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June 7, 2012

Mr. Héctor M. Mayol Kauffman Administrator Puerto Rico Government Employees and Judiciary Retirement System Administration 437 Ponce de León Avenue Hato Rey, PR 00918

Dear Mr. Mayol:

This report presents the results of the final actuarial valuation of the Puerto Rico Government Employees Retirement System (PRGERS) 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.

Purpose

The main purposes of this report are:

- to provide the Annual Required Contribution, Annual Pension Cost, and Annual Other Postemployment Benefit (OPEB) 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 Government Employees Retirement System for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning PRGERS' operations, and uses PRGERS' data, which Milliman has not audited. Milliman and PRGERS do not intend to benefit and assume no duty or liability to other parties who receive this report. Milliman and PRGERS 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. This information includes, but is not limited to, plan documents and summaries, participant data, and financial statements. As is our usual practice, we have not audited the information provided to us, but have reviewed it for general reasonableness. Our review of the data shows it to be reasonably consistent and comparable with data used in prior valuations. However, please refer to the sections "System Experience since Prior Valuation" starting on page 5 and "Census Data Overview and New Assumptions" starting on page 9 for information about recurring liability losses due to the retirement of active members, and discussion regarding PRGERS' and Milliman's review of benefit calculations for sample members and the new assumptions utilized in this valuation. Because the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or inaccurate.

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.

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

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 PRGERS. 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 VIII 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.

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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,

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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>
Actuarial Accrued Liability ¹ Actuarial Value of Assets Unfunded Actuarial Accrued Liability	\$22,539,089	\$2,918,265	\$25,457,354	\$1,758,389
	<u>1,723,811</u>	<u>0</u>	<u>1,723,811</u>	<u>0</u>
	20,815,278	2,918,265	23,733,543	1,758,389
Employer Normal Cost ² as a percent of payroll	144,241	36,135	180,376	25,773
	3.93%	0.99%	4.92%	0.70%
Annual Required Contribution (ARC) as a percent of payroll	1,757,198	262,269	2,019,467	133,654
	47.93%	7.15%	55.08%	3.64%
Annual Pension / OPEB Cost ³ as a percent of payroll	N/A	N/A	1,903,046	130,704
	N/A	N/A	51.91%	3.56%
Employer Contributions (estimated) as a percent of payroll	385,818	211,595	597,413	108,614
	10.52%	5.77%	16.29%	2.96%
Portion of ARC not covered (estimated) as a percent of payroll	1,371,380	50,674	1,422,054	25,040
	37.41%	1.38%	38.79%	0.68%

¹ A discussion of the benefits included in the respective Actuarial Accrued Liability begins on page 4 of this section. Please see page 26 for an allocation of Actuarial Accrued Liability by Pension Law and System Entity.

Employer Normal Cost and all subsequent annual amounts are on behalf of the July 1, 2011 to June 30, 2012 fiscal year.

³ Determined as if PRGERS were a single employer plan instead of a cost-sharing multiple employer plan. See page 12 for more information.

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

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

Actuarial Accrued Liability Actuarial Value of Assets Unfunded Actuarial Accrued Liability	\$21,370,006 <u>1,667,358</u> 19,702,648	\$25,457,354 <u>1,723,811</u> 23,733,543
Employer Normal Cost as a percent of payroll	74,087 1.94%	180,376 4.92%
Annual Required Contribution for upcoming fiscal year as a percent of payroll	1,734,979 45.44%	2,019,467 55.08%

GASB 45 Accounting (\$ amounts in thousands)

Actuarial Accrued Liability Actuarial Value of Assets Unfunded Actuarial Accrued Liability	\$1,699,373 <u>0</u> 1,699,373	\$1,758,389 <u>0</u> 1,758,389
Employer Normal Cost as a percent of payroll	27,349 0.72%	25,773 0.70%
Annual Required Contribution for upcoming fiscal year as a percent of payroll	129,395 3.39%	133,654 3.64%

A discussion of the benefits included in the respective Actuarial Accrued Liability begins on page 4 of this section.

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	June 30, 2010 <u>Valuation</u>	June 30, 2011 <u>Valuation</u>
Particip	ant Data	
Active Members Number Average Salary Total Annual Salary	140,642 \$27,149 \$3,818,332,000	135,972 \$26,964 \$3,666,402,000
Retirees Number Average Monthly Basic System Benefit Average Monthly System Administered Benefit	77,528 \$1,037 \$74	83,416 \$1,043 \$107
<u>Disabled Members</u> Number Average Monthly Basic System Benefit Average Monthly System Administered Benefit	16,839 \$431 \$115	16,670 \$434 \$114
Beneficiaries Number Average Monthly Basic System Benefit Average Monthly System Administered Benefit	12,171 \$275 \$20	13,105 \$290 \$17

Basic System Benefit and System Administered Benefit amounts shown above are for pension benefits, including minimum benefits and COLAs. Special Law "bonus" benefits are not reflected.

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B. General Discussion

Basic System Benefits

As summarized in Section VIII, the Puerto Rico Government Employees Retirement System (PRGERS) provides benefits to Act 447 and Act 1 members, or their beneficiaries, upon:

- Retirement
- Disability
- Vested withdrawal
- Death
- Nonvested withdrawal (return of contributions)
- Christmas bonus (\$200)

These benefits will be referred to as the "Basic System Benefits" throughout this report. Basic System Benefits for members of System 2000 consist of the accumulated member contribution account. The contributions required by statute to fund the basic system benefits listed above total 18.55% of payroll for the 2011-2012 fiscal year, comprising 8.275% from members and 10.275% from employers. These contribution rates are not actuarially determined. Statutory funding requirements in future years will increase under Law 116 (see page 8).

Annuity benefits are subject to a \$400 monthly minimum. The amount in excess of \$200 and less than \$300 is a System Administered Benefit (see below) for all employees. The amount in excess of \$300 and less than \$400 is a System Administered Benefit for Public Corporation and Municipality employees.

System Administered Benefits

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

- Additional minimum pension benefits
- Additional minimum death benefits
- Ad-hoc cost-of-living adjustments (COLAs) provided in past years
- Additional benefits due to death or disability for reasons specified in Act 127
- Medical insurance plan contribution
- Summer bonus
- Medication bonus
- Christmas bonus (\$400)

SECTION I – SUMMARY

System 2000 participants do not receive any System Administered Benefits other than those available under Act 127.

These benefits are funded on a pay-as-you-go basis from the General Fund or specific entity 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 PRGERS assets.

Other Benefits

The disability benefits provided by a private insurance long term disability program to active members of System 2000 who voluntarily elect to enroll are not considered to be a Basic System Benefit nor a System Administered Benefit for purposes of the actuarial valuation since these benefits are financed solely by employees. As a result, these benefits are not reflected in this report. (Please see Management's Discussion and Analysis on page 9 of the System's June 30, 2010 Basic Financial Statements.)

Moreover, this report does not address the guarantee insurance reserve for life insurance on loans to plan members. (Please see Notes to Basic Financial Statements on page 38 and Statements of Plan Net Assets on page 12 of the System's June 30, 2010 Basic Financial Statements.)

System Experience since Prior Valuation

The approximate actual rate of return since the prior valuation was 51.55% 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. This rate of return is determined on a net asset basis. Because of the significant amount of Pension Obligation Bond proceeds that are currently invested (approximately \$3 billion), the net asset return is significant larger than the return on a gross asset basis.

Our analysis of System experience from June 30, 2010 to June 30, 2011 resulted in a liability loss of \$0.7 billion for Basic System Benefits (e.g. – the original June 30, 2010 liability of \$17.3 billion was expected to increase to \$17.6 billion as of June 30, 2011, and instead increased to \$18.3 billion prior to the decrease in the interest rate assumption and the other assumption changes).

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Major sources of gains and losses from the original June 30, 2010 valuation are as follows:

- 1. \$100 million loss on new entrants
- 2. \$130 million loss on roughly 1,465 "pop-up" retirees who were not in the June 30, 2010 census data
- 3. \$30 million loss on retiree and beneficiary mortality and other data changes
- 4. \$430 million loss on roughly 6,600 active members who retired during the oneyear period; a large portion of this loss is due to members retiring with benefits larger than expected
- 5. \$60 million loss on continuing active members due to salary and other data changes

Further discussion is warranted on Items 2 and 4.

For Item 2, the entire \$130 million is not a loss to the extent that these new retirees were included in the deferred vested liability on June 30, 2010. However, we cannot determine what portion of the 1,465 retirees emerged from deferred vested status since deferred vested census data is not available and the deferred vested liability is developed by placing a loading assumption on the Act 447 and Act 1 liabilities to account for deferred vested members.

For Item 4, possible explanations for losses attributable to individual members include purchases of service (which are offset to some extent by the member's purchase price), Law 70 and other retirement incentives (which are offset to some extent by the additional contributions from the Commonwealth and Public Corporations for retirees under Section 4b of Law 70), and data clean-up that occurred during the benefit calculation process when the member retired. Many members experienced significant actuarial losses from the previous valuation due to the retirement benefit in the 2011 census data far exceeding what would have been expected based on the service, salary amounts, and underlying retirement law reported in the 2010 census data. The information provided in the census data does not allow us to determine which if any of the above-mentioned explanations may apply to a particular member. We conducted a study of the actual benefit calculations for selected members and have developed new assumptions in conjunction with PRGERS that have been applied in the June 30, 2011 valuation results and that were also applied in the restated June 30, 2010 valuation

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results that appear in this report. Please see the discussion in the "Census Data Overview and New Assumptions" section that follows.

Change in Interest Rate Assumption since Prior Valuation

This valuation reflects a decrease in the interest rate assumption for GASB 25 & 27 purposes from 7.5% per year to 6.4% per year. The 6.4% assumption reflects the asset allocation for the non-loan portion of the portfolio that was adopted by the Board during November 2011 as shown below and Milliman's capital market assumptions as of June 30, 2011. In addition, the assumption reflects that loans to members comprise approximately 15% of the portfolio and, as provided by the System, have an approximate return of 9.6%.

Asset Class	Target Allocation
Domestic Equity	25%
International Equity	10%
Fixed Income	55%
Cash	10%

The decrease in the interest rate assumption increased the Actuarial Accrued Liability as of June 30, 2011 for Basic System Benefits by \$2.07 billion, from \$18.31 billion to \$20.38 billion, or by 11.3%. The increase in the ARC for Basic System Benefits was \$94.8 million or 6.5%. These amounts do not reflect the new assumptions discussed in the "Census Data Overview and New Assumptions" section.

For GASB 25 and 27 accounting, the decrease in the interest rate assumption increased the Actuarial Accrued Liability as of June 30, 2011 by \$2.43 billion, from \$20.84 billion to \$23.27 billion, or by 11.7%. The increase in the ARC was \$108.7 million or 6.4%. These amounts do not reflect the new assumptions discussed in the "Census Data Overview and New Assumptions" section.

Please note that this new interest rate assumption of 6.4% per year is less than the debt service on some of the Pension Obligation Bonds (about 30% based on the outstanding balance of \$3 billion as of June 30, 2011). The debt service on the Pension Obligation Bonds ranges from 5.85% to 6.55%.

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Changes in Plan Provisions since Prior Valuation

During the 2010-2011 fiscal year, Law 116 was enacted which increased employer contributions from the prior 9.275% of compensation to 10.275% of compensation effective July 1, 2011. For the next four fiscal years effective July 1, employer contributions will increase annually by 1%. For the next five fiscal years, employer contributions will increase annually by 1.25%, reaching an employer contribution rate of 20.525% effective July 1, 2020.

In addition, Law 70 was enacted during the 2010-2011 fiscal year which provided an early retirement incentive. Under Section 4c of Law 70, active members with at least 30 years of service received a bonus equal to 6 months of salary upon retirement under Law 70. Under Section 4b of Law 70, active members who had at least 15 years of service, but less than 30 years of service, were able to retire immediately with an enhanced benefit ranging from 37.5% to 50% of salary. This enhanced benefit is paid by the General Fund for government employees and Public Corporations for their employees until the member reaches the later of age 55 or the date the member would have completed 30 years of service had the member continued working. The System will pay the benefit after this time period. While the General Fund / Public Corporation is paying the pension benefit to the member or any surviving beneficiary, the General Fund / Public Corporation will also pay a contribution equal to 9.275% (17.55% for Public Corporation) of final salary to the System. Members who retired under this incentive are not eligible to receive the Medical Insurance Plan Contribution. This valuation reflects that 2,382 members retired under Section 4b of Law 70 and 900 members retired under Section 4c of Law 70.

FY 2010-2011 Employer Contribution

In the June 30, 2010 valuation, the expected employer contribution under GASB 25 accounting for the fiscal year ending June 30, 2011 was \$542.2 million. This amount reflects contributions of 9.275% of expected payroll for Basic System Benefits (\$354.2 million), \$151.0 million for Special Law pension benefits, and \$37.0 million for early retirement incentives. The actual employer contribution under GASB 25 accounting for the 2010-2011 fiscal year was \$701.7 million. This amount equals \$349.2 million for the 9.275% payroll contribution for Basic System Benefits, \$189.7 million for Special Law pension benefits (\$146.9 million from the General Fund and \$42.8 million from public corporations and municipalities), the COFINA investment of \$162.5 million, and \$0.3

SECTION I – SUMMARY

million for early retirement incentives. The actual contribution of \$701.7 million is higher than the expected \$542.2 million, primarily due to the unanticipated COFINA investment. However, the payroll contribution was slightly less than anticipated, special law contributions were higher than anticipated, and the actual early retirement incentive contributions were only \$0.3 million versus the \$37.0 million expected.

Early Retirement Incentive Contributions

As mentioned above, the actual early retirement incentive contributions were less than estimated in the prior valuation. Last year's estimate was based on a cash basis, whereas the actual amount reflects an accrual basis. In other words, the early retirement incentive contributions are reflected in the System's financial statements in the year of the incentive even though these contributions are typically scheduled to be received over many years. As directed by the System, the actual employer contributions for GASB 25 & 27 accounting reflect early retirement incentive contributions on an accrual basis to match the amounts shown in the System's financial statements.

FY 2007-2008 Employer Contribution

This valuation reflects a true-up in the actual employer contribution for the 2007-2008 fiscal year. Prior valuations reflected the estimated amount from the June 30, 2007 valuation. However, actual contributions were about \$81 million higher. The Schedule of Employer Contributions for GASB 25 & 27 accounting has been revised to reflect the actual contributions.

Census Data Overview and New Assumptions

During the valuation process, significant effort was made to reconcile the current 2011 census data with the prior 2010 census data and to examine the individual data components. The examination of individual data components year over year is simpler for members who do not change employment status between valuations. For members whose status changes, different data components are reported. For instance, members who retire between valuations have service and salary reported in the prior census data and have a retirement benefit reported in the current data.

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Based on the census data reported, the System experienced a \$430 million liability loss on behalf of members who retired between June 30, 2010 and June 30, 2011. This loss is approximately 2% of the total Basic System Benefit liability. Approximately \$120 million of this loss is attributable to active members retiring under Section 4c of Law 70. About 90% of this loss is due to members receiving a merit pension although the data for the prior valuation would have suggested otherwise (e.g. the member was reported with less than 29 years of service as of June 30, 2010 or the member was reported as in Act 1 as of June 30, 2010). Due to the special funding mechanism for retirees under Section 4b of Law 70, those retirees did not generate a loss to the System. The remainder of the loss (about \$310 million) is due to non-Law 70 retirees. Approximately 2/3rds of this loss is estimated to be due to members retiring with a merit pension although the data for the prior valuation would have suggested otherwise (e.g. the member was reported with less than 29 years of service as of June 30, 2010 or the member was reported as in Act 1 as of June 30, 2010). We provided PRGERS with a file that will allow PRGERS to examine both the 2010 (active) and 2011 (retired) data for the individual members who retired between valuations.

Because this is the third consecutive valuation that has shown a significant liability loss due to the retirement of active members since the prior valuation (\$430 million from 2010-2011 experience, \$200 million from 2009-2010 experience, and \$800 million for the two-year experience period from 2007-2009), we requested that the System provide the actual benefit calculations for several sample members who have retired in recent years so that we could perform a detailed review of the calculated retirement benefit.

Based on the System's review of the benefit calculations, it was discovered that there were issues in the System's database relating to credited service reporting for members of Municipalities and Public Corporations. Our review of the benefit calculations revealed that other major reasons for larger than anticipated benefits were service purchases, higher past salary levels, and members who were reported as participating under Act 1 or System 2000 while active, but who retired with a merit pension under Act 447.

A two-part approach has been utilized in the June 30, 2011 valuation to address these issues:

1) To specifically address the service reporting issue, instead of using the credited service amounts provided in the census data, credited service as of the valuation

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- will be assumed to be the greater of the credited service reported or the elapsed time from the date of hire to the valuation date.
- 2) To address the remaining issues, a 20% load has been applied to the service retirement liabilities for active members of Act 447. This load was developed using a macro level analysis of prior emerging losses for retiring members.

This approach has been applied to the June 30, 2011 valuation results and at the request of the System has also been used to restate the June 30, 2010 valuation results shown in this report.

In the "System Experience Since Prior Valuation" section beginning on page 5, Item 4 reported that there was a \$430 million loss on behalf of the 6,600 members who retired in the 2010-11 fiscal year. Had the new assumptions discussed above been in place in the original June 30, 2010 valuation, the loss for the 6,600 retiring members would have been \$50 million instead of \$430 million.

The \$50 million loss equates to a loss of roughly \$7,600 per retiree, out of an average June 30, 2011 liability of \$172,000 per new retiree. Please note that the remaining loss is not \$0 after the application of the new assumptions. The act of retiring in and of itself generates a small loss when looked at for an individual member who actually retires. This is due to the acceleration of benefit payments beyond the expected amount, which is based on an average probability for all retirement-eligible members, whereas retirement is an on-off switch for any individual member. (Vice versa, a retirement-eligible member who does not retire usually generates a gain, due to deferring benefit payments.) Because only members who actually retired are considered in this portion of the analysis, a small loss is expected.

The assumption changes set forth above are being applied in the June 30, 2011 valuation to adjust for future retirees' benefits which we expect to occur but which are not possible to calculate directly for all individual members based on the census data provided for the valuation. We recommend that the System take steps to address these issues with the census data so that direct calculation of expected future benefits may be applied in future valuations.

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GASB Accounting Information

Basic System Benefits and System Administered Benefits have been valued under Governmental Accounting Standards Board Statement No. 25, "Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans" (GASB 25) and Statement No. 27, "Accounting for Pensions by State and Local Governmental Employers" (GASB 27). The Medical Insurance Plan Contribution has been valued under Governmental Accounting Standards Board Statement No. 45, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions" (GASB 45).

Accounting results under GASB 25, 27, and 45 are presented in Sections IV, V and VI of this report and are discussed below.

Net Pension/OPEB Obligation and Annual Pension/OPEB Cost

As requested, this report includes the determination of the Net Pension Obligation under GASB 25 and 27 and the Net Other Postemployment Benefit (OPEB) Obligation under GASB 45 as of June 30, 2011. We have also determined the Annual Pension Cost and the Annual OPEB Cost for the 2011-12 fiscal year. These amounts were determined as if PRGERS were a single employer plan instead of a cost sharing multiple employer plan.

We note that as a cost-sharing multiple employer plan, PRGERS is not required to report a Net Pension Obligation nor a Net OPEB Obligation. In accordance with paragraph 19 of GASB 27 and paragraph 23 of GASB 45, the employers that participate in the plan should recognize annual pension/OPEB expenditures/expense equal to their contractually required contributions to the plan. The employers do not have an Annual Required Contribution (ARC), a Net Pension Obligation or a Net OPEB Obligation. (PRGERS reports an ARC for the system as a whole, not separate ARCs for the individual employers.) Any difference between contributions required and contributions made would produce a pension/OPEB liability or asset at the employer level.

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Basic System Benefits Information

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

The FY 2011-12 Annual Required Contribution (ARC) for the Basic System Benefits only based on GASB 25 and 27 rules would be \$1.757 billion. The ARC represents the portion of the cost of PRGERS' Basic System Benefits that employers should pay in order for PRGERS to be actuarially funded in accordance with GASB's required minimum parameters. The actual employer contributions are based on the statutory funding requirement, which is 10.275% of payroll for the 2011-2012 fiscal year and which is not actuarially determined. Contributions for prior early retirement incentive programs, including Law 70, are also included. Employer contributions for Basic System Benefits are estimated to be \$385.8 million for FY 2011-12, which is less than the ARC by \$1.371 billion.

Note the above ARC has been reduced to reflect the fact that active members contribute 8.275% of pay to the system. The ARC represents the additional contributions required from employers.

As shown in Subsection C of Section IV, PRGERS has Unfunded Actuarial Accrued Liabilities (UAAL) of \$20.8 billion 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 UAAL is expected to grow indefinitely into the future instead of being amortized. Effectively, this means that the statutory member and employer contributions to PRGERS are not adequate to fund PRGERS' Basic System Benefits. Instead, *PRGERS is being rapidly disfunded*. As a result, the future scheduled contributions arising from the statutory funding requirement will not be adequate to accumulate sufficient assets to make future benefit payments when due.

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, which will be discussed separately under GASB 45 below) and have prepared accounting results under GASB 25 for the financial statements of the System

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and under GASB 27 for the Commonwealth of Puerto Rico's financial statements. The System Administered Benefits are financed on a pay-as-you-go basis from the General Fund of the Commonwealth of Puerto Rico and contributions from municipalities and public corporations.

The FY 2011-12 employer ARC under GASB 25 and 27 for these combined benefits is \$2.019 billion. The estimated FY 2011-12 combined employer contributions are only \$597.4 million, which is \$1.422 billion less than the ARC. This includes the Basic System Benefits and the System Administered Benefits (excluding the Medical Insurance Plan Contribution). The FY 2011-12 Annual Pension Cost under GASB 27 is \$1.903 billion.

As shown in Subsection B of Section V, the Unfunded Actuarial Accrued Liability for these combined benefits is \$23.7 billion. As noted above, future scheduled contributions arising from the statutory funding requirements will not be adequate to accumulate sufficient assets to make future benefit payments when due.

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 2011-12 ARC for the Medical Insurance Plan Contribution under GASB 45 is \$133.7 million.

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 6.4% 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 \$1.8 billion.

SECTION I – SUMMARY

Allocation of Actuarial Accrued Liability

Subsection A of Section III shows the Actuarial Accrued Liability as of June 30, 2011 by Pension Law (Act 447, Act 1, and System 2000) within each System Entity (Government, Public Corporation, and Municipality).

Cash Flow Projection for Basic System Benefits

PRGERS 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 a result, system assets can be expected to decline as negative cash flow (contributions less benefit payments) exceeds expected investment income. PRGERS' liabilities for the Basic System Benefits will continue to increase significantly over time as Act 447 and Act 1 employees approach retirement. Thus the funded status can also be expected to decline, based on the actuarial assumptions used to prepare this actuarial valuation.

The table shown in Subsection C of Section III provides a simplified illustration of the expected negative net cash flows over the next 10 years. Annual payroll growth of 2.5% 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 PRGERS 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.)

While Law 116 increased employer contributions, we recommend that the statutory funding requirements be further significantly increased in light of:

• the expected negative net cash flows which are expected to exhaust net System assets in FY 2013-2014 (assuming the investment return assumption of 6.4% is met);

SECTION I – SUMMARY

- the expected negative net cash flows which are expected to exhaust gross System assets in FY 2019-2020 (assuming the investment return assumption of 6.4% is met)
- the forecast decrease in funded status:
- the market value of assets as of June 30, 2011 which is significantly less than the Accumulated Member Contributions for active members as of June 30, 2011; and,
- the Annual Required Contribution based on GASB 25 and 27.

Note that in the period from FY 2013-2014 to FY 2019-2020, benefits are expected to be paid with pension obligation bond proceeds, i.e. – borrowed money. Once gross assets are exhausted there would be no System assets remaining to pay pension benefits to members, to refund member balances, nor to pay debt service to bondholders.

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 PRGERS.

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 51.55% on the Market Value of Assets. This rate of return is determined on a net asset basis. Because of the significant amount of Pension Obligation Bond proceeds that are currently invested (approximately \$3 billion), the net asset return is significant larger than the return on a gross asset basis. This exhibit also develops an estimated rate of return on a gross asset basis (e.g. net assets plus the liability for Pension Obligation Bond proceeds).

Subsection E summarizes the historical estimated rates of return on plan assets on a market value basis on both gross and net asset bases. Prior year returns were calculated by Milliman using the methodology in Subsection D, based on the asset amounts and cash flows shown in PRGERS audited financial statements.

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

Management Information

Section III presents additional information that has been derived from the valuation process.

SECTION I – SUMMARY

Subsection A shows the allocation of Actuarial Accrued Liability as of June 30, 2011 for Basic System Benefits by Pension Law (Act 447, Act 1, and System 2000) within each System Entity (Government, Public Corporation, and Municipality).

Subsection B shows the allocation of the Accumulated Member Contributions with interest for active members as of June 30, 2011 by Pension Law (Act 447, Act 1, and System 2000) within each System Entity (Government, Public Corporation, and Municipality).

Subsection C shows a projected cash flow for the current fiscal year and the next ten fiscal years for Basic System Benefits and is illustrative of the expected future decline in funded status. Please see Subsection B of Section I for a description of this 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 Actuarial Accrued Liability as of June 30, 2011.

Subsection B 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 C summarizes the development of the amortization payment of the Unfunded Actuarial Accrued liability. The amortization period used to calculate the ARC is 30 years from June 30, 2007, with level annual payments. 26 years remain as of June 30, 2011.

Subsection D 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 30 years from June 30, 2007 with level annual payments each year. 26 years remain as of June 30, 2011.

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 as if PRGERS were a single employer plan instead of a cost sharing multiple employer plan. 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 as if PRGERS were a single employer plan instead of a cost sharing multiple employer plan. 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 and the percentage contributed. This schedule is required by GASB Statements No. 25 and 27. The FY 2011-12

SECTION I – SUMMARY

contribution percentage assumes that the employer contributions for Basic System Benefits will be at the statutory level of 10.275% of payroll and include anticipated early retirement incentive contributions and that employer contributions for the applicable System Administered Benefits will be the anticipated pay-as-you-go payments. 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. As indicated on the exhibit, we restated the ARC for FY 2005-06 and FY 2006-07 based on information available in the June 30, 2005 valuation report prepared by Buck Consultants.

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. The amounts shown for the fiscal year ending June 30, 2007 and earlier are from the audited financial statements for the System (adjusted as discussed in the paragraph above).

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 30 years from June 30, 2007 with level annual payments each year. 26 years remain as of June 30, 2011.

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 as if PRGERS were a single employer plan instead of a cost sharing multiple employer plan. The NOO 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 as if PRGERS were a single employer plan instead of a cost sharing multiple employer plan. 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 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 profile of active and inactive participants, summarized by pension law. 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

Actuarial Assumptions and Methods

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	\$ 989,166,000
	COFINA Investment	162,500,000
	Bonds	963,414,000
	Stocks	1,270,736,000
	Private Equity Investments	65,457,000
	Total Loans to Plan Members	1,275,381,000
	Accounts Receivable	212,915,000
	Capital Assets	8,951,000
	Other Assets	6,375,000
	Prepaid Bond Cost	32,172,000
	Total	\$ 4,987,067,000
2.	Total Liabilities	
	Bonds Payable	\$ 3,003,482,000
	Other Liabilities	259,774,000
	Total	\$ 3,263,256,000
3.	Market Value of Assets as of June 30, 2011: (1) - (2)	\$ 1,723,811,000
		•

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	\$ 1,667,358,000
Additions a. Contributions	
Employer Contributions	\$ 349,207,000
Member Contributions	322,008,000
Early Retirement Programs	305,000
Appropriations for Special Laws	187,369,000
COFINA Investment	<u>162,500,000</u>
Total Contributions	\$ 1,021,389,000
b. Investment Income	
Interest Income	\$ 172,783,000
Dividend Income	7,344,000
Net Appreciation of Investments	472,076,000
Other Income	49,257,000
Investment Related Expenses	<u>(6,483,000)</u>
Net Investment Income	\$ 694,977,000
Total Additions	\$ 1,716,366,000
3. Decreases	
Refund of Contributions	\$ 91,195,000
Annuities and Death Benefits	1,141,858,000
Special Law Benefits	187,369,000
Administrative Expenses	34,583,000
Other Expenses	15,566,000
Cost of Bonds	<u>189,342,000</u>
Total	\$ 1,659,913,000
4. Net Increase (Decrease) in Market Value of Assets	\$ 56,453,000
5. Market Value of Assets as of June 30, 2011	\$ 1,723,811,000

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 \$1,723,811,000.

SECTION II - SYSTEM ASSETS

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

Louinatou / umaai / tato of frotain for your onamy t	June	Gross Asset Basis	Net <u>Asset Basis</u>
1. Value of Assets as of June 30, 2010	\$	4,649,133,000 \$	1,667,358,000
2. Total Contributions		1,021,389,000	1,021,389,000
3. Benefit Payments and Expenses		1,659,913,000	1,659,913,000
4. Value of Assets as of June 30, 2011		4,727,293,000	1,723,811,000
5. Non-Investment Increment: (2) - (3)		(638,524,000)	(638,524,000)
6. Investment Increment: (4) - (1) - (5)		716,684,000	694,977,000
7. Time Weighted Value: (1) +.5 * (5)		4,329,871,000	1,348,096,000
8. Estimated Annual Rate of Return: (6) / (7)		16.55%	51.55%

E. Estimated Historical Rates of Return

	Gross	Net
<u>Plan Year Ending</u>	Asset Basis	Asset Basis
June 30, 2011	16.55%	51.55%
June 30, 2010	10.01%	27.87%
June 30, 2009	-5.57%	-13.23%
June 30, 2008	-1.66%	-2.26%
June 30, 2007	18.23%	18.23%
5-year Compounded Annual Return	7.08%	14.21%

Prior year returns were calculated by Milliman using the methodology in Section D above, based on asset amounts and cash flows shown in prior valuation reports.

The rates of return determined on a gross asset basis are for illustrative purposes only and assume non-investment cash flows are the same as that determined on a net asset basis. Because of the significant amount of Pension Obligation Bond proceeds that are currently invested (approximately \$3 billion), the net asset returns are significantly larger than the returns on a gross asset basis.

SECTION III - MANAGEMENT INFORMATION

A. Allocation of Actuarial Accrued Liability by Pension Law and System Entity

	Basic System <u>Benefits</u>	System Administered <u>Benefits</u>	Basic System and System Administered Benefits	GASB 45 Benefits
Government				
Act 447	11,474,106,000	1,380,559,000	12,854,665,000	929,848,000
Act 1	1,979,854,000	349,955,000	2,329,809,000	213,480,000
System 2000	<u>433,638,000</u>	<u>218,069,000</u>	<u>651,707,000</u>	<u>4,104,000</u>
	13,887,597,000	1,948,583,000	15,836,180,000	1,147,432,000
Public Corporations				
Act 447	5,611,865,000	572,167,000	6,184,032,000	299,173,000
Act 1	518,369,000	90,620,000	608,989,000	46,591,000
System 2000	123,566,000	637,000	124,203,000	9,000
	6,253,800,000	663,424,000	6,917,224,000	345,773,000
Municipalities				
Act 447	1,795,950,000	242,702,000	2,038,652,000	193,208,000
Act 1	459,904,000	46,649,000	506,553,000	71,563,000
System 2000	141,837,000	16,907,000	158,744,000	<u>413,000</u>
	2,397,692,000	306,258,000	2,703,950,000	265,184,000
Total				
Act 447	18,881,921,000	2,195,428,000	21,077,349,000	1,422,229,000
Act 1	2,958,127,000	487,224,000	3,445,351,000	331,634,000
System 2000	<u>699,041,000</u>	235,613,000	934,654,000	<u>4,526,000</u>
	22,539,089,000	2,918,265,000	25,457,354,000	1,758,389,000

(Numbers shown may not add due to rounding.)

Basic System Benefits for System 2000 members are based on member account balances.

System Administered Benefits for System 2000 members are enhanced death and disability benefits for hazardous duty employees covered by Act 127 and the related bonus benefits for these members. GASB 45 benefits are the medical insurance plan contributions for these members.

Account balances for members of System 2000 are included in System assets shown in Section II.

SECTION III - MANAGEMENT INFORMATION

B. Accumulated Member Contributions for Active Members as of June 30, 2011

	Contribution Account Balances
Government	
Act 447	752,530,000
Act 1	988,733,000
System 2000	<u>428,821,000</u> 2,170,084,000
Public Corporations	
Act 447	267,392,000
Act 1	247,509,000
System 2000	<u>118,591,000</u>
	633,492,000
Municipalities	
Act 447	123,615,000
Act 1	219,934,000
System 2000	137,507,000
	481,056,000
Total	
Act 447	1,143,537,000
Act 1	1,456,176,000
System 2000	684,919,000
	3,284,632,000
Market Value of Assets as of June 30, 2011	1,723,811,000

SECTION III - MANAGEMENT INFORMATION

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

(Amounts in Millions)

Plan Year <u>Ending</u>	Estimated <u>Payroll</u>	Estimated Member and Employer Contributions	Estimated Benefit Payments and Administrative Expenses	Pension Obligation Bond Debt Service	Net <u>Cash Flow</u>	Estimated Net Plan Assets at Year-End	Estimated Gross Plan Assets at Year-End
06/30/2012	3,666	689	1,361	167	(839)	1,141	4,441
06/30/2013	3,758	744	1,383	167	(806)	555	3,895
06/30/2014	3,852	801	1,417	167	(783)	(45)	3,337
06/30/2015	3,948	860	1,462	167	(769)	(669)	2,758
06/30/2016	4,047	921	1,512	167	(758)	(1,321)	2,153
06/30/2017	4,148	996	1,566	167	(737)	(1,994)	1,531
06/30/2018	4,252	1,073	1,626	167	(720)	(2,692)	886
06/30/2019	4,358	1,153	1,688	167	(702)	(3,416)	220
06/30/2020	4,467	1,237	1,756	167	(686)	(4,170)	(473)
06/30/2021	4,579	1,324	1,821	167	(664)	(4,950)	(1,188)
06/30/2022	4,693	1,356	1,882	217	(743)	(5,809)	(2,030)

Notes:

- Estimated Net and Gross Plan Assets at Year-End assume that the investment return assumption of 6.4% is met.
- Estimated Payroll is assumed to grow 2.5% annually.
- Member Contributions were estimated to be 8.275% of Estimated Payroll each year.
- Employer Contributions were estimated to be 10.275% of Estimated Payroll for FYE 2012, increasing to 20.525% of Estimated Payroll for FYE 2021 and later in accordance with Law 116. Employer contributions also include expected Law 70 early retirement incentive contributions.
- 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.
- Contributions on behalf of and benefit payments to members of System 2000 are included in the table above.

SECTION IV - BASIC SYSTEM BENEFITS INFORMATION

A. Development of Actuarial Accrued Liability as of June 30, 2011

 Projected Benefits Payable to Retirees and Beneficiaries 	
Retirees	\$ 11,322,981,000
Disabled Members	781,435,000
Beneficiaries	391,286,000
Total	\$ 12,495,702,000
Projected Benefits for Vested Terminated Members	1,040,002,000
Actuarial Accrued Liability for Active Members	9,003,385,000
4. Total Actuarial Accrued Liability: (1) + (2) + (3)	\$ 22,539,089,000

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

SECTION IV - BASIC SYSTEM BENEFITS INFORMATION

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

1. Total Normal Cost as of June 30, 2011	\$ 392,597,000
2. Expected Member Contributions	\$ 294,724,000
3. Load for Administrative Expenses:	\$ 34,000,000
4. Total Employer Normal Cost as of December 31, 2011: (1) * (1.064 ^ 0.5) - (2) + (3)	\$ 144,241,000

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

SECTION IV - BASIC SYSTEM BENEFITS INFORMATION

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

1. Actuarial Accrued Liability as of June 30, 2011	\$ 22,539,089,000
2. Actuarial Value of Assets as of June 30, 2011	\$ 1,723,811,000
 Unfunded Actuarial Accrued Liability as of June 30, 2011: (1) - (2) 	\$ 20,815,278,000
4. Amortization Period in years	26
5. Amortization Factor at beginning of year	13.3116
6. Amortization Amount Payable as of December 31, 2011: [(3) / (5)] * (1.064 ^ 0.5)	\$ 1,612,957,000
D. Development of Annual Required Contribution	
1. Total Employer Normal Cost as of December 31, 2011	\$ 144,241,000
2. Amortization Payment as of December 31, 2011	\$ 1,612,957,000
3. Annual Required Contribution*: (1) + (2)	\$ 1,757,198,000

^{*} 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 <u>Benefits</u>	System Administered <u>Benefits</u>	<u>Total</u>
Projected Benefits Payable to Retirees and Beneficiairies: Retirees Disabled Members Beneficiaries Total	\$ 11,322,981,000 781,435,000 <u>391,286,000</u> 12,495,702,000	\$ 1,633,992,000 348,128,000 <u>83,790,000</u> 2,065,910,000	\$ 12,956,973,000 1,129,563,000 <u>475,076,000</u> 14,561,612,000
2. Projected Benefits Payable to Vested Terminated Members:	\$ 1,040,002,000	\$ 127,746,000	\$ 1,167,748,000
3. Actuarial Accrued Liability for Active Members	\$ 9,003,385,000	\$ 724,609,000	\$ 9,727,994,000
 Actuarial Accrued Liability as of June 30, 2011: (1) + (2) + (3) 	\$ 22,539,089,000	\$ 2,918,265,000	\$ 25,457,354,000
5. Gross Normal Cost as of December 31, 2011:	\$ 404,965,000	\$ 36,135,000	\$ 441,100,000
6. Expected Member Contributions	\$ 294,724,000	\$ 0	\$ 294,724,000
7. Administrative Expenses	\$ 34,000,000	\$ 0	\$ 34,000,000
8. Net Employer Normal Cost as of December 31, 2011: (5) - (6) + (7)	\$ 144,241,000	\$ 36,135,000	\$ 180,376,000

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	\$ 25,457,354,000
2. Actuarial Value of Assets as of June 30, 2011	\$ 1,723,811,000
 Unfunded Actuarial Accrued Liability as of June 30, 2011: (1) - (2) 	\$ 23,733,543,000
4. Amortization Period in years	26
5. Amortization Factor at beginning of year	13.3116
6. Amortization Amount Payable as of December 31, 2011: [(3)/(5)]* (1.064 ^ 0.5)	\$ 1,839,091,000
C. Development of Annual Required Contribution	
1. Total Employer Normal Cost as of December 31, 2011	\$ 180,376,000
2. Amortization Payment as of December 31, 2011	\$ 1,839,091,000
3. Annual Required Contribution*: (1) + (2)	\$ 2,019,467,000

^{*} 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

1. Net Pension Obligation as of June 30, 2010	\$ 6,353,700,000
2. Annual Pension Cost for Fiscal Year 2010 - 2011	\$ 1,656,181,000
3. Fiscal Year 2010 - 2011 Employer Contribution	\$ 701,709,000
4. Net Pension Obligation as of June 30, 2011: (1) + (2) - (3)	\$ 7,308,172,000

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

Annual Required Contribution	\$ 2,019,467,000
2. Interest on Net Pension Obligation as of June 30, 2011	\$ 467,723,000
3. Adjustment to the Annual Required Contribution	\$ 584,144,000
4. Fiscal Year 2011 - 2012 Annual Pension Cost: (1) + (2) - (3)	\$ 1,903,046,000

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

The above Net Pension Obligation and Annual Pension Cost are determined as if PRGERS was a single employer plan instead of a cost-sharing multiple employer plan. See Section I for more information.

SECTION V - GASB 25 AND 27 ACCOUNTING INFORMATION

F. Schedule of Employer Contributions

Year	Actual	Annual	
Ended	Employer	Required	Percent
<u>June 30</u>	Contribution	Contribution	Contributed
2012 *	\$597,413,000	\$2,019,467,000	29.58%
2011	701,709,000	1,734,979,000	40.44
2010	534,275,000	1,459,774,000	36.60
2009	594,509,000	1,258,695,000	47.23
2008 **	662,500,000	1,191,275,000	55.61
2007 ***	566,524,000	816,472,000	69.39
2006 ***	559,198,000	816,472,000	68.49

- * Actual Employer Contribution for the year ended June 30, 2012 assumes:
 - contribution of 10.275% of expected payroll for the Basic System Benefits, plus
 - contribution of \$211.6 million for Special Law pension benefits, plus
 - contribution of \$0.0 million for early retirement incentives.
 - contribution of \$9.1 million for Law 70 early retirement incentive.
- ** In the development of the Fiscal Year 2007-2008 Annual Required Contribution the System has adopted a level dollar amortization method with a 30-year period to reflect the closing of the defined benefit plan to new entrants under System 2000 (the Retirement Savings Account Program).
- *** Annual Required Contribution for the years ended June 30, 2007 and June 30, 2006 is restated to remove the offset of employer contributions on behalf of System 2000 members that was applied to the normal cost, and to include the Special Law Benefits. Actual Employer Contributions are restated to include receipts for Special Law pension benefits and early retirement incentives. These adjustments were made to allow for better comparability between the results of the later and the earlier valuations.

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	\$1,723,811,000	\$25,457,354,000	\$23,733,543,000	6.8%	\$3,666,402,000	647.3%
06/30/2010	1,667,358,000	21,370,006,000	19,702,648,000	7.8%	3,818,332,000	516.0%
06/30/2009	1,851,223,000	18,943,586,000	17,092,363,000	9.8%	4,292,552,000	398.2%
06/30/2008	2,607,086,000		no	ot determined		
06/30/2007	2,891,501,000	16,769,512,000	13,878,011,000	17.2%	4,246,409,000	326.8%
06/30/2006	2,541,331,000		no	ot 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 dollar

Remaining Amortization Period: 26 years

Asset valuation method: Market Value of Assets

Assumptions:

Investment rate of return 6.4%
Projected Salary Increases 3.0%
Projected Payroll Growth 2.5%
Inflation 2.5%

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

triennial increases (COLA is only applied to members covered under Act 127 who become

disabled or die in the line of duty).

SECTION VI - GASB 45 ACCOUNTING INFORMATION

A. Benefit Obligations

1. Projected Benefits Payable to Retirees and Beneficiaries:		
Retirees	\$	982,969,000
Disabled Members		148,716,000
Beneficiaries		<u>0</u>
Total	\$	1,131,685,000
2. Projected Benefits Payable to Vested Terminated Members:	\$	83,517,000
2 Actuarial Approach Liability for Active Members	φ	E 42 407 000
Actuarial Accrued Liability for Active Members	\$	543,187,000
4. Total Actuarial Accrued Liability as of June 30, 2011:	\$	1,758,389,000
1. Total / tot	Ψ	1,700,000,000
5. Total Employer Normal Cost as of December 31, 2011:	\$	25,773,000

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 Actuarial Accrued Liability and Amortization Payment Payable as of December 31, 2011:

1.	Actuarial Accrued Liability as of June 30, 2011:	\$ 1,758,389,000
2.	Actuarial Value of Assets as of June 30, 2011:	\$ 0
3.	Unfunded Actuarial Accrued Liability as of June 30, 2011: (1) - (2)	\$ 1,758,389,000
4.	Amortization Period in years	26
5.	Amortization Factor at beginning of year	16.6221
6.	Amortization Amount Payable as of December 31, 2011: [(3) / (5)] * (1.04 ^ 0.5)	\$ 107,881,000

C. Development of Annual Required Contribution

1. Total Employer Normal Cost as of December 31, 2011:	\$ 25,773,000
2. Amortization Payment as of December 31, 2011:	\$ 107,881,000
3. Annual Required Contribution*: (1) + (2)	\$ 133,654,000

^{*} 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

1. Net OPEB Obligation as of June 30, 2010	\$	96,946,000
2. Annual OPEB Cost for Fiscal Year 2010 - 2011	\$	127,336,000
3. Fiscal Year 2010 - 2011 Employer Contribution	\$	93,541,000
4. Net OPEB Obligation as of June 30, 2011: (1) + (2) - (3)	3) \$	130,741,000

E. Development of Fiscal Year 2011 - 2012 Annual OPEB Cost

Annual Required Contribution	\$	133,654,000
2. Interest on Net OPEB Obligation as of June 30, 2011	\$	5,230,000
3. Adjustment to the Annual Required Contribution	\$	8,180,000
4. Fiscal Year 2011 - 2012 Annual OPEB Cost: (1) + (2) - (3) \$	130,704,000

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

The above Net OPEB Obligation and Annual OPEB Cost are determined as if PRGERS was a single employer plan instead of a cost-sharing multiple employer plan. See Section I for more information.

SECTION VI - GASB 45 ACCOUNTING INFORMATION

F. Schedule of Employer Contributions

Year Ended	Actual Employer	Annual Required	Percent
<u>June 30</u>	Contribution	Contribution	Contributed
2012 *	\$108,614,000	\$133,654,000	81.27%
2011	93,541,000	129,395,000	72.29
2010	85,460,000	128,294,000	66.61
2009	86,739,000	111,683,000	77.67
2008	79,793,607	110,650,000	72.11

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

^{*} Actual Employer Contribution for the year ended June 30, 2012 assumes:

⁻ contribution of \$108.614 million for Special Law OPEB benefits.

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>	<u>Assets</u>	<u>Liability</u>	<u>Liability</u>	<u>Ratio</u>	<u>Salary</u>	<u>Salary</u>
06/30/2011	\$0	\$1,758,389,000	\$1,758,389,000	0.0%	\$3,666,402,000	48.0%
06/30/2010	0	1,699,373,000	1,699,373,000	0.0%	3,818,332,000	44.5%
06/30/2009	0	1,633,159,000	1,633,159,000	0.0%	4,292,552,000	38.0%
06/30/2008	0		n	ot determined		
06/30/2007	0	1,556,809,000	1,556,809,000	0.0%	4,246,409,000	36.7%

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 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 dollar

Remaining Amortization Period: 26 years
Asset valuation method: not applicable

Assumptions:

Investment rate of return 4.0%

Projected Salary Increases
Projected Payroll Growth
Inflation
Cost of Living Adjustments
not applicable
not applicable
not applicable

SECTION VII - CENSUS DATA

A. Summary of Member Data as of June 30, 2011:

	Act 447	Act 1	System 2000	Total
Active Members				
Count	30,057	50,346	55,569	135,972
Average Age	53.5	47.5	40.8	46.1
Average Salary	\$31,119	\$27,812	\$23,949	\$26,964
Average Creditable Service	25.5	16.4	6.9	14.5
Retired Members				
Count	79,177	4,239	N/A	83,416
Average Age	69.2	63.7	N/A	68.9
Average Monthly Basic System Benefit	\$1,073	\$493	N/A	\$1,043
Average Monthly System Administered Benefit	\$93	\$375	N/A	\$107
Disabled Members				
Count	16,208	462	N/A	16,670
Average Age	68.4	53.1	N/A	68.0
Average Monthly Basic System Benefit	\$432	\$507	N/A	\$434
Average Monthly System Administered Benefit	\$117	\$22	N/A	\$114
Beneficiaries in payment				
Count	13,073	32	N/A	13,105
Average Age	72.2	64.0	N/A	72.2
Average Monthly Basic System Benefit	\$289	\$362	N/A	\$290
Average Monthly System Administered Benefit	\$17	\$0	N/A	\$17

Basic System Benefit and System Administered Benefit amounts shown above are for pension benefits, including minimum benefits and COLAs. Special Law "bonus" benefits are not reflected.

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

Three main sets of benefit provisions apply to various members of PRGERS depending on the member's date of hire. In general, the benefits under Act 447 of 1951 (as amended) apply to members hired before April 1, 1990. The benefits under Act 1 of 1990 (as amended) apply to members hired on or after April 1, 1990 and on or before December 31, 1999. The benefits under Act 305 of 1999 (as amended), known as System 2000, apply to members hired on or after January 1, 2000.

This summary of plan provisions, with separate descriptions for the three sets of benefits, 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.

Act 447 of 1951 as amended

1. Type of Plan

The System is a contributory, defined benefit plan.

2. Effective Date

The System was established in 1951 by Act 447 to be effective January 1, 1952. The plan was last amended under Act 7, approved February 15, 2008.

3. Eligibility for Membership

Members of the Employees Retirement System of the Government of Puerto Rico and its Instrumentalities include all regular full-time employees who are not contributing to other Retirement Systems (Articles 1-104 and 1-105) and who were initially hired full-time prior to April 1, 1990. Employees include those in the following categories:

- Police of Puerto Rico,
- Firefighters of Puerto Rico,
- Elective officers and the employees of the Legislature,
- Officers and employees of the Government of Puerto Rico,
- Officers and employees of public enterprises,
- Officers and employees, including mayors, of the municipalities, and
- Irregular personnel fulfilling the requirements of regular employee.

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

Membership is mandatory, except for the Governor of Puerto Rico, Government Secretaries, heads of public agencies and instrumentalities, the Governor's aides, gubernatorial appointees of commissions and boards, members of the Legislature, the Controller of Puerto Rico, the employees of the Agricultural Extension Service of the U.P.R., the Ombudsman and the Commonwealth Election Board employees (Article 1-105). In addition, membership is optional for eligible employees while working and residing outside the territorial limits of the Commonwealth of Puerto Rico (Act 112 of 2004).

4. Definitions

- a. <u>Fiscal Year</u>: A Fiscal Year is a 12-month period beginning on July 1 and ending on June 30 (Article 1-104).
- b. <u>General Fund</u>: The General Expenses Budget of the Government of the Commonwealth of Puerto Rico.
- c. <u>Government of Puerto Rico or Government</u>: The Government of the Commonwealth of Puerto Rico, its departments, divisions, bureaus, offices, agencies and dependencies (Article 1-104).
- d. <u>Public Enterprise</u>: Any government instrumentality of the People of Puerto Rico (Article 1-104).
- e. Municipality: The Municipality of San Juan (Article 1-104).
- f. <u>Employer</u>: The Government of Puerto Rico, any public enterprise that has elected to participate in the System, or any municipality that has elected to participate in the System (Articles 1-104 and 1-110).
- g. <u>Employee</u>: Any officer or employee of the Employer regularly employed on a full time basis (Article 1-104).
- h. <u>Creditable Service</u>: The years and months of plan participation, during which contribution have been made, beginning on the later of date of hire or January 1, 1952 and ending on date of separation from service. For purposes of calculating Creditable Service, the following schedule shall apply:

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

Service During a Fiscal Year	Creditable Service Earned
15 days during the same month	1 month
2 months and 15 days to 5 months and 14 days	½ year
5 months and 15 days to 8 months and 14 days	¾ year
8 months and 15 days to 12 months	1 year

Note: All of the days have to be during the same month.

Months in which less than 15 days of service are rendered do not count towards Creditable Service. (Article 1-106)

In general, Creditable Service may be earned for any period of employment during which no contributions were made if Accumulated Contributions for such periods are paid to the System. The same rules hold for rehired employees who previously received a refund of Accumulated Contributions at separation. (Article 1-106)

Creditable Service also includes purchased service, if any (Article 1-106).

- i. <u>Compensation</u>: The gross cash compensation, excluding bonuses and overtime, upon which contributions by a Member to the Fund are based (Article 1-104).
- Average Compensation: The average of the 3 highest years (36 highest months)
 of compensation that the participant has received for Creditable Service (Article
 1-104).
- k. <u>Contributions</u>: The amount deducted from the compensation of a Member and the employer (Section 781).
- I. <u>Regular Interest</u>: The interest rate as prescribed by the Board of Trustees (Article 1-104). The rate of 2.50% has always been in effect.

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

- m. <u>Accumulated Contributions</u>: The sum of all amounts deducted from the compensation of a Member with regular interest (Article 1-104).
- n. <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.
- o. <u>Social Security Retirement Age (SSRA)</u>: The Social Security Retirement Age varies based on the year of birth as indicated in the table below.

Year of Birth	Social Security Retirement Age
	, ,
1937 or earlier	65 years
1938	65 years and 2 months
1939	65 years and 4 months
1940	65 years and 6 months
1941	65 years and 8 months
1942	65 years and 10 months
1943 to 1954	66 years
1955	66 years and 2 months
1956	66 years and 4 months
1957	66 years and 6 months
1958	66 years and 8 months
1959	66 years and 10 months
1960 and later	67 years

5. Coordination with Social Security: Except for police, mayors and employees of the Agricultural Extension Service of the U.P.R., participants may elect to coordinate coverage under the System with Federal Social Security by selecting the lower of two contribution options. Those participants selecting Option (1), the Coordination Plan, are subject to a benefit recalculation upon attainment of Social Security Retirement Age. Those participants selecting Option (2), the Supplementation Plan, will continue to receive the same benefits for life, without any adjustments at SSRA. At any time up to retirement, participants may change from Option (1) to Option (2) by making a contribution including interest to the System, retroactive to the later of

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

July 1, 1968 or the date of plan entry, that will bring their career Accumulated Contributions to the Option (2) level. All police, mayors and employees of the Agricultural Extension Service of the U.P.R. are covered under Option (2), the Supplementation Plan. (Article 2-115)

6. Retirement Benefits

a. Retirement due to age and service

<u>Eligibility</u>: Age 55 with 25 years of Creditable Service or Age 58 with 10 years of Creditable Service. Police and Firefighters are also eligible at age 50 with 25 years of Creditable Service. (Article 2-102)

Benefit: 1.5% of Average Compensation multiplied by years of Creditable Service up to 20 years, plus 2% of Average Compensation multiplied by years of Creditable Service in excess of 20 years. Maximum benefit is 75% of Average Compensation. Except for Police and Firefighters, the benefit is actuarially reduced for each year payment commences prior to age 58. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-101)

For participants selecting the Coordination Plan, the basic benefit is re-calculated at SSRA as 1% of Average Compensation up to \$6,600 multiplied by years of Creditable Service up to 20 years, plus 1.5% of Average Compensation up to \$6,600 multiplied by years of Creditable Service in excess of 20 years, plus 1.5% of Average Compensation in excess of \$6,600 multiplied by years of Creditable Service up to 20 years, plus 2.0% of Average Compensation in excess of \$6,600 multiplied by years of Creditable Service in excess of 20 years. Except for Police and Firefighters, the benefit is actuarially reduced for each year payment commences prior to age 58. In no event will the benefit determined be less than the Minimum Benefit.

b. Retirement because of Merit

Eligibility: 30 years of Creditable Service (Article 2-102)).

<u>Benefit</u>: If retire prior to age 55, 65% of Average Compensation; otherwise, 75% of Average Compensation. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-102)

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

For participants selecting the Coordination Plan, the benefit is re-calculated at SSRA as 1.5% of Average Compensation up to \$6,600 multiplied by years of Creditable Service, up to 30 years, plus 65% (75% if retire at age 55 or later) of Average Compensation in excess of \$6,600. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-102)

c. Special Mayor Benefit

Eligibility: Age 50 with 8 years of creditable service as a Mayor (Article 2-101).

Benefit: 5% of Highest Salary as a Mayor for each year of creditable service as a Mayor up to 10 years, plus 1.5% of Highest Salary as Mayor for each year of non-Mayoral creditable service up to 20 years, plus 2.0% of Highest Salary as Mayor for each year of non-Mayoral creditable service in excess of 20 years. Non-Mayoral creditable service includes service earned as a Mayor in excess of 10 years. Maximum benefit is 90% of Highest Salary as a Mayor. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-101)

d. <u>Compulsory Retirement</u>: All police and firefighters must retire upon attainment of age 58 and 30 years of creditable service. A two year extension may be requested by the member from the Superintendent of the Puerto Rico Police or the Chief of the Firefighter Corps as applicable. (Article 2-104a amended by Act 22 of 2005 and Act 195 of 2007.)

7. Termination Benefits

a. Lump Sum Withdrawal

Eligibility: A Member is eligible upon termination of service (Article 2-114).

<u>Benefit</u>: The benefit equals a refund of Accumulated Contributions. Interest is credited for up to six (6) months after the date of the permanent separation from service. (Article 2-114)

b. <u>Deferred Retirement</u>

<u>Eligibility</u>: A Member is eligible upon termination of service prior to age 58 and after 10 years of Creditable Service, provided the member has not taken a lump sum withdrawal (Article 2-101).

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

<u>Benefit</u>: The benefit, commencing at age 58 if less than 25 years of creditable service and at age 55 (age 50 for police and firefighters) if 25 or more years of creditable service, is the same as that determined for Retirement for Age and Service (see above) reflecting Average Compensation and Creditable Service at date of termination. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-101)

c. Special Mayor Benefit

<u>Eligibility</u>: A Member is eligible upon termination of service prior to age 50 and after 8 years of Creditable Service as a Mayor, provided the member has not taken a lump sum withdrawal (Article 2-101).

<u>Benefit</u>: The benefit, commencing at age 50, is the same as that determined for Special Mayor Benefit under Retirement (see above) reflecting Highest Salary as a Mayor and Creditable Service at date of termination. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-101)

8. 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 (Article 2-112).

Spouse's Benefit: 50% of the participant's Salary at date of death, payable as an annuity until death or remarriage (Article 2-112)

<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 100% of the participant's Salary at date of death. (Article 2-112)

<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 (Articles 2-112 and 2-113).

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

b. Pre-retirement Death Benefit

<u>Eligibility</u>: Any current non-retired member is eligible, provided not eligible for the Occupational Death Benefit (Article 2-113).

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 (Article 2-113).
- (ii) While not in active service, the benefit equals a refund of Accumulated Contributions.

c. High-Risk Death Benefit under Act 127

<u>Eligibility</u>: Police, firefighters, and other employees in specified high-risk positions who die in the line of work due to reasons specified in Act 127 of 1958 (as amended).

<u>Spouse's Benefit</u>: 50% of the participant's Salary at date of death, payable as an annuity until death or remarriage (Act 127 of 1958 as amended).

<u>Children's Benefit</u>: 50% of the participant's Salary at date of death, payable as an annuity, allocated pro-rata among eligible children. The annuity is payable for life for a disabled child, until age 18 for a non-disabled child not pursuing studies, and until age 25 for a non-disabled child who is pursuing studies. (Act 127 of 1958 as amended)

Benefit if no spouse or children: The parents of the member shall each receive 50% of the participant's Salary at date of death, payable as an annuity for life. (Act 127 of 1958 as amended)

<u>Post-death increases</u>: Effective July 1, 1996 and subsequently every three years, the above death benefits are increased by 3% provided that the beneficiary(ies) had been receiving payments for at least three years. (Act 127 of 1958 as amended)

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

The cost of these benefits is paid by the General Fund (Act 127 of 1958 as amended).

d. Special Police Death Benefit

Eligibility: Active police who die for cause not related to service (Act 8 of 1976).

<u>Benefit</u>: An annuity benefit based on the Accumulated Contributions subject to a minimum of \$180 per month payable to surviving beneficiaries. Surviving beneficiaries include surviving spouse and dependent children. The benefit shall be reduced in an amount equal to benefits received from any other sources. (Act 8 of 1976 as amended).

e. Post-retirement Death Benefit

<u>Eligibility</u>: Any retiree or disabled member receiving a monthly benefit who has not elected a reversionary annuity.

Benefit: The benefit is as follows (Law 105 as amended by Law 4):

- (i) For those married or with dependent children at the time of death, the lifetime annual income to a widow or widower is equal to 60% if the retiree was not covered under Title 11 of the Social Security Act, or 50% (30% prior to January 1, 2004) if the retiree was covered at the moment of death under Title 11 of the Social Security Act, payable for life for a surviving spouse and/or disabled children and payable until age 18 (age 25 if pursuing studies) for non-disabled children (Act 105 of 1969 as amended). If in the Coordination Plan, the benefit to the surviving spouse does not begin until the spouse's attainment of age 60 and the surviving spouse must have been married to the member for at least 10 years to be eligible for this benefit. The increase in the percentage from 30% to 50% if in the Coordination Plan is paid by the General Fund for former government employees or by the public enterprise or municipality for their former employees (Act 158 of 2003).
- (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

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

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 than \$1,000. Either the General Fund for former government employees or the public enterprise or municipality for their former employees pays the difference, up to \$250, between (1) the Accumulated Contributions less the lifetime annual income paid and (2) \$1,000. The System pays for the rest. (Article 2-113 and Act 524 of 2004)

f. Police Post-retirement Death Benefit

<u>Eligibility</u>: Police retiree receiving a monthly benefit who has not elected a reversionary annuity.

Benefit: For those married or with dependent children at the time of death, the total lifetime annual income to a widow or widower and/or dependent children is equal to 60%, payable for life for a surviving spouse and/or disabled children and payable until age 18 (age 25 if pursuing studies) for non-disabled children. This benefit is retroactive and the surviving spouse does not have an age requirement and cannot be re-married. Effective December 29, 2009, the portion of the benefit being paid to a dependent child will increase the portion being paid to the surviving spouse (if any) when the child is no longer considered a dependent. (Law 169, as amended by Act 211 of 2009)

9. 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 (Article 2-109).

<u>Benefit</u>: 1.5% of Average Compensation multiplied by years of Creditable Service up to 20 years, plus 2% of Average Compensation for each year of creditable service in excess of 20 years (Article 2-109). In no event will the benefit determined be less than the Minimum Benefit.

For participants selecting the Coordination Plan, the basic benefit is re-calculated at SSRA as 1% of Average Compensation up to \$6,600 multiplied by years of

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

Creditable Service up to 20 years, plus 1.5% of Average Compensation up to \$6,600 multiplied by years of Creditable Service in excess of 20 years, plus 1.5% of Average Compensation in excess of \$6,600 multiplied by years of Creditable Service up to 20 years, plus 2.0% of Average Compensation in excess of \$6,600 multiplied by years of Creditable Service in excess of 20 years. The Average Compensation and years of Creditable Service are determined as of the date of disability. In no event will the benefit determined be less than the Minimum Benefit.

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 (Article 2-107).

<u>Benefit</u>: 50% of Salary at date of disability (Article 2-107), payable as an annuity. In no event will the benefit determined be less than the Minimum Benefit.

For participants selecting the Coordination Plan, the basic benefit is re-calculated at SSRA as 1% of Average Compensation up to \$6,600 multiplied by years of Creditable Service up to 20 years, plus 1.5% of Average Compensation up to \$6,600 multiplied by years of Creditable Service in excess of 20 years, plus 1.5% of Average Compensation in excess of \$6,600 multiplied by years of Creditable Service up to 20 years, plus 2.0% of Average Compensation in excess of \$6,600 multiplied by years of Creditable Service in excess of 20 years. The Average Compensation and years of Creditable Service are determined as of the date of disability. In no event will the benefit determined be less than the Minimum Benefit.

c. High Risk Disability under Act 127

<u>Eligibility</u>: Police, firefighters, and other employees in specified high-risk positions who are disabled in the line of work due to reasons specified in Act 127 of 1958 (as amended).

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Benefit: 100% of Salary as of date of disability, payable as an annuity. If the member dies while still disabled, this annuity benefit continues to his beneficiaries. Beneficiaries include the surviving spouse and/or disabled children (for life), non-disabled children until age 18 (age 25 if pursuing studies), and the parents if no other beneficiaries. Effective July 1, 1996 and subsequently every three years, the disability benefit is increased by 3% provided that the member (or beneficiary) had been receiving payments for at least three years. (Act 127 of 1958 as amended) The cost of these benefits is paid by the General Fund.

10. Minimum Benefits

- a. <u>Past Ad hoc Increases</u>: The legislature, from time to time, increases pensions for certain retirees as described in Act 124 approved on June 8, 1973 and Act 23 approved on September 23, 1983. The benefits are paid 50% by the General Fund and 50% by the System.
- b. <u>Current Minimum Benefit</u>: The minimum monthly lifetime income for members who retire or become disabled is \$400 per month effective July 1, 2007 (\$300 per month up to June 30, 2007). The increase in the minimum monthly benefit from \$200 per month to \$300 per month is paid by the General Fund for former government employees or by the public enterprise or municipality for their former employees. The increase in the minimum monthly benefit from \$300 per month to \$400 per month is to be paid by the System for former government employees or by the public enterprise or municipality for their former employees. (Act 156 of 2003 and Act 35 of 2007.)
- c. <u>Current Minimum Benefit for Police</u>: All police who retire or become disabled and who normally would receive under \$1,000 per month shall receive an increased monthly amount equal to the smaller of \$200 and the difference between \$1,000 and the normal benefit amount. This increase also applied to retired police. The General Fund will pay for these increased benefits. (Act 208 of 2000)
- d. <u>Coordination Plan Minimum Benefit</u>: A minimum monthly benefit is payable upon attainment of SSRA such that the benefit, when added to the Social Security Benefit, is not less than the benefit payable prior to SSRA.

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- 11. Cost-of-Living Adjustments (COLA) to Pension Benefits: The legislature, from time to time, increases pensions by 3% for retired and disabled members. Beneficiaries are not entitled to COLAs granted after the retiree's death. The first increase was granted by Act 10 of 1992. Subsequent 3% increases have been granted every third year since 1992, with the latest 3% increase established on April 24, 2007 and effective July 1, 2007 (retroactive to January 1, 2007) for retired and disabled members that were receiving a monthly benefit on or before January 1, 2004 (Act 35). In addition, effective July 1, 2008, any retired or disabled member that was receiving a monthly annuity on or before January 1, 2004 less than \$1,250 per month received an increase of up to 3% without exceeding the limit of \$1,250 per month (Act 35). The COLAs granted in 1992 to all retirees and in 1998 to retirees who are former government or municipal employees shall be paid by the System. All other COLAs granted in 1995 and later shall be paid by the General Fund for former government employees or by the public enterprise or municipality for their former employees. (Various Acts)
- 12. <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).

13. 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 \$200 per retiree, beneficiary, and disabled member, the General Fund pays \$100 per retiree, beneficiary, and disabled member; and the balance is paid by the General Fund for former government employees or by the public enterprise or municipality for their former employees (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

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is paid by the General Fund for former government employees or by the public enterprise or municipality for their former employees (Act 155).

14. 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 8.e. In addition, a participant can elect a reversionary annuity (Article 2-105).

15. Contributions

Member Contributions: Contributions by Members selecting the Coordination Plan are 5.775% of Compensation up to \$6,600 plus 8.275% of Compensation in excess of \$6,600. Contributions by all other Members are 8.275% of Compensation. (Article 2-115)

<u>Employer Contributions</u>: Prior to July 1, 2011, employer contributions were 9.275% of Compensation. Effective July 1, 2011, employer contributions are 10.275% of Compensation. For the next four fiscal years effective July 1, employer contributions will increase annually by 1%. For the next five fiscal years, employer contributions will increase annually by 1.25%, reaching an employer contribution rate of 20.525% effective July 1, 2020. (Article 2-116 as amended by Law 116 of 2010).

- 16. <u>Service Purchase</u>: Active members with eligible service from prior employment may elect to purchase service in PRGERS. The cost of the purchase is calculated by applying the PRGERS statutory contribution rates to the member's salary during the years of service at the former employer. The amount due to member contributions is accumulated at 6% per year until 6 months after the time of the service purchase request. Any amount not covered by asset transfers from the member's prior pension fund is payable by the member (Law 10 of 1992, Law 14 of 1981, Law 122 of 2000, Laws 203 and 33 of 2007).
- 17. <u>Law 70 Retirement Incentive</u>: During the 2010-2011 fiscal year, Law 70 provided for an early retirement incentive. Active members who had at least 15 years of service, but less than 30 years of service, were able to retire immediately with an enhanced benefit ranging from 37.5% to 50% of salary. This enhanced benefit is paid by the

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General Fund for government employees and Public Corporations for their employees until the member reaches the later of age 55 or the date the member would have completed 30 years of service had the member continued working. The System will pay the benefit after this time period. While the General Fund / Public Corporation is paying the pension benefit to the member or any surviving beneficiary, the General Fund / Public Corporation will also pay a contribution equal to 9.275% (17.55% for Public Corporations) of final salary to the System. Members who retired under this incentive are not eligible to receive the Medical Insurance Plan Contribution.

18. Changes in Plan Provisions since Prior Valuation

Employer contributions were increased as provided under Law 116 (see item 15 above). In addition, an early retirement incentive occurred as provided under Law 70 (see item 17 above).

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Act 1 of 1990 as amended

1. Type of Plan

The System is a contributory, defined benefit plan.

2. Effective Date

The System was established in 1951 by Act 447 to be effective January 1, 1952. These benefits were established by Act 1 of 1990 effective April 1, 1990. The plan was last amended under Act 7, approved February 15, 2008.

3. Eligibility for Membership

Members of the Employees Retirement System of the Government of Puerto Rico and its Instrumentalities include all regular full-time employees who are not contributing to other Retirement Systems (Articles 1-104 and 1-105) and who were initially hired full-time on or after April 1, 1990 and before January 1, 2000. Employees include those in the following categories:

- Police of Puerto Rico,
- Firefighters of Puerto Rico.
- Elective officers of the People of Puerto Rico and the employees of the Legislature,
- Officers and employees of the Government of Puerto Rico,
- Officers and employees of public enterprises,
- Officers and employees, including mayors, of the municipalities, and
- Irregular personnel fulfilling the requirements of regular employee.

Membership is mandatory, except for the Governor of Puerto Rico, Government Secretaries, heads of public agencies and instrumentalities, the Governor's aides, gubernatorial appointees of commissions and boards, members of the Legislature, the employees of the Agricultural Extension Service of the U.P.R., the Ombudsman, the employees of the Commonwealth Election Board, and the Controller of Puerto Rico (Article 1-105). In addition, membership is optional for eligible employees while working and residing outside the territorial limits of the Commonwealth of Puerto Rico (Act 112 of 2004).

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4. Definitions

- a. <u>Fiscal Year</u>: A Fiscal Year is a 12-month period beginning on July 1 and ending on June 30 (Article 1-104).
- b. <u>General Fund</u>: The General Expenses Budget of the Government of the Commonwealth of Puerto Rico.
- c. <u>Government of Puerto Rico or Government</u>: The Government of the Commonwealth of Puerto Rico, its departments, divisions, bureaus, offices, agencies and dependencies (Article 1-104).
- d. <u>Public Enterprise</u>: Any government instrumentality of the People of Puerto Rico (Article 1-104).
- e. <u>Municipality</u>: Shall include the Municipality of San Juan (Article 1-104).
- f. <u>Employer</u>: The Government of Puerto Rico, any public enterprise that has elected to participate in the System, or any municipality (Articles 1-104 and 1-110).
- g. <u>Employee</u>: Any officer or employee of the Employer regularly employed on a full time basis (Article 1-104).
- h. <u>Creditable Service</u>: The years and completed months of plan participation, during which contributions have been made, beginning on the later of date of hire and ending on date of separation from service. (Articles 1-106 and 2-109) For purposes of calculating Creditable Service, the following schedule shall apply:

Service During a Fiscal Year	Creditable Service Earned
Less than 3 months	None
3 to 5 months	½ year
6 to 8 months	¾ year
9 months or more	1 year

In general, Creditable Service may be earned for any period of employment during which no contributions were made if Accumulated Contributions for such

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periods are paid to the System. The same rules hold for rehired employees who previously received a refund of Accumulated Contributions at separation. (Article 1-106)

Creditable Service also includes purchased service, if any (Article 1-106).

- i. <u>Compensation</u>: The gross cash compensation, excluding bonuses and overtime, upon which contributions by a Member to the Fund are based (Article 1-104).
- j. <u>Average Compensation</u>: The average of the 5 highest years of compensation that the participant has received for Creditable Service. If annual compensation in the averaging period exceeds by more than 10% the annual compensation in the immediately preceding year, the compensation in excess of said 10% shall not be included in the calculation of Average Compensation. (Article 2-108)
- k. <u>Contributions</u>: The amount deducted from the compensation of a Member and the employer.(Article 2-116)).
- I. <u>Regular Interest</u>: The interest rate as prescribed by the Board of Trustees (Article 1-104). The rate of 2.50% has always been in effect.
- m. <u>Accumulated Contributions</u>: The sum of all amounts deducted from the compensation of a Member with regular interest (Article 1-104).
- n. <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.

5. Retirement Benefits

a. Retirement for years of service

Eligibility: Age 65 with 10 years of Creditable Service (Article 2-103).

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Benefit: 1.5% of Average Compensation multiplied by years of Creditable Service. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-103)

b. Retirement for high-risk service

<u>Eligibility</u>: Police and Firefighters are eligible upon attainment of 30 years of Creditable Service (Article 2-103).

<u>Benefit</u>: If retire prior to age 55, 65% of Average Compensation; otherwise, 75% of Average Compensation. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-103)

c. Early retirement

<u>Eligibility</u>: Retirement directly from active service after attainment of age 55 with 25 years of Creditable Service (Article 2-103).

<u>Benefit</u>: The benefit payable due to retirement for years of service (above), actuarially reduced for each year payment commences prior to age 65. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-103)

d. Special Mayor Benefit

Eligibility: Age 50 with 8 years of creditable service as a Mayor (Article 2-101).

Benefit: 5% of Highest Salary as a Mayor for each year of creditable service as a Mayor up to 10 years, plus 1.5% of Highest Salary as Mayor for each year of non-Mayoral creditable service up to 20 years, plus 2.0% of Highest Salary as Mayor for each year of non-Mayoral creditable service in excess of 20 years. Non-Mayoral creditable service includes service earned as a Mayor in excess of 10 years. Maximum benefit is 90% of Highest Salary as a Mayor. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-101)

e. <u>Compulsory Retirement</u>: All police and firefighters must retire upon attainment of age 58 and 30 years of creditable service. A two year extension may be requested by the member from the Superintendent of the Puerto Rico Police or

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the Chief of the Firefighter Corps as applicable. (Article 2-104a amended by Act 22 of 2005 and Act 195 of 2007)

6. Termination Benefits

a. Lump Sum Withdrawal

Eligibility: A Member is eligible upon termination of service (Article 2-114).

<u>Benefit</u>: The benefit equals a refund of Accumulated Contributions. Interest is credited for up to six months after separation from service. (Article 2-114)

b. Deferred Retirement

<u>Eligibility</u>: A Member is eligible upon termination of service prior to age 65 and after 10 years of Creditable Service, provided the member has not taken a lump sum withdrawal (Article 2-103)(section 766d).

<u>Benefit</u>: The benefit, commencing at age 65, is the same as that determined for Retirement for years of service (see above) reflecting Average Compensation and Creditable Service at date of termination. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-103) (section 766d)

c. Special Mayor Benefit

<u>Eligibility</u>: A Member is eligible upon termination of service prior to age 50 and after 8 years of Creditable Service as a Mayor, provided the member has not taken a lump sum withdrawal (Article 2-101).

<u>Benefit</u>: The benefit, commencing at age 50, is the same as that determined for Special Mayor Benefit under Retirement (see above) reflecting Highest Salary as a Mayor and Creditable Service at date of termination. In no event will the benefit determined be less than the Minimum Benefit. (Article 2-101)

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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 (Article 2-112).

Spouse's Benefit: 40% of the participant's Salary at date of death, payable as an annuity until death or remarriage (Article 2-112)

<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 100% of the participant's Salary at date of death. (Article 2-112)

Benefit if no spouse or children: Refund of Accumulated Contributions, plus an amount equal to one year of Compensation in effect at the time of death (Articles 2-112 and 2-113).

b. Pre-retirement Death Benefit

<u>Eligibility</u>: Any current non-retired member is eligible, provided not eligible for the Occupational Death Benefit (Article 2-113).

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 (Article 2-113).
- (ii) While not in active service, the benefit equals a refund of Accumulated Contributions.

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c. High-Risk Death Benefit under Act 127

<u>Eligibility</u>: Police, firefighters, and other employees in specified high-risk positions who die in the line of work due to reasons specified in Act 127 of 1958 (as amended).

<u>Spouse's Benefit</u>: 40% of the participant's Salary at date of death, payable as an annuity until death or remarriage (Act 127 of 1958 as amended).

<u>Children's Benefit</u>: 40% of the participant's Salary at date of death, payable as an annuity, allocated pro-rata among eligible children. The annuity is payable for life for a disabled child, until age 18 for a non-disabled child not pursuing studies, and until age 25 for a non-disabled child who is pursuing studies. (Act 127 of 1958 as amended)

Benefit if no spouse or children: The parents of the member shall each receive 40% of the participant's Salary at date of death, payable as an annuity for life. (Act 127 of 1958 as amended)

<u>Post-death increases</u>: Effective July 1, 1996 and subsequently every three years, the above death benefits are increased by 3% provided that the beneficiary(ies) had been receiving payments for at least three years. (Act 127 of 1958 as amended)

The cost of these benefits is paid by the General Fund (Act 127 of 1958 as amended)

d. Special Police Death Benefit

Eligibility: Active police who die for cause not related to service (Act 8 of 1976)

<u>Benefit</u>: An annuity benefit based on the Accumulated Contributions subject to a minimum of \$180 per month payable to surviving beneficiaries. Surviving beneficiaries include surviving spouse and dependent children. The benefit shall be reduced in an amount equal to benefits received from any other sources. (Act 8 of 1976 as amended).

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e. Post-retirement Death Benefit

<u>Eligibility</u>: Any retiree or disabled member receiving a monthly benefit who has not elected a reversionary annuity.

Benefit: The benefit is as follows (Law 105 as amended by Law 4):

- (i) For those married or with dependent children at the time of death, the lifetime annual income to a widow or widower is 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 (age 25 if pursuing studies) for non-disabled children.
- (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 than \$1,000. Either the General Fund for former government employees or the public enterprise or municipality for their former employees pays the difference, up to \$250, between (1) the Accumulated Contributions less the lifetime annual income paid and (2) \$1,000. The System pays for the rest. (Section 773 and Act 524 of 2004)

f. Police Post-retirement Death Benefit

<u>Eligibility</u>: Police retiree receiving a monthly benefit who has not elected a reversionary annuity.

Benefit: For those married or with dependent children at the time of death, the total lifetime annual income to a widow or widower and/or dependent children is equal to 60%, payable for life for a surviving spouse and/or disabled children and payable until age 18 (age 25 if pursuing studies) for non-disabled children. This benefit is retroactive and the surviving spouse cannot be re-married. Effective December 29, 2009, the portion of the benefit being paid to a dependent child will increase the portion being paid to the surviving spouse (if any) when the child is no longer considered a dependent. (Law 169, as amended by Act 211 of 2009).

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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 (Article 2-109)).

<u>Benefit</u>: 1.5% of Average Compensation multiplied by years of Creditable Service up to 20 years, plus 2% of Average Compensation for each year of creditable service in excess of 20 years (Article 2-109). In no event will the benefit determined be less than the Minimum Benefit.

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 (Article 2-107).

<u>Benefit</u>: 40% of Salary at date of disability (Article 2-107). In no event will the benefit determined be less than the Minimum Benefit.

d. High Risk Disability

<u>Eligibility</u>: Police, firefighters, and other employees in specified high-risk positions who are disabled in the line of work due to reasons specified in Act 127 of 1958 (as amended).

<u>Benefit</u>: 80% of Salary as of date of disability, payable as an annuity. If the member dies while still disabled, this annuity benefit continues to his beneficiaries. Beneficiaries include the surviving spouse and/or disabled children (for life), non-disabled children until age 18 (age 25 if pursuing studies), and the parents if no other beneficiaries. Effective July 1, 1996 and subsequently every three years, the disability benefit is increased by 3% provided that the member (or beneficiary) had been receiving payments for at least three years. (Act 127 of 1958 as amended) The cost of these benefits is paid by the General Fund.

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9. Minimum Benefits

- a. <u>Current Minimum Benefit</u>: The minimum monthly lifetime income for members who retire or become disabled is \$400 per month effective July 1, 2007 (\$300 per month up to June 30, 2007). The increase in the minimum monthly benefit from \$200 per month to \$300 per month is paid by the General Fund for former government employees or by the public enterprise or municipality for their former employees. The increase in the minimum monthly benefit from \$300 per month to \$400 per month is to be paid by the System for former government employees or by the public enterprise or municipality for their former employees. (Act 156 of 2003 and Act 35 of 2007.)
- b. <u>Current Minimum Benefit for Police</u>: All police who retire or become disabled and who normally would receive under \$1,000 per month shall receive an increased monthly amount equal to the smaller of \$200 and the difference between \$1,000 and the normal benefit amount. This increase also applied to retired police. The General Fund will pay for these increased benefits. (Act 208 of 2000)
- 10. Cost-of-Living Adjustments (COLA) to Pension Benefits: The legislature, from time to time, increases pensions by 3% for retired and disabled members. Beneficiaries are not entitled to COLAs granted after the retiree's death. The first increase was granted by Act 10 of 1992. Subsequent 3% increases have been granted every third year since 1992, with the latest 3% increase established on April 24, 2007 and effective July 1, 2007 (retroactive to January 1, 2007) for retired and disabled members that were receiving a monthly benefit on or before January 1, 2004 (Act 35). In addition, effective July 1, 2008, any retired or disabled member that was receiving a monthly annuity on or before January 1, 2004 less than \$1,250 per month received an increase of up to 3% without exceeding the limit of \$1,250 per month (Act 35). The COLAs granted in 1992 to all retirees and in 1998 to retirees who are former government or municipal employees shall be paid by the System. All other COLAs granted in 1995 and later shall be paid by the General Fund for former government employees or by the public enterprise or municipality for their former employees. (Various Acts)
- 11. <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).

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12. 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 \$200 per retiree, beneficiary, and disabled member, the General Fund pays \$100 per retiree, beneficiary, and disabled member; and the balance is paid by the General Fund for former government employees or by the public enterprise or municipality for their former employees (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 for former government employees or by the public enterprise or municipality for their former employees (Act 155).

13. 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.c. In addition, a participant can elect a reversionary annuity (Article 2-105).

14. Contributions

<u>Member Contributions</u>: Contributions by Members are 8.275% of Compensation. (Article 2-115)

<u>Employer Contributions</u>: Prior to July 1, 2011, employer contributions were 9.275% of Compensation. Effective July 1, 2011, employer contributions are 10.275% of Compensation. For the next four fiscal years effective July 1, employer contributions will increase annually by 1%. For the next five fiscal years, employer contributions will increase annually by 1.25%, reaching an employer contribution rate of 20.525% effective July 1, 2020. (Article 2-116 as amended by Law 116 of 2010).

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- 15. <u>Service Purchase</u>: Active members with eligible service from prior employment may elect to purchase service in PRGERS. The cost of the purchase is calculated by applying the PRGERS statutory contribution rates to the member's salary during the years of service at the former employer. The amount due to member contributions is accumulated at 6% per year until 6 months after the time of the service purchase request. Any amount not covered by asset transfers from the member's prior pension fund is payable by the member (Law 10 of 1992, Law 14 of 1981, Law 122 of 2000, Laws 203 and 33 of 2007).
- 16. Law 70 Retirement Incentive: During the 2010-2011 fiscal year, Law 70 provided for an early retirement incentive. Active members who had at least 15 years of service, but less than 30 years of service, were able to retire immediately with an enhanced benefit ranging from 37.5% to 50% of salary. This enhanced benefit is paid by the General Fund for government employees and Public Corporations for their employees until the member reaches the later of age 55 or the date the member would have completed 30 years of service had the member continued working. The System will pay the benefit after this time period. While the General Fund / Public Corporation is paying the pension benefit to the member or any surviving beneficiary, the General Fund / Public Corporation will also pay a contribution equal to 9.275% (17.55% for Public Corporations) of final salary to the System. Members who retired under this incentive are not eligible to receive the Medical Insurance Plan Contribution.

17. Changes in Plan Provisions since Prior Valuation

Employer contributions were increased as provided under Law 116 (see item 14 above). In addition, an early retirement incentive occurred as provided under Law 70 (see item 16 above).

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System 2000 - Act 305 of 1999 as amended

1. Type of Plan

The System is a contributory, hybrid defined benefit plan.

2. Effective Date

Act 305 of 1999 established the benefits known as System 2000 effective January 1, 2000. These benefits were last amended under Act 296, approved September 15, 2004.

3. Eligibility for Membership

The following members will have their benefits determined under System 2000 (Article 3-101).

- a. Any new employee who enters the System on or after January 1, 2000.
- b. Any prior member of the System who separated from service, received a reimbursement of his contributions to the System, and was subsequently reemployed after December 31, 1999 and again becomes a member of the System.
- c. Any active member of the System as of December 31, 1999 who elected to irrevocably transfer to System 2000.
- d. Any active employee who is a member of an employer retirement system as of December 31, 1999 and after this date becomes a member of this System who elects to irrevocably transfer to System 2000.

4. Definitions

- a. <u>Fiscal Year</u>: A Fiscal Year is a 12-month period beginning on July 1 and ending on June 30 (Article 1-104).
- b. <u>Compensation</u>: The gross cash compensation, excluding bonuses and overtime, upon which contributions by a Member to the System are based (Article 1-104).

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- c. <u>Retirement Savings Account</u>: The individual retirement account established for each member of System 2000 (Article 1-104). Each member has a nonforfeitable right to the value of his Retirement Savings Account (Article 3-107).
- d. <u>Credits to Retirement Savings Account</u>: The credits to the retirement savings account include (1) any initial transfer balance for transferred participants, (2) contributions of the members to System 2000, and (3) the investment yield for each semester of the fiscal year based on the investment alternatives elected by the member (Article 3-107).
- e. <u>Investment Alternatives</u>: Members can choose to allocate their Retirement Savings Account, in multiples of 10%, to the following investment options. Changes in allocation can be made annually, effective each July 1.
 - i. Fixed income The yield is equal to the average monthly yield of the Two-Year Constant Maturity Treasuries during each semester of the fiscal year.
 - ii. System's investment portfolio The yield is equal to 90% (75% prior to July 1, 2004) of the investment portfolio yield of the System during each semester of each fiscal year minus management fees such as fees payable to administrators of the portfolio.
 - iii. Other alternatives adopted by the Board of the System.
- f. Normal retirement age: Attainment of age 50 if police officer or fire fighter; otherwise attainment of age 60 (Article 1-104).

5. Benefits

- a. <u>Upon Separation of Service other than due to death or disability</u>: Upon attainment of normal retirement age, the value of the Retirement Savings Program shall be used to purchase an annuity contract. The available forms of payment are described below.
- b. <u>Upon Death (before or after Separation of Service)</u>: The value of the member's Retirement Savings Account shall be paid to the member's beneficiary.
- c. <u>Upon Separation of Service due to Disability</u>: The value of the member's Retirement Savings Account shall be paid to the member. In lieu of the lump

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sum payment, a disabled member may elect any other available form of payment.

d. High-Risk Death Benefit under Act 127

<u>Eligibility</u>: Police, firefighters, and other employees in specified high-risk positions who die in the line of work due to reasons specified in Act 127 of 1958 (as amended).

Spouse's Benefit: 40% of the participant's Salary at date of death, payable as an annuity until death or remarriage (Act 127 of 1958 as amended).

<u>Children's Benefit</u>: 40% of the participant's Salary at date of death, payable as an annuity, allocated pro-rata among eligible children. The annuity is payable for life for a disabled child, until age 18 for a non-disabled child not pursuing studies, and until age 25 for a non-disabled child who is pursuing studies. (Act 127 of 1958 as amended)

Benefit if no spouse or children: The parents of the member shall each receive 40% of the participant's Salary at date of death, payable as an annuity for life. (Act 127 of 1958 as amended)

<u>Post-death increases</u>: Effective July 1, 1996 and subsequently every three years, the above death benefits are increased by 3% provided that the beneficiary(ies) had been receiving payments for at least three years. (Act 127 of 1958 as amended)

The cost of these benefits is paid by the General Fund (Act 127 of 1958 as amended)

e. <u>High-Risk Disability</u>

<u>Eligibility</u>: Police, firefighters, and other employees in specified high-risk positions who are disabled in the line of work due to reasons specified in Act 127 of 1958 (as amended).

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

Benefit: 80% of Salary as of date of disability, payable as an annuity. If the member dies while still disabled, this annuity benefit continues to his beneficiaries. Beneficiaries include the surviving spouse and/or disabled children (for life), non-disabled children until age 18 (age 25 if pursuing studies), and the parents if no other beneficiaries. Effective July 1, 1996 and subsequently every three years, the disability benefit is increased by 3% provided that the member (or beneficiary) had been receiving payments for at least three years. (Act 127 of 1958 as amended) The cost of these benefits is paid by the General Fund.

f. High-Risk Special Law Benefits

- 1. <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).
- 2. Christmas Bonus: An annual bonus of \$600 for each retiree, beneficiary, and disabled member paid in December. The System pays \$200 per retiree, beneficiary, and disabled member, the General Fund pays \$100 per retiree, beneficiary, and disabled member; and the balance is paid by the General Fund for former government employees or by the public enterprise or municipality for their former employees (Act 144).
- 3. <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).
- 4. Medication Bonus: 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 for former government employees or by the public enterprise or municipality for their former employees (Act 155).

6. Forms of Payment

a. <u>Normal Form of Payment</u>: If married, annuity purchase after normal retirement age of a joint and 50% survivor annuity where the survivor benefits do not begin

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

until the survivor's attainment of age 60. If single, annuity purchase after normal retirement age of a life annuity.

- b. Optional Forms of Payment: If a member separates from service after normal retirement age, the member may elect a single lump sum payment of the value of the Retirement Savings Account. Any member upon separation from service may elect to rollover the value of the Retirement Savings Account into a qualified retirement plan, an IRA, a non-deductible IRA, or into another government retirement system for service purchases in that system.
- c. <u>Small Lump Sum Payments</u>: If the value of the Retirement Savings Account is less than \$10,000, the member may elect a single lump sum payment of such value.

7. Contributions

<u>Member Contributions</u>: Contributions by Members are 8.275% of Compensation while an employee, with a voluntary contribution of up to 1.725% of Compensation, credited to the Retirement Savings Account (Article 3-104).

Employer Contributions: Prior to July 1, 2011, employer contributions were 9.275% of Compensation. Effective July 1, 2011, employer contributions are 10.275% of Compensation. For the next four fiscal years effective July 1, employer contributions will increase annually by 1%. For the next five fiscal years, employer contributions will increase annually by 1.25%, reaching an employer contribution rate of 20.525% effective July 1, 2020. These contributions to the System are to increase the level of System assets, reduce the actuarial deficit, and enable the System to meet its future obligations. (Article 3-105 as amended by Law 116).

8. Changes in Plan Provisions since Prior Valuation

Employer contributions were increased as provided under Law 116 (see item 7 above).

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

Interest: 6.40% 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.

<u>Compensation Increases</u>: 3.0% per year.

System 2000 Retirement Savings Account: Member contributions to the Retirement Savings Account are assumed to be 8.36% of Compensation. Retirement Savings Accounts are assumed to grow using a 4.5% annual investment return.

<u>Termination</u>: Withdrawal rates vary by employment category, age, and service.

Employment	Annual Rate of
Category	Termination
Act 447 and System 2000 General Employees	2.0%
Act 1 General Employees under age 58 or less than 10 years of	2.0
service	
Act 1 General Employees age 58 with 10 years of service	5.0
Act 1 General Employees age 59 to 64 with 10 years of service	10.0
Act 447 Police & Fire	1.6
Act 1 Police & Fire under age 58 or less than 10 years of service	1.6
Act 1 Police & Fire age 58 with 10 years of service	2.5
Act 1 Police & Fire age 59 to 64 with 10 years of service	10.0
System 2000 Police & Fire less than 30 years of service	1.6
System 2000 Police & Fire with 30 years of service and age 45 to 48	9.0
System 2000 Police & Fire with 30 years of service and age 49	13.5
Mayors	3.0

SECTION IX - SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JUNE 30, 2011

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

Employment Category	Act 447	Act 1
General Employees	58	65
Police & Fire	58	65
	(50 if 25 years of service)	(55 if 25 years of service)
Mayors	50	50

<u>Retirement</u>: Rates of retirement vary by employment category, Act, and by age and years of Creditable Service.

Act 447 General Employees (includes General Hazardous Employees)			
	Service condition		
Age	10 years	25 years	30 years
45 to 49			10.0%
50 to 53			15.0
54			20.0
55 to 57		10.0%	20.0
58	5.0%	10.0	20.0
59 to 64	10.0	15.0	20.0
65 to 69	15.0	15.0	20.0
70	100.0	100.0	100.0

SECTION IX - SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JUNE 30, 2011

Act 1 General Emp	Act 1 General Employees (includes General Hazardous Employees)			
	Service condition			
Age	10 years	25 years		
55 to 57		4.5%		
58		4.5		
59		8.0		
60		9.0		
61		10.0		
62		13.0		
63 to 64		14.0		
65	15.0%	50.0		
66	15.0	15.0		
67	100.0	100.0		

System 2000 General Employees			
Age Non-hazardous Hazardous			
60 to 66 15.0% 12.0%			
67 100.0 100.0			

	Act 447 Police & Fire		
		Service condition	
Age	10 years	25 years	30 years
45 to 48	-		10.0%
49			15.0
50		7.0%	15.0
51 to 56		15.0	20.0
57		20.0	30.0
58	2.5%	20.0	100.0
59 to 64	10.0	25.0	
65 to 69	10.0	30.0	
70	100.0	100.0	

SECTION IX - SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JUNE 30, 2011

Act 1 Police & Fire			
	Service condition		
Age	10 years	25 years	30 years
45 to 48			10.0%
49 to 50			15.0
51 to 54			20.0
55 to 56		5.0%	20.0
57		5.0	30.0
58		5.0	100.0
59 to 60		5.0	
61 to 64		10.0	
65	10.0%	50.0	
66 to 69	10.0	10.0	
70	100.0	100.0	

System 2000 Police & Fire			
	Service condition		
Age	10 years	25 years	30 years
50	1.6%	6.3%	13.5%
51 to 56	1.6	13.5	18.0
57	1.6	18.0	27.0
58	2.25	18.0	27.0
59 to 64	9.0	22.5	27.0
65 to 66	9.0	27.0	31.5
67	100.0	100.0	100.0

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

Act 447 and Act 1 Mayors			
		Service condition	
Age	8 years	25 years	30 years
45 to 49			10.0%
50 to 53	5.0%		15.0
54	10.0		20.0
55 to 56	10.0	10.0%	20.0
57 to 58	15.0	15.0	20.0
59 to 69	20.0	20.0	20.0
70	100.0	100.0	100.0

System 2000 Mayors		
Age Any Service		
60 to 66 15.0%		
67	100.0	

<u>Disability</u>: Rates are based on the six month elimination period rates in the 1987 Commissioners Group Disability Table, adjusted as set forth in the table below. Rates of disability cease to apply once a member is eligible for the 65% or 75% of Highest Salary maximum benefit.

	Adjustment to 1987 CGDT		
Act	Members Covered under Act 127	Other Members	
447	100%	75%	
1	100%	75%	
2000	 100% if more than 10 years from retirement eligibility 300% if at or past retirement eligibility Interpolated from 100% to 300% in the 10 years leading up to retirement eligibility 	75%	

100% of disabilities occurring while in active service are assumed to be occupational for members covered under Act 127. For other members, 90% of disabilities occurring

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

while in active service are assumed to be occupational and 10% are assumed to be non-occupational.

<u>Pre-retirement Mortality</u>: For General Employees and Mayors, RP-2000 Employee Mortality Rates for males and females projected on a generational basis using Scale AA. For members covered under Act 127, RP-2000 Employee Mortality Rates with blue collar adjustments for males and females, projected on a generational basis using Scale AA. As generational tables, they reflect mortality improvements both before and after the measurement date.

100% of deaths while in active service are assumed to be occupational for members covered under Act 127. For other members, 25% of deaths while in active service are assumed to be occupational and 75% are assumed to be non-occupational.

<u>Post-retirement Healthy Mortality</u>: Gender-specific mortality rates were developed based on a study of plan's experience from 2003 to 2007. Sample rates shown below are as of 2005 and are thereafter projected on a generational basis using Scale AA. As a generational table, it reflects mortality improvements both before and after the measurement date.

Age	Male	Female
50	0.93%	0.34%
55	0.84	0.51
60	0.96	0.79
65	1.15	0.98
70	1.90	1.63
75	3.33	2.72
80	6.02	4.58
85	10.76	7.92
90	18.61	13.67

<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>: 70% of current active members are assumed to be married at retirement with males 4 years older than females. 100% of current active members covered under Act

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

127 who die in service or become disabled are assumed to have qualifying beneficiaries, which are approximated by a spouse with males 4 years older than females.

Form of Payment:

Act	Marital Status	Form of Payment
447	Married at retirement	Joint and 60% survivor benefit – Supplementation Joint and 50% survivor benefit – Coordinated (30% is Basic System Benefit) (20% is System Administered Benefit)
447	Not married at retirement	Modified cash refund (approximated by single life annuity with 3 years certain)
1	Married at retirement	Joint and 60% survivor benefit
1	Not married at retirement	Modified cash refund (approximated by single life annuity with 3 years certain for Mayors, Police & Fire and 5 years certain for other members)
305 (System 2000)	Not applicable	Lump sum distribution of Retirement Savings Account Balance at termination

Marital status was provided for current retired and disabled members. For those indicated as married, a joint and survivor annuity was assumed (as shown in the table above), with an adjustment for the probability the spouse has pre-deceased the retiree as of the valuation date. Those not married were assumed to have a modified cash refund (as shown in the table above). The spouse's date of birth was imputed based on an assumed age difference of 4 years with males older than females.

All Act 127 retirees were assumed to have a joint and 100% survivor benefit regardless of marital status. The survivor was approximated by a spouse with an assumed age difference of 4 years with males older than females. An adjustment was made for the probability the survivor has pre-deceased the retiree as of the valuation date.

Members who terminate employment with a vested benefit are assumed to elect to receive a deferred pension benefit in lieu of a refund of contributions.

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

No future dependent children were assumed to become beneficiaries.

No surviving spouse is assumed to become re-married.

<u>Medical Insurance Plan Contribution</u>: 85% 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 under Act 127 to disabled members and beneficiaries, to approximate the triennial 3% increases.

<u>Deferred Vested Participants</u>: Census data on deferred vested participants was not available. The actuarial accrued liabilities for Act 447 and Act 1 members have been increased by 5% to approximate the value of the liability on behalf of deferred vested participants.

<u>Service Purchase and Data Reporting Issues</u>: Active liabilities on behalf of service retirement are increased by 20% for members of Act 447 to approximate the value of prospective service purchases at retirement and data reporting issues, including members who have higher past salaries than provided in the valuation census data, and members who are reported as participating in Act 1 or System 2000 while active but who retire under Act 447.

<u>Administrative Expenses</u>: Average of past two year's administrative expense, rounded up to the nearest \$250,000, is added to the normal cost. For the 2011-12 plan year, this amount is \$34,000,000.

Special Data Adjustments: Upon review of the June 30, 2011 census data submitted by PRGERS, we observed several areas where data was missing, inconsistent, or invalid. We reviewed each issue and presented an analysis to PRGERS that consisted of a description of the data issue, a proposed solution, and a brief rationale supporting the proposed solution. The recommendations were reviewed by PRGERS staff, revised as applicable, and applied to the census data in order to prepare it for use in the valuation. The majority of the data edits and assumptions were applied to the following data items:

- Date of birth
- Date of hire

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

- Allocation of Basic System Benefits and System Administered Benefits for newly reported inactive members
- Accumulated Employee Contributions
- Employment Category Code (Police / Fire Code)
- Plan Code (Coordinated / Supplementation option)
- Form of payment

Credited service is based on the greater of "Years Worked" reported in the valuation census data and the elapsed time from date of hire to the valuation date.

For current disabled retirees and beneficiaries receiving benefits under Act 127, the pension benefits paid by System assets (e.g. the Basic System Benefit) was assumed to be 33% of the total reported pension benefit.

Benefits for current beneficiaries who are under age 23 as of the valuation date were assumed to cease at age 23. Benefits for current beneficiaries who are age 23 or older as of the valuation data were assumed to be payable for life. In addition, the current level of benefit for all beneficiaries 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 minimis.

The disability benefits provided by a private insurance long term disability program to active members of System 2000 who voluntarily elect to enroll are not considered to be a Basic System Benefit nor a System Administered Benefit for purposes of the actuarial valuation since these benefits are financed solely by employees. As a result, these benefits are not reflected in this report. (Please see Management's Discussion and Analysis on page 9 of the System's June 30, 2010 Basic Financial Statements.)

Moreover, this report does not address the guarantee insurance reserve for life insurance on loans to plan members. (Please see Notes to Basic Financial Statements on page 38 and Statements of Plan Net Assets on page 12 of the System's June 30, 2010 Basic Financial Statements.)

Basis for demographic assumptions: The demographic assumptions used in this valuation are based on a 2009 experience study using data as of June 30, 2003, June

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

30, 2005, and June 30, 2007. All assumptions were reviewed with PRGERS staff for reasonableness and are documented above.

Changes in actuarial assumptions since the prior valuation:

- The interest rate assumption for GASB 25 & 27 accounting purposes was decreased from 7.5% per year to 6.4% per year.
- Credited service is based on the greater of "Years Worked" reported in the valuation census data and the elapsed time from date of hire to the valuation date.
- The 5% load for service purchases was revised to a 20% load for service purchases and data reporting issues.

Note that the latter two assumption changes were reflected in the restated June 30, 2010 valuation results that appear in this report.

SECTION X - SUMMARY OF ACTUARIAL METHODS AS OF JUNE 30, 2011

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 65% or 75% of Average Compensation benefit is prorated over a maximum of 30 years. 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.