696	6,808,253
	136,597,507	63,430,339
Investment expense	3,647,492	23,712,755
Net investment income	132,950,01	559,717,584
	251,483,109	9 176,361,081
DEDUCTIONS:		
Benefits paid to participants	188,310,782	2 182,614,074
General and administrative expenses	4,340,089	9 4,075,499
	192,650,87	1 186,689,573
NET (DECREASE) INCREASE IN NET POSITION	58,832,238	3 (10,328,492)
NET POSITION RESTRICTED FOR PENSIONS, beginning of year	1,332,667,782	21,342,996,274
NET POSITION RESTRICTED FOR PENSIONS, end of year	\$ 1,391,500,020	<b>0 \$</b> 1,332,667,782

The accompanying notes are an integral part of these statements.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

### 1) Organization and Summary of Significant Accounting Policies:

A) Organization – The University of Puerto Rico Retirement System (the System) is the administrator of a single-employer defined benefit pension plan that was created by Act No. 135, approved on May 7, 1942. The System started operations on January 1, 1945, the date on which contributions by employees and the University of Puerto Rico (the University) commenced. Assets of the System are legally held in a Trust, separate from the assets of the University of Puerto Rico, and are held solely for the purpose of meeting the System's obligations.

The responsibility for the proper operation and administration of the System is vested in the Executive Director of the System, which in turn will report to the Retirement System Committee of the Government Board of the University (the Committee). The Committee will then notify the Members of the University's Government Board of any decisions made related to the System. The Government Board are the Trustees of the Plan.

B) <u>Summary of significant accounting policies</u> – The accounting policies followed by the System conform to predominant industry practices and follows accounting principles generally accepted in the United States of America. The following summarizes the most significant accounting policies:

<u>Basis of presentation</u> – The System's financial statements and notes to the financial statements are prepared under the provisions of Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans*-an amendment of GASB Statement No. 25.

The accompanying financial statements have been prepared on the accrual basis of accounting. Members and employer contributions are recognized in the period in which the contributions are due and the employer has made a formal commitment to provide the contributions. Benefits are recognized when due and payable in accordance with the terms of the Plan.

<u>Investments</u> – Investments are reported at fair value. Investment in securities are valued based on quotations obtained from national security exchanges. Dividend income is recognized when received.

The fair value of investments held in foreign currencies are translated to U.S. dollars generally using current rates of exchange and the related translation adjustments are included as an addition to the unrealized change in fair value of investments which is recorded in the statement of changes in fiduciary net position as net appreciation in fair value of the investments.

The fair value of private equity fund investments is determined by the applicable fund manager.

<u>Securities lending</u> – Cash received as collateral on securities lending transactions is used to purchase investments. These investments are reported as assets in the accompanying financial statements and are generally measured at fair value with the exception of repurchase agreements, which are reported at cost. A corresponding liability is also reported for the amount owed to the broker at the termination of the lending agreement. Additional disclosures about the Plan's securities lending transactions are provided in Note 6.

<u>Loans to System's members</u> – Are carried at their unpaid principal balance, which approximates their fair value. Mortgage loans are collateralized by the member's contribution to the pension plan and first mortgage liens on the underlying properties. These mortgages are valued on the basis of future principal and interest payments discounted at prevailing interest rates for similar instruments.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

The System's Government Board granted certain members the option to select a supplemental pension benefit by making a retroactive contribution to the System. The members who accept this option have to make a lump-sum payment to cover the related benefits. The members could obtain an interest-bearing loan from the System to fund their contributions.

As of June 30, 2017 and 2016, the balance of *other loans* consisted of the principal balance of such contributions, which amounted to approximately \$11.04 million and \$13.12 million, respectively, net of allowance for uncollectible accounts.

<u>Medical insurance</u> – The System acts as a pass-through of the employer medical insurance contributions to retirees. Contributions received from the employer are recorded as a liability until paid to retirees.

<u>Capital assets</u> – Capital assets are recorded at cost. Depreciation is computed using the straight-line method based on the estimated useful lives of the depreciable property. Amounts exceeding \$1,000 and with a useful life of three years or more are capitalized.

Expenditures for maintenance and repairs are charged to operations, while those for renewals and betterments are capitalized. Depreciation expense charged to operations during the years ended June 30, 2017 and 2016 amounted to approximately \$158,300 and \$139,900, respectively.

### 2) Description of the System:

A) <u>General</u> – The System is a single-employer defined benefit pension plan that covers all employees of the University with the exception of hourly, temporary, part-time, contract and substitute employees, and visiting professors. It is qualified and exempt from Puerto Rico and United States income taxes.

Members consisted of the following as of June 30:

Description	2017	2016	
Retirees and beneficiaries receiving benefits	8,598	8,417	
Terminated plan members entitled to but not yet receiving benefits	457	445	
Terminated non-vested plan members entitled to return of their contributions	8,372	8,143	
Active plan members	10,204	10,438	
Total	27,631	27,443	

B) <u>Plan Amendments</u> – The following is a summary of the most significant Plan amendments and certifications, presented for general purposes only. Members and other users should refer to the Trust Agreement and original amendments and certifications for a more complete description of the Plan provisions and amendments.

Effective July 1, 2007, the Plan was amended by Certification No. 12. This certification was superseded by Certification No. 70 (2013-2014) in which the automatic 3% increase in pension benefits was terminated.

Effective July 1, 2014, the compensation limit for Certification No.139 was frozen at \$69,556. Effective January 1, 2015, the formula for Non-Occupational Disability was amended to increase vesting from 10 years to 15 years and the benefit payable will be 90% of the member retirement benefit payable if the member was to retire based on years of service.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

Effective July 1, 1998, the Plan was amended by establishing Certification No. 94 (1997-1998), to offer members an increase from \$35,000 to \$50,000 in the maximum salary subject to withholding contributions. The members who elect this benefit may pay retroactively to their first day of employment the differences in withholding contributions for prior year salaries exceeding \$35,000 and up to a maximum of \$50,000 plus 8% interest. Effective July 1, 1998, all new members will contribute 9% of their salary up to \$50,000.

Effective July 1, 2002, the Plan was amended by establishing Certification No. 139 (2001-2002), to offer members an increase from \$50,000 to \$60,000 in the maximum salary subject to withholding contributions. The members who elect this benefit may pay retroactively to their first day of employment the differences in withholding contributions for prior year salaries exceeding \$35,000 and up to a maximum of \$60,000, plus 8% interest. Effective July 1, 2002, all new members will have the option to contribute 9% of their salary up to \$50,000 or 11% of their salary up to \$69,556.

In addition, the maximum annual compensation for those members who had not completed 20 years of service by July 1, 1979 is \$35,000. Also, the minimum pension is \$250 a month. Finally, the reduction for commencement of pension benefits prior to age 55 is 1/3% per month for members who had not completed 20 years of service by July 1, 1979, and elected Certification No. 55, and for members hired on or after January 1, 1990.

Effective July 1, 2015, following recommendations presented by the Retirement Board, the System was amended by the Government Board through Certification No. 140 – (2014-2015): active members as of June 30, 2015 are divided into two groups:

- 1. Those who had 25 or more years of accredited service. These are not affected by the changes in regulation.
- Those who had less than 25 years of accredited service. To this group, effective June 30, 2015, individual required contribution increased by 1% and the required age for retirement changed from 55 to 58 years.

Certification No. 7:

Member who had earned 20 years of services as of July 1, 1979:

- a. Member who selected a complete supplementation with Social Security, contributes 7% of monthly compensation.
- b. Member who selected a coordinated plan with Social Security, contributes 4% of the monthly compensation up to \$ 350, plus 6 ½% of the excess.
- c. No salary CAP.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

#### Certification No. 37:

Member who had not earned 20 years of services as of July 1, 1979, and the ones who had entered on July 1, 1978 through December 1989:

Member with 25 years or more accredited at June 30, 2015	Members with less than 25 years accredited at June 30, 2015
5% up to \$35,000 (\$2,916)	6% up to \$35,000 (\$2,916)
9% up to \$50,000 (\$4,166)	10% up to \$50,000 (\$4,166)
11% up to \$69,556 (\$5,796)	12% up to \$69,556 (\$5,796)
11% up to \$69,556 (\$5,796)	12% up to \$69,556 (\$5,796)

### Certification No. 55:

Mandatory applicable to all members who entered beginning January 1, 1990 and those who enter before 1990 and are under the supplemented with social security plan and the ones who between January 1990 and December 1991 elected to fall under the coordinated with social security plan from Certification No. 55 (4/6.5%):

Member with 25 years or more accredited at June 30, 2015	Members with less than 25 years accredited at June 30, 2015
7% or 8% Suppl or 4/6.5% Coord. until \$35,000 (\$2,916)	8% or 9% Suppl or 4/6.5% Coord. until \$35,000 (\$2,916)
9% up to \$50,000 (\$4,166)	10% up to \$50,000 (\$4,166)
11% Suppl / Coord. up to \$69,556 (\$5,796)	12% Suppl / Coord. up to \$69,556 (\$5,796)

Regulation for those who entered between July 1, 1998 and March 31, 2015:

Member with 25 years or more accredited at June 30, 2015	Members with less than 25 years accredited at June 30, 2015				
9% up to \$50,000 (\$4,166)	10% up to \$50,000 (\$4,166)				
11% up to \$69,556 (\$5,796)	12% up to \$69,556.44 (\$5,796)				
Regulation for those who entered from April 1, 2015 t	to June 30, 2015:				
Member with 25 years or more accredited at June 30, 2015	Members with less than 25 years accredited at June 30, 2015				

11% up to \$69,556 (\$5,796) until June 30, 2015

12% up to \$69,556 (\$5,796)



Regulation for those who entered as of July 1, 2015:

Member with Less than 25 years of accredited at June 30, 2015

12% up to \$69,556 (\$5,796)

Contributions and Funding Policy:

The contribution requirements of members and the University are established and may be amended by the Board of Trustees. Members are required to contribute as follows:

Members who elect Certification No. 139: 11% of monthly compensation up to \$5,796

Members who have not completed 20 years of service by July 1, 1979:

- If full supplement is elected: 7% of monthly compensation up to \$2,916
- If full supplement is not elected: 5% of monthly compensation up to \$2,916
- If Certification No. 94 is elected: 9% of monthly compensation up to \$4,166
- If certification 139 is elected: 11% of monthly compensation up to \$5,796

Members who have completed 20 years of service by July 1, 1979:

- If full supplement is elected: 7% of monthly compensation
- If full supplement is not elected: 4% of monthly compensation up to \$350, plus 6.5% of the excess

Members who have not completed 20 years of service by July 1, 1979 and elect Certification No. 55:

- If full supplement is elected: 7% of monthly compensation up to \$2,916
- If full supplement is not elected: 4% of monthly compensation up to \$350, plus 6.5% of the excess up to \$2,916
- If certification 94 is elected: 9% of monthly compensation up to \$4,166
- If certification 139 is elected: 11% of monthly compensation up to \$5,796

Members who are hired between January 1, 1990 and June 30, 1998:

- 8% of monthly compensation up to \$2,916 or,
- If Certification 94 is elected: 9% of monthly compensation up to \$4,166
- If certification 139 is elected: 11% of monthly compensation up to \$5,796

Members who are hired on or after July 1, 1998 until March 31, 2015:

9% of monthly compensation up to \$4,166

Members who are hired on or after April 1, 2015:

11% of monthly compensation up to \$5,796 fully supplemented

The University contributes at an actuarially determined rate; the rate as of June 30, 2017, 2016 and 2015 was 17.56%, 15.20% and 17.29%, respectively, of annual covered payroll. The actuarially determined employer contribution rate takes into account payment of administrative expenses that are paid out of the trust fund.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

The contributions of the University were originally designed to fund, together with the contributions of the members, the current service cost on a current basis and the estimated accrued benefit cost attributable to qualifying service prior to the establishment of the System over a Certification No. 146 (2014-2015), 40-year period, but as a result of increasing benefits without a correlative increase in employer's contributions, they fall short of accomplishing the necessary funding.

Members who are hired after July 1, 2015:

- 12% of monthly compensation up to \$5,796
- C) <u>Retirement Benefits</u> The System provides retirement, disability and death benefits to members and beneficiaries.

Members who have completed 20 years of service by July 1, 1979 are entitled to annual retirement benefits at any age after 30 years of service. Otherwise, members are entitled to annual retirement benefits as follows:

- Certification No. 55 at age 55 after 30 years of service for those with 25 or more years at June 30, 2015, at age 58 for those with less than 25 years at June 30,2015.
- Certification No. 37 at age 58

Members may elect to receive their retirement benefits at age 58 after 10 years of service, or at age 55 after 25 years of service.

The amount of service retirement annuity is as follows:

For all members except those who have completed 20 years of service by July 1, 1979:

- Before age 65 for members with at least 30 years of service: 75% of average compensation. Amount is reduced by .5% for each month the member is 55 but under age 58 (Certification No. 37) and 55 (Certification No. 55), at time annuity begins.
- Before age 65 for members with less than 30 years of service: 1.5% of average compensation per year of service for the members with 20 or fewer years. Percentage increases by .05% for each year in excess of 20 years up to a maximum of 1.95% per year. Amount is reduced by .5% for each month the member is between the age of 55 and 58 at time annuity begins (Certification No. 37) and 1/3% for each month the member is under age 58 with less than 25 years of service (Certification No. 55).
- After age 65 if the member elected full supplement, the annuity is the same as before age 65. Otherwise, the annuity is reduced by .5% of average compensation not in excess of Social Security wage base in effect at retirement for each year of service. If the members had less than 30 years of service and was under age 58 at the beginning date, adjustment is made before application of .5% reduction per month under age 58.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

For those members who have completed 20 years of service by July 1, 1979:

- Before age 65 for members with at least 30 years of service: 75% of average compensation if age 55 at beginning date; 65% if under age 55. If the member completed 30 years of service before July 1973, the annuity is increased by 2% of average compensation for each year of service beyond 30 and before July 1973, but to no more than 85% of average compensation.
- Before age 65 for members with less than 30 years of service: 1.5% of average compensation per year of service for members with 20 or fewer years. Percentage increases by .05% for each year in excess of 20 years up to maximum of 1.95% per year. Amount is reduced by .5% for each month the member is under age 58 at the time the annuity begins.
- At age 65 if members elected full supplement, the annuity is the same as before age 65. Otherwise, the annuity is reduced by .5% of first \$350 of average compensation for each year of service but not by more than primary Social Security benefit. If the members had less than 30 years of service and was under age 58 at beginning date, adjustment is made before application of .5% reduction per month under age 58.

For all members who have not completed 20 years of service by July 1, 1979 and elect Certification 55, and for those hired on or after January 1, 1990:

- Before age 65 for members with less than 30 years of service: 1.5% of average compensation per year of service for members with 20 or fewer years. Percentage increases by .05% for each year in excess of 20 years up to a maximum of 1.95% per year.
- Before age 65 for members with at least 30 years of service: 75% of average compensation for members with at least 55 years of age at retirement date. Amount reduced by .5% for each month the member is between age 55 and 58 (Certification 37); and 1/3% for each month the member is under age 55 with more than 25 years of service and 1/3% for each month the member is 58 with less than 25 years of service (Certification No. 55).
- After Age 65 if members elected full supplement, annuity is the same as before age 65. Otherwise, annuity is reduced by .5% of average compensation at time of retirement multiplied by years of service.
- Minimum Annuity \$250 per month if a member terminates before rendering 10 years of service, the right to receive the portion of his accumulated plan benefits attributable to the University's contributions is forfeited. However, the member is entitled to receive, in a lump-sum payment, the value of his accumulated contributions.
- If a member terminates after rendering 10 years of service, and does not withdraw his contributions, the member receives a retirement annuity payable beginning at age 60 based on the applicable benefit formula.
- Refund may also be obtained after 10 years of service, but the vested benefit is lost.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

- D) <u>Disability Benefits</u> Members who become disabled receive annual disability benefits regardless of service if disability is due to occupational causes or after 15 years of service if disability is due to no-occupational causes. If the member is also eligible for a retirement annuity, the benefit payable is the higher of the two. Disability benefits are paid as follows:
  - Before age 65 if service related 50% of final salary. If not, services related, 30% of average compensation plus additional 1% for each year of service over 10.
  - After age 65 reduced to amount payable as retirement annuity, if that amount is less than disability
    retirement annuity, but reduced annuity plus primary Social Security benefit may not be less than
    original disability annuity.

Effective December 15, 2014, Certification No. 51, (2014-2015) non-occupational disability benefits regulation was amended. A disability due to non-occupational causes will be payable upon 15 years of service, the benefit payable will be 90% of the member's retirement benefit payable if the member was to retire based on years of service. If the member is eligible for a service retirement, benefit payable will be the higher of the two.

### E) Death Benefits -

- Pre-retirement death benefit if the death of an employee is service related, a death benefit equal to 50% of the final annual salary plus \$120 (\$240 if widow not receiving benefit) per year for each child under age 18 (21 if at school) is paid to the employee's beneficiaries. Maximum family benefit is 75% of the employee's final annual salary. If death is non-service related, a lump-sum is paid equal to the employee's contributions plus one year's final salary, but not less than \$6,000.
- Post retirement death benefits employee's contributions are refunded if they do not exceed retirement payments already made, unless reverse annuity was elected. Minimum payment is \$600. In addition, an annuity is payable to surviving spouse until death or remarriage or until they become eligible for Social Security benefits. Minimum annuity, \$75 per month, maximum annuity, \$150 per month.
- F) Christmas Bonus A \$400 annual bonus is given to all retired members.

### 3) Financial Condition and Liquidity:

The discussion in the following paragraphs regarding the System's financial and liquidity risks provides the necessary background and support for management's evaluation as to whether there is substantial doubt about the System's ability to continue as a going concern for 12 months beyond the date of the financial statements or for an extended period if there is currently known information that may raise substantial doubt shortly thereafter. GASB Statement No. 56, Codification of Accounting and Financial Reporting Guidance Contained in the AICPA Statements on Auditing Standards, establishes that the continuation of a legally separate governmental entity as a going concern is assumed in financial reporting in the absence of significant information to the contrary. Information that may significantly contradict the going concern assumption would relate to a governmental entity's inability to continue to meet its obligations as they become due without substantial disposition of assets outside the ordinary course of governmental operations, restructuring of debt, submission to the oversight of a separate fiscal assistance authority or financial review board, or similar actions. Indicators such as negative trends in operating losses and negative cash flows, possible financial difficulties such as nonpayment or default of debt and/or restructurings or noncompliance with capital or reserve requirements, and internal or external matters impacting the governmental entity's ability to meet its obligations.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

The System's sponsor (the University) faces significant risks and uncertainties, including liquidity risk, which is the risk of not having sufficient liquid financial resources to meet obligations when they come due. We note that both the Commonwealth and the University have expressed substantial doubt about their respective ability to continue as going concerns in their most recently issued financial statements. The risks and uncertainties facing the University together with other factors further described below, have led management to conclude that there is substantial doubt as to the ability of the System to continue as a going concern in accordance with GASB Statement No. 56.

The Commonwealth's recurring deficits, negative financial position, further deterioration of its economic condition (a prolonged economic recession which commenced in 2006), and inability to access the credit markets raise substantial doubt about the Commonwealth's ability to continue as a going concern. The significant financial difficulties being experienced by the Commonwealth has a significant adverse impact on the University, given its reliance on Commonwealth appropriations.

The Commonwealth and several of its component units face significant risks and uncertainties, including liquidity risk. The risks and uncertainties facing the Commonwealth, together with other factors, have led the Commonwealth's management to conclude that there is substantial doubt as to the ability of the primary government and of various discretely presented component units, to continue as a going concern. In addition, the Commonwealth's management believes that the pension trust funds, included as part of the fiduciary funds, carry a substantial risk of insolvency, if measures are not taken to significantly increase contributions to such funds.

On January 29, 2017, the Commonwealth enacted Act No. 5, the Puerto Rico Financial Emergency and Fiscal Responsibility Act ("Act No. 5"). Act No. 5 is intended to facilitate and encourage a voluntary negotiation process under PROMESA between the Governor of Puerto Rico and/or the Puerto Rico Fiscal Agency and Financial Advisory Authority (FAFAA), on behalf of the Government of Puerto Rico, and the creditors of the Government of Puerto Rico and its instrumentalities. Act No. 5 authorizes the Government of Puerto Rico, within the parameters established by PROMESA, to designate certain services necessary for the health, safety and welfare of the residents of Puerto Rico and provided by the Government of Puerto Rico and its instrumentalities as "essential services", in accordance with the Constitution of Puerto Rico. Act No. 5 amended and repealed portions of the Act No. 21, as amended by Act 40-2016 and Act 68-2016 (the "Moratorium Act").

The Moratorium Act, and executive orders issued by the Governor under the Moratorium Act (the "Executive Orders"), permitted the Government of Puerto Rico to withhold the timely payment of its obligations at a point in time before the enactment of PROMESA.

On May 2, 2017, the legal shield granted by PROMESA protecting the Commonwealth from debt-related lawsuits expired. On May 3, 2017, the Oversight Board of PROMESA approved and certified the filing in the U.S. District Court for the District of Puerto Rico of a voluntary petition under Title III of PROMESA (a court-supervised debt-adjustment process) for Commonwealth to ensure the essential services to the public, the payment of the government payroll and the suppliers. This voluntary petition under Title III of PROMESA operates as an automatic stay of actions against the Commonwealth.

The System has evaluated the current market and University situation and considered several facts to establish a mitigation action plan as follows:

Trust Regulations:

The System is the administrator of a single-employer defined benefit pension plan that was created by Act No. 135, approved on May 7, 1942. The System started operations on January 1, 1945, the date on which contributions by employees and the Employer commenced.



# NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

Fund administration:

The Retirement System located its assets in a separate Retirement Fund located in JP Morgan Chase New York in 1989. This Retirement Trust account was created to exclusively receive income, hold monies, and make disbursements on behalf of the Trust.

Investments Return:

As of June 30, 2017, the returns of the Retirement fund continue to present position positive results. During the last 12 months of fiscal year 2016-2017, the System's closed with a return of 11.08%.

Funding Ratio:

The funding ratio increased from 43.9% in June 30, 2014 to 46.60% in June 30, 2015, to 47.80% in June 30, 2016 and to 48.9% in June 30, 2017.

Contributions:

As stated in the plan document, the Retirement fund will not be used for disbursements, withdrawals, and transfer of any assets other than the exclusive use of funds for both pension and administrative expenses. Its securities, notes or other evidences of loans are clearly marked to indicate ownership by the System and are registered in the name of the System. Its administration is separated from the administration of the University as established in Cert. 53 (1989-1990).

The System is qualified and exempt from Puerto Rico and United States income taxes like other peer governmental plans. There is uncertainty as to what actions the Oversight Board and the Commonwealth will take, if any, and the effects they may have on the Plan. PROMESA requires that any fiscal plan developed by the Commonwealth or any of its affiliates shall "provide for the adequate funding for public pension systems." In addition, pursuant to the Trust Deed, the System's assets remain completely autonomous and separate of the assets of the University, the Trustee and its members and continue to be exempt from the individual or collective action of their respective creditors.

The assets of the System's fund have been well maintained over \$1.3 billion since 2014. Given the precarious scenarios in Puerto Rico, the System's funds are likely not sufficient to sustain necessary withdrawals as projected over the life of the Plan, without further contributions by the University. However, management believe the System's funds can sustain withdrawals for approximately 15 years, assuming a constant rate of return of 6.75% and liabilities as currently projected. This analysis only includes the individual contributions that are part of the University automatic payroll deductions. The employer has stated clearly that payroll is a priority under the current scenario and has asserted a commitment to fund the unfunded liability for the next 40 years to the extent it is able.

Plan Regulatory Changes:

As a result of intensive research work made by the System administration and several meetings by the Retirement Board and the Government Board, retirement system regulatory changes have been approved for the current and next fiscal years. These measures emerged as initiatives implemented towards improving sustainability of the current defined benefit system. The System amendments are described in detail in Notes 2 and 11.

### 4) Restatement of Statement of Changes in Fiduciary Net Position

During the year ended June 30, 2017, the System identified that the medical insurance reimbursements from the University, reflected as an addition, as well as the medical insurance expenses paid to retirees, reflected as a deduction, were not properly presented in the 2016 Statement of Changes in Fiduciary Net Position. Since the System acts as a pass-through from the employer to the retirees, such amounts were not required to be presented in the Statement of Changes in Fiduciary Net Position. This restatement to the 2016 Statement of Changes in Fiduciary Net Position did not have an impact on the System's net position.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

### 5) Cash and Cash Equivalents:

Cash and cash equivalents as of June 30, 2017 and 2016, is as follows:

Description	 2017	 2016
Cash Cash equivalents	\$ 15,395,360 8,643,839	\$ 21,455,730
le standa de la contra de la cont	\$ 24,039,199	\$ 21,455,730

### 6) Investments:

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3). The three levels of the fair value hierarchy are described as follows:

- Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.
- Level 2 Inputs to the valuation methodology include:
  - · Quoted prices for similar assets or liabilities in active markets;
  - · Quoted prices for identical or similar assets or liabilities in inactive markets;
  - . Inputs other than quoted prices that are observable for the asset or liability;

• Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The following is a summary of the fair value hierarchy of the fair value of investments of the System as of June 30, 2017 and 2016:

		June 30, 2017							
			Fair Value Measurements				Using:		
			Quoted Prices in Active Markets for Identical Assets		Significant Other Observable Inputs		Unobservable Inputs for the Assets		
Description	_	Total (Level 1		(Level 1)	1000	(Level 2)	(Level 3)		
U.S. Government and		AU 111 200	4		1				
Agencies' obligations	\$	72,111,583	\$	No. Catholog	\$	72,111,583	\$	-	
Common stocks		204,508,791		204,508,791		C.C. Las		-	
Mortgage-backed securities		67,384,378				67,384,378			
Municipal bonds		835,393				835,393			
Corporate bonds		66,367,475		Statistics of the		66,367,475		-	
Foreign common stock		265,835,582		265,835,582					
		Sanata A. Sanata					C	Continues	



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

Continued. . .

				and the second sec	June	30, 2017		
			-	Fair Valu	e Mea	surements Usin	g:	
Description		Total	Acti Ide	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		observable outs for the Assets Level 3)
Foreign bonds Commingled funds equity Sovereign debt Alternative investments		13,299,629 483,935,926 939,385 94,796,295		1	_	13,299,629 483,935,926 939,385 -	4	- - 94,796,295
	\$	1,270,014,437	\$	470,344,373	\$	704,873,769	\$	94,796,295
					June	30, 2016		_
				Fair Va	lue Me	asurements Usir	g:	
			Acti	oted Prices in ve Markets for entical Assets		nificant Other servable Inputs		observable puts for the Assets
Description	_	Total		(Level 1)	_	(Level 2)	_	(Level 3)
U.S. Government and Agencies obligations Common stocks Mortgage-backed securities Municipal bonds Corporate bonds Foreign common stocks Foreign bonds Commingled funds equity Sovereign debt Alternative investments	\$	67,225,694 174,806,616 65,561,087 1,817,419 72,779,176 232,215,315 10,774,681 486,362,191 979,936 89,323,115	\$	174,806,616	\$	67,225,694 65,561,087 1,817,419 72,779,176 	\$	
an address fall outs for burds our study.	\$	1,201,845,230	\$	407,021,931	\$	705,500,184	\$	89,323,115

No more than 5% of any debt issue may be purchased as an investment, with the exception of the U.S. government securities or its agencies. No more than 10% of the assets at cost may be invested in the securities of a single issuer, with the exception of the U.S. government securities or its agencies.

Investments classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets.

Investment income securities, including U.S. sponsored agencies bonds and notes, U.S. municipal bonds, foreign government bonds, mortgage-backed securities, pooled funds and corporate bonds, classified in Level 2 of the fair value hierarchy are valued using matrix pricing techniques maintained by various pricing vendors. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by our custodian bank. Alternative investments are classified in Level 3.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

The custody of these investments is held by the trust department of a commercial bank in the name of the System and the portfolio is managed by Investment Management Organization.

The UPR's Government Board has adopted the following strategic asset allocation:

Asset Class	% Allocated	Range		
Domestic Large Cap Equity	25.6%	+/-5%		
Domestic Small/Mid Cap	24.0%	+/-3%		
International Equity	6.4%	+/-3%		
Fixed Income	30.0%	+/-5%		
Real Estate	5.0%	+/-3%		
Personal Loans and Mortgages	9.0%	+/-3%		

The overall investment fund does not have a strategic asset allocation to cash but individual managers will hold varying amounts of cash within their respective portfolios as part of the normal course of managing the assets.

From time to time, when the operating cash flow has excess disbursements the Executive Director is authorized to sell securities on behalf of the Retirement System not exceeding \$6,500,000 (Certification No. 97, 2013-2014) per month. This will be executed according to market fluctuations and rebalancing requirements of the portfolio without diverging from the Investment Policy.

The overall investment fund does not have a strategic allocation to private equity. However, the overall investment fund may, from time to time, examine private equity investments that it deems acceptable. If an allocation to private equity is made it will be funded from the domestic equity asset class. At no time, will the allocation exceed 5% of total fund assets.

Alternative investments include the following as of June 30, 2017 and 2016:

			_	_	Jur	ne 30, 2017				
Description	Total Commitment		C		Co	ontributions	D	istributions	F	air Value
Grupo Guayacán, Inc.:								6.450		
Guayacán Fund of Funds II, LP	\$	6,000,000	\$	5,683,539	\$	7,377,124	\$	220,241		
Guayacán Fund of Funds III, LP		5,000,000		4,726,372		2,980,666		3,750,719		
Guayacán Fund of Funds IV, LP		5,000,000		1,401,946		200,000		1,230,846		
Advent-Morro Equity Partners Inc.:										
Guayacán Private Equity Fund I, LP		2,500,000		2,322,582		4,120,811		1,073,857		
Guayacán Private Equity Fund II, LP		5,000,000		4,909,472		797,101		4,496,622		
Guayacán Private Equity Fund III, LP		7,500,000		187,500		A DEC N		42,379		
McCoy Investment Fund 2		15,000,000		10,904,326		4,193,613		10,261,382		
RREEFF America REI T II	_	65,000,000	_	65,000,000	-		-	73,720,249		
Total	\$	111,000,000	\$	95,135,737	\$	19,669,315	\$	94,796,295		



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

			June 30, 2016						
Description	Co	Total Commitment		Contributions		DistributionsF		air Value	
Grupo Guayacán, Inc.:									
Guayacán Fund of Funds II, LP	\$	6,000,000	\$	5,683,539	\$	7,240,144	\$	418,177	
Guayacán Fund of Funds III, LP		5,000,000		4,571,372		2,330,666		3,683,381	
Guayacán Fund of Funds IV, LP		5,000,000		775,000		75,000		666,915	
Advent-Morro Equity Partners Inc.:		transfer and the set							
Guayacán Private Equity Fund I, LP		2,500,000		2,322,582		4,120,811		1,078,108	
Guayacán Private Equity Fund II, LP		5,000,000		4,909,472		. 797,101		5,109,195	
McCoy Investment Fund 2		15,000,000		10,604,326		4,193,613		9,369,668	
RREEFF America REI T II	_	65,000,000	_	65,000,000	-			58,997,671	
Total	\$	103,500,000	\$	93,866,291	\$	18,757,335	\$ 8	39,323,115	
Total	\$	103,500,000	\$	93,866,291	\$	18,757,335	\$ 8	39,32	

### **Credit Risk**

Issuer credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Investments issued or explicitly guaranteed by the United States government are excluded. The System's policy requires and limits investments in debt securities to only those in the top investment grade ratings issued by a nationally recognized statistical rating organization.

As of June 30, 2017, the System's credit quality distribution for securities was as follows:

	2017					
Description	Carrying Value	Rating				
Foreign bonds	\$13,299,629	AAA to BB+				
Corporate bonds and other debentures	66,367,475	AAA to CCC-				
Mortgage backed securities	67,384,378	AAA to D				
Municipal bonds	835,393	AAA to BBB+				



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

### **Custodial Risk**

The custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the System will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custody of the commingled fund is located at another financial institution. Investments of the System, which are under custody of a depository finance institution, are as follows:

	2017	2016		
Description	Carrying Value	Carrying Value		
Mortgage-backed securities	\$ 67,384,378	\$ 65,561,087		
Corporate bonds and other debentures	66,367,475	72,779,176		
Common stocks	204,508,791	174,806,616		
U.S. Government and Agencies obligations	1,406,201	2,802,700		
Treasury bonds and notes	70,705,382	64,422,994		
Foreign common stocks	265,835,582	232,215,315		
Foreign corporate bonds	10,231,934	8,382,673		
Foreign government bonds	3,067,695	2,392,008		
Commingled fund equity	483,935,926	486,362,191		
Sovereign debt	939,385	979,936		
Municipal bonds	835,393	1,817,419		
Total	\$ 1,175,218,142	\$ 1,112,522,115		

### Security Lending

The System has a Security Lending Agreement (the Agreement) with its investment custodian (the Custodian). In this Agreement, the University agrees to lend certain securities upon request of a borrower. The Custodian is the managing agent in this agreement where upon request of a borrower, the Custodian lends, as mentioned before, securities in exchange for collateral. Collateral may consist of cash, other approved securities and/or letter of credit from the borrower. The Custodian has the unrestricted right to invest any cash collateral; also, the Custodian may commingle any approved securities held as collateral with any other securities held under custody on behalf of the University. Under the Agreement, the borrower is compelled to return the securities loaned by the University upon termination of the loan term.

Under the Agreement as disclosed above, the System had a cash collateral of \$22,101,269 and \$41,192,852 at June 30, 2017 and 2016, respectively. This cash collateral has been reinvested, in accordance with the Agreement, in fixed income investments that are exposed to custodial credit risk as disclosed in the executed agreement.

During fiscal year 2008-2009, there was a default in a Lehman Brothers and Sigma floating rate note in which securities lending collateral had been invested. These funds are invested into a collective investment trust fund and are included on the Statement Fiduciary of Net Position. The purpose of the separate account is to provide a reserve account to offset expected losses. At 2017 and 2016, the System had an unrealized loss in the Securities Lending Collateral pool of \$1,175,454 and \$57,197, respectively, and had accrued an obligation of \$23,301,612 and \$42,416,315, respectively, in the separate account.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

### **Concentration of Credit Risk**

Concentration of credit risk is the risk of loss attributable to the magnitude of investment in a single issuer. Information regarding investment in any one issuer that represents five percent or more of the System's total investments must be disclosed under GASB No. 40, excluding investments issued or explicitly guaranteed by the United States government. The System's portfolio is not exposed to concentration of credit risk since the investment policies do not allow the System to invest in any single issuer more than 5% of the total portfolio, except for Government securities.

### Interest-Rate Risk

Interest-rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value is to changes in market interest rates. As of June 30, 2017, and 2016, the weighted average maturity by investment type in each fund follows:

			Fair	r Value			
Investment Type	Weighted Average		2017		2016		
	(Years)			15			
Corporate Bonds	3.6734	\$	66,367,475	\$	72,779,176		
Mortgage Backed Securities	5.1014		67,384,378		65,561,087		
Municipal Bonds	0.0308		835,393		1,817,419		
Foreign Bonds	0.5253		13,299,629		10,774,681		
US Government agencies obligations			A THE COLD				
and Sovereign debt	2.3179		73,050,968	-	68,205,630		
		\$	220,937,843	\$	219,137,993		
		_					

A System's exposure to foreign currency risk derives from its positions in foreign currency denominated equities and fixed income investments. The System's investment policy permits it to invest up to 15% of total investments in foreign currency denominated investments. The following is a listing of foreign assets included in the Statement of Fiduciary Net Position as of June 30, 2017:

### Foreign Currency Risk

Security Type	Currency	Maturity	Fair Value
Common Stocks	Australia	Not Applicable	\$5,840,603
Common Stocks	Bermuda	Not Applicable	10,675,786
Common Stocks	Brazil	Not Applicable	2
Common Stocks	Cayman Islands	Not Applicable	5,049,408
Common Stocks	Canada	Not Applicable	7,460,776
Common Stocks	Channel Island	Not Applicable	2,117,769
Common Stocks	China	Not Applicable	4,082,809
Common Stocks	Denmark	Not Applicable	3,617,518
Common Stocks	Finland	Not Applicable	488,478
Common Stocks	France	Not Applicable	24,716,717
and the second of			Continues



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

Continued . . .

Security Type	Currency	Maturity	Fair Value
Commercial Paper	France	Not Applicable	394,463
Common Stocks	Germany	Not Applicable	31,101,078
Common Stocks	Hong Kong	Not Applicable	2,905,163
Common Stocks	India	Not Applicable	2,757,331
Common Stocks	Indonesia	Not Applicable	1,166,881
Common Stocks	Ireland	Not Applicable	4,005,551
Common Stocks	Israel	Not Applicable	1,423,569
Common Stocks	Japan	Not Applicable	55,921,141
Common Stocks	Mexico	Not Applicable	2,670,508
Common Stocks	Netherlands	Not Applicable	12,748,028
Common Stocks	Norway	Not Applicable	1,497,140
Common Stocks	Panama	Not Applicable	309,744
Common Stocks	Singapore	Not Applicable	1,095,107
Common Stocks	Spain	Not Applicable	6,189,265
Common Stocks	Sweden	Not Applicable	3,958,509
Common Stocks	Switzerland	Not Applicable	29,051,280
Common Stocks	Taiwan	Not Applicable	5,830,065
Common Stocks	United Kingdom	Not Applicable	38,760,892
Corporate Bonds	Belgium	02/01/2026-02/01/2046	343,165
Corporate Bonds	Bermuda	12/15/2026	36,105
Corporate Bonds	Canada	09/23/2019 - 05/15/2038	2,087,370
Corporate Bonds	Channel Islands	9/23/2019	114,466
Corporate Bonds	France	09/27/2016-03/13/2027	875,549
Corporate Bonds	Germany	02/13/2018-03/16/2024	897,870
Corporate Bonds	Ireland		24,704
Corporate Bonds	Israel		375,804
Corporate Bonds	Japan	03/19/2019-02/28/2022	403,985
Corporate Bonds	Luxembourg	03/12/2018 - 03/15/2025	1,367,957
Corporate Bonds	Mexico	2/15/2020	211,032
Corporate Bonds	Neth. Antilles	12/18/2022	109,365
Corporate Bonds	Netherlands	05/25/2018-12/31/2049	1,006,473
Corporate Bonds	Peru	6/19/2047	202,000
Corporate Bonds	Switzerland	1/19/2023	1,261,282
Second Contraction			Continues .



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

Continued ...

Security Type	Currency	Maturity	Fair Value
Corporate Bonds	United Kingdom	06/12/2022-10/01/2046	914,807
Governmental Bonds	Canada	08/27/2018-06/17/2019	1,018,347
Governmental Bonds	Colombia	05/21/2024-04/25/2027	732,161
Governmental Bonds	Germany	4/8/2016-9/05/2017	298,671
Government Bonds	Mexico	03/05/2020-01/23/2046	391,767
Governmental Bonds	Panama	09/22/2024-05/15/2047	412,500
Governmental Bonds	Peru	7/15/2025	214,250
Total			\$ 279,135,211
			and do not the state of the sta

Foreign Currency Risk represent 19% of Total Assets.

### **Risk and Uncertainty**

The Retirement Fund invests in various marketable securities. These are exposed to various risks; due to the level of risk inherent in securities it is possible that changes in the values of these securities could occur in the near term and that such changes could materially affect the amounts reported in the Statement.

### 7) Capital Assets:

Capital assets additions are recorded at cost. Depreciation is provided using the straight-line method over the useful life of the asset. For the years ended June 30, 2017 and 2016, changes in capital assets, consisted of the following:

Description	Balance at June 30, 2016		June 30,		_A	dditions	Re	etirements		Balance at June 30, 2017
Building	\$	3,811,940	\$	-	\$	+	\$	3,811,940		
Equipment		292,640		101,948		÷.		394,588		
Foreclosure homes	_	376,719	-	361			-	377,080		
		4,481,299		102,309		K		4,583,608		
Less accumulated depreciation	_	(1,155,077)	_	- 2	_	(188,111)	_	(1,343,188)		
	\$	3,326,222	\$	102,309	\$	(188,111)	\$	3,240,420		

# RSM

### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

Description		Balance at June 30, 2015	Ac	lditions	Re	etirements_		Balance at June 30, 2016
Building	\$	3,811,940	\$	2	\$	2	\$	3,811,940
Equipment		292,640		- Q		1. A		292,640
Foreclosure homes		459,406	_		-	(82,687)	-	376,719
		4,563,986		-		(82,687)		4,481,299
Less accumulated depreciation	-	(1,015,225)				(139,852)	_	(1,155,077)
	\$	3,548,761	\$		\$	(222,539)	\$	3,326,222

### 8) Medical Insurance:

The System is a pass-through of the employer's medical insurance contributions to retirees and reimbursed each retiree up to a maximum of \$125 monthly for medical plan expenses. For the years ended June 30, 2017 and 2016, the medical plan expenses amounted to \$9,845,192 and \$10,293,021, respectively. Medical expenses are paid by the retiree and reimbursed, through the System, by the University of Puerto Rico.

### 9) Related Party Transactions:

All employer contributions of the System are received from the University. In addition, the University utilizes the System for certain medical insurance expenses.

### 10) Net Pension Liability of the University of Puerto Rico:

The components of net pension liability of the University of Puerto Rico as of June 30, 2017 and 2016, were as follows (in thousands):

Description	 2017	_	2016
Total pension liability Fiduciary net position	\$ 4,359,733 (1,391,500)	\$	3,339,371 (1,332,668)
Net pension liability	\$ 2,968,233	\$	2,006,703
Fiduciary net position as a percentage of the total pension liability	31.92%		39.91%

<u>Actuarial Assumptions</u> – The total pension liability at June 30, 2017, was determined by an actuarial valuation as of June 30, 2016, using the following actuarial assumptions and experience, applied to all periods included in the measurement. The result was rolled forward using standard actuarial techniques to the measurement date of June 30, 2017:

Inflation	2.5%
Salary increases	2.5% and wage growth rate of .25%
Investment rate of return	3.92%, net of investment expense per annum compounded annually



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

The rates of mortality for the period after service retirement are according to the RP-2014 White Collar Headcount-weighted Mortality Table with rates adjusted by 103.8% for males and by 98.2% for females, projected generationally using scale MP-2017 for retired healthy pensioners. Rates of mortality for the period after disability retirement are according to the RP-2014 Disabled Retiree Mortality Table with rates adjusted by 93.4% for males and by 94.3% for females, projected to 2019 using scale MP-2017.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of arithmetic real rates of return for each major asset class provided by the System's investment consultant Callan are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Broad U.S. equity Global ex U.S. equity Domestic fixed High Yield Real Estate Private Equity	32.0% 24.0% 30.0% 7.5% 5.0% 1.5%	6.27% 6.96% 0.82% 3.04% 4.84% 10.51%
Total	100.0%	

Discount rate -The discount rate used to measure the total pension liability was 3.92%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that employer contributions will be made according to the Financial Oversight and Management Board's new fiscal plan for fiscal years through 2023, and the five-year average of those contributions thereafter. The total contribution rates are projected based on a 40-year closed amortization of the System's unfunded accrued liability beginning on June 30, 2015 in accordance with Certification No. 146 adopted by the Governing Board of the University during the 2015 fiscal year. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the plan year ending June 30, 2032. Therefore, the long-term expected rate of return on pension plan investments of 6.75% was applied to all periods of projected benefit payments through June 30, 2032 and the applicable municipal bond index rate of 3.13%, based on the S&P Municipal Bond 20-year High Grade Index Rate as of June 30, 2017, was applied to all periods of projected benefit payments after June 30, 2032. The Single Equivalent Interest Rate (SEIR) of 3.92% that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability as of June 30, 2017. The SEIR at the beginning of the measurement period was 5.89% based on the long-term expected rate of return on pension plan investments of 7.75% applied to all periods of projected benefit payments through June 30, 2045 and the applicable municipal bond index rate of 3.01 % as of June 30, 2016 applied to all periods of projected benefit payments after June 30, 2045.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

The discount rate used to measure the total pension liability was 5.89 % at June 30, 2016. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that the Plan contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate.

Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members until the plan year ending June 30, 2045. Therefore, the long-term expected rate of return on pension plan investments of 7.75% was applied to all periods of projected benefit payments through June 30, 2045 and the applicable municipal bond index rate of 3.01%, based on the Bond Buyer General Obligation 20-year Municipal Bond Index published monthly by the Board of Governors of the Federal Reserve System as of June 30, 2016, was applied to all periods of projected benefit payments after June 30, 2045. The Single Equivalent Interest Rate (SEIR) of 5.89% that discounts the entire projected benefit stream to the same amount as the sum of the present values of the two separate benefit payments streams was used to determine the total pension liability as of June 30, 2016.

The SEIR at the beginning of the measurement period was 5.89% and 6.37% for prior period, based on the long-term expected rate of return on pension plan investments of 7.75% for both periods applied to all periods of projected benefit payments through June 30, 2045. The applicable municipal bond index rate of 3.01% and 3.82% as of June 30, 2016 and 2015, respectively, applied to all periods of projected benefit payments after June 30, 2045.

### Sensitivity of the Net Pension Liability of Changes in the Discount Rate -

The following presents the net pension liability of the University of Puerto Rico, at June 30, 2017, calculated using the SEIR discount rate of 3.92%, as well as what the University of Puerto Rico's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.92%) or 1-percentage-point higher (4.92%) than the current rate (in thousands):

	1%	Current	1%
	Decrease	Discount Rate	Increase
	(2.92%)	(3.92%)	(4.92%)
University of Puerto Rico's net pension liability	\$3,557,719	\$2,968,233	\$2,480,136

For June 30, 2016, the net pension liability of the University of Puerto Rico, calculated using the discount rate of 5.89%, as well as the University of Puerto Rico's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (4.89%) or 1-percentage-point higher (6.89%) than the current rate (in thousands):

	1%	Current	1%
	Decrease	Discount Rate	Increase
	(4.89%)	(5.89%)	(6.89%)
University of Puerto Rico's net pension liability	\$2,382,209	\$2,006,703	\$1,688,137

### 11) System Regulatory Changes:

As a result of intensive research work made by System Administration and several meetings by the System Board and the Government Board, effective July 1, 2015 retirement system regulatory changes occurred. These measures emerged as initiatives implemented towards improving sustainability of the current defined benefit system.



### NOTES TO BASIC FINANCIAL STATEMENTS June 30, 2017 and 2016

Effective July 1, 2015, participation rules changed for all members with less than 25 years of service. Retirement age eligibility and payroll contribution requirements were modified for members under 25 years of credited services as of June 30, 2015 (*Governing Board Certification number 140, 2014-2015*).

- For members with less than 25 years of service as of June 30, 2015, the eligible retirement age change from 55 to 58 years and the individual contribution increases an additional one percent (1%) over the one currently being deducted as of June 30, 2015. This increase in contribution does not represent changes in the employee current pension salary ceiling certification nor in the Social Security supplementation. Members retain their right to exercise the option to change to Social Security supplementation and / or to change to another pension salary ceiling certificate in accordance with established rules and regulations for these changes.
- Members who enter for the first time on July 1, 2015 and thereafter will contribute 12% of their salary to a
  maximum of \$69,556 salary ceiling supplemented with Social Security. These new members will
  automatically fall into the provisions for Annuities Service Certification 55 (1989-1990) of the Higher
  Education Council, as amended.

### 12) Subsequent Events:

On October 21, 2018, the Employer certified the Fiscal Plan of the University which includes a pension reform that proposes a freeze in the pension and a transition from a defined benefit to a defined contribution pension plan with a 50% match on a member contribution up to a 2%.

Management has evaluated subsequent events through February 21, 2019, the date in which the financial statements were available to be issued.

# **RSM**

EXHIBIT A

# SCHEDULE OF CHANGES NET PENSION LIABILITY (Unaudited) June 30, (In Thousands)

		2017	_	2016	_	2015	_	2014
Total pension liability:	\$	52,000	\$	46,571	\$	48,107	\$	49,499
Service cost Interest	φ	191,144	Ψ	194,184	Ψ	177,334	4	173,630
Changes in benefit terms Differences between expected and		-		(14,671)		(45,209)		a verbere
actual experience		(24,376)		(4,733)		(323,974)		10.300
Changes in assumptions Benefit payments, including refunds		989,905		160,911		32,269		(24,034)
of member contributions	_	(188,311)	-	(182,614)	-	(176,872)		(169,163)
Net change in total pension		1,020,362		199,648		(288,345)		29,932
Total pension liability, beginning	_	3,339,371	-	3,139,723	-	3,428,068	-	3,398,136
Total pension liability, ending (a)	\$	4,359,733	\$	3,339,371	\$	3,139,723	\$	3,428,068
System fiduciary net position:								
Contributions - employer	\$	79,491	\$	78,004	\$	88,251	\$	91,689
Contributions - members		39,042		38,640		35,594		37,900
Net investment income		132,950		59,009 (182,614)		76,684 (176,872)		206,595 (169,163)
Benefit payments		(188,311) (4,340)		(3,363)		(4,689)		(4,566)
Administrative expenses Other	-	(4,340)	-	(3,303)	_		_	
Net change in plan net position		58,832		(10,328)		18,968		162,455
Plan fiduciary net position, beginning	-	1,332,668		1,342,996	-	1,324,028	-	1,161,573
Plan fiduciary net position, ending (b)	\$	1,391,500	\$	1,332,668	\$	1,342,996	\$	1,324,028
Net Pension Liability - Ending (a) - (b)	\$	2,968,233	\$	2,006,703	\$	1,796,727	\$	2,104,040



SCHEDULE OF NET PENSION LIABILITY (Unaudited) June 30,

(In Thousands)

(in modulatio)		2017		2016		2015		2014
Total pension liabillity System's fiduciary net position	\$	4,359,733 1,391,500	\$	3,339,371 1,332,668	\$	3,139,723 1,342,996	\$	3,428,068 1,324,028
Net pension liability	\$	2,968,233	\$	2,006,703	\$	1,796,727	\$	2,104,040
Pension liability	_	31.92%		39.91%	-	42.77%	_	38.62%
Covered employee payroll	\$	488,775	\$	515,994	\$	516,226	\$	515,856
Net pension liability as a percentage of covered- employee payroll	_	607.28%	_	388.90%	-	348.05%	_	407.87%

Factors that Significantly Affect Trends in Amounts Reported

For the periods presented, there were changes of benefit terms, however no changes in the size or composition of the population covered by the benefit terms. Also, the System had changes of assumptions which significantly affect trends in the amounts reported.

Changes of benefit terms effective July 1, 2014, the compensation limit for Certification 139 was frozen at \$69,557.

Changes in actuarial assumptions:

- 1. Change assumed rates of termination from age-based to service-based rates
- 2. Reduce assumed rates of retirement
- 3. Reduce assumed rates of disability retirement
- 4. Update mortality to RP-2000 projected to 2020
- 5. Reduce assumed salary increases to 3.75%
- 6. Reduce assumed rate of investment return to 7.75%
- 7. Reduce price inflation assumption to 3.0%
- 8. Reduce wage inflation assumption to 3.75%
- 9. Reduce payroll growth assumption to 3.0%
- 10. Increase administrative expense load to 0.70% of payroll
- 11. Change amortization method from 30 year open to 30 year closed



SCHEDULE OF EMPLOYER CONTRIBUTIONS (Unaudited) June 30, (In Thousands)

EXHIBIT C

Year Ended June 30,	Contri	arial mined bution DC)	in Re the Det	ributions elation to Actuarial ermined tribution	Det	tribution ficiency xcess)	Em	vered ployee syroll	Contributions as a Percentage of Covered Employee Payroll (1)
2017	\$	85,829	\$	79,491	\$	6,338	\$	488,775	16.26%
2016		86,635		78,004		8,631		515,994	15.12%
2015		89,255		88,251		1,004		516,226	17.10%
2014		78,204		91,689		(13,485)		515,856	17.77%
2013		77,772		78,481		(709)		491,291	15.97%
2012		72,186		75,140		(2,954)		491,063	15.30%
2011		68,487		70,761		(2,274)		526,820	13.43%
2010		63,722		71,177		(7,455)		558,961	12.73%
2009		64,072		72,605		(8,533)		577,227	12.58%
2008		59,246		81,553		(22,307)		543,538	15.00%

(1) ADC Rate for each fiscal year comes from actuarial valuation at start of that fiscal year (e.g., the June 30, 2016)

### Notes to Schedule of Employer Contributions:

Method and Assumptions Used in Calculations of Actuarially Determined Contributions

The actuarially determined contribution rates in the Schedule of Employer's Contributions are calculated as of June 30, for the fiscal year beginning on that date. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

Plan	Plan Employees
Valuation date	June 30, 2017
Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, closed
Remaining amortization period	28 years
Asset valuation method	5-year smoothed market
Inflation	3.0%
Salary increase	3.75%, including inflation
Investment rate of return	7.75%, net of investment expenses per annum, compounded annually

Based on the funding policy adopted by the University's Board of Governors, employer contributions for years beginning June 30, 2015 reflect amortization of the System's unfunded actuarial accrued liability over a closed 40-year period from that date.

To determine contributions the System uses the RP-2014 mortality table projected to 2019.

# SCHEDULE OF ANNUAL MONEY - WEIGHTED RATE OF RETURN ON INVESTMENTS (Unaudited) June 30,

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**RSM** 

	Year ended June 30,				
	2017	2016	2015	2014	
Annual Money-Weighted Rate of Return, net of investment expense:	10.76%	3.93%	5.61%	17.80%	

Includes loans and private equities

### REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

### INDEPENDENT AUDITORS' REPORT

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the financial statements of University of Puerto Rico Retirement System (the System) as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents, and have issued our report thereon dated February 21, 2019. Our report includes a reference to other auditors who audited the financial statements of the System, as described in our report on the System's financial statements. This report does not include the results of the other auditors' testing of internal control over financial reporting or compliance and other matters that are reported on separately by those auditors.

#### Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiency, or a combination by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of the section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

RSN



### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contract, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not and objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

### Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

San Juan, Puerto Rico February 21, 2019.

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Stamp No. E373363 was affixed to the original of this report.