
Government of Guam Retirement Fund

Actuarial Valuation as of September 30, 2014 - REVISED

Prepared by:

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January 21, 2016



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**Government of Guam Retirement Fund –
Actuarial Valuation as of September 30, 2014**

As part of our engagement with the Board of Trustees, we performed an actuarial valuation of the Government of Guam Retirement Fund as of September 30, 2014. The purpose of this valuation is to determine the required contribution under the provisions of GCA Section 8137 and to provide the Fund with financial disclosures under GASB Statements 67 and 68.

In preparing this report, I relied, without audit, on information (some oral and some in writing) supplied by the Fund's staff. This information includes, but is not limited to, financial information, member census data, and plan provisions. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete the results may be different and the calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the Fund have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the Plan and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the Fund.

This valuation report is only an estimate of the Fund's financial condition as of a single date. It can neither predict the Fund's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of Fund benefits, only the timing of Fund contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Fund's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. The Board of Trustees has the final decision regarding the appropriateness of the assumptions and actuarial cost methods.

Actuarial computations presented in this report are for the purposes of determining the recommended funding amounts for the Fund and for assisting the Fund and employer in fulfilling their financial accounting requirements under GASB Statements 67 and 68. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in this report have been made on a basis consistent with our understanding of the Fund's funding requirements and goals, and of GASB Statements 67 and 68. Determinations for other purposes may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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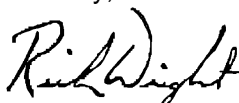
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The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,



Richard A. Wright, FSA, MAAA
Consulting Actuary

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SECTION I. VALUATION SUMMARY

INTRODUCTION

Milliman, Inc. has been retained by the Government of Guam Retirement Fund to provide an actuarial valuation of the retirement fund. In our valuation we:

- Summarize the membership data.
- Calculate the actuarial accrued liability and normal cost.
- Determine the contribution requirements.
- Provide financial information required by GASB No. 67 and 58.
- Project the fund balance and security ratio forward 40 years.

The results contained in this report represent our best estimates. However, it is likely that actual experience will vary from these estimates. To the extent that actual experience differs from the anticipated experience, actual plan costs will vary as well.

HIGHLIGHTS

- The required contribution under GCA Section 8137 is **28.16%** of payroll. Of this amount, 22.42% is for the unfunded actuarial accrued liability of the defined benefit (DB) plan, 1.94% is for the normal cost of the DB plan, and 3.80% is for contributions and expenses for the defined contribution (DC) plan.

The primary reasons for the decrease in the contribution rate are the recognition of 1/3rd of the investment gains from the 2011-12, 2012-13, and 2013-14 fiscal years and a larger than expected increase in total payroll (which reduces the percentage of payroll needed to amortize the unfunded actuarial accrued liability). These decreases were partially offset by other factors, primarily larger than expected increases in individual salaries which increased the value of projected benefits for active employees.

Contribution rate from 9/30/13 actuarial valuation	29.85%
2011-12 investment gain (final 1/3 rd recognition) *	(0.79%)
2012-13 investment gain (second 1/3 rd recognition) *	(0.53%)
2013-14 investment gain (first 1/3 rd recognition) *	(0.25%)
Total payroll increase of 9.7% (vs. assumption of a 3.0% increase)	(0.75%)
Other factors, including demographic changes	<u>0.63%</u>
Contribution rate in 9/30/14 actuarial valuation	28.16%

* Investment returns that differ from the actuarial assumption of 7% are recognized over a 3 year period.

- Public Law 28-150 provided that the current employer contribution rate will increase over a 5-year period until it reaches the actuarial contribution rate. The employer contribution rate for the 2014-15 fiscal year is 29.85%.
- The defined benefit payroll for the 2013-14 fiscal year was \$169.9 million compared with \$164.3 million for the 2012-13 fiscal year. The total defined benefit and defined contribution payroll for the 2013-14 fiscal year, was \$504.9 million compared with \$460.3 million for the 2012-13 fiscal year, an increase of 9.7%. The long term assumption is a 3.0% annual growth in total

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SECTION I. VALUATION SUMMARY

payroll. If total payroll had increased by 3.0%, the required contribution rate would have been 28.91%. Because the 2013-14 total payroll includes some retroactive salary increases, we have estimated that total payroll for the 2014-15 fiscal year will be \$504.3 million, which is assumed to grow 3.0% per year thereafter.

- Based on the audited financial statements, we calculated an investment return on the total market value of assets of 10.0% for the fiscal year ending September 30, 2014. The average annual return on the market value of assets for the last 5 fiscal years has been 10.4%. The investment return on the actuarial value of assets, which recognizes investment gains and losses over a 3 year period, was 14.5%.
- The unfunded actuarial accrued liability decreased from \$1.442 billion as of September 30, 2013, to \$1.369 billion as of September 30, 2014. The primary cause for the decrease was the return on the actuarial value of assets of 14.5%. The payment required to amortize the unfunded actuarial accrued liability under GCA Section 8137 has decreased from \$114.2 million to \$113.1 million. The payment as a percentage of payroll has decreased from 24.09% to 22.42%, due to a higher than expected investment return and increase in total payroll.
- No changes have been made to the actuarial assumptions. These continue to be based upon the actuarial experience study for the period from October 1, 2007, to September 30, 2011.

SECTION I. VALUATION SUMMARY

RESULTS OF VALUATION

	9/30/2014		9/30/2013	
Participant Counts				
Active				
– Non-Uniformed (DB)		2,420		2,572
– Uniformed (DB)		<u>272</u>		<u>306</u>
– Total (DB)		2,692		2,878
Retired (DB)		<u>7,226</u>		<u>7,196</u>
Total Actives and Retirees (DB)		9,918		10,074
Inactive and Terminated Members assumed to withdraw contributions (DB)		4,776		5,232
Inactive and Terminated Members <u>not</u> assumed to withdraw contributions (DB)		165		162
Active Participants (DC)		8,181		7,885
		(\$millions)		(\$millions)
Actual Payroll for Prior Fiscal Year				
Defined benefit (DB) payroll		\$169.9		\$164.3
Total payroll (DB and DC)		504.9		460.3
Expected Payroll for Next Fiscal Year				
Defined benefit (DB) payroll		\$154.7		\$152.4
Total payroll (DB and DC)		504.3		474.2
Financial Status				
Actuarial accrued liability		\$2,931.7		\$2,855.4
Actuarial value of assets		<u>1,562.5</u>		<u>1,413.0</u>
Unfunded actuarial accrued liability (UAAL)		\$1,369.2		\$1,442.3
Security ratio		53.30%		49.49%
		% of DB Payroll		% of DB Payroll
Normal Cost				
Total normal cost	\$ 24.5*	15.86%	\$ 24.3*	15.92%
Estimated employee contributions	<u>(14.7)</u>	<u>(9.54%)</u>	<u>(14.6)</u>	<u>(9.55%)</u>
Government normal cost	\$ 9.8	6.32%	\$ 9.7	6.37%
		% of Total Payroll		% of Total Payroll
Required Contribution per GCA §8137				
Unfunded actuarial accrued liability cost	\$ 113.1	22.42%	\$ 114.2	24.09%
Government DB normal cost	9.8	1.94%	9.7	2.05%
Expected government DC contributions	<u>19.1*</u>	<u>3.80%</u>	<u>17.6*</u>	<u>3.71%</u>
Total DB and DC contribution	\$ 142.0	28.16%	\$ 141.5	29.85%
Yield on Market Value of Assets		10.0%		14.1%

* Includes budgeted administrative expenses.

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SECTION I. VALUATION SUMMARY

5-YEAR HISTORICAL SUMMARY

The following table summarizes the principal valuation results over the last 5 years.

	9/30/2014	9/30/2013	9/30/2012	9/30/2011	9/30/2010
Participant Counts					
Active (DB)	2,692	2,878	3,090	3,361	3,594
Retired (DB)	7,226	7,196	7,155	7,117	7,082
Inactives (DB)	<u>4,941</u>	<u>5,394</u>	<u>5,507</u>	<u>5,833</u>	<u>6,466</u>
Total (DB)	14,859	15,468	15,752	16,311	17,142
Active (DC)	8,181	7,885	7,766	7,690	7,471
Actual Payroll					
DB payroll	\$169.9	\$164.3	\$169.9	\$179.0	\$175.8
DC payroll	<u>335.0</u>	<u>296.0</u>	<u>287.1</u>	<u>282.2</u>	<u>253.3</u>
Total payroll	\$504.9	\$460.3	\$457.0	\$461.2	\$429.0
Financial Status					
Accrued liability	\$2,931.7	\$2,855.4	\$2,811.4	\$2,906.9	\$2,790.5
Actuarial assets	<u>1,562.5</u>	<u>1,413.0</u>	<u>1,328.8</u>	<u>1,264.1</u>	<u>1,245.9</u>
UAAL	\$1,369.2	\$1,442.3	\$1,482.6	\$1,642.8	\$1,544.7
Security ratio	53.30%	49.49%	47.26%	43.49%	44.65%
Contribution Rate					
DB Normal Cost (as % of DB payroll)	6.32%	6.37%	7.11%	8.02%	7.57%
% of Total Payroll					
UAAL Rate	22.42%	24.09%	24.01%	24.33%	23.75%
DB Normal Cost	1.94%	2.05%	2.39%	3.00%	3.03%
DC Contribution	<u>3.80%</u>	<u>3.71%</u>	<u>3.62%</u>	<u>3.43%</u>	<u>3.31%</u>
Actuarial Rate *	28.16%	29.85%	30.03%	30.76%	30.09%
Budget Rate	**	29.85%	30.03%	30.09%	28.30%
Investment Yield (Market Value)	10.0%	14.1%	18.1%	(1.1%)	11.7%

* "Actuarial Rate" is the contribution rate determined in the actuarial valuation. "Budget Rate" is the contribution rate set by the legislature. Contribution rates apply to the fiscal year beginning one year after the valuation date.

** The budget rate for 2015-16 has not yet been determined.

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SECTION I. VALUATION SUMMARY

ACTUARIAL ASSUMPTIONS

The following are the major assumptions used in the actuarial valuation. The assumptions are the same as those used for the prior valuation, based upon recommendations from the actuarial experience study for the period October 1, 2007, through September 30, 2011. To the extent that actual experience differs from the assumptions below, future pension costs will differ.

Interest Rate: The interest rate used to discount future benefit payments to the present was 7.0% as of September 30, 2014. This assumption is unchanged from the prior valuation. Milliman's expected long-term returns on various asset classes is shown below. The target asset allocation is the expected long-term asset allocation and is based on the Fund's investment policy.

Asset Class	(a) Target Asset Allocation	x	(b) Expected Nominal Return ¹	=	(c) Component Return
U.S. Equities (large cap)	30.00%		8.12%		2.44%
U.S. Equities (small cap)	10.00%		9.32%		0.93%
Non-U.S. Equities	14.25%		8.76%		1.25%
Non-U.S. Equities (emerging markets)	5.75%		11.03%		0.64%
U.S. Fixed Income (aggregate)	30.00%		4.97%		1.49%
Real Estate (REITs)	10.00%		8.14%		<u>0.81%</u>
Expected average return for one year					7.56%
Expected geometric mean (40 years)					6.90%
25 th to 75 th Percentile Return					5.60% - 8.17%

¹ Assumes annual inflation of 2.75%.

The current assumption of 7.0% is slightly higher than the expected geometric average return over the next 40 years, and is close to the midpoint of the 25th to 75th percentile of expected results. Note that if investments fail to achieve the assumed interest rate, future pension costs will increase.

Mortality. The mortality table used as of September 30, 2014, was the RP-2000 combined mortality table, set forward by 4 years for males and 1 year for females. The mortality table used for disabled lives was the RP-2000 disability mortality table for males and females. These mortality assumptions are unchanged from the prior valuation.

Salary Increases. Salaries were assumed to increase 7.5% per year for employees in their first 5 years of service, 6.0% for service between 6 and 10 years, 5.0% for service between 11 and 15 years, and 4.5% for service after 15 years. This assumption is unchanged from the prior valuation.

Total Payroll Growth. Total payroll for defined benefit and defined contribution members is assumed to increase 3.0% per year. This assumption is unchanged from the prior valuation.

Retirement Age. We have assumed 40% of employees will retire when first eligible for unreduced retirement. Thereafter, 15% of employees will retire at each year until age 65, and 20% of employees will retire from age 65 until age 70, at which time all remaining employees are assumed to retire. This assumption is unchanged from the prior valuation.

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SECTION I. VALUATION SUMMARY

Return of Contributions. We have assumed that any current employees who terminate employment prior to retirement and who have less than 20 years of service will elect a return of contributions in lieu of a deferred benefit. Employees with at least 20 years of service who terminate employment are assumed to retire upon eligibility for unreduced benefits. Employees with between 20 and 24 years of service who terminate employment and are ineligible for the service retirement benefit are assumed to retire at age 60 with an unreduced benefit with no survivor benefits.

Current terminated or inactive members with at least 5 years of service and a contributions balance that exceeds \$10,000 who have not withdrawn their contributions and for whom sufficient earnings data are available to value their retirement benefits are assumed to retire upon eligibility for unreduced benefits. All other terminated and inactive members are assumed to elect to withdraw their contributions.

Administrative Expenses. Total administrative expenses are assumed to be \$5,806,000, which is the amount budgeted for the year ending September 30, 2015. Of this amount, \$4,146,000 is allocated to the defined benefit plan and \$1,660,000 to the defined contribution plan.

Rates of Withdrawal and Disability. The assumed rates of withdrawal and disability are shown in Appendix B, and are unchanged from the prior valuation.

Probability of Marriage. We have assumed that 75% of retirees will be married at retirement. This assumption is unchanged from the prior valuation.

Asset Valuation Method. Investment gains/losses relative to the assumed investment return are phased in over a period of 3 years. Certain receivables and liabilities whose payments are deducted from employer contributions to the Fund are excluded from the actuarial value of assets. This valuation method is unchanged from the prior valuation.

A complete summary of actuarial assumptions is in Appendix B.

FUNDING METHOD

GCA Section 8137 requires a contribution sufficient to fully fund the unfunded actuarial accrued liability by 2031 (within 80 years from May 1, 1951). The required contribution shown in this report includes a payment for the normal cost of active members of the Fund, and amortizes the unfunded actuarial accrued liability over the remaining 16.58 years as a level percentage of total payroll (including both defined benefit and defined contribution members).

Exhibits 17 and 18 project the employer and employee contributions, fund balance, actuarial accrued liability and security ratio forward 40 years based upon the current funding method.

SECTION II. FUND ASSETS

EXHIBIT 1. SUMMARY OF DB PLAN ASSETS

Listed below are the assets reported for the defined benefit (DB) pension plan in the Fund's financial statements, excluding certain receivables and liabilities whose payments are deducted from employer contributions to the Fund.

	9/30/2014	9/30/2013
Investments		
Common stocks	\$ 1,061,632,545	\$ 969,334,249
Mutual funds	155,708,951	156,848,845
U.S. government securities	216,830,055	189,991,596
Corporate bonds and notes	144,343,162	166,735,779
Money market funds	<u>30,336,838</u>	<u>49,016,947</u>
Total investments	1,608,851,551	1,531,927,416
Receivables		
Employer contributions, net	1,059,857	2,089,394
Employer contributions, unfunded liability	2,014,898	3,616,088
Member contributions	353,239	678,724
Accrued investment income	3,966,005	4,075,645
Due from brokers for unsettled trades	4,820,165	7,627,324
Notes receivable for service credits	756,356	798,635
Notes receivable ERIP	354,600	993,746
Interest and penalties	366,905	274,402
Supplemental/insurance benefits advanced	3,511,711	3,511,711
Other receivables	519,790	658,183
Due from DC plan	<u>359,668</u>	<u>184,894</u>
Total receivables	18,083,194	24,508,746
Cash and cash equivalents	7,254,534	4,296,618
Property and equipment	<u>1,000,103</u>	<u>802,844</u>
Total assets	\$ 1,635,189,382	\$ 1,561,535,624
Liabilities		
Accounts payable and accrued expenses	\$ 2,832,410	\$ 2,173,721
Due to brokers for unsettled trades	<u>7,101,618</u>	<u>33,226,876</u>
Total liabilities	\$ 9,934,028	\$ 35,400,597
Valuation Assets	<u>\$ 1,625,255,354</u>	<u>\$ 1,526,135,027</u>
Excluded Assets ¹		
Receivable – ERIP employer share	\$ 0	\$ 0
Supplemental/COLA benefits receivable	44,785,528	50,818,265
Deferred revenue for service credits	<u>(1,400,075)</u>	<u>(2,597,509)</u>
Total excluded assets	\$ 43,385,453	\$ 48,220,756

¹ Excluded because payments towards these receivables are deducted from employer contributions.

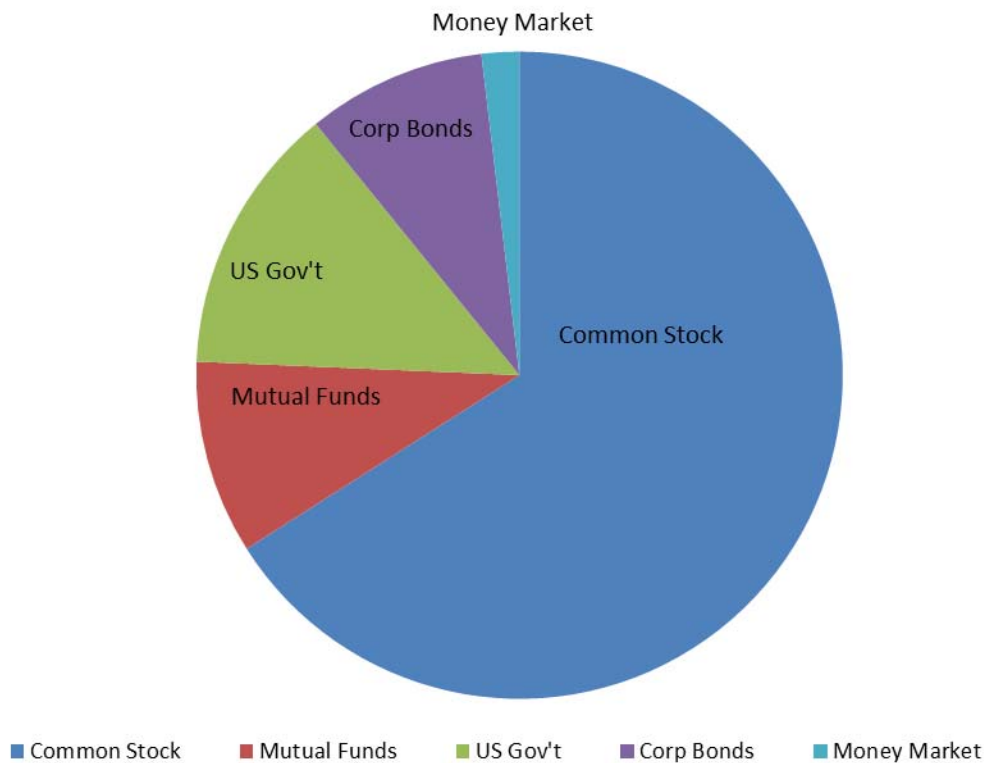
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SECTION II. FUND ASSETS

EXHIBIT 2. DB PLAN ASSET ALLOCATION

The allocation of assets among various investment classes is an important determinant of expected future investment returns.

	DB ASSET ALLOCATION	
	9/30/2014	9/30/2013
Common stocks	66.0%	63.3%
Mutual funds	9.7%	10.2%
U.S. government securities	13.4%	12.4%
Corporate bonds and notes	9.0%	10.9%
Money market funds	<u>1.9%</u>	<u>3.2%</u>
Total	100.0%	100.0%



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SECTION II. FUND ASSETS

EXHIBIT 3. CHANGES IN DB PLAN ASSETS

Assets increase or decrease each year due to employer contributions, investment income, benefit payments to retiring participants, plan expenses paid by the trust fund, and any realized and unrealized gains and losses from investments.

	FISCAL YEAR ENDING	
	9/30/2014	9/30/2013
Beginning Balance	\$ 1,526,135,027	\$ 1,391,421,887
Contributions		
Employer contributions	129,271,564	117,909,509
Member contributions	16,626,009	16,290,014
Decrease/(increase) in excluded assets	<u>4,835,303</u>	<u>4,031,421</u>
Total contributions	150,732,876	138,230,944
Investment Income		
Net appreciation in fair value	121,293,316	162,486,174
Interest	18,663,467	17,175,304
Dividends	15,704,974	17,019,088
Other investment income	540,907	1,412,466
Investment expenses	<u>(5,647,797)</u>	<u>(5,316,971)</u>
Total investment income	150,554,867	192,776,061
Benefit Payments		
Age and service annuities	162,794,390	158,484,501
Disability annuities	6,628,195	6,798,408
Survivor annuities	25,706,384	24,997,522
Refunds to separated employees	2,961,749	2,413,061
Interest on refunded contributions	1,442,661	914,543
Balances transferred to DC plan	<u>0</u>	<u>0</u>
Total benefit payments	199,533,379	193,608,035
Administrative Expenses	2,634,037	2,685,830
Ending Balance	\$ 1,625,255,354	\$ 1,526,135,027

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SECTION II. FUND ASSETS

EXHIBIT 4. ACTUARIAL VALUE OF ASSETS

The actuarial value of assets as of September 30, 2014, is equal to the market value of DB plan assets adjusted to phase in gains and losses relative to the assumed rate of return over a 3-year period, and to exclude certain receivables and liabilities whose payments are deducted from employer contributions to the Fund.

	9/30/2014	9/30/2013
Valuation assets at market value	\$ 1,625,255,354	\$ 1,526,135,027
(Gains)/Losses excluded from actuarial value (see below)	<u>(62,788,238)</u>	<u>(113,110,062)</u>
Actuarial value of assets	\$ 1,562,467,116	\$ 1,413,024,965
Actuarial value as % of market value	96.1%	92.6%

3-Year Phase-in of Gains and (Losses)

Year	Expected Return ¹	Actual Return	Gain/(Loss)	Percent Excluded	Excluded From Market Value
2013/2014	\$105,059,690	\$150,554,867	\$ 45,495,177	66.67%	\$ 30,330,118
2012/2013	95,401,701	192,776,061	97,374,360	33.33%	32,458,120
2011/2012	91,267,121	235,848,587	144,581,466	0.00%	<u>0</u>
Total					\$ 62,788,238

¹ Expected return is based on the assumed investment return, which is 7.0%.

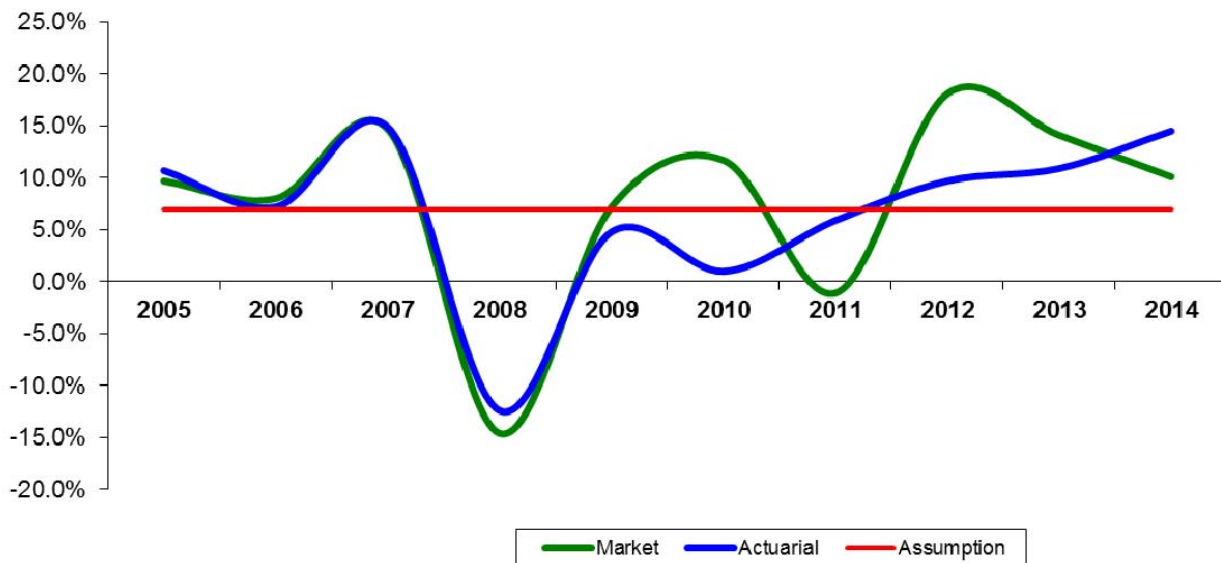
SECTION II. FUND ASSETS

EXHIBIT 5. HISTORICAL RETURNS ON DB PLAN ASSETS

The following table shows the historical return on DB plan assets over the last 13 years. The assumed actuarial valuation rate is 7.0%.

Fiscal Year Ending 9/30	Return on Market Value	Return on Actuarial Value
2014	10.0%	14.5%
2013	14.1%	10.9%
2012	18.1%	9.7%
2011	(1.1)%	5.9%
2010	11.7%	1.0%
2009	7.2%	4.8%*
2008	(14.6%)	(12.4%)
2007	14.7%	14.9%
2006	8.0%	7.2%
2005	9.7%	10.7%
2004	9.3%	10.4%
2003	9.9%	13.0%
2002	(0.5%)	(2.7%)
Average of last 5 years	10.4%	8.3%
Average of last 10 years	7.4%	6.4%

* Based on the asset valuation method as of September 30, 2008 (i.e., fixed income investments are valued at amortized cost).



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SECTION III. MEMBERSHIP DATA

EXHIBIT 6. ACTIVE EMPLOYEES (DB)

	9/30/2014	9/30/2013
Reconciliation of Census		
Members reported in raw data	7,688	8,319
Number excluded due to:		
Reported as inactive	4,683	5,147
Reported as terminated	230	231
Zero earnings	23	15
Refund of contributions	5	1
Duplicate inactive records	20	43
Included as retirees or deceased	<u>35</u>	<u>4</u>
Total exclusions	4,996	5,441
Active employees in valuation	2,692	2,878
Active Employees – Non-Uniformed		
Number vested	2,397	2,548
Number not vested	<u>23</u>	<u>24</u>
Total	2,420	2,572
Average age	52.9	52.2
Average service	24.4	23.5
Average earnings	\$ 56,684	\$ 52,388
Average accumulated contributions	\$ 140,043	\$ 130,489
Active Employees – Uniformed		
Number vested	271	305
Number not vested	<u>1</u>	<u>1</u>
Total	272	306
Average age	49.4	49.0
Average service	25.7	24.9
Average earnings	\$ 85,504	\$ 72,552
Average accumulated contributions	\$ 188,364	\$ 171,297
Active Employees – Total		
Number vested	2,668	2,853
Number not vested	<u>24</u>	<u>25</u>
Total	2,692	2,878
Average age	52.5	51.8
Average service	24.5	23.7
Average earnings	\$ 59,596	\$ 54,532
Average accumulated contributions	\$ 144,926	\$ 134,828

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SECTION III. MEMBERSHIP DATA

EXHIBIT 7. ACTIVE EMPLOYEES BY AGENCY

	9/30/2014 (DC)	9/30/2014 (DB)	9/30/2013 (DC)	9/30/2013 (DB)
Agency For Human Resources Development	31	11	26	12
Bureau of Budget & Management Research	12	7	9	8
Bureau of Statistics and Plans	17	15	12	19
Chamorro Land Trust	5	2	4	2
Chief Medical Examiner	3	0	3	0
Customs & Quarantine	107	40	111	43
Dept of Administration	97	50	85	50
Dept of Agriculture	36	29	35	31
Dept of Corrections	168	35	133	43
Dept of Labor	34	12	32	12
Dept of Land Management	23	26	27	24
Dept of Law	145	36	134	38
Dept of Mental Health & Substance Abuse	159	35	161	34
Dept of Military Affairs	30	9	29	9
Dept of Parks and Recreation	30	18	32	20
Dept of Public Health & Social Services	285	101	288	107
Dept of Public Works	194	121	186	126
Dept of Revenue and Taxation	129	51	113	54
Dept of Youth Affairs	56	22	55	26
D.I.S.I.D.	14	7	16	10
Governor's Office	83	8	85	8
Guam CAHA*	0	0	0	0
Guam Energy Office	6	3	6	3
Guam Environmental Protection Agency	42	9	44	9
Guam Fire Dept	168	121	162	131
Guam Legislature	43	8	44	9
Guam Police Dept	252	108	237	114
Guam Public Library*	0	0	0	0
Judiciary Of Guam	290	94	259	96
KGTF	3	5	3	6
Lt. Governor's Office	17	0	16	0
Mayor's Council	205	16	207	18
Public Auditors	11	1	13	1
Public Defender	39	1	37	19
General Fund Total	2,734	1,001	2,604	1,082
Dept of Chamorro Affairs*	26	12	26	12
Dept of Education	2,806	873	2,782	935
Government of Guam Retirement Fund	25	11	22	13
Guam Airport Authority	161	73	132	78
Guam Community College	217	63	206	70
Guam Economic Development Agency	29	6	28	7
Guam Housing & Urban Renewal Agency	71	38	70	22
Guam Housing Corporation	20	6	18	6
Guam Memorial Hospital Authority	824	157	794	163
Guam Power Authority	358	155	358	173
Guam Visitors Bureau	28	6	25	6
Guam Waterworks Authority	229	60	236	67
Port Authority Of Guam	255	84	231	92
University Of Guam	398	147	353	152
Others Total	5,447	1,691	5,281	1,796
GRAND TOTAL	8,181	2,692	7,885	2,878

* The Dept. of Chamorro Affairs' member count includes Guam CAHA and Guam Public Library.

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SECTION III. MEMBERSHIP DATA

EXHIBIT 8. RETIRED EMPLOYEES (DB)

	9/30/2014	9/30/2013
Service Retirees		
Count	5,076	5,054
Average age	68.6	68.1
Average benefit	\$32,376	\$31,665
Median benefit	\$29,760	\$29,159
Disabled Retirees		
Count	306	313
Average age	66.1	65.7
Average benefit	\$21,708	\$21,269
Median benefit	\$19,899	\$19,492
Survivors		
Count	1,609	1,588
Average age	70.9	70.5
Average benefit	\$15,824	\$15,476
Median benefit	\$13,797	\$13,413
Child Pensioners		
Count	235	241
Average age	16.3	15.7
Average benefit	\$2,880	\$2,880
Median benefit	\$2,880	\$2,880
Total Retirees and Survivors		
Count	7,226	7,196
Average age*	69.0	68.6
Average benefit*	\$28,100	\$27,500
Median benefit*	\$25,044	\$24,455

* Excludes child pensioners.

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SECTION III. MEMBERSHIP DATA

EXHIBIT 9. TERMINATED AND INACTIVE MEMBERS (DB)

	9/30/2014	9/30/2013
Reported as Inactive		
Count	4,664	5,136
Accumulated contributions	\$ 12,066,498	\$ 11,992,810
Reported as Terminated		
Count	230	231
Accumulated contributions	\$ 540,012	\$ 545,876
Zero Earnings		
Count	42	26
Accumulated contributions	\$ 1,690,049	\$ 1,164,605
Refund of Contributions		
Count	5	1
Accumulated contributions	\$ 1,888	\$ 186
Total Terminateds and Inactives		
Count	4,941	5,394
Accumulated contributions	\$ 14,298,447	\$ 13,703,477
<hr/>		
Assumed to Withdraw Contributions		
Count	4,776	5,232
Accumulated contributions	\$ 3,316,052	\$ 3,677,872
Not Assumed to Withdraw Contributions		
Count	165	162
Average age	52.6	52.5
Average benefit	\$ 14,021	\$ 13,438
Accumulated contributions	\$ 10,982,395	\$ 10,025,605

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SECTION III. MEMBERSHIP DATA

EXHIBIT 10. RECONCILIATION OF MEMBERSHIP DATA (DB)

	Assumed to Withdraw Contributions					No With'd	Ret	Surv	Disab	Child	Total
	Act	Inact	Term	Zero	Refund	Inact					
9/30/2013	2,878	4,985	231	15	1	162	5,054	1,588	313	241	15,468
Additions from:											
Actives		30	0	12	5	18	128	0	10	0	203
Inactives	11		0	0	0	0	2	0	0	0	13
Terminations	1	0		0	0	0	0	0	0	0	1
Zero earnings	2	0	0		0	0	0	0	0	0	2
Refunds	0	1	0	0		0	0	0	0	0	1
Inactives no w/d	4	0	0	0			3	0	0	0	7
Retiree	1	0	0	0	0	0		0	0	0	1
Survivor	0	0	0	0	0	0	0		0	0	0
Disability	0	0	0	0	0	0	0	0		0	0
Child	0	0	0	0	0	0	0	0	0		0
Other adds ¹	5	5	0	0	0	0	48	95	1	27	176
Subtotal	24	31	0	12	5	18	181	95	11	27	404
Subtractions due to:											
Actives		-11	-1	-2	0	-4	-1	0	0	0	-19
Inactives	-30		0	0	-1	0	0	0	0	0	-31
Terminations	0	0		0	0	0	0	0	0	0	0
Zero earnings	-12	0	0		0	0	0	0	0	0	-12
Refunds	-5	0	0	0		0	0	0	0	0	-5
Inactives no w/d	-18	0	0	0	0		0	0	0	0	-18
Retiree	-128	-2	0	0	0	-3		0	0	0	-133
Survivor	0	0	0	0	0	0	0		0	0	0
Disability	-10	0	0	0	0	0	0	0		0	-10
Child	0	0	0	0	0	0	0	0	0		0
Other drops ²	-7	-485	0	-2	0	-8	-158	-74	-18	-33	-785
Subtotal	-210	-498	-1	-4	-1	-15	-159	-74	-18	-33	-1,013
9/30/2014	2,692	4,518	230	23	5	165	5,076	1,609	306	235	14,859

1 Other additions indicate members or beneficiaries who were reported this year but who were not included in the prior year's valuation (e.g. a new beneficiary, etc.).

2 Other drops indicate members or beneficiaries who were in the prior year's valuation but who were not reported in this year's census data (e.g. members who received a complete refund, retirees or beneficiaries who are now deceased, children who have reached the maximum age, etc.).

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SECTION IV. VALUATION EXHIBITS

EXHIBIT 11. ACTUARIAL ACCRUED LIABILITY

The actuarial accrued liability has been calculated using the Entry Age Normal actuarial cost method, and is equal to the present value of benefits for all DB members less the present value of future normal costs for active DB employees.

	9/30/2014	9/30/2013
Present Value of Benefits		
Active employees –		
Retirement	\$ 1,017,790,970	\$ 974,788,551
Disability	27,815,911	28,334,174
Death	27,731,320	27,627,304
Withdrawal	<u>43,434,715</u>	<u>43,472,694</u>
Total active PVB	1,116,772,916	1,074,222,723
Retirees and Survivors		
Retirees	1,638,441,688	1,614,661,708
Disabled retirees	61,982,810	62,566,099
Survivors	<u>235,615,124</u>	<u>230,185,082</u>
Total retirees and survivors	1,936,039,622	1,907,412,889
Terminated and inactive members		
Assumed to retire	15,433,081	14,141,103
Assumed to elect return of contributions	<u>3,316,052</u>	<u>3,677,872</u>
Total terminated and inactive members	18,749,133	17,818,975
Total PVB	\$ 3,071,561,671	\$ 2,999,454,587
Present Value of Future Normal Cost		
Active employees –		
Retirement	\$ 104,896,366	\$ 108,435,338
Disability	8,184,463	8,698,079
Death	6,415,518	6,859,038
Withdrawal	<u>20,360,406</u>	<u>20,098,138</u>
Total active PVFNC	\$ 139,856,753	\$ 144,090,593
Actuarial Accrued Liability		
Active members	\$ 976,916,163	\$ 930,132,130
Retirees and survivors	1,936,039,622	1,907,412,889
Terminations and inactives	<u>18,749,133</u>	<u>17,818,975</u>
Total accrued liability	\$ 2,931,704,918	\$ 2,855,363,994

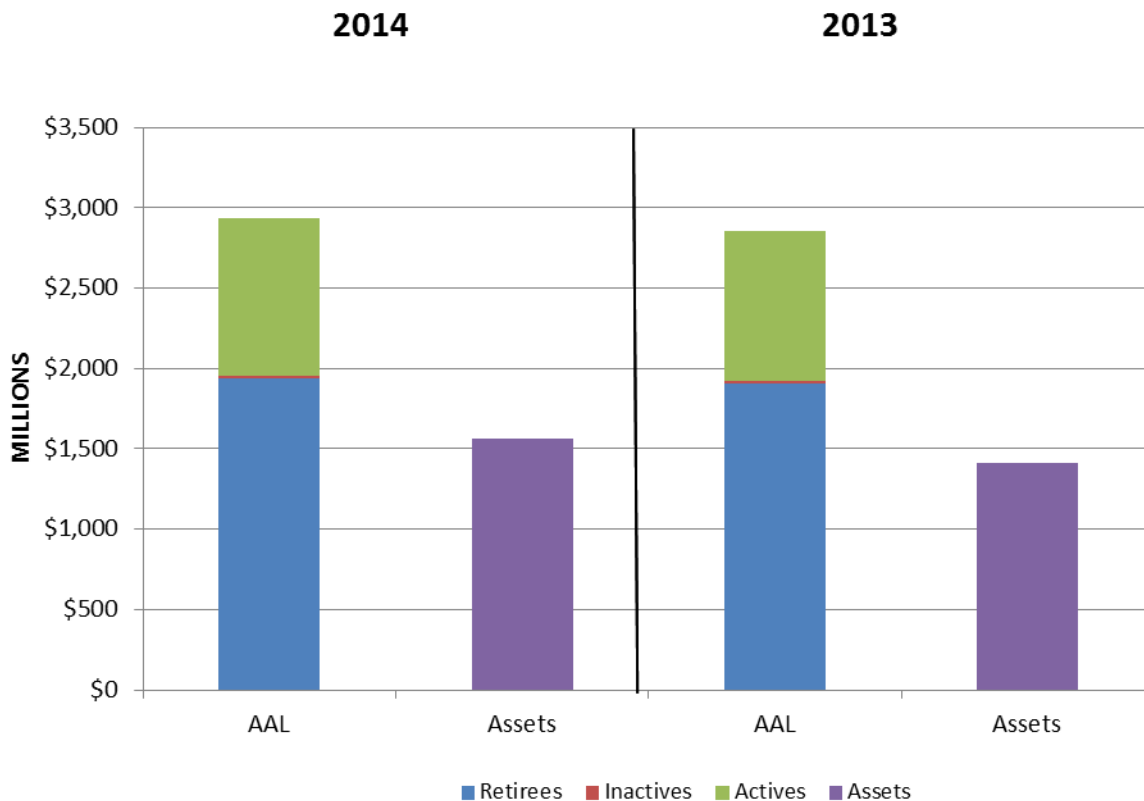
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SECTION IV. VALUATION EXHIBITS

EXHIBIT 12. CALCULATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

The unfunded actuarial accrued liability is used to determine the funding requirements. The unfunded actuarial accrued liability equals the actuarial accrued liability less the valuation assets.

	9/30/2014	9/30/2013
Actuarial Accrued Liability		
Active members	\$ 976,916,163	\$ 930,132,130
Retirees and survivors	1,936,039,622	1,907,412,889
Terminations and inactives	<u>18,749,133</u>	<u>17,818,975</u>
Total accrued liability	\$ 2,931,704,918	\$ 2,855,363,994
 Actuarial Value of Assets	 1,562,467,116	 1,413,024,965
 Unfunded Actuarial Accrued Liability	 \$ 1,369,237,802	 \$ 1,442,339,029
 Security Ratio = (Assets/AAL)	 53.30%	 49.49%



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SECTION IV. VALUATION EXHIBITS

EXHIBIT 13. CALCULATION OF ACTUARIAL GAIN/LOSS

	9/30/2014	9/30/2013
Unfunded Actuarial Accrued Liability, beginning of year	\$ 1,442,339,029	\$ 1,482,646,076
Additions:		
Normal cost	9,382,274	10,891,549
Interest to end of year	<u>101,620,491</u>	<u>104,547,634</u>
Total additions	111,002,765	115,439,183
Deductions:		
Employer contributions for year	134,106,867	121,940,930
Interest on contributions	<u>4,614,355</u>	<u>4,195,749</u>
Total deductions	138,721,222	126,136,679
Other Changes:		
Plan amendments	0	0
Changes in assumptions and methods	<u>0</u>	<u>0</u>
Net other changes	0	0
Expected UAAL, end of year	\$ 1,414,620,572	\$ 1,471,948,580
Actual UAAL, end of year	<u>1,369,237,802</u>	<u>1,442,339,029</u>
Actuarial Gain/(Loss)	\$ 45,382,770	\$ 29,609,551
Components of Actuarial Gain/(Loss):		
Investment gain/(loss) on actuarial value of assets	\$ 103,734,705	\$ 51,319,527
Other gains/(losses)	<u>(58,351,935)</u>	<u>(21,709,976)</u>
Total actuarial gain/(loss)	\$ 45,382,770	\$ 29,609,551

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SECTION IV. VALUATION EXHIBITS

EXHIBIT 14. NORMAL COST

The normal cost has been calculated using the Entry Age Normal actuarial cost method.

	9/30/2014		9/30/2013	
Expected defined benefit payroll for next fiscal year	\$ 154,671,923		\$ 152,372,948	
		% of DB Payroll		% of DB Payroll
Normal cost ¹				
Retirement	\$ 15,300,804	9.89%	\$ 15,257,104	10.01%
Disability	1,218,177	0.79%	1,244,988	0.82%
Withdrawal	2,916,861	1.89%	2,770,060	1.82%
Death	<u>952,815</u>	<u>0.62%</u>	<u>984,445</u>	<u>0.65%</u>
Total active normal cost	\$ 20,388,657	13.18%	\$ 20,256,597	13.29%
Assumed DB administrative expenses	<u>4,146,000</u>	<u>2.68%</u>	<u>4,007,613</u>	<u>2.63%</u>
Total normal cost and expenses	\$ 24,534,657	15.86%	\$ 24,264,210	15.92%
Expected member contributions	<u>(14,760,316)</u>	<u>(9.54%)</u>	<u>(14,559,110)</u>	<u>(9.55%)</u>
Government portion of normal cost	\$ 9,774,341	6.32%	\$ 9,705,100	6.37%

¹ Includes interest to mid-year.

SECTION IV. VALUATION EXHIBITS

EXHIBIT 15. AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

Pursuant to GCA Section 8137, the unfunded liabilities of the Government of Guam Retirement Fund are to be completely funded within 80 years from May 1, 1951. As of September 30, 2014, there are 16.58 years remaining in the funding period. The amortization of the unfunded actuarial accrued liability is calculated as a constant percentage of total payroll, which is assumed to grow at 3.0% per year.

	9/30/2014	9/30/2013
Total payroll (DB and DC) for fiscal year following	\$ 504,256,946	\$ 474,158,213
Unfunded actuarial accrued liability	1,369,237,802	1,442,339,029
Remaining funding period	16.58 years	17.58 years
Annual amortization	\$ 113,061,089	\$ 114,248,248
As % of total payroll (DB and DC)	22.42%	24.09%

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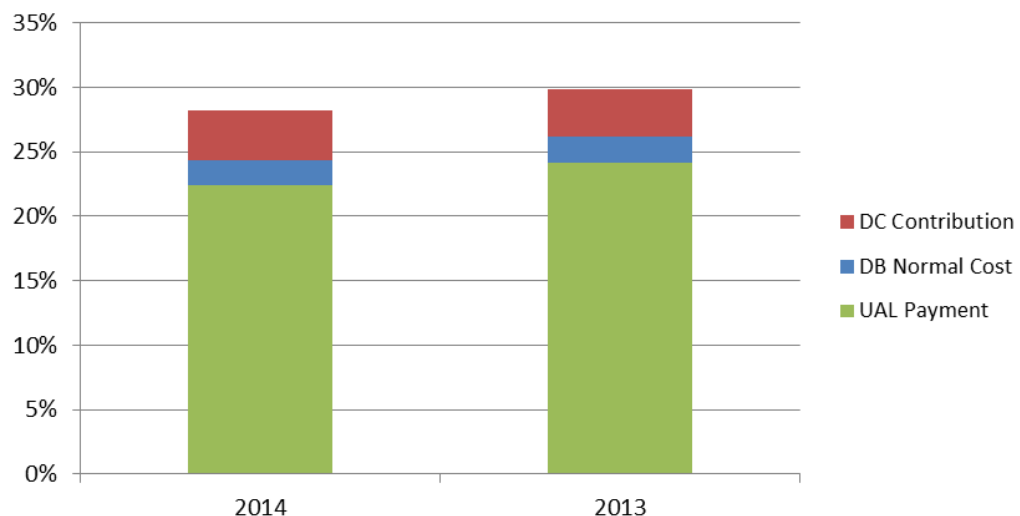
SECTION IV. VALUATION EXHIBITS

EXHIBIT 16. CONTRIBUTION REQUIREMENTS

The required contribution is equal to the sum of (1) the government normal cost for the defined benefit (DB) plan, (2) the amortization payment towards the unfunded actuarial accrued liability of the defined benefit (DB) plan, and (3) the expected government contributions to the defined contribution (DC) plan. The required contribution is then divided by the sum of the DB and DC payroll to determine the contribution rate as a percentage of payroll.

	9/30/2014	9/30/2013
Expected payroll for next fiscal year		
Defined benefit (DB)	\$ 154,671,923	\$ 152,372,948
Defined contribution (DC)	<u>349,585,023</u>	<u>321,785,265</u>
Total payroll (DB and DC)	\$ 504,256,946	\$ 474,158,213
Government normal cost excluding expenses (DB)	\$ 9,774,341	\$ 9,705,100
As % of DB payroll	6.32%	6.37%
As % of total payroll (DB and DC)	1.94%	2.05%
Amortization of UAAL (DB)	\$ 113,061,089	\$ 114,248,248
As % of total payroll (DB and DC)	22.42%	24.09%
Government DC contributions	\$ 19,139,251	\$ 17,568,184
As % of DC payroll	5.47%	5.46%
As % of total payroll (DB and DC)	3.80%	3.71%
Total DB and DC contributions	\$ 141,974,681	\$ 141,521,532
% of total payroll (DB and DC)	28.16%	29.85%

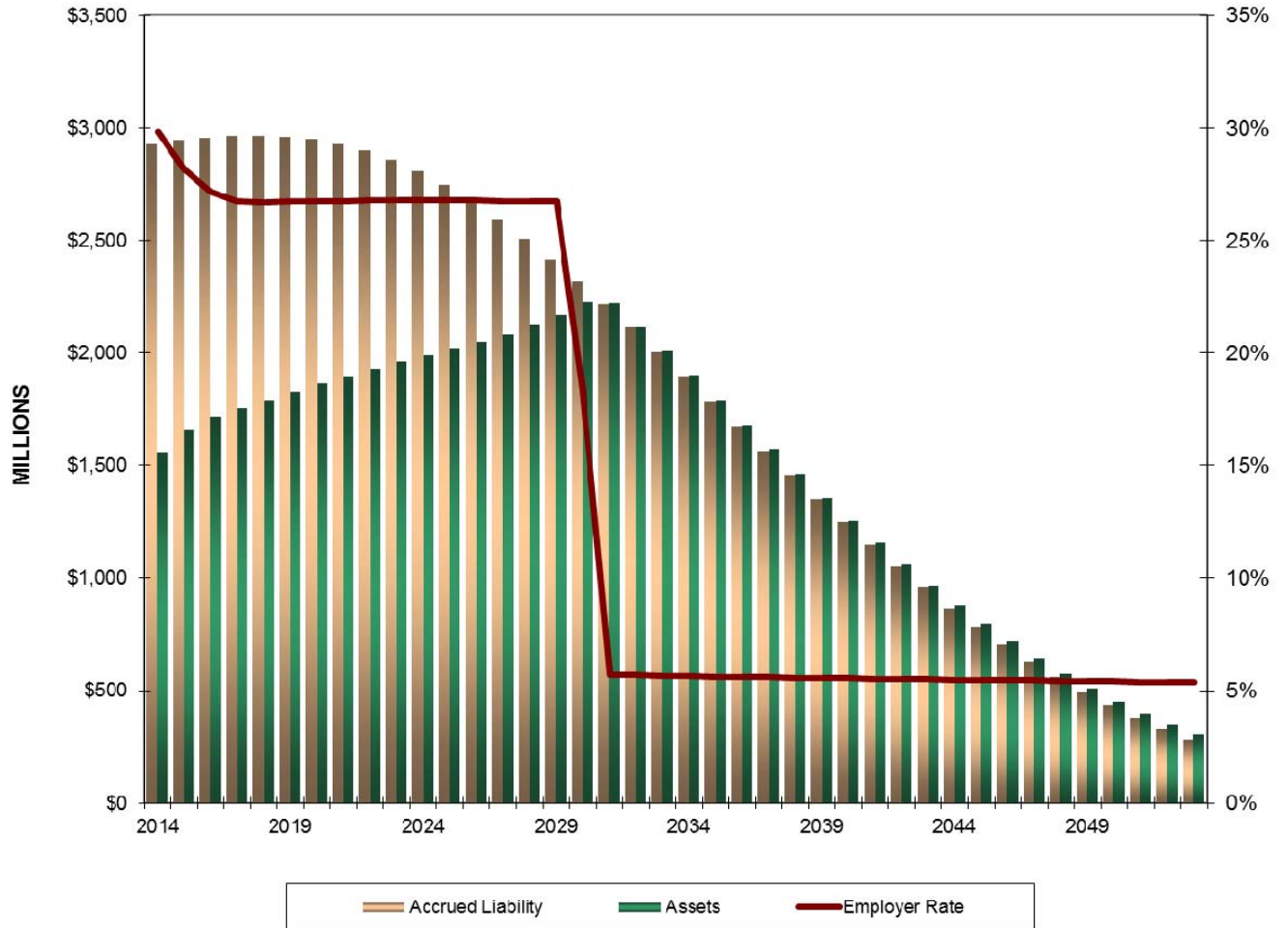
CONTRIBUTION RATE



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SECTION IV. VALUATION EXHIBITS

EXHIBIT 17. PROJECTION OF CONTRIBUTION RATE



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SECTION IV. VALUATION EXHIBITS

EXHIBIT 17. PROJECTION OF CONTRIBUTION RATE (values)

Year Ending	PAYROLL ¹		CONTRIB RATE		CONTRIBUTIONS			Invest Gain ³	Benefits/ Expenses	DB Fund Actuarial
	DB	DC	DB	DC ²	DB	DC ²	EE			
2014										\$1,562.47
2015	154.67	349.59	29.85%	24.38%	46.17	85.21	14.72	110.67	(207.15)	1,659.72
2016	149.30	370.08	28.16%	22.71%	42.04	84.03	14.23	113.78	(211.34)	1,717.62
2017	143.20	391.76	27.13%	21.71%	38.86	85.06	13.66	116.51	(215.57)	1,756.13
2018	136.62	414.40	26.75%	21.35%	36.55	88.48	13.03	119.05	(220.00)	1,793.24
2019	128.89	438.65	26.71%	21.33%	34.43	93.58	12.29	121.53	(224.95)	1,830.11
2020	119.73	464.84	26.72%	21.36%	31.99	99.31	11.43	123.97	(230.65)	1,866.17
2021	109.31	492.79	26.73%	21.40%	29.23	105.45	10.44	126.33	(237.01)	1,900.60
2022	98.26	521.91	26.75%	21.44%	26.29	111.88	9.39	128.56	(243.62)	1,933.10
2023	86.78	552.00	26.76%	21.46%	23.23	118.48	8.31	130.67	(250.08)	1,963.70
2024	75.25	582.70	26.78%	21.49%	20.15	125.25	7.20	132.65	(256.25)	1,992.71
2025	64.29	613.39	26.78%	21.51%	17.22	131.96	6.17	134.58	(261.22)	2,021.43
2026	54.23	643.78	26.79%	21.53%	14.53	138.60	5.22	136.55	(265.08)	2,051.24
2027	45.77	673.18	26.78%	21.53%	12.26	144.94	4.41	138.66	(267.16)	2,084.35
2028	38.64	701.88	26.76%	21.52%	10.34	151.06	3.73	141.09	(267.45)	2,123.12
2029	32.39	730.34	26.74%	21.51%	8.66	157.13	3.14	143.97	(266.64)	2,169.38
2030	26.91	758.71	26.72%	21.50%	7.19	163.15	2.62	147.43	(264.53)	2,225.23
2031	22.12	787.06	18.32%	13.11%	4.05	103.15	2.16	149.27	(261.51)	2,222.35
2032	18.09	815.37	5.69%	0.49%	1.03	3.98	1.76	145.70	(257.33)	2,117.49
2033	14.67	843.80	5.68%	0.48%	0.83	4.05	1.44	138.55	(252.08)	2,010.29
2034	11.64	872.58	5.66%	0.47%	0.66	4.11	1.15	131.27	(245.96)	1,901.52
2035	9.05	901.70	5.65%	0.46%	0.51	4.17	0.90	123.92	(239.13)	1,791.88
2036	6.95	931.12	5.63%	0.45%	0.39	4.21	0.69	116.53	(231.67)	1,682.02
2037	5.28	960.93	5.61%	0.44%	0.30	4.24	0.53	109.16	(223.29)	1,572.96
2038	3.91	991.29	5.60%	0.43%	0.22	4.26	0.39	101.86	(214.44)	1,465.26
2039	2.81	1,022.24	5.58%	0.42%	0.16	4.28	0.29	94.69	(205.02)	1,359.65
2040	1.94	1,053.86	5.56%	0.41%	0.11	4.29	0.20	87.68	(195.26)	1,256.68
2041	1.27	1,086.21	5.55%	0.40%	0.07	4.31	0.13	80.86	(185.25)	1,156.81
2042	0.75	1,119.35	5.53%	0.39%	0.04	4.31	0.09	74.27	(175.00)	1,060.51
2043	0.39	1,153.31	5.52%	0.37%	0.02	4.32	0.04	67.93	(164.69)	968.14
2044	0.19	1,188.12	5.50%	0.36%	0.01	4.32	0.02	61.87	(154.27)	880.10
2045	0.09	1,223.88	5.49%	0.35%	-	4.32	0.01	56.12	(143.90)	796.65
2046	0.04	1,260.65	5.47%	0.34%	-	4.32	0.00	50.68	(133.65)	718.02
2047	0.01	1,298.50	5.46%	0.33%	-	4.32	0.00	45.57	(123.59)	644.31
2048	-	1,337.46	5.45%	0.32%	-	4.32	-	40.80	(113.79)	575.64
2049	-	1,377.58	5.43%	0.31%	-	4.32	-	36.36	(104.29)	512.03
2050	-	1,418.91	5.42%	0.30%	-	4.32	-	32.27	(95.14)	453.48
2051	-	1,461.48	5.41%	0.30%	-	4.32	-	28.52	(86.37)	399.96
2052	-	1,505.32	5.40%	0.29%	-	4.32	-	25.10	(78.01)	351.37
2053	-	1,550.48	5.39%	0.28%	-	4.32	-	22.01	(70.10)	307.60

¹ Payroll is assumed to increase 3.0% per year.

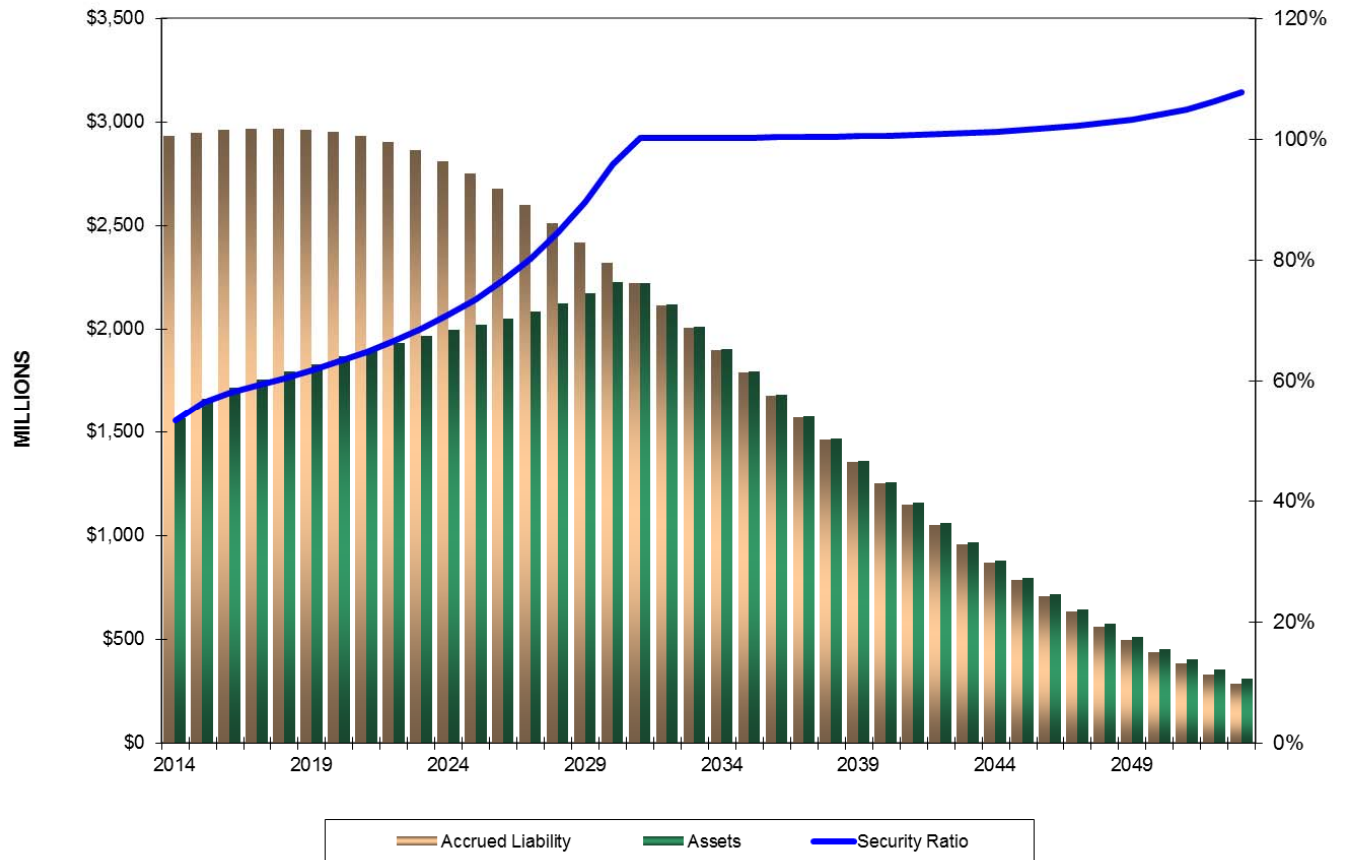
² DC rate and contributions are those for payment towards UAAL and plan expenses only.

³ Investment earnings are assumed to be 7.0% per year on the market value of assets.

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SECTION IV. VALUATION EXHIBITS

EXHIBIT 18. PROJECTION OF SECURITY RATIO



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SECTION IV. VALUATION EXHIBITS

EXHIBIT 18. PROJECTION OF SECURITY RATIO (values)

Year Ending	EMPLOYER CONTRIBUTIONS					Security Ratio
	Payroll ¹	DB Rate	Contribs DB Plan	DB Fund AVA ²	Accrued Liability	
2014				\$1,562.47	\$2,931.71	53.30%
2015	\$ 504.26	29.85%	131.38	1,659.72	2,947.04	56.32%
2016	519.38	28.16%	126.07	1,717.62	2,958.38	58.06%
2017	534.97	27.13%	123.91	1,756.13	2,965.24	59.22%
2018	551.02	26.75%	125.03	1,793.24	2,967.07	60.44%
2019	567.55	26.71%	128.01	1,830.11	2,962.91	61.77%
2020	584.57	26.72%	131.31	1,866.17	2,951.36	63.23%
2021	602.11	26.73%	134.67	1,900.60	2,931.06	64.84%
2022	620.17	26.75%	138.17	1,933.10	2,900.98	66.64%
2023	638.78	26.76%	141.71	1,963.70	2,860.60	68.65%
2024	657.94	26.78%	145.40	1,992.71	2,809.40	70.93%
2025	677.68	26.78%	149.18	2,021.43	2,747.98	73.56%
2026	698.01	26.79%	153.13	2,051.24	2,676.84	76.63%
2027	718.95	26.78%	157.20	2,084.35	2,597.32	80.25%
2028	740.52	26.76%	161.40	2,123.12	2,510.95	84.55%
2029	762.73	26.74%	165.79	2,169.38	2,418.50	89.70%
2030	785.62	26.72%	170.34	2,225.23	2,321.01	95.87%
2031	809.18	18.32%	107.21	2,222.35	2,219.16	100.14%
2032	833.46	5.69%	5.01	2,117.49	2,113.95	100.17%
2033	858.46	5.68%	4.88	2,010.29	2,006.36	100.20%
2034	884.22	5.66%	4.77	1,901.52	1,897.18	100.23%
2035	910.74	5.65%	4.68	1,791.88	1,787.08	100.27%
2036	938.07	5.63%	4.60	1,682.02	1,676.73	100.32%
2037	966.21	5.61%	4.54	1,572.96	1,567.13	100.37%
2038	995.19	5.60%	4.48	1,465.26	1,458.86	100.44%
2039	1,025.05	5.58%	4.44	1,359.65	1,352.63	100.52%
2040	1,055.80	5.56%	4.40	1,256.68	1,248.99	100.62%
2041	1,087.48	5.55%	4.38	1,156.81	1,148.40	100.73%
2042	1,120.10	5.53%	4.35	1,060.51	1,051.34	100.87%
2043	1,153.70	5.52%	4.34	968.14	958.15	101.04%
2044	1,188.31	5.50%	4.33	880.10	869.23	101.25%
2045	1,223.96	5.49%	4.33	796.65	784.84	101.51%
2046	1,260.68	5.47%	4.32	718.02	705.19	101.82%
2047	1,298.50	5.46%	4.32	644.31	630.42	102.20%
2048	1,337.46	5.45%	4.32	575.64	560.59	102.69%
2049	1,377.58	5.43%	4.32	512.03	495.74	103.29%
2050	1,418.91	5.42%	4.32	453.48	435.88	104.04%
2051	1,461.48	5.41%	4.32	399.96	380.94	104.99%
2052	1,505.32	5.40%	4.32	351.37	330.83	106.21%
2053	1,550.48	5.39%	4.32	307.60	285.45	107.76%

¹ Payroll is assumed to increase 3.0% per year.

² Actuarial Value of Assets. Investment earnings are assumed to be 7.0% per year on the market value of assets.

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SECTION V. ACCOUNTING EXHIBITS

EXHIBIT 19. NET PENSION LIABILITY

GASB 67 requires the disclosure of the Net Pension Liability. The Total Pension Liability was determined by an actuarial valuation as of the prior valuation date, calculated based on the discount rate and actuarial assumptions listed below and shown in Appendix B, and was then projected forward to the measurement date taking into account any significant changes between the valuation date and the fiscal year end as prescribed by GASB 67 and 68.

The liabilities are calculated using a discount rate that is a blend of the expected investment rate of return and a high quality bond index rate. The expected investment rate of return applies for as long as the plan assets (including future contributions) are projected to be sufficient to make the projected benefit payments. If plan assets are projected to be depleted at some point in the future, the rate of return of a high quality bond index is used for the period after the depletion date.

	September 30, 2014	September 30, 2013
Total Pension Liability	\$ 2,871,562,108	\$ 2,829,439,663
Fiduciary Net Position	<u>1,625,255,354</u>	<u>1,526,135,027</u>
Net Pension Liability	\$ 1,246,306,754	\$ 1,303,304,636
Fiduciary Net Position as a % of Total Pension Liability	56.60%	53.94%
Covered Payroll (DB and DC)	\$ 504,943,471	\$ 460,347,780
Net Pension Liability as % of Covered Payroll	246.82%	283.11%
Valuation Date	9/30/2013	9/30/2012
Measurement date	9/30/2014	9/30/2013
GASB 67 Reporting date	9/30/2014	9/30/2013
Depletion date	None	None
Discount rate	7.00%	7.00%
Expected rate of return, net of investment expenses	7.00%	7.00%
Municipal bond rate	n/a	n/a

Sensitivity Analysis	As of September 30, 2014		
	1% Decrease in Discount Rate 6.00%	Current Discount Rate 7.00%	1% Increase in Discount Rate 8.00%
Total Pension Liability	\$ 3,222,601,736	\$ 2,871,562,108	\$ 2,606,481,001
Fiduciary Net Position	<u>1,625,255,354</u>	<u>1,625,255,354</u>	<u>1,625,255,354</u>
Net Pension Liability	\$ 1,597,346,382	\$ 1,246,306,754	\$ 981,225,647

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SECTION V. ACCOUNTING EXHIBITS

EXHIBIT 20. NET PENSION LIABILITY BY COMPONENT UNIT

GGRF is a single employer plan under GASB 68. For the purpose of allocating the Net Pension Liability among the component units listed below, we have used the ratio of each component unit's expected contribution to the total expected employer contributions. The expected contributions are based upon a contribution rate of 30.03% of defined benefit (DB) payroll and 25.03% of defined contribution (DC) payroll.

GASB 68 permits an employer to report its net pension liability as of a measurement date one year earlier than the net pension liability reported by the plan. The allocation below is as of the current measurement date, which may be reported by the employer in the subsequent fiscal year.

FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2014 TO BE REPORTED AS OF SEPTEMBER 30, 2015					
Component Unit	DB Payroll	DC Payroll	Expected DB Contributions	% Share	Allocated Net Pension Liability
Gov't of Guam General Fund	\$ 61,653,743	\$ 93,976,859	\$ 42,037,027	31.16%	\$ 388,427,011
Attorney General	2,550,774	6,423,804	2,373,875	1.76%	21,934,881
Mayors' Council of Guam	644,949	5,210,158	1,497,781	1.11%	13,839,670
Department of Chamorro Affairs	570,911	738,396	356,265	0.26%	3,291,930
KGTF	186,246	138,457	90,585	0.07%	837,016
Gov't of Guam Retirement Fund	592,969	909,598	405,741	0.30%	3,749,094
Guam Community College	3,911,096	8,029,694	3,184,334	2.36%	29,423,616
Guam Department of Education	46,064,780	101,380,112	39,208,696	29.07%	362,292,904
Guam Econ. Dev. Authority	416,365	1,337,609	459,838	0.34%	4,248,957
Guam Housing and UR Authority	1,258,416	2,721,274	1,059,037	0.79%	9,785,625
Guam Housing Corporation	293,278	923,111	319,126	0.24%	2,948,761
Guam Int'l Airport Authority	5,165,644	7,020,412	3,308,452	2.45%	30,570,481
Guam Legislature	383,472	1,599,039	515,396	0.38%	4,762,319
Guam Memorial Hosp. Authority	9,406,704	35,301,278	11,660,743	8.65%	107,746,620
Guam Power Authority	10,155,112	16,796,731	7,253,802	5.38%	67,025,973
Guam Visitors Bureau	325,885	1,263,466	414,109	0.31%	3,826,415
Guam Waterworks Authority	3,959,460	9,971,026	3,684,774	2.73%	34,047,740
Judiciary of Guam	7,250,966	13,002,363	5,431,957	4.03%	50,191,914
Port Authority of Guam	5,103,141	10,142,994	4,071,265	3.02%	37,618,961
Public Auditor	101,926	487,383	152,601	0.11%	1,410,051
University of Guam	<u>9,856,900</u>	<u>17,716,968</u>	<u>7,394,584</u>	<u>5.48%</u>	<u>68,326,815</u>
Total	\$169,852,739	\$335,090,732	\$134,879,988	100.00%	\$ 1,246,306,754

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SECTION V. ACCOUNTING EXHIBITS

**EXHIBIT 20a. NET PENSION LIABILITY BY COMPONENT UNIT
AS OF SEPTEMBER 30, 2013**

GGRF is a single employer plan under GASB 68. For the purpose of allocating the Net Pension Liability among the component units listed below, we have used the ratio of each component unit's expected contribution to the total expected employer contributions. The expected contributions are based upon a contribution rate of 30.09% of defined benefit (DB) payroll and 25.09% of defined contribution (DC) payroll.

GASB 68 permits an employer to report its net pension liability as of a measurement date one year earlier than the net pension liability reported by the plan. The allocation below is as of the current measurement date, which may be reported by the employer in the subsequent fiscal year.

FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2013 TO BE REPORTED AS OF SEPTEMBER 30, 2014					
Component Unit	DB Payroll	DC Payroll	Expected DB Contributions	% Share	Allocated Net Pension Liability
Gov't of Guam General Fund	\$ 53,262,079	\$ 73,062,551	\$ 34,357,954	27.77%	\$ 361,947,456
Attorney General	2,238,654	5,595,752	2,077,585	1.68%	21,886,536
Mayors' Council of Guam	1,101,222	4,457,514	1,449,748	1.17%	15,272,522
Department of Chamorro Affairs	512,918	663,089	320,706	0.26%	3,378,511
KGTF	219,583	83,144	86,933	0.07%	915,805
Gov't of Guam Retirement Fund	643,426	861,856	409,847	0.33%	4,317,576
Guam Community College	4,294,037	7,341,286	3,134,005	2.53%	33,015,503
Guam Department of Education	47,560,470	94,431,934	38,003,918	30.71%	400,356,244
Guam Econ. Dev. Authority	446,884	1,179,015	430,282	0.35%	4,532,851
Guam Housing and UR Authority	1,391,390	2,853,570	1,134,630	0.92%	11,952,878
Guam Housing Corporation	287,848	914,852	316,150	0.26%	3,330,515
Guam Int'l Airport Authority	4,681,595	5,832,594	2,872,090	2.32%	30,256,332
Guam Legislature	358,421	1,700,274	534,448	0.43%	5,630,198
Guam Memorial Hosp. Authority	9,410,618	32,773,399	11,054,501	8.94%	116,454,796
Guam Power Authority	11,032,885	16,229,843	7,391,863	5.97%	77,870,353
Guam Visitors Bureau	333,717	1,031,253	359,157	0.29%	3,783,577
Guam Waterworks Authority	4,245,215	9,488,606	3,658,076	2.96%	38,536,384
Judiciary of Guam	5,888,035	10,296,576	4,355,121	3.52%	45,879,477
Port Authority of Guam	5,497,008	10,222,802	4,218,951	3.41%	44,444,980
Public Auditor	110,632	449,204	145,994	0.12%	1,537,989
University of Guam	<u>10,788,614</u>	<u>16,573,416</u>	<u>7,404,564</u>	<u>5.99%</u>	<u>78,004,153</u>
Total	\$164,305,250	\$296,042,530	\$123,716,523	100.00%	\$ 1,303,304,636

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SECTION V. ACCOUNTING EXHIBITS

**EXHIBIT 20b. NET PENSION LIABILITY BY COMPONENT UNIT
AS OF SEPTEMBER 30, 2012**

GGRF is a single employer plan under GASB 68. For the purpose of allocating the Net Pension Liability among the component units listed below, we have used the ratio of each component unit's expected contribution to the total expected employer contributions. The expected contributions are based upon the contribution rates for the 2012-13 fiscal year, which are 30.09% of defined benefit (DB) payroll and 25.09% of defined contribution (DC) payroll.

GASB 68 permits an employer to report its net pension liability as of a measurement date one year earlier than the net pension liability reported by the plan. The allocation below is as of the current measurement date, which may be reported by the employer in the subsequent fiscal year.

FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2012 TO BE REPORTED AS OF SEPTEMBER 30, 2013					
Component Unit	DB Payroll*	DC Payroll*	Expected DB Contributions	% Share	Allocated Net Pension Liability
Gov't of Guam General Fund	\$ 53,262,079	\$ 73,062,551	\$ 34,357,954	27.77%	\$ 394,349,317
Attorney General	2,238,654	5,595,752	2,077,585	1.68%	23,845,839
Mayors' Council of Guam	1,101,222	4,457,514	1,449,748	1.17%	16,639,732
Department of Chamorro Affairs	512,918	663,089	320,706	0.26%	3,680,958
KGTF	219,583	83,144	86,933	0.07%	997,788
Gov't of Guam Retirement Fund	643,426	861,856	409,847	0.33%	4,704,089
Guam Community College	4,294,037	7,341,286	3,134,005	2.53%	35,971,081
Guam Department of Education	47,560,470	94,431,934	38,003,918	30.71%	436,196,494
Guam Econ. Dev. Authority	446,884	1,179,015	430,282	0.35%	4,938,636
Guam Housing and UR Authority	1,391,390	2,853,570	1,134,630	0.92%	13,022,911
Guam Housing Corporation	287,848	914,852	316,150	0.26%	3,628,666
Guam Int'l Airport Authority	4,681,595	5,832,594	2,872,090	2.32%	32,964,906
Guam Legislature	358,421	1,700,274	534,448	0.43%	6,134,219
Guam Memorial Hosp. Authority	9,410,618	32,773,399	11,054,501	8.94%	126,879,934
Guam Power Authority	11,032,885	16,229,843	7,391,863	5.97%	84,841,377
Guam Visitors Bureau	333,717	1,031,253	359,157	0.29%	4,122,286
Guam Waterworks Authority	4,245,215	9,488,606	3,658,076	2.96%	41,986,195
Judiciary of Guam	5,888,035	10,296,576	4,355,121	3.52%	49,986,649
Port Authority of Guam	5,497,008	10,222,802	4,218,951	3.41%	48,423,735
Public Auditor	110,632	449,204	145,994	0.12%	1,675,671
University of Guam	<u>10,788,614</u>	<u>16,573,416</u>	<u>7,404,564</u>	<u>5.99%</u>	<u>84,987,155</u>
Total	\$164,305,250	\$296,042,530	\$123,716,523	100.00%	\$1,419,977,638

* DB payroll and DC payroll are for the fiscal year ending 9/30/13.

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SECTION V. ACCOUNTING EXHIBITS

EXHIBIT 21. SCHEDULE OF CHANGES IN NET PENSION LIABILITY

GASB 67 requires a 10-Year schedule of changes in the Net Pension Liability. Changes for the most recent two years are shown below. The values as of September 30, 2013, are shown for comparative purposes.

	FOR THE FISCAL YEAR ENDING	
	September 30, 2014	September 30, 2013
Total Pension Liability - Beginning of Year	\$ 2,829,439,663	\$ 2,811,399,525
Service cost	5,697,487	4,799,185
Member contributions	16,626,009	16,290,014
Interest on the total pension liability	191,594,023	190,558,974
Changes of benefit terms	0	0
Differences between actual and expected experience with regard to economic or demographic factors	27,739,034	0
Changes of assumptions	0	0
Benefit payments	<u>(199,534,108)</u>	<u>(193,608,035)</u>
Total changes	42,122,445	18,040,138
Total Pension Liability - End of Year	\$ 2,871,562,108	\$ 2,829,439,663
Fiduciary Net Position – Beginning of Year	\$ 1,526,135,027	\$ 1,391,421,887
Contributions from employer	134,106,867	121,940,930
Member contributions	16,626,009	16,290,014
Net investment income	150,599,955	192,776,061
Benefit payments	(199,534,108)	(193,608,035)
Administrative expense	<u>(2,678,396)</u>	<u>(2,685,830)</u>
Total changes	99,120,327	134,713,140
Fiduciary Net Position – End of Year	\$ 1,625,255,354	\$ 1,526,135,027
Net Pension Liability - End of Year	\$ 1,246,306,754	\$ 1,303,304,636
Fiduciary Net Position as a % of Total Pension Liability	56.60%	53.94%
Covered employee payroll	\$ 504,943,471	\$ 460,347,780
Net Pension Liability as a % of Covered Employee Payroll	246.82%	283.11%

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EXHIBIT 22. SCHEDULE OF EMPLOYER CONTRIBUTIONS

Plan Year Ending September 30	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contribution as a % of Covered Payroll
2014	\$134,107,000	\$134,107,000	\$0	\$ 504,943,000	26.56%
2013	121,698,000 ¹	121,941,000	(243,000)	460,348,000	26.49%
2012	121,078,000	113,876,000	7,202,000	456,985,000	24.92%
2011	113,964,000	111,527,000	2,437,000	461,211,000	24.18%
2010	113,944,000	101,232,000	12,712,309	429,044,000	23.59%
2009	95,945,000	92,921,000	3,024,000	423,774,000	21.93%
2008	98,743,000	86,806,000	11,937,000	411,383,000	21.10%
2007	92,207,000	76,973,000	15,234,000	377,049,000	20.41%
2006	110,940,000	85,771,000	25,169,000	376,604,000	22.77%
2005	91,913,000	70,658,000	21,255,000	359,850,000	19.64%

¹ Based upon actuarial valuation as of September 30, 2010.

Actuarially determined contribution rates are calculated as of September 30, two years prior to the end of the fiscal year in which contributions are reported. The methods and assumptions used to determine contribution rates are as follows:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll, closed
Remaining amortization period	May 1, 2031 (16.58 years remaining as of September 30, 2014)
Asset valuation method	3-year smoothed market value (effective September 30, 2009)
Inflation	2.75% per year
Total payroll growth	3.00% per year
Salary increases	7.5% per year for the first 5 years of service, 6% for 5-10 years, 5% for 11-15 years and 4.5% for service over 15 years.
Investment rate of return	7.00%, net of investment expenses, including inflation of 2.75%
Retirement age	40% are assumed to retire upon first eligibility for unreduced retirement. Thereafter, the probabilities of retirement are 15% until age 65, 20% from 65-69, and 100% at age 70.
Mortality	RP-2000 healthy mortality table set forward by 4 years for males and 1 year for females. Mortality for disabled lives is the RP 2000 disability mortality table with no set forwards.
Other information	Actuarial assumptions are based upon periodic experience studies. The last experience study reviewed experience from 2007-2011, and was first reflected in the actuarial valuation as of September 30, 2012.

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SECTION V. ACCOUNTING EXHIBITS

EXHIBIT 23. CALCULATION OF PENSION EXPENSE

GASB 68 requires the calculation of the pension expense for fiscal years beginning on or after June 15, 2014, and permits the use of a measurement period ending one year prior to the reporting date. The values shown for the fiscal year ending September 30, 2013 (reported as of September 30, 2014), are for comparative purposes only.

Pension Expense	For the Fiscal Year Ending To Be Reported as of	September 30, 2014 September 30, 2015	September 30, 2013 September 30, 2014
Service cost		\$ 22,323,496	\$ 21,089,199
Interest on the total pension liability		191,594,023	190,558,974
Effect of plan changes		0	0
Administrative expense		2,678,396	2,685,830
Member contributions		(16,626,009)	(16,290,014)
Expected investment return, net of investment expenses		(105,058,139)	(95,401,701)
Recognition of Deferred Inflows/Outflows of Resources			
Economic/demographic (gains) or losses		18,492,689	0
Assumption changes		0	0
Investment (gains) or losses		<u>(28,583,235)</u>	<u>(19,474,872)</u>
Total Recognition		(10,090,546)	(19,474,872)
Pension expense		\$ 84,821,221	\$ 83,167,416

Deferred Inflows / Outflows of Resources	To Be Reported as of September 30, 2015	
	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual experience	\$ 0	\$ 9,246,345
Changes of assumptions	0	0
Net difference between projected and actual earnings	(94,858,069)	0
Contributions made subsequent to measurement date	<u>0</u>	<u>TBD</u>
Total	\$ (94,858,069)	\$ TBD

Amounts currently reported as deferred inflows and outflows of resources related to pensions will be recognized in pension expense as follows:

Fiscal Year Ending June 30	Recognized Deferred Inflows/Outflows
2016	\$ (19,336,890)
2017	(28,583,235)
2018	(28,583,235)
2019	(9,108,364)
2020	0
Thereafter	0

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SECTION V. ACCOUNTING EXHIBITS

EXHIBIT 24. SCHEDULE OF DEFERRED INFLOWS AND OUTFLOWS OF RESOURCES

Investment (gains)/losses are recognized in pension expense over a period of five years. Economic/demographic (gains)/losses and assumption changes or inputs are recognized over the average remaining service life for all active and inactive members.

Date Established	Original Amount	Original Recognition Period	Amount Recognized in Expense FYE 2015	Balance of Deferred Inflows 9/30/2015	Balance of Deferred Outflows 9/30/2015
Investment (gains) or losses					
9/30/2014	\$ (97,374,360)	5.0	\$ (19,474,872)	\$ (58,424,616)	\$ 0
9/30/2015	(45,541,816)	5.0	(9,108,363)	(36,433,453)	0
Economic/demographic (gains) or losses					
9/30/2014	\$ 0	n/a	\$ 0	\$ 0	\$ 0
9/30/2015	27,739,034	1.5	18,492,689	0	9,246,345
Assumption changes or inputs					
9/30/2014	\$ 0	n/a	\$ 0	\$ 0	\$ 0
9/30/2015	0	n/a	0	0	0

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APPENDIX A. SUMMARY OF PLAN PROVISIONS

The following description is only a brief summary of the more important provisions of the retirement plan. Actual plan provisions are contained in Chapter 8 of the Guam Code.

Membership Conditions and Exclusions: All employees of the Government of Guam hired on or before September 30, 1995 are required to participate as a condition of employment, except:

- a) Persons who are compensated on a fee basis;
- b) Independent contractors;
- c) Persons employed for a specific project;
- d) Persons employed in the Senior Citizens' Community Employment Program; and
- e) Persons with less than 20 years of service prior to September 30, 1995 who elect to transfer to the Government of Guam Defined Contribution Fund. Participants have an annual opportunity to transfer.

Membership is optional for:

- a) Temporary, seasonal, intermittent and part-time employees;
- b) Persons employed for a specific period of time and not domiciled in Guam; and
- c) Employees of a public corporation of the Government of Guam.

Membership is also applicable to members of the Legislature with special provisions for:

- a) The determination of average annual salary for pension computation purposes; and
- b) Contributions.

Pension Credits: Employees are entitled to pension credit for:

- a) Service rendered to the Government prior to May 1, 1951 when the Fund began operations.
- b) Service on or after May 1, 1951 for which contributions are required to be made by the employees.
- c) Casual or part-time employment under prescribed conditions for which contributions must be made.
- d) Unused and accumulated sick and annual (vacation) leaves with 12 days of service counted as a full month; 6 to 11 days, ½ month; and less than 6 days disregarded.
- e) For employees hired before June 1, 1989, pension credit is granted up to a maximum of 5 years for Federal service, provided the employee terminates membership in the Federal Civil Service Retirement Fund and makes a contribution to the Government of Guam Retirement Fund equal to the amount contributed by the member and his employer during the period which is equal in length to the period for which service credit is requested, and which ends on the member's termination date of such employment with interest from the date of such termination to the date of payment.
- f) For employees hired before June 1, 1989, educational leave time or periods of termination for educational training purposes, if contributions are made to the Fund with interest. Members who first joined the fund prior to January 31, 1987, may receive credit for up to the normal period of time required to complete degree without having been employed by the government prior to the period during which the degree was earned.

SECTION VI. APPENDICES

- g) Military service prior to May 1, 1951, if not considered for any Federal Government Pension other than for disability. If entry into military service occurred after May 1, 1951, total pension credit is limited to 5 years in the aggregate, provided the employee was in the service of the Government of Guam at date of entry into military service and returned to the Government of Guam service within one year following discharge from military service under conditions other than dishonorable, or within 6 months after completion of education under the various education benefits programs for veterans; otherwise the total credit is limited to three years.

Schedule for Computing Service: The following schedule shall govern the computation of pension credit: 12 days or more during any month constitutes a month of service; 6 to 11 days, ½ month; less than 6 days is disregarded. Nine months or more during any year constitutes a year of service.

Vesting of Pension Credit: Vesting occurs after at least 5 years of service.

Upon separation from service, an employee may optionally leave the contribution credits in the Fund and qualify for a deferred retirement annuity, based upon the total pension credit. If the pension credit is 25 years or more, no refund of contributions is payable and the employee must accept a deferred retirement annuity.

Conditions for Service Retirement: With respect to any employee who originally became a member of the Fund prior to October 1, 1981:

- a) Such member may retire on a service retirement annuity at age 60 or over, or at age 55 in the case of a member of the uniformed personnel after at least 10 years of service. Upon retirement, a member of the uniformed personnel shall be considered one grade above that held at date of retirement.
- b) A member with at least 25 years of service may retire at any age on an unreduced retirement annuity.
- c) Any retired employee with at least 25 years of credit service shall be entitled to the full retirement annuity on and after September 30, 1981.
- d) Any member, active or inactive, may retire after 20 years of service, regardless of age. In such case, the retirement annuity shall be reduced ¼ of 1% for each month that the age of the member is less than 60 years (3% per year).

With respect to an employee who became a member of the Fund on or after October 1, 1981, and prior to August 22, 1984, the following provisions shall govern:

- a) Such member may retire on a service retirement annuity at age 60 or over, or at age 55 if a member of the uniformed personnel after at least 15 years of service and upon retirement shall be considered one rank grade above that held at such date.
- b) A member with at least 30 years of service shall be eligible for service retirement, regardless of age, without reduction for early retirement.
- c) Any member, whether in an active or inactive status, may retire after 25 years of service, at any age, on an annuity reduced ¼ of 1% per month (3% per year) for each month member's age is less than 60.

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With respect to any employee becoming a member of the Fund on or after August 22, 1984:

- a) Such member may retire on a service retirement annuity at age 65 or over, or at age 60 in the case of a member of the uniformed personnel after at least 15 years of service. Upon retirement, a member of the uniformed personnel shall be considered one grade above that held at date of retirement.
- b) A member with at least 30 years of service may retire at any age on an unreduced retirement annuity.
- c) Any member, active or inactive, may retire after 25 years of service, regardless of age. In such case, the retirement annuity shall be reduced $\frac{1}{4}$ of 1% for each month that the age of the member is less than 65 years (3% per year).

Amount of Service Retirement Annuity: A basic annuity of 2.00% of “average annual salary” for each of the first 10 years of credited service; and 2.5% of “average annual salary” for each full year of pension credit above 10 years, plus twenty dollars (\$20.00) multiplied by years of credited service reduced by an amount equal to one hundredth of one percent (.01%) of said amount for each one dollar (\$1.00) that a member’s average annual salary exceeds the amount of six thousand dollars (\$6,000).

The minimum amount of service retirement annuity payable by the Fund is \$1,200 per year. The maximum retirement annuity is 85% of “average annual salary.”

Average Annual Salary: Average of three highest annual salaries received by a member during the entire period of pension credit, or \$6,000, whichever is greater.

The annual salary of the member shall include the basic rate of salary on which contributions were made by the member and any salary on which the member made contributions as required under GCA, Section 8136(a). Effective October 1, 1986, salary can include payment for unused annual leave upon retirement.

In case of members of the Legislature, the average annual salary is the salary of the Director of Administration at the member’s date of retirement, or the average of the three highest annual salaries received by the member during the period of membership credit, whichever is greater.

Automatic Increase in Annuity: Effective July 1, 1984, any member retiring from service and entitled to benefits after September 1, 1972, is to receive each year, on the anniversary date of retirement, an increment of \$600 if the annual annuity is \$3,500 or less; \$400 if the annuity is between \$3,500 and \$6,300 per year; \$300 if the annuity is between \$6,300 and \$10,100; and \$200 if the annuity exceeds \$10,100 per year.

Disability Retirement: Upon total and permanent disability due to physical or mental causes, an employee under age 65 is entitled to a disability retirement annuity. For employees hired prior to August 22, 1984, the amount of the disability retirement annuity will be 66-2/3% of the employee’s salary in effect on the date of disability. Subsequent employees will have an annuity amount based on 66-2/3% of the average of the highest three years of salary. If the disability was not due to occupational causes, the employee must have Government of Guam service credit of at least six years, or five years in the case of terminal illness, in order to qualify, except that new members since May 28, 1985, may not retire if a disability arises from impairment or conditions existing prior to employment.

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A disability retirement annuitant must submit to a medical examination at least once a year during the first five years of disability, and at least once every three years thereafter, by a physician or physicians designated by the Board in order to establish continuing disability and entitlement to benefits. Should a disability annuitant resume gainful employment in a position other than the particular job in which he was engaged when declared disabled, the disability retirement benefit shall continue as initially determined.

A member receiving disability retirement benefits since December 1, 1972, is entitled to receive on the anniversary date of retirement, an annual increase of \$300 if the benefit is \$3,000 per year or less; \$250 per year where the annuity is between \$3,000 and \$6,000 per year; \$200 per year where the annuity is between \$6,000 and \$10,000 per year; and \$100 if the annuity exceeds \$10,000 per year.

Re-entry Into Service: A member on retirement who re-enters services as an employee eligible for membership shall have the annuity suspended during the period of employment without losing rights to automatic increases in the retirement annuity during the period of re-employment. This provision does not apply to Department of Education employees who occupy positions dealing with the Chamorro Language and Culture Program in Guam schools, persons employed as classroom teachers, guidance or health counselors when critical need arises, nor elected officials.

Benefits to Survivors: Benefits are payable to a surviving spouse and children under age 21, upon the death of a member while in service after at least three years of service, or occurring while on retirement. The benefit to children of an annuitant or member whose death occurs while in service after at least three years of service is payable until age 25 if they are full-time students in an accredited educational institution, or payable regardless of age if disabled and disability occurred before age 21.

If only a spouse survives the active or retired member, the annuity payable is 60% of the service or disability retirement annuity earned by the member, subject to a minimum of \$1,200 per year.

The annuity to a child is \$2,880 per year, subject to a maximum payment to five or more minor children of \$14,400 per year. The term "child" or "children" includes any natural child or adopted child under age 21, or any permanently disabled child whose incapacity began before the child attained age 21.

A survivor annuitant is entitled to an automatic increase in annuity each year on the anniversary date of the annuity of \$600 if the annuity is \$3,500 per year or less; \$400 if the annuity is between \$3,500 and \$6,300 per year; \$300 if the annuity is between \$6,300 and \$10,100; and \$200 if the annuity is more than \$10,100 per year.

A surviving spouse or minor child surviving the member is entitled, in addition to the above, a death benefit of \$1,000 payable in a lump sum.

A survivor's annuity terminates upon death or re-marriage under the age of 40, attainment of age 21 of the child, or the termination of the incapacity of a disabled child.

Optional Privilege at Retirement: Upon retirement from service, any unmarried employee, if in good health as determined by medical examination, may elect to receive, on an actuarial equivalent basis in lieu of the full retirement annuity, a reduced retirement annuity payable during the

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annuitant's lifetime, plus an annuity to a designated beneficiary to become payable at death of the annuitant. The annuity to the beneficiary is to be paid at the same rate and under the same conditions that apply to a survivor of a married member whose death occurs while in service.

Death Benefit – Active and Retired Members Without Survivors: Upon death of a member while in service, leaving no survivors eligible for annuities, the designated beneficiary or estate is entitled to a refund of the contribution credits, plus interest, together with a death benefit of \$1,000 payable in a lump sum.

Upon death of a retired member, if no survivors' annuities are payable, the death benefit to a designated beneficiary or the estate of the member consists of the excess, if any, of: (1) the total contribution credits of the member at retirement, plus interest, over (2) the total amount of annuity payments made to the retired member, plus the sum of \$1,000.

Death Benefit – Inactive Members: Upon the death of an inactive member with at least 20 years of pension credit, and survived by a spouse or minor children, the following benefit options are provided: (a) the surviving spouse or children, as the case may be, may elect to receive the annuities prescribed if the death of a member occurs while in service; or (b) a refund of the deceased member's total contribution credits, plus interest.

Refund of Members' Contributions: Upon complete separation from service, or transfer to the Government of Guam Defined Contribution Fund, a member with less than 25 years of pension credit may receive a refund of the total contributions, plus interest (except that no interest is payable if the total pension credit is less than one year).

Contributions by Members: Each member shall contribute to the Fund 9½% of salary earned and accruing after October 1, 1997; and at the member's option, 10½% of non-base pay subsequent to October 1, 1997.

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APPENDIX B. ACTUARIAL COST METHOD AND ASSUMPTIONS

	September 30, 2014		September 30, 2013	
Actuarial Cost Method	Entry Age Normal		Entry Age Normal	
Interest Rate	7.00%		7.00%	
Long-term Expected Rate of Return on Plan Assets	7.00%		7.00%	
Salary Increases	<u>Service</u>	<u>% Increase</u>	<u>Service</u>	<u>% Increase</u>
	0 – 5	7.5%	0 – 5	7.5%
	6 – 10	6.0%	6 – 10	6.0%
	11 – 15	5.0%	11 – 15	5.0%
	16 – 20	4.5%	16 – 20	4.5%
	Over 20	4.5%	Over 20	4.5%
Total Payroll Growth (DB and DC)	3.00%		3.00%	
Cost of Living Adjustment	Specified in Plan		Specified in Plan	
Mortality	RP-2000 Combined Healthy table +4 for males +1 for females No provision was made for future mortality improvement.		RP-2000 Combined Healthy table +4 for males +1 for females No provision was made for future mortality improvement.	
Disability				
Incidence	1974-78 SOA LTD Non-Jumbo, with rates reduced by 50%		1974-78 SOA LTD Non-Jumbo, with rates reduced by 50%	
Post-disability mortality	RP 2000 Disability male/female tables		RP 2000 Disability male/female tables	
Withdrawal Rates	Service-based rates (see attached)		Service-based rates (see attached)	
Retirement Age	40% assumed to retire at earliest eligibility for unreduced benefits.		40% assumed to retire at earliest eligibility for unreduced benefits.	
	15% per year thereafter until age 65		15% per year thereafter until age 65	
	20% per year thereafter until age 70		20% per year thereafter until age 70	
	100% at age 70		100% at age 70	

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	September 30, 2014	September 30, 2013
Return of Contributions	<p>100% of current employees who withdraw before retirement and who have less than 20 years of service are assumed to elect a return of contributions</p> <p>Terminated or inactive members with at least 5 years of service and an account balance of at least \$10,000 and who have not withdrawn their contributions are assumed to retire upon eligibility for unreduced benefits. All other employees who have previously withdrawn are assumed to elect a return of contributions.</p> <p>Contributions earn 4.5% interest</p>	<p>100% of current employees who withdraw before retirement and who have less than 20 years of service are assumed to elect a return of contributions</p> <p>Terminated or inactive members with at least 5 years of service and an account balance of at least \$10,000 and who have not withdrawn their contributions are assumed to retire upon eligibility for unreduced benefits. All other employees who have previously withdrawn are assumed to elect a return of contributions.</p> <p>Contributions earn 4.5% interest</p>
Marital Status	<p>Retiree data included spouse information. For active employees, 75% are assumed to have spouses at retirement. The assumed age difference is 3 years (+3 for a male spouse; -3 for a female spouse).</p>	<p>Retiree data included spouse information. For active employees, 75% are assumed to have spouses at retirement. The assumed age difference is 3 years (+3 for a male spouse; -3 for a female spouse).</p>
Sick Leave Adjustments	<p>Assumed to add 1.5 years of service and increase average earnings by 10% at retirement</p>	<p>Assumed to add 1.5 years of service and increase average earnings by 10% at retirement</p>
Administrative Expenses	<p>\$5,806,000 per year (equal to budgeted expense for year ending 9/30/15), allocated 71% to DB and 29% to DC</p>	<p>\$5,486,534 per year (equal to budgeted expense for year ending 9/30/14), allocated 73% to DB and 27% to DC</p>
Survivor Benefit – Minor Children	<p>Assumed to increase value of retirement benefits by 0.67% and survivor benefits by 20% for active members</p>	<p>Assumed to increase value of retirement benefits by 0.67% and survivor benefits by 20% for active members</p>
Asset Valuation Method	<p>3-year phase-in of gains/losses relative to interest rate assumption</p>	<p>3-year phase-in of gains/losses relative to interest rate assumption</p>
Data Inconsistencies	<p>None</p>	<p>None</p>

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Probabilities of Separation from Active Service
(per 100 working at each age)

MALE					FEMALE				
Age	Death	Disability	Service	Withdrawal	Age	Death	Disability	Service	Withdrawal
20	0.04	0.05	0	15.0	20	0.02	0.05	0	15.0
21	0.04	0.05	1	14.0	21	0.02	0.05	1	14.0
22	0.04	0.05	2	13.0	22	0.02	0.05	2	13.0
23	0.04	0.05	3	12.0	23	0.02	0.05	3	12.0
24	0.04	0.05	4	11.0	24	0.02	0.05	4	11.0
25	0.04	0.05	5	10.0	25	0.02	0.05	5	10.0
26	0.04	0.05	6	9.0	26	0.02	0.05	6	9.0
27	0.05	0.05	7	8.0	27	0.02	0.05	7	8.0
28	0.06	0.05	8	7.0	28	0.02	0.05	8	7.0
29	0.06	0.05	9	6.0	29	0.03	0.05	9	6.0
30	0.07	0.05	10	5.0	30	0.03	0.05	10	5.0
31	0.08	0.05	11	4.5	31	0.04	0.05	11	4.5
32	0.08	0.05	12	4.0	32	0.04	0.05	12	4.0
33	0.09	0.05	13	3.5	33	0.04	0.05	13	3.5
34	0.10	0.05	14	3.0	34	0.05	0.05	14	3.0
35	0.10	0.05	15	2.5	35	0.05	0.05	15	2.5
36	0.11	0.05	16	2.0	36	0.06	0.05	16	2.0
37	0.11	0.05	17	2.0	37	0.06	0.05	17	2.0
38	0.12	0.05	18	2.0	38	0.06	0.05	18	2.0
39	0.13	0.05	19	2.0	39	0.07	0.05	19	2.0
40	0.14	0.10	20 & over	2.0	40	0.08	0.10	20 & over	2.0
41	0.15	0.10			41	0.09	0.10		
42	0.16	0.10			42	0.09	0.10		
43	0.17	0.10			43	0.10	0.10		
44	0.19	0.10			44	0.11	0.10		
45	0.20	0.18			45	0.12	0.18		
46	0.21	0.18			46	0.13	0.18		
47	0.24	0.18			47	0.14	0.18		
48	0.27	0.18			48	0.16	0.18		
49	0.29	0.18			49	0.17	0.18		
50	0.32	0.32			50	0.19	0.32		
51	0.36	0.32			51	0.20	0.32		
52	0.42	0.32			52	0.22	0.32		
53	0.47	0.32			53	0.24	0.32		
54	0.53	0.32			54	0.27	0.32		
55	0.59	0.53			55	0.31	0.53		
56	0.67	0.53			56	0.35	0.53		
57	0.77	0.53			57	0.39	0.53		
58	0.88	0.53			58	0.44	0.53		
59	1.00	0.53			59	0.51	0.53		
60	1.13	0.76			60	0.58	0.76		
61	1.27	0.76			61	0.67	0.76		
62	1.44	0.76			62	0.76	0.76		
63	1.61	0.76			63	0.86	0.76		
64	1.79	0.76			64	0.97	0.76		

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APPENDIX C. SUMMARY OF PARTICIPANT DATA

Active Non-Uniformed

Age	COUNT			ANNUAL SALARIES		
	Males	Females	Total	Males	Females	Total
Under 20	-	-	-	-	-	-
20 – 24	-	-	-	-	-	-
25 – 29	-	-	-	-	-	-
30 – 34	-	-	-	-	-	-
35 – 39	16	6	22	*	*	*
40 – 44	130	147	277	\$ 6,637,961	\$ 7,493,624	\$ 14,131,585
45 – 49	247	297	544	13,367,950	16,332,709	29,700,659
50 – 54	303	365	668	16,388,953	20,626,184	37,015,137
55 – 59	206	262	468	11,934,268	14,835,879	26,770,147
60 – 64	99	178	277	6,094,320	9,921,329	16,015,649
65 – 69	37	74	111	2,590,778	3,900,769	6,491,547
70 & Over	<u>26</u>	<u>27</u>	<u>53</u>	<u>1,691,540</u>	<u>1,451,290</u>	<u>3,142,830</u>
Total	1,064	1,356	2,420	\$58,705,770	\$74,561,784	\$133,267,554

* Not shown if less than 20 members. The totals only sum the cells that are displayed.

Age	SERVICE									Total
	0 - 4	5 - 9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 20	-	-	-	-	-	-	-	-	-	-
20 – 24	-	-	-	-	-	-	-	-	-	-
25 – 29	-	-	-	-	-	-	-	-	-	-
30 – 34	-	-	-	-	-	-	-	-	-	-
35 – 39	2	2	4	4	10	-	-	-	-	22
40 – 44	5	12	12	62	172	14	-	-	-	277
45 – 49	4	11	10	42	283	179	15	-	-	544
50 – 54	11	15	10	36	240	233	115	8	-	668
55 – 59	6	8	12	28	165	133	86	29	1	468
60 – 64	2	2	4	15	112	77	44	15	6	277
65 – 69	-	1	-	6	42	34	13	12	3	111
70 & Over	<u>-</u>	<u>-</u>	<u>3</u>	<u>2</u>	<u>19</u>	<u>14</u>	<u>8</u>	<u>3</u>	<u>4</u>	<u>53</u>
Total	30	51	55	195	1,043	684	281	67	14	2,420

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SECTION VI. APPENDICES

Active Uniformed

Age	COUNT			ANNUAL SALARIES		
	Males	Females	Total	Males	Females	Total
Under 20	-	-	-	-	-	-
20 – 24	-	-	-	-	-	-
25 – 29	-	-	-	-	-	-
30 – 34	-	-	-	-	-	-
35 – 39	4	-	4	*	-	*
40 – 44	43	2	45	\$ 3,069,873	*	\$ 3,069,873
45 – 49	83	3	86	7,161,101	*	7,161,101
50 – 54	94	5	99	8,188,199	*	8,188,199
55 – 59	29	1	30	2,684,771	*	2,684,771
60 – 64	5	-	5	*	-	*
65 – 69	1	-	1	*	-	*
70 & Over	<u>2</u>	<u>-</u>	<u>2</u>	<u>*</u>	<u>-</u>	<u>*</u>
Total	261	11	272	\$21,103,944	*	\$21,103,944

* Not shown if less than 20 members. The totals only sum the cells that are displayed.

Age	SERVICE									Total
	0 – 4	5 – 9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 20	-	-	-	-	-	-	-	-	-	-
20 – 24	-	-	-	-	-	-	-	-	-	-
25 – 29	-	-	-	-	-	-	-	-	-	-
30 – 34	-	-	-	-	-	-	-	-	-	-
35 – 39	-	-	-	4	-	-	-	-	-	4
40 – 44	-	-	-	10	32	3	-	-	-	45
45 – 49	1	-	-	4	40	35	6	-	-	86
50 – 54	-	-	-	2	27	42	28	-	-	99
55 – 59	-	-	-	-	6	9	10	5	-	30
60 – 64	-	-	-	-	2	1	2	-	-	5
65 – 69	-	-	-	-	-	1	-	-	-	1
70 & Over	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>2</u>
Total	1	0	0	20	107	92	47	5	-	272

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SECTION VI. APPENDICES

Active Total

Age	COUNT			ANNUAL SALARIES		
	Males	Females	Total	Males	Females	Total
Under 20	-	-	-	-	-	-
20 – 24	-	-	-	-	-	-
25 – 29	-	-	-	-	-	-
30 – 34	-	-	-	-	-	-
35 – 39	20	6	26	-	-	-
40 – 44	173	149	322	\$ 9,707,834	\$ 7,493,624	\$ 17,201,458
45 – 49	330	300	630	20,529,051	16,332,709	36,861,760
50 – 54	397	370	767	24,577,152	20,626,184	45,203,336
55 – 59	235	263	498	14,619,039	14,835,879	29,454,918
60 – 64	104	178	282	6,094,320	9,921,329	16,015,649
65 – 69	38	74	112	2,590,778	3,900,769	6,491,547
70 & Over	<u>28</u>	<u>27</u>	<u>55</u>	<u>1,691,540</u>	<u>1,451,290</u>	<u>3,142,830</u>
Total	1,325	1,367	2,692	\$79,809,714	\$74,561,784	\$154,371,498

* Not shown if less than 20 members. The totals only sum the cells that are displayed.

Age	SERVICE									Total
	0 - 4	5 – 9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 20	-	-	-	-	-	-	-	-	-	-
20 – 24	-	-	-	-	-	-	-	-	-	-
25 – 29	-	-	-	-	-	-	-	-	-	-
30 – 34	-	-	-	-	-	-	-	-	-	-
35 – 39	2	2	4	8	10	-	-	-	-	26
40 – 44	5	12	12	72	204	17	-	-	-	322
45 – 49	5	11	10	46	323	214	21	-	-	630
50 – 54	11	15	10	38	267	275	143	8	-	767
55 – 59	6	8	12	28	171	142	96	34	1	498
60 – 64	2	2	4	15	114	78	46	15	6	282
65 – 69	-	1	-	6	42	35	13	12	3	112
70 & Over	<u>-</u>	<u>-</u>	<u>3</u>	<u>2</u>	<u>19</u>	<u>15</u>	<u>9</u>	<u>3</u>	<u>4</u>	<u>55</u>
Total	31	51	55	215	1,150	776	328	72	14	2,692

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SECTION VI. APPENDICES

Service Retirees

Age	COUNT			ANNUAL BENEFITS		
	Males	Females	Total	Males	Females	Total
Under 25	-	1	1	-	*	*
25 – 29	-	-	-	-	-	-
30 – 34	-	-	-	-	-	-
35 – 39	-	-	-	-	-	-
40 – 44	-	-	-	-	-	-
45 – 49	16	4	20	-	-	-
50 – 54	115	78	193	\$ 4,645,850	\$ 2,834,920	\$ 7,480,770
55 – 59	315	272	587	12,772,356	9,274,335	22,046,691
60 – 64	556	531	1,087	20,998,531	17,218,080	38,216,611
65 – 69	543	545	1,088	19,791,237	16,793,212	36,584,449
70 – 74	379	426	805	13,331,202	12,215,931	25,547,133
75 – 79	273	329	602	8,309,867	8,437,703	16,747,570
80 – 84	175	223	398	4,787,882	5,374,473	10,162,355
85 – 89	101	126	227	2,633,004	2,798,966	5,431,970
90 & Over	<u>29</u>	<u>39</u>	<u>68</u>	<u>563,700</u>	<u>785,826</u>	<u>1,349,526</u>
Total	2,502	2,574	5,076	\$87,833,629	\$75,733,446	\$163,567,075

* Not shown if less than 20 members. The totals only sum the cells that are displayed. Payees receiving benefits under Qualified Domestic Relations Orders (QDROs) are included with service retirees.

Age	ANNUAL BENEFIT LEVEL									Total
	<\$5k	\$5-10k	\$10-15k	\$15-20k	\$20-25k	\$25-30k	\$30-40k	\$40-50k	\$50k+	
Under 40	-	-	-	-	1	-	-	-	-	1
40 – 44	-	-	-	-	-	-	-	-	-	-
45 – 49	-	1	-	1	3	4	4	2	5	20
50 – 54	-	3	8	13	20	25	45	38	41	193
55 – 59	1	6	23	33	72	83	143	121	105	587
60 – 64	3	10	54	60	123	171	319	198	149	1,087
65 – 69	3	11	60	92	152	192	302	153	123	1,088
70 – 74	-	19	71	97	122	136	162	110	88	805
75 – 79	1	23	76	106	82	94	132	42	46	602
80 – 84	-	10	84	92	65	43	54	26	24	398
85 – 89	-	2	53	62	25	32	34	4	15	227
90 & Over	<u>-</u>	<u>-</u>	<u>25</u>	<u>26</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>68</u>
Total	8	85	454	582	671	783	1,198	698	597	5,076

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SECTION VI. APPENDICES

Disabled Retirees

Age	COUNT			ANNUAL BENEFITS		
	Males	Females	Total	Males	Females	Total
Under 25	-	-	-	-	-	-
25 – 29	-	-	-	-	-	-
30 – 34	-	-	-	-	-	-
35 – 39	-	-	-	-	-	-
40 – 44	4	2	6	-	-	-
45 – 49	9	3	12	-	-	-
50 – 54	10	8	18	-	-	-
55 – 59	22	20	42	\$ 533,641	\$ 448,378	\$ 982,019
60 – 64	29	29	58	683,207	555,258	1,238,465
65 – 69	23	35	58	588,378	772,964	1,361,342
70 – 74	26	25	51	546,457	463,275	1,009,732
75 – 79	14	19	33	-	-	-
80 – 84	8	10	18	-	-	-
85 – 89	2	6	8	-	-	-
90 & Over	<u>1</u>	<u>1</u>	<u>2</u>	-	-	-
Total	148	158	306	\$2,351,683	\$2,239,875	\$4,591,558

* Not shown if less than 20 members. The totals only sum the cells that are displayed.

Age	ANNUAL BENEFIT LEVEL									Total
	<\$5k	\$5-10k	\$10-15k	\$15-20k	\$20-25k	\$25-30k	\$30-40k	\$40-50k	\$50k+	
Under 40	-	-	-	-	-	-	-	-	-	-
40 – 44	-	-	-	4	-	1	-	1	-	6
45 – 49	-	-	-	4	2	2	4	-	-	12
50 – 54	-	-	1	4	7	4	1	1	-	18
55 – 59	-	-	1	17	10	6	5	3	-	42
60 – 64	-	-	9	22	9	13	4	1	-	58
65 – 69	-	-	6	18	14	10	7	2	1	58
70 – 74	-	-	8	25	11	5	1	1	-	51
75 – 79	-	-	4	8	13	4	4	-	-	33
80 – 84	-	-	7	8	2	1	-	-	-	18
85 – 89	-	-	6	1	1	-	-	-	-	8
90 & Over	<u>-</u>	<u>-</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2</u>
Total	-	-	44	111	69	46	26	9	1	306

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SECTION VI. APPENDICES

Surviving Spouses and Child Pensioners

Age	COUNT			ANNUAL BENEFITS		
	Males	Females	Total	Males	Females	Total
Under 25	93	102	195	\$ 267,840	\$ 293,760	\$ 561,600
25 – 29	-	2	2	-	-	-
30 – 34	2	4	6	-	-	-
35 – 39	4	10	14	-	-	-
40 – 44	4	19	23	-	-	-
45 – 49	5	41	46	-	554,939	554,939
50 – 54	11	74	85	-	1,188,030	1,188,030
55 – 59	18	119	137	-	2,074,480	2,074,480
60 – 64	20	196	216	277,647	3,536,299	3,813,946
65 – 69	37	207	244	591,331	3,407,296	3,998,627
70 – 74	49	173	222	714,874	2,874,687	3,589,561
75 – 79	41	190	231	639,688	2,941,842	3,581,530
80 – 84	37	164	201	478,696	2,311,222	2,789,918
85 – 89	39	109	148	599,581	1,563,611	2,163,192
90 & Over	<u>17</u>	<u>57</u>	<u>74</u>	-	<u>759,231</u>	<u>759,231</u>
Total	377	1,467	1,844	\$3,569,657	\$21,505,397	\$25,075,054

* Not shown if less than 20 members. The totals only sum the cells that are displayed.

Surviving Spouses Only

Age	ANNUAL BENEFIT LEVEL									Total
	<\$5k	\$5-10k	\$10-15k	\$15-20k	\$20-25k	\$25-30k	\$30-40k	\$40-50k	\$50k+	
Under 40	-	4	2	1	1	-	-	-	-	8
40 – 44	-	4	9	3	1	1	1	-	-	19
45 – 49	-	4	17	13	2	2	-	-	-	38
50 – 54	1	15	29	20	12	2	2	-	1	82
55 – 59	-	15	47	29	25	7	5	2	1	131
60 – 64	-	17	86	47	30	14	17	3	1	215
65 – 69	1	23	103	54	38	9	12	1	-	241
70 – 74	-	27	95	58	19	12	7	2	1	221
75 – 79	-	28	115	48	20	13	5	2	-	231
80 – 84	-	35	116	32	6	8	2	2	-	201
85 – 89	-	15	92	21	15	3	1	-	1	148
90 & Over	<u>-</u>	<u>12</u>	<u>49</u>	<u>8</u>	<u>3</u>	<u>-</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>74</u>
Total	2	199	760	334	172	71	54	12	5	1,609

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SECTION VI. APPENDICES

Inactive and Terminated Members Who are Assumed Not to Withdraw Contributions

Age	COUNT			ANNUAL BENEFITS		
	Males	Females	Total	Males	Females	Total
Under 25	-	-	-	-	-	-
25 – 29	-	-	-	-	-	-
30 – 34	-	-	-	-	-	-
35 – 39	2	1	3	*	*	*
40 – 44	14	12	26	*	*	*
45 – 49	19	10	29	*	*	*
50 – 54	25	23	48	\$512,739	\$288,282	\$801,021
55 – 59	14	12	26	*	*	*
60 – 64	10	11	21	*	*	*
65 – 69	4	3	7	*	*	*
70 – 74	1	-	1	*	-	*
75 – 79	2	1	3	*	-	*
80 – 84	-	1	1	-	*	*
85 – 89	-	-	-	-	-	-
90 & Over	-	-	-	-	-	-
Total	91	74	165	\$512,739	\$288,282	\$801,021

* Not shown if less than 20 members. The totals only sum the cells that are displayed.

Age	ANNUAL BENEFIT LEVEL									Total
	<\$5k	\$5-10k	\$10-15k	\$15-20k	\$20-25k	\$25-30k	\$30-40k	\$40-50k	\$50k+	
Under 40	-	1	1	1	-	-	-	-	-	3
40 – 44	5	11	6	1	1	2	-	-	-	26
45 – 49	5	5	8	7	1	-	2	1	-	29
50 – 54	4	11	9	9	8	5	-	1	1	48
55 – 59	-	9	5	2	4	3	1	1	1	26
60 – 64	4	9	4	2	-	-	1	1	-	21
65 – 69	2	4	-	-	-	-	1	-	-	7
70 – 74	1	-	-	-	-	-	-	-	-	1
75 – 79	1	2	-	-	-	-	-	-	-	3
80 – 84	-	-	1	-	-	-	-	-	-	1
85 – 89	-	-	-	-	-	-	-	-	-	-
90 & Over	-	-	-	-	-	-	-	-	-	-
Total	22	52	34	22	14	10	5	4	2	165

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APPENDIX D. GLOSSARY OF KEY TERMS

Actuarial Accrued Liability or Total Pension Liability. The Present Value of Future Benefits allocated to past service in accordance with the actuarial cost method. GASB 67 uses the term Total Pension Liability.

Actuarial Cost Method. A method of allocating the present value of benefits to past and future periods. Actuarial cost methods take into consideration the effect of wage inflation.

Actuarial Gains and Losses. Changes to the Actuarial Accrued Liability due to deviations from the actuarial assumptions. These can include gains and losses from investments, employee turnover, disability, retirement, mortality, and administrative expenses.

Actuarial Value of Assets. A method of valuing Fund assets that may smooth gains and losses that occur in the market value over a period of time.

GASB. Government Accounting Standards Board. GASB Statements No. 67, and 68 are accounting standards issued by GASB that require certain items be disclosed in the Fund's financial statements.

Fiduciary Net Position. The market value of Fund assets.

Net Pension Liability. The dollar value of the Total Pension Liability that exceeds the market value of Fund assets. A fully funded plan will have no Net Pension Liability.

Normal Cost or Service Cost. The value of benefits earned for one year of service. The normal cost is calculated in accordance with the actuarial cost method. The accumulation of all normal costs assigned to past service equals the Actuarial Accrued Liability. GASB 68 uses the term Service Cost.

Present Value of Benefits. The sum of all benefits expected to be paid in the future by the retirement system, with the payments discounted to the present using the valuation interest rate. This includes benefits to be earned in the future for current employees.

Present Value of Future Normal Cost. The sum of all future normal costs expected for current employees, with the costs discounted back to the present using the valuation interest rate.

Security Ratio. The percentage of the Actuarial Accrued Liability that is funded by the Fund assets. A fully funded plan will have a security ratio of 100%.

Unfunded Actuarial Accrued Liability. The dollar value of the Actuarial Accrued Liability that exceeds the Actuarial Value of Assets. A fully funded plan will have no unfunded actuarial accrued liability.