# PUERTO RICO JUDICIARY RETIREMENT SYSTEM June 30, 2011 Actuarial Valuation Report This report was prepared solely to provide assistance to PRJRS. Milliman and PRJRS do not intend to benefit and assume no duty or liability to other parties who receive this work. Milliman and PRJRS recommend that any third party recipient of this report be aided by its own actuary or other qualified professional when reviewing the Milliman report.



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February 6, 2012

Mr. Héctor M. Mayol Kauffman Adminstrator Puerto Rico Judiciary Retirement System P.O. Box 42003 – Minilas Station San Juan, PR 00940-2003

Dear Mr. Mayol:

This report presents the results of the actuarial valuation of the Puerto Rico Judiciary Retirement System (PRJRS) as of June 30, 2011. Section I contains highlights of the valuation including a general discussion and comments on the various schedules included in the report. The subsequent Sections contain schedules summarizing the underlying calculations, asset information, participant data, plan benefits and actuarial assumptions and methods.

#### <u>Purpose</u>

The main purposes of this report are:

- to provide the Annual Required Contribution and Annual Pension Cost for the Fiscal Year ending June 30, 2012 based on relevant Statements of the Government Accounting Standards Board (GASB);
- to review the experience under the plan since the previous valuation;
- to present information pertaining to the operation of the plan for inclusion in financial statements; and
- to assess the relative funded position of the plan.

The use of this report for purposes other than those stated above may not be appropriate and should be reviewed with Milliman.

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The report was prepared solely to provide assistance to the Commonwealth of Puerto Rico Judiciary Retirement System for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning PRJRS's operations, and uses PRJRS's data, which Milliman has not audited. Milliman and PRJRS do not intend to benefit and assume no duty or liability to other parties who receive this report. Milliman and PRJRS recommend that any third party recipient of this report be aided by its own actuary or other qualified professional when reviewing the Milliman report.

#### Data Reliance

In performing this analysis, we relied on the census data, asset information, and other information (both written and oral) provided by the System. We have not audited or verified the census data, asset information, or other information. To the extent that any of these are inaccurate or incomplete, the results of this valuation may likewise be inaccurate or incomplete.

We did not audit the data used in our analysis, but did review it for reasonableness and consistency and have not found material defects in the data. It is possible that material defects in the data would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

#### **Future Measurements**

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as the following:

- Plan experience differing from the actuarial assumptions;
- Future changes in the actuarial assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as potential additional contribution requirements due to changes in the plan's funded status); and,
- Changes in the plan provisions or accounting standards.

Due to the limited scope of our assignment, we did not perform an analysis of the potential range of such measurements.

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#### Certification

We hereby certify that, to the best of our knowledge, this report is complete and accurate and all costs and liabilities were determined in conformance with generally accepted actuarial principles and practices which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying Opinions, and supporting recommendations of the American Academy of Actuaries and are based on actuarial assumptions and methods adopted by the System. All of the actuarial assumptions were developed by Milliman in consultation with PRJRS. We believe that the actuarial assumptions and methods used in this actuarial valuation are reasonable for valuing the benefits provided under the plan.

Actuarial computations presented in this report are for purposes of fulfilling financial accounting requirements under the GASB Statements 25, 27, and 45. The calculations in the enclosed report have been made on a basis consistent with our understanding of the plan provisions described in Section VI of this report, and of the applicable GASB Statements. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

#### Qualifications

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

We are members of the Society of Actuaries and meet the qualification standards of the American Academy of Actuaries to render this actuarial opinion.

Respectfully submitted,

By Glenn D. Bowen, F.S.A.

Member American Academy of Actuaries

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# **SECTION I – SUMMARY**

# A. Summary of Principal Results of June 30, 2011 Actuarial Valuation (\$ amounts in thousands)

	Basic System Pension Benefits only	System Administered Pension Benefits only	GASB 25 & 27 Accounting (Basic System and System Administered Pension Benefits)	GASB 45 Accounting (Other Postemployment <u>Benefits)</u>
Present Value of Benefits <sup>1</sup>	\$389,526	\$52,729	\$442,255	\$6,790
Actuarial Accrued Liability	336,149	46,627	382,776	5,810
Actuarial Value of Assets	<u>63,975</u>	<u>0</u>	<u>63,975</u>	<u>0</u>
Unfunded Actuarial Accrued Liability	272,174	46,627	318,801	5,810
Employer Normal Cost <sup>2</sup> as a percent of payroll	5,126	814	5,940	132
	16.11%	2.56%	18.67%	0.41%
Annual Required Contribution (ARC) as a percent of payroll	28,693	4,851	33,544	554
	90.20%	15.25%	105.45%	1.74%
Annual Pension / OPEB Cost as a percent of payroll	N/A	N/A	32,274	529
	N/A	N/A	101.46%	1.66%
Employer Contributions (estimated) 3 as a percent of payroll	9,651	1,360	11,011	312
	30.34%	4.28%	34.61%	0.98%
Portion of ARC not covered (estimated) as a percent of payroll	19,042	3,491	22,533	242
	59.86%	10.97%	70.83%	0.76%

<sup>&</sup>lt;sup>1</sup> A discussion of the benefits included in the respective Present Value of Benefits begins on page 4 of this section. <sup>2</sup> Employer Normal Cost and all subsequent annual amounts are on behalf of the July 1, 2011 to June 30, 2012 fiscal year.

<sup>&</sup>lt;sup>3</sup> Estimated employer contributions shown on this table do not include the proposed contributions discussed on pages 9-10.

# **SECTION I – SUMMARY**

June 30, 2010	June 30, 2011
<u>Valuation</u>	<u>Valuation</u>

# GASB 25 & 27 Accounting (\$ amounts in thousands)

Present Value of Benefits <sup>1</sup>	\$385,807	\$442,255
Actuarial Accrued Liability Actuarial Value of Assets Unfunded Actuarial Accrued Liability	338,195 <u>55,410</u> 282,785	382,776 <u>63,975</u> 318,801
Employer Normal Cost as a percent of payroll	4,914 15.33%	5,940 18.67%
Annual Required Contribution for upcoming fiscal year as a percent of payroll	29,684 92.59%	33,544 105.45%

# GASB 45 Accounting (\$ amounts in thousands)

Present Value of Benefits <sup>1</sup>	\$6,777	\$6,790
Actuarial Accrued Liability Actuarial Value of Assets Unfunded Actuarial Accrued Liability	5,808 <u>0</u> 5,808	5,810 <u>0</u> 5,810
Employer Normal Cost as a percent of payroll	131 0.40%	132 0.41%
Annual Required Contribution for upcoming fiscal year as a percent of payroll	529 1.65%	554 1.74%

<sup>&</sup>lt;sup>1</sup> A discussion of the benefits included in the respective Present Value of Benefits begins on page 4 of this section.

# SECTION I – SUMMARY

	June 30, 2010 <u>Valuation</u>	June 30, 2011 <u>Valuation</u>
Participant Data		
Active Members Number Average Salary Total Annual Salary	362 \$88,566 \$32,060,841	362 \$87,876 \$31,811,235
Retirees Number Average Monthly Basic System Benefit Average Monthly System Administered Benefit	333 \$4,188 \$167	335 \$4,315 \$253
<u>Disabled Members</u> Number Average Monthly Basic System Benefit Average Monthly System Administered Benefit	0 n/a n/a	0 n/a n/a
Beneficiaries Number Average Monthly Basic System Benefit Average Monthly System Administered Benefit	61 \$1,413 \$94	56 \$1,693 \$140
Terminated Vested Members Number Average Monthly Basic System Benefit	45*	48*
(for those assumed to receive an annuity)	\$3,482	\$3,729

<sup>\*</sup> Terminated vested members include both (a) members due a deferred annuity benefit (24 as of June 30, 2010 and 25 as of June 30, 2011) and (b) members who are due a refund of member and, if applicable, employer contributions (21 as of June 30, 2010 and 23 as of June 30, 2011). Former active members who are not vested in PRJRS but are covered by another Puerto Rico government system are assumed to be due both their member and employer contributions with interest.

Basic System Benefit and System Administered Benefit amounts shown above are for pension benefits, including COLAs, and are as of the respective valuation date. Special Law "bonus" benefits are not reflected.

# **SECTION I – SUMMARY**

#### **B.** General Discussion

#### Basic System Benefits

As summarized in Section VIII, the Puerto Rico Judiciary Retirement System (PRJRS) provides benefits to members, or their beneficiaries, upon:

- Retirement
- Disability
- Vested withdrawal
- Death
- Nonvested withdrawal (return of contributions)
- Christmas bonus (\$150)

The statutory funding requirement for these benefits as of the June 30, 2011 valuation date totals 38.34% of payroll, comprising 8.0% member and 30.34% employer contributions. The employer contribution rate was increased from 20.0% to 30.34% of payroll as of July 1, 2008. These benefits will be referred to as the "Basic System Benefits" throughout this report.

As discussed on pages 9 and 10, a proposal exists under which the Commonwealth would make additional contributions each year as needed to present negative net cash flows. Because this is a proposal only at this stage, it has not been incorporated into the GASB results set forth in this report.

#### System Administered Benefits

Also summarized in Section VIII are benefits granted under a series of special laws that are administered by PRJRS, including:

- Additional minimum death benefit
- Cost-of-living adjustments (COLAs)
- Medical insurance plan contribution
- Summer bonus
- Medication bonus
- Christmas bonus (\$450)

These benefits are funded on a pay-as-you-go basis from the General Fund of the Commonwealth of Puerto Rico and will be referred to as "System Administered Benefits" throughout this report. These benefits are not an obligation of the PRJRS assets.

# SECTION I – SUMMARY

#### System Experience since Prior Valuation

The approximate actual rate of return since the prior valuation was 27.22% for 2010-2011. This significant asset gain decreased the System's unfunded actuarial accrued liability, prior to the reflection of the new investment return assumption as discussed below.

Our analysis of System experience from June 30, 2010 to June 30, 2011 resulted in a liability gain of \$5 million for Basic System Benefits (e.g. – the June 30, 2010 liability of \$301 million was expected to increase to \$311 million as of June 30, 2011, and instead decreased to \$306 million, prior to the change in the investment return assumption).

Major sources of gains and losses are as follows:

- 1. \$2 million loss on 37 new entrants
- 2. \$1 million gain on 2 rehired members
- 3. \$1 million loss on 2 "pop-up" retirees who were not in the June 30, 2010 census data
- 4. \$6 million gain due to salary increases less than anticipated (no increases were made)
- 5. \$1 million gain from all other sources

#### Changes in Assumptions since Prior Valuation

This valuation reflects a decrease in the interest rate assumption for GASB 25 & 27 purposes from 7.5% per year to 6.6% per year. The 6.6% assumption reflects the asset allocation that was adopted by the Board during November 2011 as shown below and Milliman's capital market assumptions as of June 30, 2011.

Asset Class	Target Allocation
Domestic Equity	40%
International Equity	15%
Fixed Income	44%
Cash	1%

The decrease in the interest rate assumption increased the Actuarial Accrued Liability as of June 30, 2011 for Basic System Benefits by \$30 million, from \$306 million to \$336

# **SECTION I – SUMMARY**

million, or by 9.9%. The increase in the ARC for Basic System Benefits was \$2.4 million or 9.0%.

For GASB 25 and 27 accounting, the decrease in the interest rate assumption increased the Actuarial Accrued Liability as of June 30, 2011 by \$36 million, from \$347 million to \$383 million, or by 10.4%. The increase in the ARC was \$2.8 million or 9.1%.

#### GASB Accounting Information

Accounting results under Governmental Accounting Standards Board Statement No. 25, "Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans" (GASB 25), Statement No. 27, "Accounting for Pensions by State and Local Governmental Employers" (GASB 27), and Governmental Accounting Standards Board Statement No. 45, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions" (GASB 45) are presented in two sections in this report as discussed below. In addition, as requested by PRJRS, we have separately determined the Annual Required Contribution based on GASB 25 and 27 rules for just the Basic System Benefits.

#### Basic System Benefits Information

We have performed a June 30, 2011 actuarial valuation of the Basic System Benefits and have prepared accounting results for them based on GASB 25 and 27 rules.

The FY 2011-2012 ARC for the Basic System Benefits only based on GASB 25 and 27 rules would be \$28,692,986, which equals 90.20% of payroll. The ARC represents the portion of the cost of PRJRS' Basic System Benefits that employers should pay in order for PRJRS to be actuarially funded in accordance with GASB's required minimum parameters; i.e., the ARC has been reduced to reflect the fact that active members contribute 8% of pay to the system. The employer portion of the statutory funding requirement, which is 30.34% of payroll, is less than the ARC by 59.86% of payroll, or \$19,041,986.

As shown in Subsection D of Section IV, PRJRS has Unfunded Actuarial Accrued Liabilities of \$272.2 million on behalf of Basic System Benefits, which should be amortized over a period not to exceed 30 years in accordance with GASB 25 and 27 rules. Based on the current statutory member and employer funding requirements, the

# **SECTION I – SUMMARY**

UAAL is expected to grow indefinitely into the future instead of being amortized. Effectively, this means that the statutory member and employer contributions to PRJRS are not adequate to fund PRJRS' Basic System Benefits. *Instead, PRJRS is being disfunded.* 

# GASB 25 and 27 Accounting Information

We have performed a June 30, 2011 actuarial valuation of the Basic System Benefits and the System Administered Benefits (excluding the Medical Insurance Plan Contribution) and have prepared accounting results under GASB 25 for the financial statements of the System and under GASB 27 for the Commonwealth of Puerto Rico's financial statements.

The FY 2011-2012 ARC under GASB 25 and 27 is \$33,543,944, which equals 105.45% of payroll. This includes the Basic System Benefits and the System Administered Benefits (excluding the Medical Insurance Plan Contribution). The FY 2011-2012 APC under GASB 27 is \$32,274,160, which equals 101.46% of payroll.

As shown in Subsection B of Section V, the Unfunded Actuarial Accrued Liability on a GASB 25 and 27 basis is \$318.8 million. Based on the current funding requirements, the UAAL is expected to grow indefinitely into the future. As discussed above, the statutory member and employer contributions to PRJRS are not adequate to fund PRJRS' Basic System Benefits. *Instead, PRJRS is being disfunded.* The System Administered Benefits are financed on a pay-as-you-go basis from the General Fund of the Commonwealth of Puerto Rico

# GASB 45 Accounting Information

We have performed a June 30, 2011 actuarial valuation of the Medical Insurance Plan Contribution and have prepared accounting results for the Commonwealth of Puerto Rico's financial statements under GASB 45. (Note that the Medication Bonus has been included in the GASB 25 and 27 results as a Pension Benefit because members can receive the bonus without submitting documentation to substantiate medication expenses.)

The FY 2011-2012 ARC for the Medical Insurance Plan Contribution under GASB 45 is \$554,150, which equals 1.74% of payroll.

#### SECTION I – SUMMARY

There are no member or employer contributions on behalf of the Medical Insurance Plan Contribution. This benefit is financed on a pay-as-you-go basis from the General Fund of the Commonwealth of Puerto Rico. Since this is an Other Postemployment Benefit that is not funded in advance, the ARC for this benefit has been calculated based on an assumed investment return rate of 4.0%, instead of the 6.6% rate used for the Pension Benefits. As shown in Subsection B of Section VI, the Unfunded Actuarial Accrued Liability on a GASB 45 basis for this benefit is \$5.8 million.

#### Solvency Test for Basic System Benefits

Subsection A of Section III determines the solvency percentage for each membership group for the Basic System Benefits. The Actuarial Value of Assets was allocated to each membership group by first allocating based on the accumulated member contributions with interest. The remaining assets were then assigned first to retirees, disabled members, and beneficiaries, second to terminated members with rights to a deferred pension, and then to active members. As shown in Subsection A of Section III, the overall solvency percentage is 19.0%. For retirees, disabled members, and beneficiaries, the solvency percentage is 17.4%. Vested terminated members with rights to deferred pensions or due a refund of member contributions and active members have solvency percentages of 16.7% and 21.5%, respectively. Accumulated member contributions for active members includes contributions from other government retirement systems as years of government service are considered in this system once eight years of service are earned as a judge.

Note there were insufficient assets to cover all of the benefit obligations attributable to retirees, disabled members, and beneficiaries. Therefore, the assets allocated to vested terminated members with the right to a deferred pension or due a refund of member contributions and active members are solely attributable to the accumulated value of their own contributions; no employer contributions are available to fund their benefit obligations based on this allocation procedure.

#### SECTION I – SUMMARY

#### Cash Flow Projection for Basic System Benefits

PRJRS is a mature retirement system with a significant retiree population. Based on the current statutory funding requirements, the annual benefit payments and administrative expenses paid by the system are significantly larger than the member and employer contributions made to the system. Thus investment income must be used to cover this negative cash flow. As the negative cash flow exceeds expected investment income, system assets are expected to continually decline. PRJRS' liabilities for the Basic System Benefits will continue to increase significantly over time. Thus the funded status can be expected to decline over time based on the actuarial assumptions used to prepare this actuarial valuation.

The table shown in Subsection B of Section III provides a simplified illustration of the expected negative net cash flows over the next 10 years. Annual payroll growth of 3.0% is assumed, as future members are assumed to replace current members who terminate or retire. (Note, we did not attempt to include in the expected benefit payments any benefit payments attributable to new members in preparing this table. Members who join PRJRS in the future will generate some cash outflow during the next 10 years due to refunds of their contributions, death and disability benefits, and immediate annuities due to service purchases, etc. We expect that these amounts will be relatively modest and they have not been included in the results shown. Doing so would increase the expected negative net cash flow.)

Based on this estimate of future statutory contributions and benefit payments, the PRJRS assets will be exhausted by the 2018-2019 fiscal year, assuming an annual 6.6% investment return.

We recommend that the statutory funding requirements be significantly increased in excess of the recent employer contribution rate increase to 30.34% in light of:

- the expected negative net cash flows;
- the forecast exhaustion of plan assets by 2018-2019; and,
- the Annual Required Contribution based on GASB 25 and 27.

# Proposed Contribution Alternative

We understand that a proposal exists under which the Commonwealth would make additional contributions to the System, if necessary, to prevent negative net cash flow

# **SECTION I – SUMMARY**

(i.e. employer contributions will be increased so that the employer and member contributions in a given year are at least as large as the benefit payments and administrative expenses for that year.) The table shown in subsection C of Section III modifies the simplified illustration in Subsection B of Section III (described above) to reflect these proposed additional employer contributions.

As shown in this table, the additional employer contributions start at \$8.4 million in Fiscal Year 2011-12 and increase to \$13.7 million in Fiscal Year 2021-22. In this simplified illustration, net plan assets are estimated to grow at the assumed investment return of 6.6% each year, thus the market value of assets increases over time. Increasing employer contributions as proposed, in order to prevent negative cash flow, can be a powerful tool in ensuring the System's ability to pay benefits in future years. This is however a lower and different goal than moving a fully funded status.

#### SECTION I – SUMMARY

#### C. Discussion of Supporting Exhibits

#### System Assets

Section II summarizes the plan assets taken into account in the preparation of the GASB 27 Employer Accounting results for PRJRS.

Subsection A summarizes the Market Value of Assets as of June 30, 2011, including the additional amounts due to the contribution receivables, if any.

Subsection B summarizes the reconciliation of the Market Value of Assets from June 30, 2010 to June 30, 2011.

Subsection C summarizes the development of the Actuarial Value of Assets as of June 30, 2011. The Actuarial Value of Assets is equal to the Market Value of Assets.

Subsection D develops an estimated rate of return on plan assets for the previous plan year. The estimated rate of return from June 30, 2010 to June 30, 2011 was 27.22% on the Market Value of Assets.

Subsection E summarizes the historical estimated rate of return on plan assets on a market value basis.

The asset information used for the valuation was taken from financial statements provided by PRJRS as of June 30, 2011.

#### Management Information

Section III presents additional information that has been derived from the valuation process and is illustrative of the expected future decline in funded status that is projected based upon our analysis of the valuation results.

Subsection A shows the allocation of assets to liability for Basic System Benefits by membership group and determines the solvency percentage for each group. Please see Subsection B of Section I for a description of this determination.

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Subsection B shows a projected cash flow for the current fiscal year and the next ten fiscal years for Basic System Benefits. Please see Subsection B of Section I for a description of this projection.

Subsection C shows a projected cash flow for the current fiscal year and the next ten fiscal years for Basic System Benefits under a proposed contribution alternative. Please see Subsection B of Section I for a description of this alternative projection.

#### Basic System Benefits Information

Section IV summarizes the Actuarial Accrued Liability and the development of the Annual Required Contribution for just the Basic System Benefits under GASB 25 and 27 for the fiscal year ending June 30, 2012 (please see Subsection B of Section I for a description of the benefits included in this valuation).

Subsection A summarizes the development of the Present Value of Benefits as of June 30, 2011.

Subsection B summarizes the development of the Actuarial Accrued Liability as of June 30, 2011.

Subsection C summarizes the development of the Employer Normal Cost. The Employer Normal Cost is the total normal cost under the Projected Unit Credit Actuarial Cost Method adjusted for interest to mid-year, increased by expected administrative expenses paid from the fund, and reduced by expected member contributions.

Subsection D summarizes the development of the amortization payment of the Unfunded Actuarial Accrued Liability. The amortization period used to calculate the ARC is 15 years from June 30, 2011 with annual payments increasing each year by 3.0% to remain as a level percent of payroll.

Subsection E summarizes the development of the Annual Required Contribution (ARC). The ARC is the sum of the employer normal cost and the amortization payments, adjusted to mid-year to reflect that payments are made throughout the year.

#### SECTION I – SUMMARY

#### GASB 25 and 27 Accounting Information

Section V summarizes the Actuarial Accrued Liability and the development of the Annual Required Contribution and Annual Pension Cost under GASB 25 and 27 for the fiscal year ending June 30, 2012 (please see Subsection B of Section I for a description of the benefits included in these valuation results). Results are shown in total for GASB 25 and 27, with the Actuarial Accrued Liability and Employer Normal Cost presented for the underlying Basic System Benefits and for the underlying System Administered Benefits that are included in this valuation.

Subsection A summarizes the development of the Actuarial Accrued Liability as of June 30, 2011 and Employer Normal Cost as of December 31, 2011.

Subsection B summarizes the development of the amortization payment of the Unfunded Actuarial Accrued Liability. The amortization period used to calculate the ARC is 15 years from June 30, 2011 with annual payments increasing each year by 3.0% to remain as a level percent of payroll.

Subsection C summarizes the development of the Annual Required Contribution (ARC). The ARC is the sum of the employer normal cost and the amortization payments, adjusted to mid-year to reflect that payments are made throughout the year.

Subsection D summarizes the development of the Net Pension Obligation (NPO) as of June 30, 2011. The NPO is defined as the cumulative difference between the Annual Pension Cost (APC) and the employer's contribution to the plan, including any pension liability (asset) at transition.

Subsection E summarizes the development of the APC for the fiscal year ending June 30, 2012. The APC is the amount recognized in the employer's financial statements as the cost of the pension plan and is determined in accordance with GASB Statement No. 27. The APC is equal to the ARC plus interest on the NPO, if any, as of June 30, 2011 less an amortization of this NPO.

Subsection F shows a seven-year history of the ARC, APC, and the percentage contributed. This schedule is required by GASB Statements No. 25 and 27. The FY 2011-2012 contribution percentage assumes that employer contributions for Basic System Benefits will remain at the statutory level of 30.34% of payroll and that employer

#### SECTION I – SUMMARY

contributions for the applicable System Administered Benefits will be the anticipated pay-as-you-go payments. Based on our understanding of prior valuations, the ARCs and APCs shown for the years ending June 30, 2006 through June 30, 2007 do not include the liability for any System Administered Benefits. In addition, the Actual Employer Contributions shown for fiscal years ending June 30, 2006 through June 30, 2007 only reflect the contributions for the Basic System Benefit, no contributions for the System Administered Benefits have been included. The amounts shown for the fiscal year ending June 30, 2007 and earlier are from the audited financial statements for the System and for the Commonwealth of Puerto Rico.

Subsection G shows a six-year history of the funding progress of the plan. This schedule is required by GASB Statements No. 25 and 27. Please refer to the paragraph above for the benefits that appear not to be reflected in the Accrued Liability as of June 30, 2005, based on our understanding of prior valuations. The amounts shown for the fiscal year ending June 30, 2007 and earlier are from the audited financial statements for the System.

Schedule H summarizes information used to determine the Annual Required Contribution for the fiscal year ending June 30, 2012.

# GASB 45 Accounting Information

Section VI summarizes the Actuarial Accrued Liability and the development of the Annual Required Contribution for the fiscal year ending June 30, 2012 for the Medical Insurance Plan Contribution.

Subsection A summarizes the development of the Actuarial Accrued Liability as of June 30, 2011 and Employer Normal Cost as of December 31, 2011.

Subsection B summarizes the development of the amortization payment of the Unfunded Actuarial Accrued liability. The amortization period used to calculate the ARC is 15 years from June 30, 2011 with annual payments increasing each year by 3.0% to remain as a level percent of payroll.

Subsection C summarizes the development of the Annual Required Contribution (ARC). The ARC is the sum of the employer normal cost and the amortization payments, adjusted to mid-year to reflect that payments are made throughout the year.

#### SECTION I – SUMMARY

Subsection D summarizes the development of the Net OPEB Obligation (NOO) as of June 30, 2011. The NPO is defined as the cumulative difference between the Annual OPEB Cost (AOC) and the employer's contribution to the plan since the adoption of GASB 45.

Subsection E summarizes the development of the AOC for the fiscal year ending June 30, 2011. The AOC is the amount recognized in the employer's financial statements as the cost of other postemployment benefits and is determined in accordance with GASB Statement No. 45. The AOC is equal to the ARC plus interest on the NOO, if any, as of June 30, 2011 less an amortization of this NOO.

Subsection F shows a five-year history of the ARC, AOC, and the percentage contributed. This schedule is required by GASB Statements No. 45. The FY 2011-2012 contribution percentage assumes that employer contributions for the Medical Insurance Plan Contribution will be the anticipated pay-as-you-go payments.

Subsection G shows a five-year history of the funding progress of the plan. This schedule is required by GASB Statements No. 45.

Schedule H summarizes information used to determine the Annual Required Contribution for the fiscal year ending June 30, 2012.

#### Census Data

Section VII summarizes the census data provided by the System and utilized in the preparation of the actuarial valuation. Subsection A provides a reconciliation of the current year participant counts from the prior valuation. Subsection B presents a profile of active participants, summarized by gender and age and service groups. Subsections C, D, and E show the number and average benefit of the terminated vested participants, retirees, and beneficiaries, respectively. Special data adjustments are discussed in Section IX.

#### Summary of Principal Plan Provisions

Section VIII summarizes the principal plan provisions as of the valuation date and denotes any changes from the previous valuation.

# **SECTION I – SUMMARY**

# <u>Actuarial Assumptions and Methods</u>

Sections IX and X summarize the actuarial assumptions and methods that were utilized in the preparation of this actuarial valuation and denote any changes from the previous valuation.

# **SECTION II - SYSTEM ASSETS**

# A. Market Value of Assets as of June 30, 2011

1.	Assets	
	Cash	\$ 10,638,000
	Bonds	39,954,000
	Stocks	22,136,000
	Total Loans to Plan Members	845,000
	Accounts Receivable	290,000
	Total	\$ 73,863,000
2.	Total Liabilities	\$ 9,888,000
3.	Market Value of Assets as of June 30, 2011: (1) - (2)	\$ 63,975,000

# **SECTION II - SYSTEM ASSETS**

# B. Reconciliation of Market Value of Assets from June 30, 2010 to June 30, 2011

1. Market Value of Assets as of June 30, 2010	\$	55,410,000
2. Additions		
<ul> <li>a. Contributions</li> <li>Member Contributions</li> <li>Employer Contributions</li> </ul>	\$	2,789,000 9,966,000
Appropriations for Special Laws Total Contributions	\$	<u>629,000</u> 13,384,000
b. Investment Income	_	
Interest Income Dividends Income	\$	1,352,000 176,000
Net Appreciation of Investments		12,928,000
Other Income		10,000
Investment Related Expenses		(162,000)
Net Investment Income	\$	14,304,000
Total Additions	\$	27,688,000
3. Decreases		
Refund of Member Contributions	\$	0
Annuities, Death Benefits, and Special Law Benefits		18,617,000
Administrative Expenses Total	\$	<u>506,000</u> 19,123,000
	·	
4. Net Increase (Decrease) in Market Value of Assets	\$	8,565,000
5. Market Value of Assets as of June 30, 2011	\$	63,975,000

# C. Development of Actuarial Value of Assets as of June 30, 2011

The Actuarial Value of Assets as of June 30, 2011 is equal to the Market Value of Assets as of June 30, 2011 of \$63,975,000.

# **SECTION II - SYSTEM ASSETS**

# D. Estimated Annual Rate of Return for year ending June 30, 2011

	Market Value
1. Value of Assets as of June 30, 2010	\$ 55,410,000
2. Total Contributions	13,384,000
3. Benefit Payments and Expenses	19,123,000
4. Value of Assets as of June 30, 2011	63,975,000
5. Non-Investment Increment: (2) - (3)	(5,739,000)
6. Investment Increment: (4) - (1) - (5)	14,304,000
7. Time Weighted Value: (1) +.5 * (5)	52,540,500
8. Estimated Annual Rate of Return: (6) / (7)	27.22%

#### E. Estimated Historical Rates of Return

Plan Year Ending	Market Value
June 30, 2011	27.22%
June 30, 2010	19.74%
June 30, 2009	-22.68%
June 30, 2008	-8.06%
June 30, 2007	19.82%
5-year Compounded Annual Return	5.35%

#### **SECTION III - MANAGEMENT INFORMATION**

#### A. Allocation of Assets for Basic System Benefits to Membership Group

	Membership <u>Group</u>	Actuarial Accrued <u>Liability</u>	Allocated Assets *	Solvency Percentage
1.	Retirees, Disabled Members, and Beneficiaries	\$191,349,137	\$ 33,375,098	17.4%
2.	Vested Terminated Members	9,756,063	1,626,601	16.7%
3.	Active Members	135,044,147	28,973,301	<u>21.5%</u>
4.	Total	\$336,149,347	\$ 63,975,000	19.0%

<sup>\*</sup> Allocated assets are determined by first assigning the accumulated member contributions with interest to each membership category. Remaining assets are then allocated first to retirees, disabled members, and beneficiaries, second to vested terminated members, and the rest to active members.

#### **SECTION III - MANAGEMENT INFORMATION**

#### B. Projected Cash Flows for Basic System Benefits (Simplified Illustration)

						Estimated		
						Benefit		Estimated
	<u>-</u>	Estimate	d Member and	Employer Con	tributions	Payments and		Net
Plan Year	Estimated		Statutory	Additional		Administrative	Net	Plan Assets
<b>Ending</b>	<u>Payroll</u>	<u>Member</u>	<b>Employer</b>	<b>Employer</b>	<u>Total</u>	<b>Expenses</b>	Cash Flow	at Year-End
06/30/2012	31,811,000	2,545,000	9,652,000	0	12,197,000	20,573,000	(8,376,000)	59,549,000
06/30/2013	32,766,000	2,621,000	9,941,000	0	12,562,000	21,766,000	(9,204,000)	53,977,000
06/30/2014	33,749,000	2,700,000	10,239,000	0	12,939,000	22,856,000	(9,917,000)	47,300,000
06/30/2015	34,761,000	2,781,000	10,546,000	0	13,327,000	24,011,000	(10,684,000)	39,391,000
06/30/2016	35,804,000	2,864,000	10,863,000	0	13,727,000	24,983,000	(11,256,000)	30,369,000
06/30/2017	36,878,000	2,950,000	11,189,000	0	14,139,000	25,948,000	(11,809,000)	20,181,000
06/30/2018	37,984,000	3,039,000	11,524,000	0	14,563,000	26,816,000	(12,253,000)	8,862,000
06/30/2019	39,124,000	3,130,000	11,870,000	0	15,000,000	28,136,000	(13,136,000)	(4,115,000)
06/30/2020	40,298,000	3,224,000	12,226,000	0	15,450,000	28,801,000	(13,351,000)	(18,171,000)
06/30/2021	41,506,000	3,321,000	12,593,000	0	15,914,000	29,652,000	(13,738,000)	(33,555,000)
06/30/2022	42,752,000	3,420,000	12,971,000	0	16,391,000	30,115,000	(13,724,000)	(49,939,000)

#### Notes:

- Estimated Net Plan Assets at Year-End assumes that the investment return assumption of 6.6% is met.
- Estimated Payroll is assumed to grow 3.0% annually.
- Member Contributions were estimated to be 8.00% of Estimated Payroll.
- Statutory Employer Contributions were estimated to be 30.34% of Estimated Payroll.
- No Additional Employer Contributions were assumed.
- The Estimated Benefit Payments do not include amounts expected to be made to future participants, such as:
  - refund of contributions to terminated nonvested participants,
  - disability benefits,
  - death benefits.
  - retirement benefits due to service purchase, and thus are slightly understated.
- Administrative Expenses are assumed to grow 2.5% annually.

#### **SECTION III - MANAGEMENT INFORMATION**

#### C. Projected Cash Flows for Basic System Benefits (Simplified Illustration) - Proposed Contribution Alternative

						Estimated		
						Benefit		Estimated
		Estimate	d Member and	Employer Con	tributions	Payments and		Net
Plan Year	Estimated		Statutory	Additional		Administrative	Net	Plan Assets
<u>Ending</u>	<u>Payroll</u>	<u>Member</u>	<b>Employer</b>	<b>Employer</b>	<u>Total</u>	<u>Expenses</u>	Cash Flow	at Year-End
06/30/2012	31,811,000	2,545,000	9,652,000	8,376,000	20,573,000	20,573,000	0	68,197,000
06/30/2013	32,766,000	2,621,000	9,941,000	9,204,000	21,766,000	21,766,000	0	72,698,000
06/30/2014	33,749,000	2,700,000	10,239,000	9,917,000	22,856,000	22,856,000	0	77,496,000
06/30/2015	34,761,000	2,781,000	10,546,000	10,684,000	24,011,000	24,011,000	0	82,611,000
06/30/2016	35,804,000	2,864,000	10,863,000	11,256,000	24,983,000	24,983,000	0	88,064,000
06/30/2017	36,878,000	2,950,000	11,189,000	11,809,000	25,948,000	25,948,000	0	93,876,000
06/30/2018	37,984,000	3,039,000	11,524,000	12,253,000	26,816,000	26,816,000	0	100,072,000
06/30/2019	39,124,000	3,130,000	11,870,000	13,136,000	28,136,000	28,136,000	0	106,676,000
06/30/2020	40,298,000	3,224,000	12,226,000	13,351,000	28,801,000	28,801,000	0	113,717,000
06/30/2021	41,506,000	3,321,000	12,593,000	13,738,000	29,652,000	29,652,000	0	121,222,000
06/30/2022	42,752,000	3,420,000	12,971,000	13,724,000	30,115,000	30,115,000	0	129,223,000

#### Notes:

- Estimated Net Plan Assets at Year-End assumes that the investment return assumption of 6.6% is met.
- Estimated Payroll is assumed to grow 3.0% annually.
- Member Contributions were estimated to be 8.00% of Estimated Payroll.
- Statutory Employer Contributions were estimated to be 30.34% of Estimated Payroll.
- Additional Employer Contributions, if necessary, are determined such that net cash flow was equal to zero.
- The Estimated Benefit Payments do not include amounts expected to be made to future participants, such as:
  - refund of contributions to terminated nonvested participants,
  - disability benefits,
  - death benefits.
  - retirement benefits due to service purchase, and thus are slightly understated.
- Administrative Expenses are assumed to grow 2.5% annually.

# **SECTION IV - BASIC SYSTEM BENEFITS INFORMATION**

# A. Development of Present Value of Benefits as of June 30, 2011

<ol> <li>Projected Benefits Payable to Retirees and Beneficiaries</li> </ol>	
Retirees	\$ 182,410,077
Disabled Members	0
Beneficiaries	8,939,060
Total	\$ 191,349,137
2. Projected Benefits for Vested Terminated Members	9,756,063
3. Projected Benefits for Active Members	
Retirement	\$ 177,998,107
Disability	3,734,523
Pre Retirement Death	1,754,108
Return of Members' Contributions	1,477,841
Vested Withdrawal	<u>3,456,031</u>
Total	\$ 188,420,610
4. Total Present Value of Benefits: (1) + (2) + (3)	\$ 389,525,810

The above liabilities are for Basic System Benefits. See Section I for more information.

# **SECTION IV - BASIC SYSTEM BENEFITS INFORMATION**

# B. Development of Actuarial Accrued Liability as of June 30, 2011

<ol> <li>Projected Benefits Payable to Retirees and Beneficiaries</li> </ol>	
Retirees	\$ 182,410,077
Disabled Members	0
Beneficiaries	8,939,060
Total	\$ 191,349,137
2. Projected Benefits for Vested Terminated Members	9,756,063
3. Actuarial Accrued Liability for Active Members	
Retirement	\$ 127,290,107
Disability	3,058,677
Pre Retirement Death	1,333,201
Return of Members' Contributions	910,829
Vested Withdrawal	2,451,333
Total	\$ 135,044,147
4. Total Actuarial Accrued Liability: (1) + (2) + (3)	\$ 336,149,347

The above liabilities are for Basic System Benefits. See Section I for more information.

# **SECTION IV - BASIC SYSTEM BENEFITS INFORMATION**

# C. Development of Employer Normal Cost Payable as of December 31, 2011

1. Total Normal Cost as of June 30, 2011	
Retirement	\$ 6,254,826
Disability	145,436
Pre Retirement Death	71,467
Return of Members' Contributions	151,514
Vested Withdrawal	<u>227,298</u>
Total	\$ 6,850,541
2. Expected Member Contributions	\$ 2,466,787
3. Load for Administrative Expenses:	\$ 520,000
4. Total Employer Normal Cost as of	
December 31, 2011: (1) * (1.066 ^ 0.5) - (2) + (3)	\$ 5,126,210

The above liabilities are for Basic System Benefits. See Section I for more information.

# **SECTION IV - BASIC SYSTEM BENEFITS INFORMATION**

# D. Development of Unfunded Actuarial Accrued Liability and Amortization Payment Payable as of December 31, 2011

1. Actuarial Accrued Liability as of June 30, 2011	\$ 336,149,347
2. Actuarial Value of Assets as of June 30, 2011	\$ 63,975,000
<ol> <li>Unfunded Actuarial Accrued Liability as of June 30, 2011:</li> <li>(1) - (2)</li> </ol>	\$ 272,174,347
4. Amortization Period in years	15
5. Amortization Factor at beginning of year *	11.9241
6. Amortization Amount Payable as of December 31, 2011: [(3)/(5)]* (1.066 ^ 0.5)	\$ 23,566,776

<sup>\*</sup> Amortization calculated as a level percent of pay increasing 3.0% per year.

#### E. Development of Annual Required Contribution

1. Total Employer Normal Cost as of December 31, 2011	\$ 5,126,210
2. Amortization Payment as of December 31, 2011	\$ 23,566,776
3. Annual Required Contribution*: (1) + (2)	\$ 28,692,986

<sup>\*</sup> Assumes payments made throughout the year.

The above liabilities are for Basic System Benefits. See Section I for more information.

# **SECTION V - GASB 25 AND 27 ACCOUNTING INFORMATION**

# A. Benefit Obligations

		Basic System Benefits	System Administered <u>Benefits</u>	<u>Total</u>
1. Projected Benefits as of June 30, 2011 Payable	to:			
Retirees	\$	182,410,077	\$ 28,023,902	\$ 210,433,979
Disabled Members		0	0	0
Beneficiaries		8,939,060	1,599,853	10,538,913
Vested Terminated Members		9,756,063	1,089,321	10,845,384
Active Members		188,420,610	22,015,724	210,436,334
Total	\$	389,525,810	\$ 52,728,800	\$ 442,254,610
2. Actuarial Accrued Liability for Active Members	\$	135,044,147	\$ 15,913,623	\$ 150,957,770
3. Actuarial Accrued Liability as of June 30, 2011	\$	336,149,347	\$ 46,626,699	\$ 382,776,046
4. Total Employer Normal Cost				
as of December 31, 2011	\$	5,126,210	\$ 813,689	\$ 5,939,899

The above liabilities are for Basic System Benefits and selected System Administered Benefits. See Section I for more information.

# **SECTION V - GASB 25 AND 27 ACCOUNTING INFORMATION**

# B. Development of Unfunded Actuarial Accrued Liability and Amortization Payment Payable as of December 31, 2011

1. Actuarial Accrued Liability as of June 30, 2011	\$ 382,776,046
2. Actuarial Value of Assets as of June 30, 2011	\$ 63,975,000
<ol> <li>Unfunded Actuarial Accrued Liability as of June 30, 2011:</li> <li>(1) - (2)</li> </ol>	\$ 318,801,046
4. Amortization Period in years	15
5. Amortization Factor at beginning of year *	11.9241
6. Amortization Amount Payable as of December 31, 2011: [(3)/(5)]* (1.066 ^ 0.5)	\$ 27,604,045

<sup>\*</sup> Amortization calculated as a level percent of pay increasing 3.0% per year.

#### C. Development of Annual Required Contribution

1. Total Employer Normal Cost as of December 31, 20	11 \$	5,939,899
2. Amortization Payment as of December 31, 2011	\$	27,604,045
3. Annual Required Contribution*: (1) + (2)	\$	33,543,944

<sup>\*</sup> Assumes payments made throughout the year.

The above liabilities are for Basic System Benefits and selected System Administered Benefits. See Section I for more information.

# **SECTION V - GASB 25 AND 27 ACCOUNTING INFORMATION**

# D. Development of Net Pension Obligation as of June 30, 2011

Net Pension Obligation as of June 30, 2010	\$ 36,109,561
2. Annual Pension Cost for Fiscal Year 2010 - 2011	\$ 29,112,555
3. Fiscal Year 2010 - 2011 Employer Contribution	\$ 10,955,000
4. Net Pension Obligation as of June 30, 2011: (1) + (2) - (3)	\$ 54,267,116

#### E. Development of Fiscal Year 2011 - 2012 Annual Pension Cost

Annual Required Contribution	\$ 33,543,944
2. Interest on Net Pension Obligation as of June 30, 2011	\$ 3,581,630
3. Adjustment to the Annual Required Contribution	\$ 4,851,414
4. Fiscal Year 2011 - 2012 Annual Pension Cost: (1) + (2) - (3)	\$ 32,274,160

The above liabilities are for Basic System Benefits and selected System Administered Benefits. See Section I for more information.

#### **SECTION V - GASB 25 AND 27 ACCOUNTING INFORMATION**

#### F. Schedule of Employer Contributions

Year	Actual	Annual		Annual	
Ended	Employer	Required	Percent	Pension	Percent
<u>June 30</u>	<b>Contribution</b>	Contribution	Contributed	Cost	<b>Contributed</b>
2012	\$11,011,000	\$33,543,944	32.83%*	\$32,274,160	34.12%*
2011	10,955,000	29,683,697	36.91	29,112,555	37.63
2010	11,006,000	28,127,454	39.13	27,894,796	39.46
2009	11,105,000	22,195,169	50.03	22,122,808	50.20
2008	7,262,000	19,803,209	36.67	19,828,957	36.62
2007	6,632,000	9,735,243	68.12	9,553,000	69.42
2006	6,727,000	9,735,243	69.10	9,553,000	70.42

<sup>\*</sup> Percentage contributed for the year ended June 30, 2012 assumes the actual employer contribution is 30.34% of expected payroll for the Basic System Benefits plus the expected pay-as-you-go amounts for the selected System Administered Benefits.

Please refer to pages 12-13 for a discussion of the benefits not reflected in the above amounts for the years ending on or before June 30, 2007, which may impair the comparison of prior valuation amounts.

The above liabilities are for Basic System Benefits and selected System Administered Benefits. See Section I for more information.

# **SECTION V - GASB 25 AND 27 ACCOUNTING INFORMATION**

# **G. Schedule of Funding Progress**

	(a)	(b)	(c)=(b)-(a)	(d)=(a)/(b) (e)		(f)=(c)/(e)
Actuarial Valuation <u>Date</u>	Actuarial Value of <u>Assets</u>	Accrued <u>Liability</u>	Unfunded <u>Liability</u>	Funded <u>Ratio</u>	Annual <u>Salary</u>	Unfunded Liability as a % of Annual <u>Salary</u>
06/30/2011	\$63,975,000	\$382,776,046	\$318,801,046	16.7%	\$31,811,235	1002.2%
06/30/2010	55,410,000	338,195,442	282,785,442	16.4%	32,060,841	882.0%
06/30/2009	50,566,000	323,928,191	273,362,191	15.6%	30,586,694	893.7%
06/30/2008	69,311,000			-not determined		
06/30/2007	81,473,000	258,577,128	177,104,128	31.5%	31,256,135	566.6%
06/30/2006	72,850,000			-not determined		

The above liabilities are for Basic System Benefits and selected System Administered Benefits. See Section I for more information.

# **SECTION V - GASB 25 AND 27 ACCOUNTING INFORMATION**

## H. Additional Information

The following information was used to determine the Annual Required Contribution for the fiscal year ending June 30, 2012. The ARC is for the Basic System Benefits and selected System Administered Benefits. See Section I for more information.

Valuation Date: June 30, 2011

Actuarial Cost Method: Projected unit credit cost method; with straight

proration based on service to decrement

Amortization method: 30 years closed, level percent of payroll

Remaining Amortization Period: 15 years

Asset valuation method: Market Value of Assets

Assumptions:

Investment rate of return 6.6% Projected Salary Increases 3.0% Inflation 2.5%

Cost of Living Adjustments 0.99% annual COLA to approximate 3%

triennial increases.

# **SECTION VI - GASB 45 ACCOUNTING INFORMATION**

# A. Benefit Obligations

1.	Projected Benefits as of June 30, 2011 Payable to:		
	Retirees	\$	3,307,802
	Disabled Members		0
	Beneficiaries		0
	Vested Terminated Members		267,062
	Active Members		<u>3,215,579</u>
	Total	\$	6,790,443
2.	Actuarial Accrued Liability for Active Members	\$	2,235,306
3.	Actuarial Accrued Liability as of June 30, 2011	\$	5,810,170
4.	Total Employer Normal Cost	•	
	as of December 31, 2011	\$	131,863

The above liabilities are for the Medical Insurance Plan Contribution portion of the System Administered Benefits. See Section I for more information.

### **SECTION VI - GASB 45 ACCOUNTING INFORMATION**

# B. Development of Unfunded Accrued Liability and Amortization Payment Payable as of December 31, 2011

1.	Actuarial Accrued Liability as of June 30, 2011	\$ 5,810,170
2.	Actuarial Value of Assets as of June 30, 2011	\$ 0
3.	Unfunded Actuarial Accrued Liability as of June 30, 2011: (1) - (2)	\$ 5,810,170
4.	Amortization Period in years	15
5.	Amortization Factor at beginning of year *	14.0313
6.	Amortization Amount Payable as of December 31, 2011: [ (3) / (5) ] * ( 1.04 ^ 0.5 )	\$ 422,287

<sup>\*</sup> Amortization calculated as a level percent of pay increasing 3.0% per year.

## C. Development of Annual Required Contribution

1. Total Employer Normal Cost as of December 31, 2011	\$ 131,863
2. Amortization Payment as of December 31, 2011	\$ 422,287
3. Annual Required Contribution*: (1) + (2)	\$ 554,150

<sup>\*</sup> Assumes payments made throughout the year.

The above liabilities are for the Medical Insurance Plan Contribution portion of the System Administered Benefits. See Section I for more information.

# **SECTION VI - GASB 45 ACCOUNTING INFORMATION**

# D. Development of Net OPEB Obligation as of June 30, 2011

2. Interest on Net OPEB Obligation as of June 30, 2011

4. Fiscal Year 2011 - 2012 Annual OPEB Cost: (1) + (2) - (3)

3. Adjustment to the Annual Required Contribution

Annual Required Contribution	\$	554,150
E. Development of Fiscal Year 2011 - 2012 Annual OPEB Co	et	
4. Net OPEB Obligation as of June 30, 2011: (1) + (2) - (3)	\$	729,381
3. Fiscal Year 2010 - 2011 Employer Contribution	\$	310,000
2. Annual OPEB Cost for Fiscal Year 2010 - 2011	\$	512,918
1. Net OPEB Obligation as of June 30, 2010	\$	526,463

29,175

54,062

529,263

The above liabilities are for the Medical Insurance Plan Contribution portion of the System Administered Benefits. See Section I for more information.

# **SECTION VI - GASB 45 ACCOUNTING INFORMATION**

## F. Schedule of Employer Contributions

Year Ended <u>June 30</u>	Actual Employer Contribution	Annual Required Contribution	Percent Contributed	Annual OPEB <u>Cost</u>	Percent Contributed
2012	\$312,000	\$554,150	56.30%*	\$529,263	58.95%*
2011	310,000	528,615	58.64	512,918	60.44
2010	295,000	488,319	60.41	479,420	61.53
2009	261,000	425,362	61.36	421,245	61.96
2008	225,895	407,693	55.41	407,693	55.41

The above liabilities are for the Medical Insurance Plan Contribution portion of the System Administered Benefits. See Section I for more information.

<sup>\*</sup> Percentage contributed for the year ended June 30, 2012 assumes the actual employer contribution is the expected pay-as-you-go amounts for the Medical Insurance Plan Contribution.

# **SECTION VI - GASB 45 ACCOUNTING INFORMATION**

# **G. Schedule of Funding Progress**

	(a)	(b)	(c)=(b)-(a)	(d)=(a)/(b)	(e)	(f)=(c)/(e)
Actuarial	Actuarial					Unfunded Liability as a
Valuation	Value of	Accrued	Unfunded	Funded	Annual	% of Annual
<u>Date</u>	Assets	Liability	Liability	<u>Ratio</u>	Salary	Salary
		<u></u> _	<del></del> -		<del></del>	<del></del>
06/30/2011	\$0	\$5,810,170	\$5,810,170	0.0%	\$31,811,235	18.3%
06/30/2010	0	5,808,213	5,808,213	0.0%	32,060,841	18.1%
06/30/2009	0	5,643,300	5,643,300	0.0%	30,586,694	18.5%
06/30/2008	0			-not determined		
06/30/2007	0	4,676,848	4,676,848	0.0%	31,256,135	15.0%

The above liabilities are for the Medical Insurance Plan Contribution portion of the System Administered Benefits. See Section I for more information.

### **SECTION VI - GASB 45 ACCOUNTING INFORMATION**

## **H.** Additional Information

The following information was used to determine the Annual Required Contribution for the fiscal year ending June 30, 2012. The ARC is for the Medical Insurance Plan Contribution. See Section I for more information.

Valuation Date: June 30, 2011

Actuarial Cost Method: Projected unit credit cost method; with straight

proration based on service to decrement

Amortization method: 30 years closed, level percent of payroll

Remaining Amortization Period: 15 years

Asset valuation method: Market Value of Assets

Assumptions:

Investment rate of return 4.0%

Projected Salary Increases not applicable

Payroll growth 3.0%

Inflation not applicable Cost of Living Adjustments not applicable

# **SECTION VII – CENSUS DATA**

### A. Reconciliation with Prior Valuation

	<u>Active</u>	Terminated <u>Vested</u>	Retirees, Disabled Members, and <u>Beneficiaries</u>	<u>Total</u>
Members as of June 30, 2010	362	45	394	801
Changes				
Terminated Vested	(6)	6	0	0
Retired & Disabled	(17)	0	17	0
Death	(1)	0	(18)	(19)
Disappeared	0	0	(7)	(7)
New or Rehired	24	(3)	5	26
Members as of				
June 30, 2011	362	48	391	801

As of June 30, 2011, terminated vested members include both (a) 25 members due a deferred annuity benefit and (b) 23 members who are due a refund of member and, if applicable, employer contributions. Former active members who are not vested in PRJRS but are covered by another Puerto Rico government system are assumed to be due both their member and employer contributions with interest.

# SECTION VII – CENSUS DATA

# B. Summary of Active Members as of June 30, 2011

## **Number of Male Participants by Age and Service Groups**

	Years of Credited Service												
Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up	Total		
0-24	-	-	-	-	-	-	-	-	-	-	-		
25-29	-	-	-	-	-	-	-	-	-	-	-		
30-34	-	4	1	-	-	-	-	-	-	-	5		
35-39	2	6	2	1	-	-	-	-	-	-	11		
40-44	-	2	8	8	8	-	-	-	-	-	26		
45-49	2	2	9	2	4	7	5	-	-	-	31		
50-54	-	1	5	2	5	7	4	3	2	-	29		
55-59	1	2	3	1	5	9	5	2	3	-	31		
60-64	-	1	4	1	4	2	-	2	-	-	14		
65-69	-	1	2	2	1	2	-	1	-	-	9		
70&Up	-	-	-	-	-	-	-	-	-	-	-		
Total	5	19	34	17	27	27	14	8	5	-	156		

## Average Compensation of Male Participants by Age and Service Groups

	Years of Credited Service												
Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up	Average		
0-24	-	-	-	-	-	-	-	-	-	-	-		
25-29	-	-	-	-	-	-	-	-	-	-	-		
30-34	-	69,600	69,600	-	-	-	-	-	-	-	69,600		
35-39	104,800	76,267	79,600	89,600	-	-	-	-	-	-	83,273		
40-44	-	89,600	84,600	82,100	89,025	-	-	-	-	-	85,577		
45-49	79,600	97,300	86,311	79,600	89,600	83,886	89,600	-	-	-	86,561		
50-54	-	89,600	92,680	79,600	81,600	93,943	93,450	94,733	97,300	-	90,703		
55-59	89,600	97,300	94,733	89,600	92,680	93,022	92,680	89,600	94,733	-	93,077		
60-64	-	89,600	101,150	89,600	84,600	89,600	-	89,600	-	-	91,471		
65-69	-	89,600	87,300	89,600	89,600	89,600	-	125,000	-	-	93,022		
70&Up	-	-	-	-	-	-	-	-	-	-	-		
Average	91,680	82,800	88,506	83,718	87,778	90,385	91,800	95,950	95,760	-	88,500		

Average compensation values shown above are as of June 30, 2011. Compensation values shown elsewhere in this report are estimated for the 2011-2012 fiscal year reflecting mid-year increases.

## SECTION VII – CENSUS DATA

# B. Summary of Active Members as of June 30, 2011

## **Number of Female Participants by Age and Service Groups**

	Years of Credited Service												
Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up	Total		
0-24	-	-	-	-	-	-	-	-	-	-	-		
25-29	-	-	-	-	-	-	-	-	-	-	-		
30-34	2	4	-	-	-	-	-	-	-	-	6		
35-39	1	11	7	10	1	-	-	-	-	-	30		
40-44	1	3	11	5	10	6	-	-	-	-	36		
45-49	2	6	5	5	9	9	4	-	1	-	41		
50-54	-	1	3	2	8	10	8	4	-	-	36		
55-59	-	1	5	2	5	6	5	4	3	1	32		
60-64	-	-	6	1	4	2	6	-	-	1	20		
65-69	-	-	-	-	2	2	-	-	1	-	5		
70&Up	-	-	-	-	-	-	-	-	-	-	-		
Total	6	26	37	25	39	35	23	8	5	2	206		

#### Average Compensation of Female Participants by Age and Service Groups

				Ye	ars of Cred	lited Servic	e				
Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up	Average
0-24	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-
30-34	79,600	69,600	-	-	-	-	-	-	-	-	72,933
35-39	89,600	82,327	81,029	79,140	69,600	-	-	-	-	-	80,780
40-44	89,600	76,267	80,509	73,600	83,140	82,933	-	-	-	-	80,583
45-49	79,600	82,933	81,600	85,600	87,378	89,089	88,450	-	89,600	-	85,961
50-54	-	69,600	89,600	89,600	87,100	90,640	87,100	88,450	-	-	88,094
55-59	-	69,600	95,760	89,600	85,600	88,067	85,600	89,600	89,600	89,600	88,400
60-64	-	-	96,467	105,000	89,600	89,600	94,667	-	-	89,600	93,950
65-69	-	-	-	-	87,300	79,600	-	-	69,600	-	80,680
70&Up	-	-	-	-	-	-	-	-	-	-	-
Average	82,933	78,831	86,141	82,032	85,774	87,789	88,983	89,025	85,600	89,600	85,287

Average compensation values shown above are as of June 30, 2011. Compensation values shown elsewhere in this report are estimated for the 2011-2012 fiscal year reflecting mid-year increases.

## **SECTION VII – CENSUS DATA**

# B. Summary of Active Members as of June 30, 2011

### **Number of All Active Participants by Age and Service Groups**

				Ye	ars of Cred	dited Servi	се				
Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up	Total
0-24	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-
30-34	2	8	1	-	-	-	-	-	-	-	11
35-39	3	17	9	11	1	-	-	-	-	-	41
40-44	1	5	19	13	18	6	-	-	-	-	62
45-49	4	8	14	7	13	16	9	-	1	-	72
50-54	-	2	8	4	13	17	12	7	2	-	65
55-59	1	3	8	3	10	15	10	6	6	1	63
60-64	-	1	10	2	8	4	6	2	-	1	34
65-69	-	1	2	2	3	4	-	1	1	-	14
70&Up	-	-	-	-	-	-	-	-	-	-	-
Total	11	45	71	42	66	62	37	16	10	2	362

## Average Compensation of All Active Participants by Age and Service Groups

Years of Credited Service											
Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up	Average
0-24	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-
30-34	79,600	69,600	69,600	-	-	-	-	-	-	-	71,418
35-39	99,733	80,188	80,711	80,091	69,600	-	-	-	-	-	81,449
40-44	89,600	81,600	82,232	78,831	85,756	82,933	-	-	-	-	82,678
45-49	79,600	86,525	84,629	83,886	88,062	86,813	89,089	-	89,600	-	86,220
50-54	-	79,600	91,525	84,600	84,985	92,000	89,217	91,143	97,300	-	89,259
55-59	89,600	88,067	95,375	89,600	89,140	91,040	89,140	89,600	92,167	89,600	90,702
60-64	-	89,600	98,340	97,300	87,100	89,600	94,667	89,600	-	89,600	92,929
65-69	-	89,600	87,300	89,600	88,067	84,600	-	125,000	69,600	-	88,614
70&Up	-	-	-	-	-	-	-	-	-	-	-
Average	86,909	80,507	87,273	82,714	86,594	88,919	90,049	92,488	90,680	89,600	86,671

Average compensation values shown above are as of June 30, 2011. Compensation values shown elsewhere in this report are estimated for the 2011-2012 fiscal year reflecting mid-year increases.

# **SECTION VII – CENSUS DATA**

# C. Summary of Terminated Vested Members as of June 30, 2011

	<u>Ma</u>	<u>lle</u>	<u>Fe</u>	<u>male</u>	]	<u>otal</u>
		Average Annual Pension Basic		Average Annual Pension Basic		Average Annual Pension Basic
<u>Age</u>	<u>Count</u>	System Benefit	Count	System Benefit	<u>Count</u>	System Benefit
Under 35	0	0	0	0	0	0
35-39	0	0	0	0	0	0
40-44	0	0	1	52,200	1	52,200
45-49	1	67,200	3	16,200	4	28,950
50-54	8	54,094	3	49,800	11	52,923
55-59	2	42,600	4	53,438	6	49,825
60-64	2	18,000	1	33,600	3	23,200
65 & Over	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>O</u>
All Ages	13	47,781	12	41,463	25	44,748

The Average Annual Pension Basic System Benefit amounts above are as of June 30, 2011 for terminated vested participants who are due a deferred annuity. In addition, there are 23 former participants who are due accumulated member and, if applicable, employer contributions totaling \$457,455 as of June 30, 2011.

# **SECTION VII – CENSUS DATA**

# D. Summary of Retirees as of June 30, 2011

<u>Males</u>				<u>Females</u>		<u>Total</u>			
	<u>/</u>	<u> Average Anr</u>	nual Pension	<u> </u>	Average Anr	nual Pension	<u> </u>	Average Anr	nual Pension
		Basic			Basic			Basic	
		System	Total		System	Total		System	Total
<u>Age</u>	Count	<u>Benefit</u>	<u>Benefit</u>	<u>Count</u>	<u>Benefit</u>	<u>Benefit</u>	<u>Count</u>	<u>Benefit</u>	<u>Benefit</u>
Under 45	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0
50-54	1	32,814	32,814	1	34,048	35,070	2	33,431	33,942
55-59	18	67,565	67,743	8	63,244	63,339	26	66,235	66,388
60-64	46	64,523	66,198	18	63,439	65,195	64	64,218	65,916
65-69	39	56,705	59,502	19	58,467	61,214	58	57,282	60,063
70-74	54	53,002	56,997	17	51,686	55,086	71	52,687	56,539
75-79	60	40,529	44,617	5	67,554	72,773	65	42,608	46,783
80-84	24	33,849	37,943	3	28,107	31,298	27	33,211	37,205
85-89	16	31,319	35,249	0	0	0	16	31,319	35,249
90-94	6	36,373	40,938	0	0	0	6	36,373	40,938
95-99	0	0	0	0	0	0	0	0	0
100 &									
Over	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
All Ages	264	50,205	53,382	71	57,655	60,177	335	51,784	54,823

The Average Annual Pension amounts above are as of June 30, 2011.

# **SECTION VII – CENSUS DATA**

# E. Summary of Beneficiaries as of June 30, 2011

<u>Males</u>				<u>Females</u>			<u>Total</u>		
	<u>A</u>	verage Ann	<u>ual Pension</u>	<u>A</u>	<u>verage Ann</u>	<u>ual Pension</u>	<u>A</u>	verage Ann	<u>ual Pension</u>
		Basic			Basic			Basic	
		System	Total		System	Total		System	Total
<u>Age</u>	<u>Count</u>	<u>Benefit</u>	<u>Benefit</u>	<u>Count</u>	<u>Benefit</u>	<u>Benefit</u>	<u>Count</u>	<u>Benefit</u>	<u>Benefit</u>
Under 40	1	20,160	20,765	1	20,160	20,765	2	20,160	20,765
40-44	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0
50-54	0	0	0	2	25,107	27,825	2	25,107	27,825
55-59	0	0	0	1	11,082	11,414	1	11,082	11,414
60-64	0	0	0	3	42,046	44,050	3	42,046	44,050
65-69	0	0	0	4	29,910	31,744	4	29,910	31,744
70-74	1	14,759	16,713	4	42,835	46,313	5	37,220	40,393
75-79	2	10,152	11,341	10	18,255	19,363	12	16,905	18,026
80-84	2	11,175	12,648	6	15,369	16,654	8	14,320	15,653
85-89	2	13,197	14,937	6	17,479	19,484	8	16,409	18,347
90-94	1	7,985	9,047	3	12,337	13,472	4	11,249	12,366
95-99	0	0	0	0	0	0	0	0	0
100 & Over	<u>5</u>	<u>8,703</u>	<u>9,751</u>	<u>2</u>	<u>33,407</u>	<u>37,813</u>	<u>7</u>	<u>15,761</u>	<u>17,769</u>
All Ages	14	11,105	12,367	42	23,382	25,207	56	20,313	21,997

The Average Annual Pension amounts above are as of June 30, 2011.

# SECTION VIII – SUMMARY OF PRINCIPAL PLAN PROVISIONS AS OF JUNE 30, 2011

This summary of plan provisions is intended only to describe the essential features of the plan for valuation purposes. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself.

## 1. Type of Plan

The System is a contributory, defined benefit plan.

# 2. Effective Date

The Plan was established in 1954 by Act 12. The plan was last amended under Act 54, approved June 28, 2007.

# 3. Eligibility for Membership

Members of the Judiciary Retirement System of Puerto Rico include all persons holding a position as Judge of the Supreme Court, Judge of the Court of Appeals, Superior Judges of the Court of First Instance, and Municipal Judges of the Court of First Instance in the Commonwealth of Puerto Rico (Section 235 and Act 201 of 2003).

#### 4. Definitions

- a. <u>Fiscal Year</u>: A Fiscal Year is a 12-month period beginning on July 1 and ending on June 30 (Section 234).
- b. <u>General Fund</u>: The General Expenses Budget of the Government of the Commonwealth of Puerto Rico.
- c. <u>Creditable Service</u>: The years and months (where fractional months are counted as full months of service) of System participation, beginning on the Date Credit Begins and ending on the date of separation of service. All intervening periods following a resignation, separation or expiration of any term by election or appointment during which a participant was not in government service are excluded. Periods for which no contributions have been made or for which contributions were refunded are also excluded. However, credit will be granted

# SECTION VIII – SUMMARY OF PRINCIPAL PLAN PROVISIONS AS OF JUNE 30, 2011

for refund periods if the participant returns any refunded Accumulated Contributions with interest to the System. (Section 234)

- d. <u>Date Credit Begins</u>: For participants with less than eight years of Credited Service as a judge, Creditable Service begins on the day of appointment as a judge. For participants with at least eight years of Creditable Service as a judge, Credited Service begins on the earlier of (1) the day of appointment as a judge or (2) the day first employed by the Government of Puerto Rico, provided that Accumulated Contributions for prior government service are transferred to the System. (Section 234)
- e. <u>Salary</u>: The annual compensation received by a judge for his services in that capacity (Section 234).
- f. Highest Salary: The highest salary received as a judge (Section 236).
- g. <u>Average Compensation</u>: The average of the 36 highest months of salary that the participant has received for Creditable Service (System Disability Regulation).
- h. <u>Contributions</u>: The amount deducted from the compensation of a Member (Sections 242 and 244).
- i. <u>Interest</u>: 2.5% compounded annually, or any other rate as may subsequently be prescribed by the Board of Trustees based on the System's experience (Section 234). The rate of 2.5% has always been in effect.
- j. <u>Accumulated Contributions</u>: The sum of all amounts deducted from the compensation of a Member with interest (Section 239).
- k. <u>Actuarial Equivalent</u>: Equality in value such that the present value of the amount under any form of payment is essentially the same as the present value of the amount under the normal form of annuity payment for single participants. Actuarially Equivalent factors are determined based on annuity and mortality tables adopted by the Board of Trustees based on the system's experience and in accordance with the recommendations of the actuary. (Section 234)

# SECTION VIII – SUMMARY OF PRINCIPAL PLAN PROVISIONS AS OF JUNE 30, 2011

### 5. Retirement Benefits

#### a. Normal Retirement

Basic Eligibility: Age 60 with 10 years of Creditable Service (Section 236).

<u>Basic Benefit</u>: 25% of Highest Salary, plus 5% of Highest Salary for each year of Creditable Service in excess of 10 years, subject to a maximum of 75% of Highest Salary (Section 236).

<u>Eligibility for judges who serve without a fixed tenure</u>: 10 years of Creditable Service (Section 236, as interpreted by the System). This enhanced eligibility is not available to judges who are appointed after June 28, 2007 to an unlimited term (Act 54, Section 2).

Benefit for judges who serve without a fixed tenure: 25% of the Salary corresponding to the office during the retirement period, plus 5% of such Salary for each year of Creditable Service in excess of 10 years, subject to a maximum of 100% of such Salary. If the judge has served in a position without a fixed tenure for a total of at least 8 years, the 25% increases to 50% in the preceding formula. (Section 236). This enhanced benefit is not available to judges who are appointed after June 28, 2007 to an unlimited term (Act 54, Section 2).

Optional Eligibility: Age and Creditable Service as shown in the table below, provided at least 8 years of Creditable Service were earned in office as a judge (Section 236a).

Age	Years of Creditable Service
Less than 60	30
62	20
61	21
60	22
59	23
58	24
57	25
56	26
55	27

# SECTION VIII – SUMMARY OF PRINCIPAL PLAN PROVISIONS AS OF JUNE 30, 2011

Optional Benefit: 75% of Highest Salary (Section 236a).

Enhanced Eligibility: Any judge who has served without a fixed tenure for at least 3 years and has at least 25 years of Creditable Service (Section 236). This enhanced benefit is not available to judges who are appointed after June 28, 2007 to an unlimited term (Act 54, Section 2).

Enhanced Benefit: 75% of the Salary earned at the time of retirement (Section 236).

<u>Compulsory Retirement</u>: All judges must retire by age 70. If the judge has less than 10 years of creditable service, the judge can elect a refund of Accumulated Contributions or a proportional part of the Basic Benefit based on completed years and months of creditable service. (Section 236)

## b. Early Retirement

Basic Eligibility: 20 years of Creditable Service before age 60 (Section 236).

<u>Basic Benefit</u>: The Basic Benefit payable under Normal Retirement, reduced on an actuarial equivalent basis for each month that Early Retirement Date precedes age 60. However, no actuarial reduction is applied for judges who serve without a fixed tenure. (Section 236).

Optional Eligibility: 20 years of Creditable Service, provided at least 8 years of Creditable Service were earned in office as a judge (Section 236a).

Optional Benefit: 75% of Highest Salary, reduced on an actuarial equivalent basis for each month that Early Retirement Date precedes the age specified in the table under Optional Eligibility under Normal Retirement for the applicable years of Creditable Service (Section 236a).

# SECTION VIII – SUMMARY OF PRINCIPAL PLAN PROVISIONS AS OF JUNE 30, 2011

## 6. Termination Benefits

## a. Lump Sum Withdrawal

<u>Eligibility</u>: A Member is eligible upon termination of service.

Benefit: The benefit equals a refund of Accumulated Contributions (Section 239).

### b. Deferred Retirement

<u>Eligibility</u>: A Member is eligible upon termination of service prior to age 60 and after 10 years of Creditable Service, provided the member has not taken a lump sum withdrawal.

<u>Benefit</u>: The benefit, commencing at age 60, is equal to the benefit payable upon Normal Retirement (Section 236).

#### 7. Death Benefits

#### a. Occupational Death Benefit

<u>Eligibility</u>: The beneficiaries of any active participant who dies from an employment-related cause under the Workmen's Accident Compensation Act (Section 240).

<u>Spouse's Benefit</u>: 50% of the participant's Salary at date of death, payable as an annuity until death or remarriage (Section 240)

<u>Children's Benefit</u>: \$10 (\$20 if full orphan) for each child payable monthly until child's age 18 or completion of studies, if later. The maximum family benefit is 75% of the participant's Salary at date of death. (Section 240)

<u>Benefit if no spouse or children</u>: Refund of Accumulated Contributions, plus an amount equal to one year of Compensation in effect at the time of death (Section 240).

# <u>SECTION VIII – SUMMARY OF PRINCIPAL PLAN PROVISIONS</u> <u>AS OF JUNE 30, 2011</u>

## b. Pre-retirement Death Benefit

<u>Eligibility</u>: Any current non-retired member is eligible, provided not eligible for the Occupational Death Benefit (Section 240).

Benefit: The benefit is as follows:

- (i) While in active service, the benefit equals a refund of Accumulated Contributions; plus an amount equal to one year of Compensation in effect at the time of death (Section 240).
- (ii) While not in active service, the benefit equals a refund of Accumulated Contributions.

## c. Special Pre-retirement Death Benefit

<u>Eligibility</u>: An active participant who was eligible to retire at the date of death with a surviving spouse or dependent children (Section 240a).

<u>Benefit</u>: The post-retirement death benefits described below assuming the active participant retired the day before the date of death (Section 240a).

### d. Post-retirement Death Benefit

Eligibility: Any retiree or disabled member receiving a monthly benefit.

Benefit: The benefit is as follows:

- (i) For those married or with dependent children at the time of death, an annual income equal to 60% of the Retirement Benefit at time of death, payable for life for a surviving spouse and/or disabled children and payable until age 18 or completion of studies, if later, for non-disabled children (Section 240a).
- (ii) The benefit, when there is no relation as stated above, is equal to the remaining balance of Accumulated Contributions at the time of retirement after the deduction of lifetime annual income paid and is payable to a beneficiary or to the Member's estate. In no case shall the benefit be less

# SECTION VIII – SUMMARY OF PRINCIPAL PLAN PROVISIONS AS OF JUNE 30, 2011

than \$1,000. The General Fund pays the difference, up to \$500, between (1) the Accumulated Fees with interest less the lifetime annual income paid and (2) \$1,000. The System pays for the rest. (Section 240 and Act 548)

#### 8. Disability Benefits

### a. Non-occupational Disability

<u>Eligibility</u>: All members are eligible for Non-occupational Disability upon 10 years of Creditable Service and the occurrence of disability (Section 238).

<u>Benefit</u>: 30% of Average Compensation, plus 1% of Average Compensation for each year of creditable service in excess of 10 years, payable as an annuity; subject to a maximum of 50% of Average Compensation (Section 238).

## b. Occupational Disability

<u>Eligibility</u>: All members disabled while in the course and as a consequence of their work, as certified by two physicians appointed by the Plan Administrator, and provided the member is receiving compensation from the Workmen's Accident Compensation Act (Section 238).

<u>Benefit</u>: 50% of Salary at date of disability, payable as an annuity, reduced by any payments received from the State Insurance Fund under the Workmen's Accident Compensation Act (Section 238).

- 9. Cost-of-Living Adjustments (COLA) to Pension Benefits: Effective January 1, 2001, commencing January 1, 2002 and subsequently every three years thereafter, the annual benefit is increased by 3% for retirees, beneficiaries, and disabled members provided that the member (including the retired member for beneficiaries) had been receiving payments for at least three years (Section 236c). These COLAs are paid by the General Fund. In addition, an ad-hoc 3% COLA was granted effective January 1, 1999 and is paid by the System (Section 236b).
- 10. <u>Medical Insurance Plan Contribution</u>: A payment of up to \$100 per month to the eligible medical insurance plan selected by the retiree or disabled member. This benefit is paid by the General Fund (Act 483).

# SECTION VIII – SUMMARY OF PRINCIPAL PLAN PROVISIONS AS OF JUNE 30, 2011

## 11. Special "Bonus" Benefits:

- a. <u>Christmas Bonus</u>: An annual bonus of \$600 for each retiree, beneficiary, and disabled member paid in December. The System pays \$150 per retiree, beneficiary, and disabled member and the balance is paid by the General Fund (Act 144).
- b. <u>Summer Bonus</u>: An annual bonus of \$100 for each retiree, beneficiary, and disabled member paid in July. The amount is prorated if there are multiple beneficiaries. This benefit is paid by the General Fund (Act 37).
- c. <u>Medication Bonus</u>: An annual bonus of \$100 for each retiree, beneficiary, and disabled member to cover health costs paid in July. Evidence of coverage is not required. The amount is prorated if there are multiple beneficiaries. This benefit is paid by the General Fund (Act 155).

### 12. Forms of Payment

The basic pension benefits described in the above sections are payable in the form of a cash refund annuity. Optional benefits are provided upon a member's death to the surviving beneficiaries as described in 7.d.

## 13. Contributions

<u>Member Contributions</u>: Contributions by Members are 8.0% of Compensation (Sections 234, 240a and 242).

<u>Employer Contributions</u>: Contributions by the Commonwealth of Puerto Rico are currently 20.0% of Compensation (Section 242). Effective July 1, 2008, the employer contribution rate increased to 30.34% of Compensation.

#### 14. Changes in Plan Provisions since Prior Valuation

None.

# <u>SECTION IX – SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JUNE 30, 2011</u>

Interest: 6.60% per annum, net of investment expenses, for GASB 25 and 27. (7.50%

prior to June 30, 2011)

4.00% per annum for GASB 45.

Compensation Increases: 3.0% per year.

<u>Termination – Judges who serve with a fixed tenure</u>: Withdrawal rates vary by age and years of Creditable Service as a judge (not including any prior governmental service).

Years of	Less than	Age 45
Creditable Service	Age 45	and older
0 - 6	3.5%	0.0%
7	0.0	0.0
8	30.0	15.0
9 - 11	3.0	3.0
12+	0.0	0.0

<u>Retirement – Judges who serve with a fixed tenure</u>: Rates of retirement vary by age and years of Creditable Service (including any prior governmental service). Retirement rates are not applied prior to completion of 8 years of Creditable Service as a judge.

## If Eligible for the 75% of Highest Salary Maximum Benefit:

A retirement rate of 45% per year is assumed for active members who are eligible for retirement with the maximum benefit (e.g. age 60 with 20 years of Creditable Service, 30 years of Creditable Service, or Optional Eligibility).

## If Not Yet Eligible for the 75% of Highest Salary Maximum Benefit:

The rates shown below apply when an active member is eligible for retirement with less than the maximum benefit (e.g. age 60 with 10 years of Creditable Service, or 20 years of Creditable Service before age 60).

	Less than 20 years of	20 or more years of
Age	Creditable Service	Creditable Service
Less than 60	N/A	1.5%
60 and older	8.0%	N/A

At age 70, a retirement rate of 100% is applied.

# <u>SECTION IX – SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JUNE 30, 2011</u>

<u>Termination – Judges who serve without a fixed tenure</u>: No termination is assumed prior to retirement eligibility.

<u>Retirement – Judges who serve without a fixed tenure</u>: Rates of retirement vary by age. The rates do not apply until the completion of 10 years of Creditable Service with 8 years earned as judge.

Age	Rate of Retirement
Under 65	0%
65 to 69	20
70 & Over	100

For benefit purposes, all Judges who serve without a fixed tenure are assumed to retire with at least 8 years of Creditable Service earned as a judge without a fixed tenure.

<u>Commencement of benefits for terminated vested members</u>: Current terminated members with a vested benefit are assumed to retire at age 60 or at the attained age on the valuation date if later.

<u>Disability</u>: 50% of the six month elimination period rates in the 1987 Commissioners Group Disability Table. 100% of disabilities are assumed to be occupational. Rates of disability cease to apply once a member is eligible for the 75% of Highest Salary maximum benefit.

<u>Pre-retirement Mortality</u>: RP-2000 Employee Mortality Rates with white collar adjustments for males and females, projected on a generational basis using Scale AA. As a generational table, it reflects mortality improvements both before and after the measurement date.

Among deaths while in active service, 50% are assumed to be occupational, 50% are assumed to be non-occupational.

<u>Post-retirement Healthy Mortality</u>: RP-2000 Healthy Annuitant Mortality Rates with white collar adjustments for males and females, projected on a generational basis using Scale AA. As a generational table, it reflects mortality improvements both before and after the measurement date.

# <u>SECTION IX – SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JUNE 30, 2011</u>

<u>Post-retirement Disabled Mortality</u>: RP-2000 Disabled Annuitant Mortality Rates, without projection. No provision was made for future mortality improvement for disabled retirees.

<u>Marriage</u>: 75% of current active and terminated members are assumed to be married at retirement with males 3 years older than females.

<u>Form of Payment</u>: Future retired members are assumed to receive a joint and 60% survivor annuity if married and a modified cash refund (approximated by a single life annuity with 2 years certain) if not married.

Spousal information was not provided for current retired and disabled members. If the retiree or disabled member was indicated as married, that member was assumed to receive a joint and 60% survivor annuity. The spouse's date of birth was imputed based on an assumed age difference of 3 years with males older than females. If the retiree or disabled member was indicated as not married, that member was assumed to receive a modified cash refund (approximate by a single life annuity with 2 years certain).

No future dependent children were assumed to become beneficiaries.

Members who terminate employment with at least 10 years of Creditable Service are assumed to elect to receive a deferred pension benefit in lieu of a refund of contributions.

<u>Medical Insurance Plan Contribution</u>: 75% of future and current service and disability retirees are assumed to receive a monthly medical insurance continuation benefit of \$100 per month.

<u>Future 3% COLA Adjustments</u>: An annual compound COLA of 0.99% per year is assumed to be granted in the future to retirees, beneficiaries, and disabled members to approximate the triennial 3% increases.

<u>Administrative Expenses</u>: Average of past two year's expense, rounded up to the nearest \$5,000, is added to the normal cost. For the 2010-2011 plan year, this amount is \$520,000.

<u>Tenure as Judge</u>: Supreme Court judges appointed before June 29, 2007 are assumed to serve with unlimited terms. All other judges are assumed to have a fixed tenure.

# <u>SECTION IX – SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JUNE 30, 2011</u>

<u>Special Data Adjustments</u>: The following adjustments were made to the census data received from the System.

The amount of the COLA effective January 1, 2011 was estimated for current participants in pay status. Retirees with a date of retirement on or before January 1, 2008 and all beneficiaries were assumed to receive the COLA effective January 1, 2011.

Benefits for some of the current terminated vested members were estimated based on the provided years of creditable service and the last monthly salary.

Refer to the Form of Payment assumption above for a description of form of payment and spousal data imputation for current retired and disabled members.

Accumulated member contributions for active members with other government service include the contributions accumulated during the other government service.

Benefits for current beneficiaries who are under age 22 as of the valuation date were assumed to cease at age 22. Benefits for current beneficiaries who are age 22 or older as of the valuation data were assumed to be payable for life. In addition, the current level of benefit was assumed to remain constant.

<u>Benefits not valued</u>: The minimum post-retirement death benefit of \$1,000 for retirees without surviving beneficiaries is not explicitly valued. The additional liability associated with this benefit is expected to be de minimus.

<u>Changes in actuarial assumptions since the prior valuation</u>: The interest rate assumption for GASB 25 & 27 was decreased from 7.5% to 6.6%.

## <u>SECTION X – SUMMARY OF ACTUARIAL METHODS AS OF JUNE 30, 2011</u>

The ultimate cost of a pension plan is the excess of actual benefits and administrative expenses paid over actual net investment return on plan assets during the plan's existence until the last payment has been made to the last participant. The plan's "actuarial cost method" determines the expected incidence of actuarial costs by allocating portions of the ultimate cost to each plan year. The cost method is thus a budgeting tool to help to ensure that the plan will be adequately and systematically funded and accounted for. There are several commonly-used cost methods which differ in how much of the ultimate cost is assigned to each prior and future year. Therefore, the pattern of annual contributions and accounting expense varies with the choice of cost method. Annual contributions and accounting expense are also affected by the "asset valuation method" (as well as the plan provisions, actuarial assumptions, and actual plan demographic and investment experience each year).

## **Actuarial Cost Method**

The plan's actuarial cost method is the <u>projected unit credit method</u>. Under this method, a projected benefit is determined at each active participant's assumed retirement age assuming future compensation increases. The projected benefit is attributed to each year of service using straight proration based on projected service to each assumed retirement age. The plan's normal cost is the sum of the present value of the portion of each active participant's projected benefit attributable to the current year of service. The plan's accrued liability is the sum of (a) the present value of the portion of each active participant's projected benefit attributable to all prior years of service plus (b) the present value of each inactive participant's future benefits.

### Asset Valuation Method

The Actuarial Value of Assets is equal to the Market Value of Assets.

Changes in actuarial methods since the prior valuation

None.