

PUERTO RICO TEACHERS RETIREMENT SYSTEM

June 30, 2007 Actuarial Valuation Report

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March 25, 2008

Mr. Harold González Rosado
Executive Director
Puerto Rico Teachers Retirement System
Capital Center Building
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North Tower, 8th Floor
Hato Rey, PR 00919-1879

Dear Mr. González Rosado:

This report presents the results of the actuarial valuation of the Puerto Rico Teachers Retirement System (PRTRS) as of June 30, 2007. 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 and Annual Pension Cost for the Fiscal Year ending June 30, 2008 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 Teachers Retirement System for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning PRTRS's operations, and uses PRTRS's data, which Milliman has not audited. Milliman and PRTRS do not intend to benefit and assume no duty or liability to other parties who receive this report. Milliman and PRTRS 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 provided by the System. We have not audited or verified the census data, asset information, or other information. To the extent that any of these are inaccurate or incomplete, the results of this valuation may likewise be inaccurate or incomplete.

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

Variability of Results

Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

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;

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

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

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 PRTRS. After considering PRTRS' input, we agreed with PRTRS on an 8% investment return assumption. We believe that this investment return assumption, which was used in prior valuations, is reasonable for the purpose of these measurements because it falls within our estimate, which reflects the System's investment policy, of the 25th to 75th percentile range of the long term expected rate of investment return.

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

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Mr. Harold González Rosado
March 25, 2008
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Qualifications

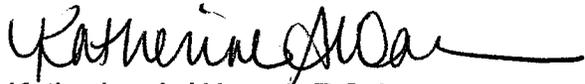
We are members of the Society of Actuaries and meet the qualification standards of the American Academy of Actuaries to render this actuarial opinion.

Respectfully submitted,

MILLIMAN, INC.



By Glenn D. Bowen, F.S.A.
Member American Academy of Actuaries



Katherine A. Warren, F.S.A.
Member American Academy of Actuaries

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION I – SUMMARY

A. Summary of Principal Results of June 30, 2007 Actuarial Valuation (\$ amounts in thousands)

	Basic System Pension <u>Benefits only</u>	System Administered <u>Pension Benefits only</u>	GASB 25 & 27 Accounting (Basic System and System Administered <u>Pension Benefits</u>)	GASB 45 Accounting (Other Postemployment <u>Benefits</u>)
Present Value of Benefits ¹	\$8,820,242	\$553,277	\$9,373,519	\$787,335
Actuarial Accrued Liability	7,226,816	529,002	7,755,817	652,157
Actuarial Value of Assets	<u>3,162,720</u>	<u>0</u>	<u>3,162,720</u>	<u>0</u>
Unfunded Actuarial Accrued Liability	4,064,096	529,002	4,593,097	652,157
Employer Normal Cost as a percent of payroll	62,475 4.56%	3,196 0.23%	65,672 4.79%	13,083 0.96%
Annual Required Contribution (ARC) as a percent of payroll	306,531 22.38%	34,964 2.55%	341,495 24.93%	36,836 2.69%
Annual Pension / OPEB Cost as a percent of payroll	N/A N/A	N/A N/A	355,743 25.97%	36,836 2.69%
Employer Contributions (estimated) as a percent of payroll	116,430 8.50%	47,776 3.49%	164,206 11.99%	27,759 2.03%
Portion of ARC not covered (estimated) as a percent of payroll	190,101 13.88%	(12,812) (0.94)%	177,289 12.94%	9,077 0.66%

¹ A discussion of the benefits included in the respective Present Value of Benefits begins on page 5 of this section.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION I – SUMMARY

June 30, 2007
Valuation

Participant Data

Active Members

Number	48,505
Average Salary	\$28,240
Total Annual Salary	\$1,369,770,012

Retirees

Number	24,388
Average Monthly Benefit without COLAs	\$1,116
Average Monthly Benefit with COLAs	\$1,199

Disabled Members

Number	2,047
Average Monthly Benefit without COLAs	\$402
Average Monthly Benefit with COLAs	\$454

Beneficiaries

Number	2,531
Average Monthly Benefit with COLAs	\$353

Terminated Vested Members

Number	791
Average Monthly Benefit	\$794

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION I – SUMMARY

B. General Discussion

Basic System Benefits

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

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

Annuity benefits are subject to a \$300 monthly minimum. The statutory funding requirement for these benefits totals 17.5% of payroll, comprising 9.0% member and 8.5% employer contributions.

These benefits will be referred to as the “Basic System Benefits” throughout this report.

System Administered Benefits

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

- Additional minimum pension benefits
- Additional minimum death benefit
- Ad-hoc cost-of-living adjustments (COLAs)
- Medical insurance plan contribution
- Summer bonus
- Medication bonus
- Christmas bonus (\$450)

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION I – SUMMARY

Future Ad-hoc COLAs

Pension increases of 3% for retirees and disabled members may be granted by the Legislature of Puerto Rico on an ad-hoc basis every three years based on enabling legislation enacted in 1992. Since 1992, these ad-hoc increases have been granted on average every third year.

Subsection C of Section III, "Management Information", compares GASB 25 and 27 accounting ARCs for System Administered Pension Benefits both with and without future ad-hoc COLAs to illustrate the potential additional long-term cost of these benefits, if they continue to be enacted.

Experience Study

The complete set of actuarial assumptions used in the June 30, 2004 valuation was not available, nor was the complete June 30, 2004 census data as used by the prior actuary.

We were provided with enhanced June 30, 2004 and June 30, 2007 census data files by the System. We analyzed the demographic experience over the three-year period and converted the results into annualized rates to develop new assumptions for:

- Retirement
- Disability
- Withdrawal
- Mortality
- Service purchase
- Salary increases

In addition, several ancillary assumptions such as the probability of marriage and spouse age difference assumptions were developed. All assumptions were reviewed with PRTRS staff for reasonableness and are documented in Section IX. A summary of the June 30, 2007 census data files and a reconciliation underlying the results of our study are presented in Section VII.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION I – SUMMARY

GASB Accounting Information

In the June 30, 2004 valuation, the Basic System Benefits (excluding the \$150 Christmas bonus) were valued and reported 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). In valuations prior to June 30, 2004, the Basic System Benefits (excluding the \$150 Christmas bonus) and accumulated past ad-hoc COLAs (a System Administered Benefit) were valued and reported under GASB 25 and GASB 27. The prior valuations only mention the COLAs effective January 1, 1992 and January 1, 1995. They do not mention the ad-hoc COLAs effective January 1, 1998 and January 1, 2001. Accordingly, we are uncertain if all accumulated past ad-hoc COLAs were included in the prior valuations.

Based on our understanding of prior valuations, the \$150 Christmas bonus included in the Basic System Benefits for this actuarial valuation was not previously reflected in the actuarial valuations. The System Administered Benefits (other than the past ad-hoc COLAs as discussed above) were also not reflected in the prior actuarial valuations.

Since the prior valuation, Governmental Accounting Standards Board Statement No. 45, "*Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*" (GASB 45) has been released and is effective for Phase 1 entities (total annual revenues of over \$100 million for the first fiscal year beginning after June 15, 1999) for fiscal years beginning after December 15, 2006.

Accounting results under GASB 25, 27, and 45 are presented in two sections in this report as discussed below. In addition, as requested by PRTRS, we have separately determined the Annual Required Contribution based on GASB 25 and 27 rules for just the Basic System Benefits.

Basic System Benefits Information

We have performed a June 30, 2007 actuarial valuation of the Basic System Benefits and have prepared accounting results for them based on GASB 25 and 27 rules.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION I – SUMMARY

The FY 2007-8 ARC for the Basic System Benefits only based on GASB 25 and 27 rules would be \$306,531,254, which equals 22.38% of payroll. The ARC represents the portion of the cost of PRTRS' Basic System Benefits that employers should pay in order for PRTRS to be actuarially sound; i.e., the ARC has been reduced to reflect the fact that active members contribute 9% of pay to the system. The employer portion of the statutory funding requirement, which is 8.5% of payroll, is less than the ARC by 13.88% of payroll, or \$190,101,254.

As shown in Subsection D of Section IV, PRTRS has Unfunded Actuarial Accrued Liabilities of \$4.1 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 PRTRS are not adequate to fund PRTRS' Basic System Benefits. Instead, PRTRS is being gradually disfunded.

GASB 25 and 27 Accounting Information

We have performed a June 30, 2007 actuarial valuation of the Basic System Benefits and the System Administered Benefits (excluding the Medical Insurance Plan Contribution) and have prepared accounting results under GASB 25 for the financial statements of the System and under GASB 27 for the Commonwealth of Puerto Rico's financial statements. No future ad-hoc COLAs are anticipated in these results. (Please see Section III, "Management Information", for an analysis of the impact of continuing to grant future ad-hoc COLAs).

Based on our understanding of the 2004 valuation, only the Basic System Benefits (excluding the \$150 Christmas bonus) were reflected in the actuarial valuation as of June 30, 2004. The Annual Required Contribution (ARC) and the Annual Pension Cost (APC) determined in that valuation have been the basis for reporting for FYs 2004-5 and 2005-6.

For financial reporting purposes actuarial valuations should be performed at least biennially. Since the results of the June 30, 2004 actuarial valuation have been used as the basis for reporting for two fiscal years already, as an alternative to continuing the use of the June 30, 2004 results for a third year, for FY 2006-7 we have developed an

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ARC by multiplying the 2006-7 payroll by the FY 2007-8 ARC (expressed as a percentage of the 2007-8 payroll) developed in this report. We believe that this approach is preferable to estimating an ARC for FY 2006-7 based on the 2004 actuarial valuation because:

- There were some significant improvements in the active member data since the 2004 valuation;
- Some System Administered Benefits that should be included in the ARC were not reflected in the 2004 valuation (based on our understanding of the valuation); and,
- It avoided using the 2004 actuarial valuation results for a third year.

The Annual Pension Cost (APC) for FY 2006-7 under GASB 27 was then developed based on:

- The estimated ARC for FY 2006-7 (as described above), and,
- The Net Pension Obligation reported as of June 30, 2006.

The resulting APC was then used in conjunction with the actual employer contributions in FY 2006-7 to determine the Net Pension Obligation as of June 30, 2007.

The FY 2007-8 ARC under GASB 25 and 27 is \$341,495,050, which equals 24.93% of payroll. This includes the Basic System Benefits and the System Administered Benefits (excluding the Medical Insurance Plan Contribution). The FY 2007-8 APC under GASB 27 is \$355,742,842, which equals 25.97% of payroll.

As shown in Subsection B of Section V, the Unfunded Actuarial Accrued Liability on a GASB 25 and 27 basis is \$4.6 billion. Based on the current funding requirements, the UAAL is expected to grow indefinitely into the future. As discussed above, the statutory member and employer contributions to PRTRS are not adequate to fund PRTRS' Basic System Benefits. Instead, PRTRS is being gradually defunded. The System Administered Benefits are financed on a pay-as-you-go basis from the General Fund of the Commonwealth of Puerto Rico

GASB 45 Accounting Information

We have performed a June 30, 2007 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. This benefit has not been previously

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION I – SUMMARY

valued. (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 2007-8 ARC for the Medical Insurance Plan Contribution under GASB 45 is \$36,836,179, which equals 2.69% of payroll.

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 8.0% 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 \$652 million.

Solvency Test for Basic System Benefits

Subsection A of Section III determines the solvency percentage for each membership group for the Basic System Benefits. The Actuarial Value of Assets was allocated to each membership group by first allocating based on the accumulated member contributions with interest. The remaining assets were then assigned first to retirees, disabled members, and beneficiaries, second to terminated members with rights to a deferred pension, and then to active members. As shown in Subsection A of Section III, the overall solvency percentage is 43.8%. For retirees, disabled members, and beneficiaries, the solvency percentage is 48.3%. Vested terminated members with rights to deferred pensions and active members have solvency percentages of 49.4% and 39.3%, respectively. The solvency percentage for former members due a refund of accumulated members contributions with interest is always 100.0% under this test.

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

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SECTION I – SUMMARY

Cash Flow Projection for Basic System Benefits

PRTRS is a relatively 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 grow very slowly over time and then to decline when the negative cash flow exceeds investment income. PRTRS' liabilities for the Basic System Benefits will continue to increase significantly over time. Thus the funded status can be expected to decline over time based on the actuarial assumptions used to prepare this actuarial valuation. For example, the funded ratio of PRTRS for the Basic System Benefits as determined by this actuarial valuation was 43.8% as of June 30, 2007. We have roughly forecasted that this ratio can be expected to decrease to approximately 30% over the next 10 years if actual experience is consistent with the actuarial assumptions, including the 8.0% assumed investment return.

The table shown in Subsection B of Section III illustrates the expected negative net cash flows over the next 10 years. Annual payroll growth of 3.5% 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 PRTRS 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.)

We recommend that the statutory funding requirements be increased in light of:

- the expected negative net cash flows;
- the forecast decrease in funded status; and,
- the Annual Required Contribution based on GASB 25 and 27.

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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 PRTRS.

Subsection A summarizes the Market Value of Assets as of June 30, 2007, 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, 2006 to June 30, 2007.

Subsection C summarizes the development of the Actuarial Value of Assets as of June 30, 2007. 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, 2006 to June 30, 2007 was 17.5% on the Market Value of Assets.

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

The asset information used for the valuation was taken from financial statements provided by PRTRS as of June 30, 2007.

Management Information

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

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

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SECTION I – SUMMARY

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

Subsection C shows a development of the portion of the GASB 25 ARC attributable to System Administered Benefits with and without a continuation of ad-hoc COLAs.

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, 2008 (please see Subsection B of Section I for a description of the benefits included in this valuation).

Subsection A summarizes the development of the Present Value of Benefits as of June 30, 2007.

Subsection B summarizes the development of the Actuarial Accrued Liability as of June 30, 2007.

Subsection C summarizes the development of the Employer Normal Cost. The Employer Normal Cost is the total normal cost under the Entry Age Normal Actuarial Cost Method increased by expected administrative expenses paid from the fund and reduced by expected member contributions.

Subsection D summarizes the development of the amortization payment of the Unfunded Actuarial Accrued liability. The amortization period used to calculate the ARC is 30 years from June 30, 2007 with annual payments increasing each year by 3.5% to remain as a level percent of payroll. This amortization payment is the minimum GASB compliant amount.

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

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, 2008 (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, 2007 and Employer Normal Cost as of December 31, 2007.

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 annual payments increasing each year by 3.5% to remain as a level percent of payroll. This amortization payment is the minimum GASB compliant amount.

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, 2007. 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. Note that the historical employer contributions used to develop the NPO for GASB 27 appear to include the payments from the General Fund of the Commonwealth of Puerto Rico to reimburse PRTRS for the System Administered Benefits. But the historical ARC figures appear to be based on the Basic System Benefits only. If our understanding is correct, the NPO presented on the June 30, 2006 Commonwealth of Puerto Rico financial statement would be understated. In our development of the NPO for GASB 27 as of June 30, 2007, we have used the NPO as reported in the Commonwealth of Puerto Rico's June 30, 2006 financial statement rather than restating it.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION I – SUMMARY

Subsection E summarizes the development of the APC for the fiscal year ending June 30, 2008. 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, 2007 less an amortization of this NPO.

Subsection F shows a seven-year history of the ARC, APC, and the percentage contributed. This schedule is required by GASB Statements No. 25 and 27. The FY 2007-8 contribution percentage assumes that employer contributions for Basic System Benefits will remain at the statutory level of 8.5% of payroll and that employer contributions for the applicable System Administered Benefits will be the anticipated pay-as-you-go payments. Based on our understanding of prior valuations, the ARCs and APCs shown for the years ended June 30, 2006 and June 30, 2005 do not include the liability for any System Administered Benefits and the ARCs and APCs shown for the years ending on or prior to June 30, 2004 include the liability for ad hoc COLAs granted in 1992 and 1995 but do not include the liability for any of the other applicable System Administered Benefits. Consequently, the ratios of Actual Employer Contributions to ARCs and APCs shown in this exhibit for the fiscal years ending June 30, 2002 to June 30, 2006 could be overestimated. We have restated the actual employer contribution figures in the seven-year history to exclude the payments from the General Fund of the Commonwealth of Puerto Rico for the System Administered Benefits not included in GASB 25 and 27 (the Medical Insurance Plan Contribution and the Cultural Trip).

Subsection G shows a six-year history of the funding progress of the plan. This schedule is required by GASB Statements No. 25 and 27. Please refer to the paragraph above for the benefits that appear not to be reflected in the Accrued Liability as of June 30, 2004 and earlier, based on our understanding of prior valuations.

Schedule H summarizes information used to determine the Annual Required Contribution for the fiscal year ending June 30, 2008.

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, 2008 for the Medical

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION I – SUMMARY

Insurance Plan Contribution.

Subsection A summarizes the development of the Actuarial Accrued Liability as of June 30, 2007 and Employer Normal Cost as of December 31, 2007.

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 annual payments increasing each year by 3.5% to remain as a level percent of payroll. This amortization payment is the minimum GASB compliant amount.

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.

Census Data

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

Summary of Principal Plan Provisions

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

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.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION II - SYSTEM ASSETS

A. Market Value of Assets as of June 30, 2007

1. Assets	
Cash	\$ 36,665,000
Corporate Bonds	173,685,000
Government Bonds	294,767,000
Stocks	2,218,033,000
Private Equity Investments	46,686,000
Total Loans to Plan Members	364,121,000
Accounts Receivable	33,194,000
Capital Assets	25,890,000
Other Assets	<u>700,000</u>
Total	\$ 3,193,741,000
2. Total Liabilities	\$ 31,021,000
3. Market Value of Assets as of June 30, 2007: (1) - (2)	\$ 3,162,720,000

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION II - SYSTEM ASSETS

B. Reconciliation of Market Value of Assets from June 30, 2006 to June 30, 2007

1. Market Value of Assets as of June 30, 2006	\$	2,806,887,000
2. Additions		
a. Contributions		
Member Contributions	\$	127,809,000
Employer Contributions		116,320,000
Transfers In		12,396,000
Special		<u>57,960,000</u>
Total Contributions	\$	314,485,000
b. Investment Income		
Interest Income	\$	65,367,000
Dividends Income		13,654,000
Net Appreciation of Investments		406,131,000
Other Income		1,299,000
Investment Related Expenses		<u>(6,217,000)</u>
Net Investment Income	\$	480,234,000
Total Additions	\$	794,719,000
3. Decreases		
Refund of Member Contributions	\$	5,447,000
Annuities and Death Benefits		364,998,000
Special Benefits		45,564,000
Administrative Expenses		<u>22,877,000</u>
Total	\$	438,886,000
4. Net Increase (Decrease) in Market Value of Assets	\$	355,833,000
5. Market Value of Assets as of June 30, 2007	\$	3,162,720,000

C. Development of Actuarial Value of Assets as of June 30, 2007

The Actuarial Value of Assets as of June 30, 2007 is equal to the Market Value of Assets as of June 30, 2007 of \$3,162,720,000.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION II - SYSTEM ASSETS

D. Estimated Annual Rate of Return for year ending June 30, 2007

	<u>Market Value</u>
1. Value of Assets as of June 30, 2006	\$ 2,806,887,000
2. Total Contributions	314,485,000
3. Benefit Payments and Expenses	438,886,000
4. Value of Assets as of June 30, 2007	3,162,720,000
5. Non-Investment Increment: (2) - (3)	(124,401,000)
6. Investment Increment: (4) - (1) - (5)	480,234,000
7. Time Weighted Value: (1) +.5 * (5)	2,744,686,500
8. Estimated Annual Rate of Return: (6) / (7)	17.50%

E. Estimated Historical Rates of Return

<u>Plan Year Ending</u>	<u>Market Value</u>
June 30, 2007	17.50%
June 30, 2006	13.44%
June 30, 2005	9.53%
June 30, 2004	16.24%
June 30, 2003	2.44%
5-year Compounded Annual Return	11.69%

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION III - MANAGEMENT INFORMATION

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

<u>Membership Group</u>	<u>Actuarial Accrued Liability</u>	<u>Allocated Assets *</u>	<u>Solvency Percentage</u>
1. Retirees, Disabled Members, and Beneficiaries	\$3,437,729,379	\$ 1,658,734,086	48.3%
2. Vested Terminated Members	49,158,235	24,294,559	49.4%
3. Active Members	3,724,597,981	1,464,360,973	39.3%
4. Former Members due a refund of contributions	<u>15,330,382</u>	<u>15,330,382</u>	<u>100.0%</u>
5. Total	\$7,226,815,977	\$ 3,162,720,000	43.8%

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION III - MANAGEMENT INFORMATION

B. Projected Cash Flows for Basic System Benefits

<u>Plan Year Ending</u>	<u>Estimated Payroll</u>	<u>Estimated Member and Employer Contributions</u>	<u>Estimated Benefit Payments and Administrative Expenses</u>	<u>Net Cash Flow</u>
06/30/2008	1,369,770,012	239,709,752	392,236,947	(152,527,195)
06/30/2009	1,417,711,962	248,099,594	413,968,939	(165,869,345)
06/30/2010	1,467,331,881	256,783,079	438,287,397	(181,504,318)
06/30/2011	1,518,688,497	265,770,487	464,637,861	(198,867,374)
06/30/2012	1,571,842,594	275,072,453	492,039,630	(216,967,177)
06/30/2013	1,626,857,085	284,699,990	520,133,748	(235,433,758)
06/30/2014	1,683,797,083	294,664,489	548,793,540	(254,129,051)
06/30/2015	1,742,729,981	304,977,746	578,012,451	(273,034,705)
06/30/2016	1,803,725,530	315,651,968	608,056,604	(292,404,636)
06/30/2017	1,866,855,924	326,699,787	639,007,790	(312,308,003)
06/30/2018	1,932,195,881	338,134,279	671,489,864	(333,355,585)

Notes:

- Estimated Payroll is assumed to grow 3.5% annually.
- Member and Employer Contributions were estimated to be 17.5% of Estimated Payroll each year.
- 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.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION III - MANAGEMENT INFORMATION

C. ILLUSTRATION OF GASB 25 INFORMATION FOR SYSTEM ADMINISTERED BENEFITS IF FUTURE COLAS ARE REFLECTED

	<u>Without</u> <u>Future COLAs</u>	<u>With</u> <u>Future COLAs</u>
1. Projected Benefits as of June 30, 2007 Payable to:		
Retirees	\$ 393,432,317	\$ 689,852,706
Disabled Members	23,159,025	30,038,568
Beneficiaries	7,985,478	7,985,478
Vested Terminated Members	2,891,662	6,988,314
Active Members	<u>125,808,475</u>	<u>656,341,788</u>
Total	\$ 553,276,957	\$ 1,391,206,854
2. Present Value of Future Normal Cost	\$ 24,275,441	\$ 176,531,953
3. Actuarial Accrued Liability as of June 30, 2007: (1) - (2)	\$ 529,001,516	\$ 1,214,674,901
4. Actuarial Value of Assets as of June 30, 2007:	\$ 0	\$ 0
5. Unfunded Accrued Liability as of June 30, 2007: (3) - (4)	\$ 529,001,516	\$ 1,214,674,901
6. Amortization Period in years	30	30
7. Amortization Factor at beginning of year *	17.3056	17.3056
8. Amortization Amount Payable as of December 31, 2007: [(5) / (7)] * (1.08 ^ 0.5)	\$ 31,767,434	\$ 72,943,278
9. Total Employer Normal Cost as of December 31, 2007	\$ 3,196,362	\$ 18,512,381
10. Annual Required Contribution**: (8) + (9)	\$ 34,963,796	\$ 91,455,659

* Amortization calculated as a level percent of pay increasing 3.5% per year.

** Assumes payments made throughout the year.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION IV - BASIC SYSTEM BENEFITS INFORMATION

A. Development of Present Value of Benefits as of June 30, 2007

1. Projected Benefits Payable to Retirees and Beneficiaries	
Retirees	\$ 3,272,465,447
Disabled Members	84,108,358
Beneficiaries	<u>81,155,574</u>
Total	\$ 3,437,729,379
2. Projected Benefits for Vested Terminated Members	49,158,235
3. Projected Benefits for Active Members	
Retirement	\$ 5,173,548,410
Disability	52,037,034
Pre Retirement Death	68,884,167
Return of Members' Contributions	17,024,808
Vested Withdrawal	<u>6,529,496</u>
Total	\$ 5,318,023,915
4. Return of Contributions due to former Members	\$ 15,330,382
5. Total Present Value of Benefits: (1) + (2) + (3) + (4)	\$ 8,820,241,911

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION IV - BASIC SYSTEM BENEFITS INFORMATION

B. Development of Actuarial Accrued Liability as of June 30, 2007

1. Total Present Value of Benefits	\$ 8,820,241,911
2. Present Value of Future Total Normal Cost	
Retirement	\$ 1,466,939,642
Disability	22,812,297
Pre Retirement Death	33,976,047
Return of Members' Contributions	65,607,154
Vested Withdrawal	<u>4,090,794</u>
Total	\$ 1,593,425,934
3. Present Value of Future Active Member Contributions	\$ 1,227,207,652
4. Present Value of Future Employer Normal Cost: (2) - (3)	\$ 366,218,282
5. Actuarial Accrued Liability: (1) - (2)	\$ 7,226,815,977

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION IV - BASIC SYSTEM BENEFITS INFORMATION

C. Development of Employer Normal Cost Payable as of December 31, 2007

1. Total Normal Cost as of December 31, 2007	
Retirement	\$ 147,611,628
Disability	2,284,149
Pre Retirement Death	3,527,590
Return of Members' Contributions	6,625,949
Vested Withdrawal	<u>400,782</u>
Total	\$ 160,450,098
2. Expected Member Contributions	\$ 120,738,666
3. Load for Administrative Expenses:	\$ 22,764,000
4. Total Employer Normal Cost as of December 31, 2007: (1) - (2) + (3)	\$ 62,475,432

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION IV - BASIC SYSTEM BENEFITS INFORMATION

D. Development of Unfunded Actuarial Accrued Liability and Amortization Payment Payable as of December 31, 2007

1. Actuarial Accrued Liability as of June 30, 2007	\$ 7,226,815,977
2. Actuarial Value of Assets as of June 30, 2007	\$ 3,162,720,000
3. Unfunded Actuarial Accrued Liability as of June 30, 2007: (1) - (2)	\$ 4,064,095,977
4. Amortization Period in years	30
5. Amortization Factor at beginning of year *	17.3056
6. Amortization Amount Payable as of December 31, 2007: [(3) / (5)] * (1.08 ^ 0.5)	\$ 244,055,822

* Amortization calculated as a level percent of pay increasing 3.5% per year.

E. Development of Annual Required Contribution

1. Total Employer Normal Cost as of December 31, 2007	\$ 62,475,432
2. Amortization Payment as of December 31, 2007	\$ 244,055,822
3. Annual Required Contribution*: (1) + (2)	\$ 306,531,254

* Assumes payments made throughout the year.

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION V - GASB 25 AND 27 ACCOUNTING INFORMATION

A. Benefit Obligations

	Basic System <u>Benefits</u>	System Administered <u>Benefits</u>	<u>Total</u>
1. Projected Benefits as of June 30, 2007 Payable to:			
Retirees	\$ 3,272,465,447	\$ 393,432,317	\$ 3,665,897,764
Disabled Members	84,108,358	23,159,025	107,267,383
Beneficiaries	81,155,574	7,985,478	89,141,052
Vested Terminated Members	49,158,235	2,891,662	52,049,897
Return of Contributions due to former Members	15,330,382	0	15,330,382
Active Members	<u>5,318,023,915</u>	<u>125,808,475</u>	<u>5,443,832,390</u>
Total	\$ 8,820,241,911	\$ 553,276,957	\$ 9,373,518,868
2. Present Value of Future Normal Cost	\$ 1,593,425,934	\$ 24,275,441	\$ 1,617,701,375
3. Actuarial Accrued Liability as of June 30, 2007:			
(1) - (2)	\$ 7,226,815,977	\$ 529,001,516	\$ 7,755,817,493
4. Total Employer Normal Cost as of December 31, 2007	\$ 62,475,432	\$ 3,196,362	\$ 65,671,794

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION V - GASB 25 AND 27 ACCOUNTING INFORMATION

B. Development of Unfunded Accrued Liability and Amortization Payment Payable as of December 31, 2007

1. Accrued Liability as of June 30, 2007	\$	7,755,817,493
2. Actuarial Value of Assets as of June 30, 2007	\$	3,162,720,000
3. Unfunded Accrued Liability as of June 30, 2007 (1) - (2):	\$	4,593,097,493
4. Amortization Period in years		30
5. Amortization Factor at beginning of year *		17.3056
6. Amortization Amount Payable as of December 31, 2007: $[(3) / (5)] * (1.08 ^ 0.5)$	\$	275,823,256

* Amortization calculated as a level percent of pay increasing 3.5% per year.

C. Development of Annual Required Contribution

1. Total Employer Normal Cost as of December 31, 2007	\$	65,671,794
2. Amortization Payment as of December 31, 2007	\$	275,823,256
3. Annual Required Contribution*: (1) + (2)	\$	341,495,050

* 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.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION V - GASB 25 AND 27 ACCOUNTING INFORMATION

D. Development of Net Pension Obligation as of June 30, 2007

1. Net Pension Obligation as of June 30, 2006	\$	605,663,000
2. Annual Pension Cost for Fiscal Year 2006 - 2007	\$	351,814,817
3. Fiscal Year 2006 - 2007 Employer Contribution	\$	147,597,000
4. Net Pension Obligation as of June 30, 2007: (1) + (2) - (3)	\$	809,880,817

E. Development of Fiscal Year 2007 - 2008 Annual Pension Cost

1. Annual Required Contribution	\$	341,495,050
2. Interest on Net Pension Obligation as of June 30, 2007	\$	64,790,465
3. Adjustment to the Annual Required Contribution	\$	50,542,673
4. Fiscal Year 2007 - 2008 Annual Pension Cost: (1) + (2) - (3)	\$	355,742,842

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION V - GASB 25 AND 27 ACCOUNTING INFORMATION

F. Schedule of Employer Contributions

<u>Year Ended June 30</u>	<u>Actual Employer Contribution</u>	<u>Annual Required Contribution</u>	<u>Percent Contributed</u>	<u>Annual Pension Cost</u>	<u>Percent Contributed</u>
2008	\$164,206,000	\$341,495,050	48.08%*	\$355,742,842	46.16%*
2007	147,597,000	341,159,718	43.26	351,814,817	41.95
2006	150,215,000	220,820,946	68.03	221,449,560	67.83
2005	151,690,000	220,820,946	68.69	221,449,560	68.50
2004	132,403,000	217,001,910	61.01	219,168,233	60.41
2003	118,303,000	172,338,498	68.65	176,238,028	67.13
2002	112,956,000	150,882,755	74.86	154,782,285	72.98

* Percentage contributed for the year ended June 30, 2008 assumes the actual employer contribution is 8.5% of expected payroll for the Basic System Benefits plus the expected pay-as-you-go amounts for the selected System Administered Benefits.

Please refer to page 13 for a discussion of the benefits not reflected in the above amounts for the years ending on or before June 30, 2006, which may impair the comparison of prior valuation amounts.

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

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 Date	Actuarial Value of Assets	Accrued Liability	Unfunded Liability	Funded Ratio	Annual Salary	Unfunded Liability as a % of Annual Salary
06/30/2007	\$3,162,720,000	\$7,755,817,493	\$4,593,097,493	40.8%	\$1,369,770,012	335.3%
06/30/2006		Not Determined			Not Determined	
06/30/2005		Not Determined			Not Determined	
06/30/2004	2,402,995,000	4,701,907,235	2,298,912,235	51.1%	1,293,532,830	177.7%
06/30/2003	2,142,662,000	4,539,809,983	2,397,147,983	47.2%	1,195,167,867	200.6%
06/30/2002	2,167,091,000	4,154,848,177	1,987,757,177	52.2%	991,068,262	200.6%

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

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, 2008. The ARC is for the Basic System Benefits and selected System Administered Benefits. See Section I for more information.

Valuation Date:	June 30, 2007
Actuarial Cost Method:	Entry Age Normal
Amortization method:	30 years closed, level percent of payroll
Remaining Amortization Period:	30 years
Asset valuation method:	Market Value of Assets
Assumptions:	
Investment rate of return	8.0%
Projected Salary Increases	3.5% general wage inflation plus a service based merit increase
Inflation	2.5%
Cost of Living Adjustments	None assumed

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION VI - GASB 45 ACCOUNTING INFORMATION

A. Benefit Obligations

1. Projected Benefits as of June 30, 2007 Payable to:		
Retirees	\$	321,482,514
Disabled Members		21,494,935
Beneficiaries		2,913,063
Vested Terminated Members		8,648,488
Active Members		<u>432,795,701</u>
Total	\$	787,334,701
2. Present Value of Future Normal Cost	\$	135,177,988
3. Actuarial Accrued Liability as of June 30, 2007:		
(1) - (2)	\$	652,156,713
4. Total Employer Normal Cost		
as of December 31, 2007	\$	13,083,185

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

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION VI - GASB 45 ACCOUNTING INFORMATION

B. Development of Unfunded Actuarial Accrued Liability and Amortization Payment Payable as of December 31, 2007

1. Actuarial Accrued Liability as of June 30, 2007	\$	652,156,713
2. Actuarial Value of Assets as of June 30, 2007	\$	0
3. Unfunded Actuarial Accrued Liability as of June 30, 2007: (1) - (2)	\$	652,156,713
4. Amortization Period in years		30
5. Amortization Factor at beginning of year *		27.9995
6. Amortization Amount Payable as of December 31, 2007: [(3) / (5)] * (1.04 ^ 0.5)	\$	23,752,994

* Amortization calculated as a level percent of pay increasing 3.5% per year.

C. Development of Annual Required Contribution

1. Total Employer Normal Cost as of December 31, 2007	\$	13,083,185
2. Amortization Payment as of December 31, 2007	\$	23,752,994
3. Annual Required Contribution*: (1) + (2)	\$	36,836,179

* 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.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION VII – CENSUS DATA

A. Reconciliation with Prior Valuation

	<u>Active</u>	<u>Terminated Vested</u>	<u>Retirees, Disabled Members, and Beneficiaries</u>	<u>Total</u>
Members as of				
June 30, 2004 Valuation Report	51,026	781	27,163	78,970
June 30, 2004 Revised Data	49,085	1,058	27,319	77,462
Changes from June 30, 2004 Revised Data:				
Terminated Vested	(642)	642	0	0
Retired & Disabled	(2,958)	(114)	3,072	0
Death	(208)	(2)	(885)	(1,095)
Disappeared	(2,047)	0	(1,404)	(3,451)
Return to Active	919	(892)	(27)	0
New	4,356	99	891	5,346
Members as of				
June 30, 2007	48,505	791	28,966	78,262

The liability for the Return of Contributions due to former Members was provided by the System and equals the accumulated contributions with interest as of June 30, 2007 for former participants who terminated employment by June 30, 2007 with less than ten years of service and have not received a return of contributions as of June 30, 2007. Detailed participant information was not provided.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION VII – CENSUS DATA

B. Summary of Active Members as of June 30, 2007

Number of Male Participants by Age and Service Groups

Age	Years of Service										Total	
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up		
0-24	57	19	-	-	-	-	-	-	-	-	-	76
25-29	118	452	129	-	-	-	-	-	-	-	-	699
30-34	69	300	677	40	1	-	-	-	-	-	-	1,087
35-39	44	221	428	413	77	1	-	-	-	-	-	1,184
40-44	24	143	249	353	696	73	1	-	-	-	-	1,539
45-49	24	136	214	235	582	584	136	-	-	-	-	1,911
50-54	17	102	143	185	294	391	684	132	-	-	-	1,948
55-59	6	57	94	106	156	196	265	114	26	1	1	1,021
60-64	5	25	32	30	72	53	72	33	37	2	2	361
65-69	1	8	8	15	10	17	25	4	8	12	4	108
70&Up	-	4	6	2	2	11	9	2	3	4	4	43
Total	365	1,467	1,980	1,379	1,890	1,326	1,192	285	74	19	19	9,977

Average Compensation of Male Participants by Age and Service Groups

Age	Years of Service										Average	
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up		
0-24	17,211	17,976	-	-	-	-	-	-	-	-	-	17,403
25-29	17,791	20,988	24,547	-	-	-	-	-	-	-	-	21,105
30-34	18,148	22,134	26,457	29,261	44,436	-	-	-	-	-	-	24,856
35-39	17,773	22,603	27,212	29,501	30,928	28,800	-	-	-	-	-	27,043
40-44	17,684	22,925	26,735	29,642	30,968	31,744	38,040	-	-	-	-	29,066
45-49	18,834	23,069	26,784	29,612	30,833	31,572	32,826	-	-	-	-	29,894
50-54	21,043	24,252	26,526	29,603	30,501	31,254	31,887	32,314	-	-	-	30,475
55-59	18,300	24,669	27,002	29,558	30,116	30,739	31,240	31,959	35,066	24,660	-	30,136
60-64	17,321	23,188	27,828	28,749	30,511	30,935	31,910	32,777	33,898	33,150	-	30,347
65-69	18,000	26,751	27,978	31,500	29,894	30,130	31,591	32,094	33,282	33,491	-	30,794
70&Up	-	19,935	27,790	30,408	32,070	30,659	32,339	29,454	32,860	33,276	-	30,008
Average	17,981	22,244	26,629	29,574	30,767	31,311	31,854	32,202	34,200	32,945	32,945	28,333

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION VII – CENSUS DATA

Number of Female Participants by Age and Service Groups

Age	Years of Service										Total	
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40&Up</u>		
0-24	254	138	-	-	-	-	-	-	-	-	-	392
25-29	484	1,686	471	-	-	-	-	-	-	-	-	2,641
30-34	221	1,151	2,505	169	-	-	-	-	-	-	-	4,046
35-39	148	792	1,753	1,543	338	1	1	-	-	-	-	4,576
40-44	122	663	1,349	1,348	2,926	376	6	-	-	-	-	6,790
45-49	79	491	873	887	2,064	2,183	708	-	-	-	-	7,285
50-54	36	296	552	641	1,181	1,148	2,974	840	2	-	-	7,670
55-59	19	131	221	336	632	511	818	597	132	1	1	3,398
60-64	8	43	98	113	261	224	278	82	91	48	48	1,246
65-69	1	11	28	29	55	61	102	22	16	29	29	354
70&Up	1	6	7	15	20	21	21	11	5	23	23	130
Total	1,373	5,408	7,857	5,081	7,477	4,525	4,908	1,552	246	101	101	38,528

Average Compensation of Female Participants by Age and Service Groups

Age	Years of Service										Average	
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40&Up</u>		
0-24	17,658	18,823	-	-	-	-	-	-	-	-	-	18,068
25-29	17,931	20,951	24,687	-	-	-	-	-	-	-	-	21,064
30-34	17,928	21,506	26,451	28,964	-	-	-	-	-	-	-	24,684
35-39	17,806	22,184	26,937	29,683	30,818	29,460	29,760	-	-	-	-	27,033
40-44	17,873	22,428	26,661	29,324	30,747	31,912	29,820	-	-	-	-	28,673
45-49	18,543	22,916	26,620	29,601	30,725	31,405	32,015	-	-	-	-	29,767
50-54	20,058	23,989	26,622	29,367	30,624	31,359	31,473	31,678	30,210	-	-	30,480
55-59	18,720	23,954	26,565	29,262	30,424	31,039	31,371	31,760	32,547	30,060	30,060	30,381
60-64	19,632	23,293	26,866	28,847	29,858	30,968	31,168	32,069	32,285	31,602	31,602	30,121
65-69	18,000	24,689	26,812	29,802	29,964	30,589	30,974	31,199	32,915	33,523	33,523	30,404
70&Up	19,800	26,936	26,645	29,306	29,226	30,751	30,460	31,829	32,366	33,292	33,292	30,424
Average	17,974	21,827	26,531	29,463	30,657	31,358	31,500	31,725	32,451	32,523	32,523	28,216

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION VII – CENSUS DATA

Number of Active Participants by Age and Service Groups

Age	Years of Service										Total	
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up		
0-24	311	157	-	-	-	-	-	-	-	-	-	468
25-29	602	2,138	600	-	-	-	-	-	-	-	-	3,340
30-34	290	1,451	3,182	209	1	-	-	-	-	-	-	5,133
35-39	192	1,013	2,181	1,956	415	2	1	-	-	-	-	5,760
40-44	146	806	1,598	1,701	3,622	449	7	-	-	-	-	8,329
45-49	103	627	1,087	1,122	2,646	2,767	844	-	-	-	-	9,196
50-54	53	398	695	826	1,475	1,539	3,658	972	2	-	-	9,618
55-59	25	188	315	442	788	707	1,083	711	158	2	-	4,419
60-64	13	68	130	143	333	277	350	115	128	50	-	1,607
65-69	2	19	36	44	65	78	127	26	24	41	-	462
70&Up	1	10	13	17	22	32	30	13	8	27	-	173
Total	1,738	6,875	9,837	6,460	9,367	5,851	6,100	1,837	320	120	48,505	

Average Compensation of Active Participants by Age and Service Groups

Age	Years of Service										Average	
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up		
0-24	17,576	18,721	-	-	-	-	-	-	-	-	-	17,960
25-29	17,903	20,959	24,657	-	-	-	-	-	-	-	-	21,072
30-34	17,980	21,636	26,452	29,021	44,436	-	-	-	-	-	-	24,720
35-39	17,798	22,276	26,991	29,645	30,838	29,130	29,760	-	-	-	-	27,035
40-44	17,842	22,516	26,673	29,390	30,790	31,885	30,994	-	-	-	-	28,746
45-49	18,611	22,949	26,652	29,603	30,749	31,441	32,145	-	-	-	-	29,794
50-54	20,374	24,056	26,602	29,420	30,600	31,332	31,551	31,764	30,210	-	-	30,479
55-59	18,619	24,171	26,695	29,333	30,363	30,956	31,339	31,792	32,961	27,360	-	30,324
60-64	18,743	23,254	27,103	28,827	29,999	30,962	31,320	32,272	32,751	31,664	-	30,171
65-69	18,000	25,557	27,071	30,381	29,953	30,489	31,095	31,337	33,038	33,513	-	30,495
70&Up	19,800	24,136	27,174	29,436	29,485	30,720	31,024	31,464	32,552	33,290	-	30,321
Average	17,976	21,916	26,550	29,487	30,679	31,348	31,569	31,799	32,856	32,590	28,240	

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION VII – CENSUS DATA

C. Summary of Terminated Vested Members as of June 30, 2007

<u>Age</u>	<u>Male</u>		<u>Female</u>		<u>Total</u>	
	<u>Count</u>	<u>Average Annual Pension</u>	<u>Count</u>	<u>Average Annual Pension</u>	<u>Count</u>	<u>Average Annual Pension</u>
Under 35	0	0	2	4,829	2	4,829
35-39	17	5,944	42	5,862	59	5,886
40-44	45	7,182	113	7,043	158	7,082
45-49	62	8,337	139	8,776	201	8,640
50-54	52	10,474	126	11,171	178	10,967
55-59	32	13,108	86	13,112	118	13,111
60-64	17	10,589	31	10,447	48	10,497
65 & Over	<u>9</u>	<u>13,121</u>	<u>18</u>	<u>11,019</u>	<u>27</u>	<u>11,720</u>
All Ages	234	9,416	557	9,567	791	9,522

The Average Annual Pension amounts above are as of June 30, 2007. The \$400 minimum monthly benefit is not reflected.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION VII – CENSUS DATA

D. Summary of Retirees as of June 30, 2007

Age	Males		Females		Total	
	Count	Average Annual Pension w/o COLAs w/ COLAs	Count	Average Annual Pension w/o COLAs w/ COLAs	Count	Average Annual Pension w/o COLAs w/ COLAs
Under 45	0	0	7	6,707	7	6,707
45-49	3	8,440	10	12,616	13	11,597
50-54	103	21,853	468	20,456	571	20,698
55-59	842	20,000	3,440	18,510	4,282	18,725
60-64	1,169	17,752	3,803	15,951	4,972	16,204
65-69	1,059	14,173	3,289	12,784	4,348	13,123
70-74	952	11,451	2,715	10,648	3,667	10,857
75-79	868	9,813	2,159	9,290	3,027	9,440
80-84	430	8,890	1,627	8,335	2,057	8,451
85-89	211	8,348	757	7,860	968	7,966
90-94	54	7,751	275	7,261	329	7,341
95-99	13	7,790	96	6,795	109	6,914
100 &						
Over	<u>0</u>	<u>0</u>	<u>38</u>	<u>6,420</u>	<u>38</u>	<u>6,420</u>
All Ages	5,704	13,887	18,684	13,247	24,388	13,397
		14,950		14,209		14,382

The Average Annual Pension amounts above are as of June 30, 2007. The \$400 minimum monthly benefit is not reflected. In addition, 726 retirees are currently paying annual additional contributions of \$1,964,298 (via a reduced monthly benefit which is not reflected above).

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION VII – CENSUS DATA

E. Summary of Disabled Members as of June 30, 2007

Age	Males		Females		Total	
	Count	Average Annual Pension w/o COLAs w/ COLAs	Count	Average Annual Pension w/o COLAs w/ COLAs	Count	Average Annual Pension w/o COLAs w/ COLAs
Under 35	0	0	1	3,623	1	3,623
35-39	1	3,600	2	3,766	3	3,710
40-44	9	4,708	23	5,149	32	5,025
45-49	14	5,192	60	5,806	74	5,690
50-54	36	6,237	165	5,730	201	5,821
55-59	59	5,281	224	5,552	283	5,495
60-64	51	4,953	239	4,930	290	4,934
65-69	33	5,000	277	4,497	310	4,551
70-74	38	4,288	249	4,367	287	4,357
75-79	59	4,248	229	4,290	288	4,282
80-84	23	4,615	143	4,367	166	4,401
85-89	13	4,253	64	4,423	77	4,395
90-94	5	4,287	25	4,214	30	4,226
95-99	1	5,281	3	4,150	4	4,433
100 & Over	0	0	1	5,059	1	5,059
All Ages	342	4,895	1,705	4,804	2,047	4,820
						5,448

The Average Annual Pension amounts above are as of June 30, 2007. The \$400 minimum monthly benefit is not reflected.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION VII – CENSUS DATA

F. Summary of Beneficiaries as of June 30, 2007

<u>Age</u>	<u>Males</u>		<u>Females</u>		<u>Total</u>	
	<u>Count</u>	<u>Average Annual Pension w/ COLAs</u>	<u>Count</u>	<u>Average Annual Pension w/ COLAs</u>	<u>Count</u>	<u>Average Annual Pension w/ COLAs</u>
Under 20	36	2,799	41	3,741	77	3,300
20-24	22	4,928	27	3,047	49	3,891
25-29	3	4,063	3	5,330	6	4,696
30-34	4	3,810	3	4,426	7	4,074
35-39	9	3,365	13	2,785	22	3,022
40-44	11	3,719	19	4,143	30	3,988
45-49	19	3,204	19	4,203	38	3,704
50-54	30	3,992	47	4,974	77	4,592
55-59	50	5,290	66	5,553	116	5,440
60-64	81	4,807	139	5,155	220	5,027
65-69	100	4,199	181	5,046	281	4,744
70-74	129	4,261	278	4,484	407	4,413
75-79	175	4,166	272	4,148	447	4,155
80-84	159	4,001	219	3,863	378	3,921
85-89	111	3,774	119	3,697	230	3,734
90-94	43	3,959	45	3,182	88	3,562
95-99	11	2,522	30	2,589	41	2,571
100 & Over	<u>7</u>	<u>3,699</u>	<u>10</u>	<u>2,495</u>	<u>17</u>	<u>2,991</u>
All Ages	1,000	4,120	1,531	4,309	2,531	4,234

The Average Annual Pension amounts above are as of June 30, 2007.

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PUERTO RICO TEACHERS RETIREMENT SYSTEM

SECTION VIII – SUMMARY OF PRINCIPAL PLAN PROVISIONS AS OF JUNE 30, 2007

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

1. Type of Plan

The System is a contributory, defined benefit plan.

2. Effective Date

The Plan was established in 1951. Act 91 of March 29, 2004 superseded Act 218 of May 6, 1951. The plan was last amended under Act 38, approved April 24, 2007.

3. Eligibility for Membership

Members of the Teacher's Retirement System of Puerto Rico include teachers hired by the Department of Education, retired teachers, licensed teachers working in private schools or other educational organizations who elect to become members, employees of the System hired before March 29, 2004 who elected to become members, and employees of the System hired on or after March 29, 2004 (Act 91, Section 15).

4. Definitions

- a. Fiscal Year: A Fiscal Year is a 12-month period beginning on July 1 and ending on June 30.
- b. Fund: The Teacher's Annuities and Pensions Fund of Puerto Rico (Act 91, Section 2).
- c. General Fund: The General Expenses Budget of the Government of the Commonwealth of Puerto Rico.
- d. Creditable Service: A year of service for each fiscal year a teacher or an employee is a Member of the Retirement System and required contributions were made (Act 91, Section 27) plus purchased service, if any (Act 91, Sections 21 and 22).

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- e. Compensation: The gross cash compensation, excluding bonuses and overtime, upon which contributions by a Member to the Fund are based (Act 91, Section 2).
- f. Average Compensation: The average of the 36 highest months of compensation that the participant has received for Creditable Service (Act 91, Section 2).
- g. Average Non-occupational Disability Compensation: The average of the 60 highest months of compensation that the participant has received. (Act 91, Sections 29 and 31).
- h. Average Occupational Disability Compensation: The average of the 60 highest months of compensation that the participant has received. If less than 60 months of creditable service, the average of the monthly compensation that the participant has received. (Act 91, Section 29).
- i. Fees or Contributions: The amount deducted from the compensation of a Member or directly paid to the System (Act 91, Section 2).
- j. Accumulated Fees or Contributions: The sum of all amounts deducted from the compensation of a Member or directly paid to the System without interest (Act 91, Section 2).

5. Retirement Benefits

a. Retirement because of age

Eligibility: Age 60 with 10 years of Creditable Service (Act 91, Section 28).

Benefit: Members who retire because of age shall be entitled to a lifetime monthly income equal to 1.8% of Average Compensation multiplied by years of Creditable Service (Act 91, Section 40). In no event will the benefit determined be less than the Minimum Benefit.

Additional Contributions required: None.

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b. Retirement because of age and years of service

Eligibility: Age 47 with 25 years of Creditable Service (Act 91, Section 40).

Benefit: Members who retire because of age and years of service shall be entitled to a lifetime monthly income based on age and years of Creditable Service as shown below (Act 91, Section 40). In no event will the benefit determined below be less than the Minimum Benefit.

Attained Age	Years of Creditable Service	Lifetime Monthly Income
55	30	75% of Average Compensation
50	30	75% of Average Compensation
Under 50	30	65% of Average Compensation
50	25 but less than 30	1.8% of Average Compensation multiplied by years of Creditable Service
47 but less than 50	25 but less than 30	95% of 1.8% of Average Compensation multiplied by years of Creditable Service

Additional Contributions required: If a member retires at age 55 or older with at least 30 years of Creditable Service, no additional contributions are required. Members who have not attained age 55 and 30 years of Creditable Service at retirement must contribute to the Fund 9% of the Average Compensation on a monthly basis for a minimum period of 5 years after retiring because of age and years of service (Act 91, Section 40). Current administrative practice requires contributions until attainment of both age 55 and the date when 30 years of Creditable Service would have been completed if employment had continued.

6. Termination Benefits

a. Lump Sum Withdrawal

Eligibility: A Member is eligible upon termination of service.

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Benefit: The benefit equals a refund of Accumulated Fees, plus interest accumulated at 2.0% per annum for a period no longer than 6 months following separation of service (Act 91, Section 19).

b. Deferred Retirement

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

Benefit: The benefit, commencing at age 60, is equal to 1.8% of Average Compensation multiplied by years of Creditable Service at date of termination (Act 91, Section 40). In no event will the benefit determined be less than the Minimum Benefit.

7. Death Benefits

a. Pre-retirement Death Benefit

Eligibility: Any current non-retired member is eligible.

Benefit: The benefit is as follows:

- (i) While in active service, the benefit equals a refund of Accumulated Fees, plus interest accumulated at 2.0% per annum until the date of death; plus an amount equal to one year of Compensation in effect at the time of death (Act 91, Section 34).
- (ii) While not in active service, the benefit equals a refund of Accumulated Fees, plus interest accumulated at 2.0% per annum up to separation of service (Act 91, Sections 2 and 33).

b. Post-retirement Death Benefit

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

Benefit: The benefit is as follows:

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- (i) For those married at the time of death, the lifetime annual income to a widow or widower is equal to 50% of the Retirement Benefit at time of death, payable for life (Act 91, Section 35).
- (ii) For those with children at the time of death, the total lifetime annual income to all children is equal to 50% of the Retirement Benefit at time of death. The benefit is payable while the children are under age 6 or are currently enrolled in a regular public or private school or college program until the age of 22, and it is payable for life while they are disabled (Act 91, Section 35).
- (iii) The benefit, when there is no relation as stated above, is equal to the remaining balance of Accumulated Fees with interest (interest is determined as of the date of retirement if retired directly from active service or as of separation of service otherwise) 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. The General Fund pays the difference, up to \$500, between (1) the Accumulated Fees with interest less the lifetime annual income paid and (2) \$1,000. The System pays for the rest. (Act 91, Section 35 and Act 272)

8. Disability Benefits

a. Non-occupational Disability

Eligibility: All members are eligible for Non-occupational Disability upon 5 years of Creditable Service and the occurrence of disability (Act 91, Section 31).

Benefit: 1.8% of Average Non-occupational Disability Compensation multiplied by years of Creditable Service (Act 91, Section 29). In no event will the benefit determined be less than the Minimum Benefit.

b. Occupational Disability

Eligibility: All members disabled while in the course and as a consequence of their work. (Act 91, Section 31).

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Benefit: 1.8% of Average Occupational Disability Compensation multiplied by years of Creditable Service (Act 91, Section 29). In no event will the benefit determined be less than the Minimum Benefit.

9. Minimum Benefits

- a. Past Ad hoc Increases: The legislature, from time to time, increases pensions for certain retirees as described in Act 124 approved on June 8, 1973 and Act 47 approved on June 1, 1984. The benefits are paid 50% by the General Fund and 50% by the System.
- b. Current Minimum Benefit: 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 General Fund will pay for the \$100 per month increase in the minimum benefit (Act 91, Section 25 and Act 38 of 2007, Section 3).

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 62 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 38). 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 will receive an increase of up to 3% without exceeding the limit of \$1,250 per month (Act 38). All COLAs are paid by the General Fund (various Acts).

11. Medical Insurance Plan Contribution: A payment of up to \$100 per month to the eligible medical insurance plan selected by the retiree, disabled member, or beneficiary. The amount is prorated if there are multiple beneficiaries. This benefit is paid by the General Fund (Act 483).

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12. Special “Bonus” Benefits:

- a. Christmas Bonus: An annual bonus of \$600 for each retiree and disabled member paid in December. The System pays \$150 per retiree and disabled member and the balance is paid by the General Fund (Act 144).
- b. Summer Bonus: 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 38 in 2001).
- c. 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 (Act 162).

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.b.

14. Contributions

Member Contributions: Contributions by Members are 9% of Compensation (Act 91, Section 16). Before January 27, 2000, member contributions were 7% of Compensation.

Employer Contributions: Contributions by the Commonwealth of Puerto Rico and private school employers, as applicable, are 8.5% of Compensation (Act 91, Section 47).

15. Service Purchase: Active members with eligible service from prior employment may elect to purchase service in PRTRS. The cost of the purchase is calculated by applying the PRTRS statutory member and employer 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 2% per year until the time of service purchase. If the service purchase is a time purchase and not an intergovernmental

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service transfer, the amount due to employer contributions is accumulated at 2% per year until the time of service purchase. Any amount not covered by asset transfers from the member's prior pension fund is payable by the member (Act 91, Sections 20, 21, 22, and 23).

16. Changes in Plan Provisions since Prior Valuation

This valuation reflects the adoption of Act 272 on September 14, 2004, Act 144 on November 22, 2005, and Act 38 on April 24, 2007.

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SECTION IX – SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JUNE 30, 2007

Interest: 8.00% per annum, net of investment expenses, for GASB 25 and 27.
4.00% per annum for GASB 45.

Compensation Increases: Compensation increases vary by years of creditable service as shown below. The rates below include the assumption for general wage inflation of 3.5%.

Years of Creditable Service	Annual Rate
0-5	5.70%
6	5.50
7	5.30
8	5.10
9	4.90
10	4.80
11	4.70
12	4.60
13	4.50
14	4.30
15	4.20
16	4.10
17-19	4.00
20	3.90
21	3.80
22	3.75
23	3.70
24-27	3.65
28	3.60
29 & Over	3.50

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Termination: Withdrawal rates vary by gender and years of creditable service. The withdrawal rates are shown below.

Years of Creditable Service	Male	Female
0	12.00%	15.00%
1	9.00	8.00
2	6.00	5.00
3	3.00	3.00
4	3.00	2.75
5	2.50	2.50
6	2.50	2.25
7	2.00	2.00
8	1.50	1.50
9	1.00	0.50
10+	0.10	0.05

Retirement: Rates of retirement vary by age and years of creditable service. The rates shown below apply when an active member is eligible for retirement (e.g. age 47 with at least 25 years of creditable service or age 60 with at least 10 years of creditable service).

Age	Less than 30 years of Creditable Service	30 or more years of Creditable Service
47-49	0.5%	20.0
50-54	2.0	25.0
55-59	5.0	30.0
60-61	10.0	25.0
62-64	12.0	25.0
65-79	15.0	25.0
80	100.0	100.0

Current terminated vested members were assumed to retire (i) at age 55, or attained age if later, if the member had at least 30 years of service or (ii) at age 60, or attained age if later, otherwise.

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Service Purchases: Members over age 50 who are not eligible for retirement are assumed to elect to purchase enough service to retire immediately at the rates shown in the table below.

Age	Annual Rate
50-54	0.5%
55-59	1.0
60-64	2.0
65-79	8.0

Disability: Unisex rates which vary by age and years of creditable service are assumed. Illustrative rates are shown below.

Age	Less than 5 years of Creditable Service	5 or more years of Creditable Service
25	0.008%	0.013%
30	0.008	0.013
35	0.008	0.013
40	0.009	0.014
45	0.020	0.031
50	0.068	0.105
55	0.133	0.204
60 & Over	0.000	0.000

Members who become disabled after at least 30 years of service are assumed to receive the retirement for age and years of service benefit instead of the disability benefit.

Pre-retirement Mortality: RP-2000 Employee Mortality Rates for males and females, projected on a generational basis using Scale AA.

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Post-retirement Healthy Mortality: Rates which vary by gender are assumed for healthy retirees and beneficiaries. The rates are projected on a generational basis starting in 2005 using Scale AA. Illustrative rates are shown below.

Age	Males	Females
50	0.23%	0.19%
55	0.40	0.31
60	0.71	0.56
65	1.10	0.81
70	1.69	1.17
75	2.94	1.93
80	5.20	3.36
85	9.16	5.77
90	15.61	9.90
95	23.04	15.86
100	30.16	23.55

Post-retirement Disabled Mortality: Rates which vary by gender are assumed for disabled retirees. Illustrative rates are shown below.

Age	Males	Females
40	1.74%	0.77%
45	1.74	0.77
50	2.23	1.19
55	2.73	1.70
60	3.23	2.24
65	3.86	2.88
70	4.81	3.87
75	6.31	5.37
80	8.41	7.43
85	10.89	10.30
90	14.10	14.39
95	20.57	19.99
100	26.50	24.40

Marriage: 65% of current active and terminated members are assumed to be married at retirement with males 3 years older than females.

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Form of Payment: Future retired members are assumed to receive a joint and 50% survivor annuity if married and a modified cash refund (approximated by a single life annuity with 3 years certain) if not married.

Spousal information was not provided for current retired and disabled members. A 65% marriage assumption was applied to all current retirees and disabled members retroactively to the date of retirement or disability. The spouse's date of birth was imputed based on an assumed age difference of 3 years with males older than females. A 3-year certain period, retroactive to date of retirement or disability, is applied to approximate the cost of a modified cash refund for retirees without a surviving spouse.

No future dependent children were assumed to become beneficiaries.

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

Medical Insurance Plan Contribution: 85% of future and current retirees and disableds and 10% of future and current beneficiaries were assumed to receive a monthly medical insurance continuation benefit of \$100 per month.

Future COLA Adjustments: Where results are indicated to include future COLAs, an annual compound COLA of 0.99% per year is assumed to be granted in the future to retired and disabled members to approximate the expected triennial 3% increases.

Administrative Expenses: Average of past two year's expense is added to the normal cost. For 2007, this amount is \$22,764,000.

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

The entry age for active members was assumed to be the age as of June 30, 2007 less the provided years of creditable service.

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

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

The portion of the annual benefit payable to current beneficiaries attributable to past COLA adjustments was assumed to be 5% (and thus paid by the General Fund of the Commonwealth of Puerto Rico instead of the System).

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

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

Changes in actuarial assumptions since the prior valuation: Demographic assumptions used in this valuation were developed by analyzing the cumulative experience between census data files as of June 30, 2004 and June 30, 2007 provided by the System.

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SECTION X – SUMMARY OF ACTUARIAL METHODS AS OF JUNE 30, 2007

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 entry age normal method. Under this method, a projected benefit is determined at each active participant's assumed retirement age assuming future compensation increases. The plan's normal cost is the sum of each active participant's annual cost for the current year of service determined such that, if it were calculated as a level percentage of his compensation each year, it would accumulate at the valuation interest rate over his total prior and future years of service to his assumed retirement date into an amount sufficient to fund his projected benefit. The plan's accrued liability is the sum of (a) the accumulation of each active participant's normal costs attributable to all prior years of service plus (b) the present value of each inactive participant's future benefits.

For the medical insurance plan contribution and the special bonus benefits administered by PRTRS and paid by the General Fund of the Commonwealth of Puerto Rico, the actuarial cost method is also the entry age normal method but the normal cost is determined as a level dollar amount instead of a level percentage of compensation. Under this variation, the normal cost is the sum of each active participant's annual cost for the current year of service determined such that, if it were calculated as a level amount each year, it would accumulate at the valuation interest rate over his total prior and future years of service to his assumed retirement date into an amount sufficient to fund his projected benefit.

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SECTION X – SUMMARY OF ACTUARIAL METHODS AS OF JUNE 30, 2007

Asset Valuation Method

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

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