

**Government of Guam  
Retirement Fund**

**Actuarial Valuation as of September 30, 2005**

**Prepared by:**

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Milliman**

**June 16, 2006**



**Milliman**

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June 16, 2006

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**Government of Guam Retirement Fund –  
Actuarial Valuation as of September 30, 2005 – Final**

At the request of the Trustees, we have made an actuarial valuation of the Government of Guam Retirement Fund as of September 30, 2005. The purpose of this valuation is to determine the required contribution under the provisions of GCA 8137 and to provide the Fund with financial disclosures under GASB 25.

In preparing our report, we relied on financial information and employee data furnished to us by the Government of Guam Retirement Fund. While Milliman has not audited the financial and census data, they have been reviewed for reasonableness and are, in our opinion, sufficient and reliable for the purposes of our calculations. If any of this information as summarized in this report is inaccurate or incomplete, the results shown could be materially affected and this report may need to be revised.

The actuarial cost method and assumptions used as well as the supporting data and principal plan provisions upon which the valuation is based are set forth in the following report. In our opinion, each actuarial assumption, method, and technique used (a) is reasonable taking into account the experience of the Plan and reasonable expectations or (b) would, in the aggregate, result in a total contribution equivalent to that which would be determined if each such assumption, method, or technique were reasonable. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions.

The results of this valuation are applicable only for the current year and are intended to be used only by the plan sponsor for the specific purposes described herein. Accordingly, this report may not be distributed outside the Fund except as required by law. Reliance on information contained in this report by anyone for anything other than the intended purpose puts the relying entity at risk of being misled.



Government of Guam Retirement Fund  
June 16, 2006  
Page 2

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, all costs, liabilities, and other factors under the Plan were determined in accordance with generally accepted actuarial principles and practices which are consistent with the applicable Actuarial Standards of Practice of the American Academy of Actuaries. We further certify that, to the best of our knowledge, the report is complete and accurate and the information presented herein, in our opinion, fully and fairly discloses the actuarial position of the Plan.

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,

A handwritten signature in black ink that reads "Richard A. Wright".

Richard A. Wright, F.S.A.  
Consulting Actuary

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## TABLE OF CONTENTS

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<i>Section</i>	<i>Page</i>
<b>I Valuation Summary</b>	
Introduction.....	1
Highlights.....	1
Results of Valuation.....	2
Actuarial Assumptions.....	3
Alternative Funding Strategies.....	4
<b>II Fund Assets</b>	
Exhibit 1. Summary of Fund Assets.....	5
Exhibit 2. Asset Allocation.....	6
Exhibit 3. Changes in Fund Assets.....	7
Exhibit 4. Actuarial Value of Assets.....	8
Exhibit 5. Historical Returns on Fund Assets.....	9
<b>III Membership Data</b>	
Exhibit 6. Active Employees.....	10
Exhibit 7. Active Employees by Agency.....	11
Exhibit 8. Retired Employees.....	12
Exhibit 9. Terminated and Inactive Members.....	13
Exhibit 10. Reconciliation of Membership Data.....	14
<b>IV Valuation Exhibits</b>	
Exhibit 11. Accrued Liability.....	15
Exhibit 12. Calculation of Unfunded Liability.....	16
Exhibit 13. Calculation of Actuarial Gain/Loss.....	17
Exhibit 14. Normal Cost.....	18
Exhibit 15. Amortization of Unfunded Liability.....	19
Exhibit 16. Contribution Requirements.....	20
Exhibit 17. GASB No. 25 Schedule of Funding Progress.....	21
Exhibit 18. GASB No. 25 Schedule of Employer Contributions.....	22
Exhibit 19. 40-Year Projection of Fund Balance.....	23
Exhibit 20. 40-Year Projection of Security Ratio.....	24
<b>V Appendices</b>	
Appendix A. Summary of Pension Plan.....	25-29
Appendix B. Actuarial Cost Method and Assumptions.....	30-32
Appendix C. Summary of Participant Data.....	33-38
Appendix D. Glossary of Key Terms.....	39



## SECTION I. VALUATION SUMMARY

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### *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 accrued liability and normal cost.
- Determine the contribution requirements.
- Provide financial information required by GASB No. 25.
- 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 8137 for the 2006-2007 fiscal year is **27.48%** of payroll. Of this amount, 20.66% is for the unfunded liability of the defined benefit (DB) plan, 4.26% is for the normal cost of the DB plan, and 2.55% is for contributions to the defined contribution (DC) plan.
- The defined benefit payroll for the 2004-05 fiscal year was \$196.2 million compared with \$203.6 million for the 2003-04 fiscal year. The total defined benefit and defined contribution payroll for the 2004-05 fiscal year, was \$359.9 million compared with \$353.2 million for the 2003-04 fiscal year.
- The unfunded accrued liability decreased from \$1.354 billion as of September 30, 2004, to \$1.290 billion as of September 30, 2005, due mainly to investment returns greater than expected. The payment required to amortize the unfunded accrued liability under GCA 8137 has decreased from \$78.1 million to \$76.2 million. The payment as a percentage of payroll has decreased from 21.36% to 20.66%.
- Based on the unaudited financial statements, we calculated an investment return on the total market value of assets of 9.7% for the fiscal year ending September 30, 2005. The average annual return on the actuarial value of assets for the last 5 fiscal years has been 5.6%.
- The Fund's administrative expenses for the defined benefit plan were \$2,880,552 for the year ending September 30, 2005, net of the adjustment for bad debts. We have used this as the expense assumption for future years. The prior valuation assumed administrative expenses of \$2,599,657 per year.
- There have been no changes in plan provisions or actuarial assumptions since the prior actuarial valuation.



## SECTION I. VALUATION SUMMARY

### *Results of Valuation*

The following table summarizes the principal valuation results and compares them with the prior year.

	<u>9/30/2005</u>	<u>9/30/2004</u>
<b>Participant Counts</b>		
Active – Non-Uniformed	4,286	4,671
– Uniformed	<u>419</u>	<u>442</u>
– Total	4,705	5,113
Retired	<u>6,852</u>	<u>6,822</u>
Total Actives and Retirees	11,557	11,935
Inactive and Terminated Members with Accumulated contributions	7,063	7,034
<b>Actual Payroll for Prior Fiscal Year</b>		
	<i>(\$millions)</i>	<i>(\$millions)</i>
Defined benefit (DB) payroll	\$196.2	\$203.6
Total payroll (DB and DC)	359.9	353.2
<b>Expected Payroll for Next Fiscal Year</b>		
Defined benefit (DB) payroll	\$180.5	\$203.6
Total payroll (DB and DC)	368.7	365.6
<b>Financial Status</b>		
Accrued liability	\$2,583.4	\$2,599.7
Actuarial value of assets	<u>1,293.6</u>	<u>1,245.3</u>
Unfunded accrued liability	\$1,289.8	\$1,354.4
Security ratio	50.07%	47.90%
<b>Normal Cost</b>		
		<i>% of DB</i>
		<u>Payroll</u>
Total normal cost	\$ 32.8	18.21%
Estimated employee contributions	<u>(17.1)</u>	<u>(9.50%)</u>
Government normal cost	\$ 15.7	8.71%
		<i>% of Total</i>
<b>Required Contribution per GCA 8137</b>		
		<u>Payroll</u>
Unfunded liability cost	\$ 76.2	20.66%
Government DB normal cost	15.7	4.26%
Expected government DC contributions	<u>9.4</u>	<u>2.55%</u>
Total DB and DC contribution	\$101.3	<b>27.48%</b>
<b>Yield on Market Value of Assets</b>	9.7%	9.3%



## SECTION I. VALUATION SUMMARY

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### *Actuarial Assumptions*

The following assumptions should be reviewed for reasonableness. To the extent that actual experience differs from the assumptions below, future pension costs will differ as well.

Interest Rate: The interest rate used as of September 30, 2005, was 7.0%. Milliman's expected long-term returns on various asset classes is shown below. The target asset allocation is from the proposed new investment management guidelines, and is the expected long-term asset allocation.

<i>Asset Class</i>	<i>Expected 1 Year Nominal Return</i>	<i>Target Asset Allocation</i>
U.S. Equities	9.58%	38%
Non-U.S. Equities	9.75%	16%
Non-U.S. Equities (emerging markets)	12.08%	3%
U.S. Fixed Income (aggregate)	5.30%	38%
Non-U.S. Fixed Income	3.48%	4%
Cash	4.01%	1%
Expected Average Return (1 yr)	7.76%	
Expected Geometric Average Return (30 yrs)	7.19%	
25 <sup>th</sup> to 75 <sup>th</sup> Percentile Return	5.84% to 8.55%	

The current assumption of 7.0% is about equal to the geometric average return over 30 years, and is within the 25<sup>th</sup> to 75<sup>th</sup> 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, 2005, was the Uninsured Pensioner 1994 Table (UP94), with male mortality rates set forward 2 years. The mortality table used for disabled lives is the UP94 table with a 10-year set forward for males and an 8-year set forward for females. This assumption is unchanged from the prior valuation.

Salary Increases. Salaries are assumed to increase 8.5% per year for employees in their first 5 years of service, 7.0% for service between 6 and 10 years, 6.0% for service between 11 and 15 years, 5.0% for service between 16 and 20 years, and 4.0% for service after 20 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 3.5% per year. This assumption is unchanged from the prior valuation.

Retirement Age. We have assumed 50% of employees will retire when first eligible for unreduced retirement. Thereafter, 20% of employees will retire at each year until age 70, at which time all remaining employees are assumed to retire. This assumption is unchanged from the prior valuation.



## SECTION I. VALUATION SUMMARY

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*Return of Contributions.* We have assumed 100% of employees who withdraw prior to retirement and who have less than 20 years of service will elect of return of contributions in lieu of a deferred benefit. This assumption is unchanged from the prior valuation.

*Administrative Expenses.* Annual administrative expenses are assumed to be \$3,076,635, which is the amount of defined benefit plan expenses for the year ending September 30, 2005, as reported in the Fund's audited financial statements, and is net of the adjustment for bad debts. The prior valuation assumed annual expenses of \$2,599,657.

A summary of actuarial assumptions is in Appendix B.

### *Alternative Funding Strategies*

GC Section 8137 requires a contribution sufficient to fully fund the unfunded 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 liability over the remaining 25.58 years as a level percentage of total payroll (including both defined benefit and defined contribution members).

Any change in contribution requirements requires legislative action. One alternative strategy is to achieve a funding target of less than 100% after a certain number of years. Another strategy recognizes the decreasing size of the active population and develops contribution requirements that decrease as a percentage of payroll.

Exhibits 19 and 20 project the employer and employee contributions, fund balance, accrued liability and security ratio forward 40 years under the current funding requirements. Any change in funding requirements should consider the effect on the projected fund balance and security ratio.





## SECTION II. FUND ASSETS

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### Exhibit 1. Summary of Fund Assets

Listed below are the unaudited assets reported in the Fund's financial statements as of September 30, 2005, excluding certain receivables and liabilities whose payments are deducted from employer contributions to the Fund, along with the audited assets as of September 30, 2004.

	<u>9/30/2005</u>	<u>9/30/2004</u>
<b>Investments</b>		
Common stocks	\$ 641,550,000	\$ 590,471,874
U.S. Government securities	307,926,251	280,041,882
Non-U.S. fixed income	3,482,587	0
Corporate bonds and notes	228,136,001	272,326,917
Money market funds	<u>45,367,251</u>	<u>38,729,970</u>
Total investments	1,226,462,090	1,181,570,643
<b>Receivables</b>		
Employer contributions, net	16,863,474	18,331,507
Member contributions	6,240,707	6,922,201
Accrued investment income	5,563,159	5,618,196
Due from brokers for unsettled trades	1,214,130	9,467,943
Notes receivable for service credits	8,807,252	7,635,763
Notes receivable ERIP	10,185,803	11,115,954
Interest and penalties	5,814,607	4,299,453
Supplemental/insurance benefits advanced	4,404,792	4,604,359
Other receivables	3,048,065	2,582,849
Due from DC plan	<u>738,758</u>	<u>419,722</u>
Total receivables	62,880,747	70,997,947
Cash and cash equivalents	2,622,576	4,707,675
Property and equipment	<u>1,257,365</u>	<u>1,352,815</u>
Total assets	\$ 1,293,222,778	\$ 1,258,629,080
<b>Liabilities</b>		
Accounts payable and accrued expenses	\$ 2,989,440	\$ 2,557,836
Due to brokers for unsettled trades	<u>6,031,941</u>	<u>7,442,975</u>
Total liabilities	\$ 9,021,381	\$ 10,000,811
<b>Valuation Assets</b>	<u>\$ 1,284,201,397</u>	<u>\$ 1,248,628,269</u>
<b>Excluded Assets <sup>1</sup></b>		
Receivable – ERIP employer share	\$ 9,094,642	\$ 12,625,667
Supplemental/COLA benefits receivable	92,162,185	99,296,144
Deferred revenue for service credits	<u>(28,087,697)</u>	<u>(31,377,384)</u>
Total excluded assets	\$ 73,169,130	\$ 80,544,427

<sup>1</sup> These assets are excluded because payments towards these receivables are deducted from the regular contributions.



## SECTION II. FUND ASSETS

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### Exhibit 2. Asset Allocation

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

	<i>Asset Allocation</i>	
	<i>9/30/2005</i>	<i>9/30/2004</i>
Common stocks	52.3%	50.1%
U.S. Government securities	26.2%	21.2%
Non-U.S. Fixed Income	0.3%	0.0%
Corporate bonds and notes	17.5%	25.4%
Money market funds	<u>3.7%</u>	<u>3.3%</u>
<b>Total</b>	100.0%	100.0%



## SECTION II. FUND ASSETS

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### Exhibit 3. Changes in Fund Assets

Fund 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.

	<i>Fiscal Year Ending</i>	
	<i>9/30/2005</i>	<i>9/30/2004</i>
<b>Beginning Balance</b>	\$ 1,248,628,269	\$ 1,225,284,732
Adjustment to correct long-term supplemental receivable	(2,820,732)	0
<b>Contributions</b>		
Employer contributions	63,282,604	61,561,461
Member contributions	19,362,457	20,176,135
Decrease/(increase) in excluded assets	<u>7,375,297</u>	<u>1,826,214</u>
Total contributions	90,020,358	83,563,810
<b>Investment Income</b>		
Net appreciation in fair value	90,329,575	72,376,615
Interest	22,929,215	31,092,905
Dividends	12,496,681	11,396,669
Other investment income	848,735	1,522,685
Investment expenses	<u>(3,305,543)</u>	<u>(3,350,907)</u>
Total investment income	123,298,663	113,037,967
<b>Benefit Payments</b>		
Age and service annuities	137,760,494	133,401,910
Disability annuities	8,835,311	8,976,389
Survivor annuities	15,087,946	14,300,943
Insurance	0	66,489
Refunds to separated employees	9,464,772	11,443,283
Interest on refunded contributions	451,636	679,621
Balances transferred to DC plan	<u>444,480</u>	<u>1,789,948</u>
Total benefit payments	172,044,639	170,658,583
<b>Administrative Expenses</b>		
Administrative expenses	3,165,537	3,082,551
Bad debts (recoveries)	<u>(285,015)</u>	<u>(482,894)</u>
Net administrative expenses	2,880,522	2,599,657
<b>Ending Balance</b>	\$ 1,284,201,397	\$ 1,248,628,269

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## SECTION II. FUND ASSETS

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### Exhibit 4. Actuarial Value of Assets

The actuarial value of assets equals the market value of Fund assets, excluding certain receivables and liabilities whose payments are deducted from employer contributions to the Fund, and valuing fixed income investments at their amortized cost instead of market value.

	<u>9/30/2005</u>	<u>9/30/2004</u>
Valuation assets	\$ 1,284,201,397	\$ 1,248,628,269
Amortized cost of bonds	548,907,116	549,046,005
Market value of bonds	<u>539,544,839</u>	<u>552,368,799</u>
Adjustment to valuation assets	9,362,277	(3,322,794)
Actuarial value of assets	\$ 1,293,563,674	\$ 1,245,305,474
Actuarial value as % of market value	100.7%	99.7%



## SECTION II. FUND ASSETS

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### Exhibit 5. Historical Returns on Fund Assets

The following table shows the historical return on Fund assets over the last 5 years:

<i>Fiscal Year Ending 9/30</i>	<i>Return on Market Value</i>	<i>Return on Actuarial Value</i>
2005	9.7%	10.7%
2004	9.3%	10.4%
2003	9.9%	13.0%
2002	(0.5%)	(2.7%)
2001	(0.7%)	(2.3%)
Average since 2001	5.7%	5.6%

The actuarial valuation rate is 7.00%.



## SECTION III. MEMBERSHIP DATA

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### Exhibit 6. Active Employees

	<u>9/30/2005</u>	<u>9/30/2004</u>
<b>Reconciliation of Census</b>		
Members reported in raw data	11,916	12,147
Number excluded due to:		
Reported as inactive	5,029	5,062
Reported as terminated	305	274
Zero earnings	1,544	1,427
Refund of contributions	185	271
Duplicate retiree records	<u>148</u>	<u>0</u>
Total exclusions	7,211	7,034
Active employees in valuation	4,705	5,113
<b>Active Employees – Non-Uniformed</b>		
Number vested	4,229	4,592
Number not vested	<u>57</u>	<u>79</u>
Total	4,286	4,671
Average age	47.3	46.5
Average service	18.0	17.0
Average earnings	\$ 37,668	\$ 38,966
Average accumulated contributions	\$ 66,463	\$ 60,081
<b>Active Employees – Uniformed</b>		
Number vested	419	442
Number not vested	<u>0</u>	<u>0</u>
Total	419	442
Average age	42.2	41.5
Average service	18.1	17.3
Average earnings	\$ 47,666	\$ 48,752
Average accumulated contributions	\$ 84,667	\$ 75,654
<b>Active Employees – Total</b>		
Number vested	4,648	5,034
Number not vested	<u>57</u>	<u>79</u>
Total	4,705	5,113
Average age	46.8	46.1
Average service	18.0	17.0
Average earnings	\$ 38,559	\$ 39,812
Average accumulated contributions	\$ 68,084	\$ 61,427



## SECTION III. MEMBERSHIP DATA

### Exhibit 7. Active Employees by Agency

	<u>9/30/2005</u>	<u>9/30/2004</u>
None listed	-	5
Agency For Human Resources Development	13	13
Bureau of Budget & Management Research	15	13
Bureau of Planning	28	27
Chamorro Land Trust	5	4
Chief Medical Examiner	1	1
Civil Service Commission	5	5
Commissioner's Council	26	28
Customs & Quarantine	50	54
Dept of Administration	74	79
Dept of Agriculture	45	45
Dept of Commerce	-	1
Dept of Corrections	77	81
Dept of Education	1,561	1,667
Dept of Labor	26	31
Dept of Land Management	37	38
Dept of Law	51	60
Dept of Mental Health & Substance Abuse	47	48
Dept of Military Affairs	14	14
Dept of Parks and Recreation	45	49
Dept of Public Health & Social Services	185	191
Dept of Public Works	257	278
Dept of Revenue and Taxation	86	91
Dept of Vocational Rehabilitation	17	18
Dept of Youth Affairs	36	41
Government of Guam Retirement Fund	18	20
Governor's office	16	23
Guam Airport Authority	108	124
Guam Caha	3	3
Guam Community College	106	110
Guam Economic Development Agency	7	11
Guam Election Commission	1	1
Guam Energy Office	4	4
Guam Environmental Protection Agency	18	17
Guam Fire Dept	176	180
Guam Housing & Urban Renewal Agency	42	43
Guam Housing Corporation	8	9
Guam Legislature	28	35
Guam Memorial Hospital Authority	306	335
Guam Police Dept	148	146
Guam Power Authority	271	282
Guam Reparation Commission	6	7
Guam Telephone Authority	37	147
Guam Visitors Bureau	10	11
Guam Waterworks Authority	120	131
KGTF	6	7
Lt. Governor's Office	2	2
Nieves M. Flores Memorial Library	6	6
Port Authority Of Guam	142	154
Public Defender	28	26
Superior Court Of Guam	-	128
Supreme Court Of Guam	132	8
Territorial Auditors	2	3
University Of Guam	252	257
Veteran's Affairs Office	<u>1</u>	<u>1</u>
TOTAL	4,705	5,113



## SECTION III. MEMBERSHIP DATA

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### Exhibit 8. Retired Employees

	<u>9/30/2005</u>	<u>9/30/2004</u>
<b>Service Retirees</b>		
Count	4,931	4,878
Average age	63.5	62.9
Average benefit	\$27,691	\$27,248
<b>Disabled Retirees</b>		
Count	482	508
Average age	61.6	60.6
Average benefit	\$19,166	\$18,438
<b>Survivors</b>		
Count	1,179	1,152
Average age	67.2	66.7
Average benefit	\$11,297	\$10,958
<b>Child Pensioners</b>		
Count	260	284
Average age	15.9	15.8
Average benefit	\$2,160	\$2,160
<b>Total Retirees and Survivors</b>		
Count	6,852	6,822
Average age*	64.0	63.4
Average benefit*	\$24,136	\$23,693

\* Excludes child pensioners.





### SECTION III. MEMBERSHIP DATA

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#### Exhibit 9. Terminated and Inactive Members

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	<u>9/30/2005</u>	<u>9/30/2004</u>
<b>Reported as Inactive</b>		
Count	5,029	5,062
Accumulated contributions	\$ 2,186,473	\$ 2,228,403
<b>Reported as Terminated</b>		
Count	305	274
Accumulated contributions	\$ 1,516,092	\$ 929,306
<b>Zero Earnings</b>		
Count	1,544	1,427
Accumulated contributions	\$ 8,645,978	\$ 7,316,665
<b>Refund of Contributions</b>		
Count	185	271
Accumulated contributions	\$ 178,517	\$ 226,506
<b>Total Terminateds and Inactives</b>		
Count	7,063	7,034
Accumulated contributions	\$12,527,060	\$10,700,880

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## SECTION III. MEMBERSHIP DATA

### Exhibit 10. Reconciliation of Membership Data

	<i>Act</i>	<i>Inact</i>	<i>Term</i>	<i>Zero</i>	<i>Ref</i>	<i>Ret</i>	<i>Sp</i>	<i>Disab</i>	<i>Child</i>	<i>Total</i>
<b>9/30/04</b>	5,113	5,062	274	1,427	271	4,878	1,152	508	284	18,969
<b>Additions:</b>										
Actives		0	19	86	50	99	2	28	0	284
Inactives	0		2	9	1	0	0	0	0	12
Terminations	0	0		1	0	0	0	0	0	1
Zero earnings	28	0	13		10	9	0	2	0	62
Refunds	1	0	0	132		2	1	0	0	136
Retiree	0	0	0	0	1		0	0	0	1
Spouse	0	0	0	0	0	0		0	0	0
Disability	0	0	0	0	0	31	0		0	31
Child	0	0	0	0	0	0	0	0		0
Other adds <sup>1</sup>	1	0	1	5	8	44	71	5	18	153
Subtotal	30	0	35	233	70	185	74	35	18	680
<b>Subtractions:</b>										
Actives		0	0	-28	-1	0	0	0	0	-29
Inactives	0		0	0	0	0	0	0	0	0
Terminations	-19	-2		-13	0	0	0	0	0	-34
Zero earnings	-86	-9	-1		-132	0	0	0	0	-228
Refunds	-50	-1	0	-10		-1	0	0	0	-62
Retiree	-99	0	0	-9	-2		0	-31	0	-141
Spouse	-2	0	0	0	-1	0		0	0	-3
Disability	-28	0	0	-2	0	0	0		0	-30
Child	0	0	0	0	0	0	0	0		0
Other drops <sup>2</sup>	-154	-21	-3	-54	-20	-131	-47	-30	-42	-502
Subtotal	-438	-33	-4	-116	-156	-132	-47	-61	-42	-1,029
<b>9/30/05</b>	4,705	5,029	305	1,544	185	4,931	1,179	482	260	18,620

- 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.).



## SECTION IV. VALUATION EXHIBITS

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### Exhibit 11. Accrued Liability

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

	<u>9/30/2005</u>	<u>9/30/2004</u>
<b>Present Value of Benefits</b>		
Active employees –		
Retirement	\$ 906,661,064	\$ 975,505,112
Disability	71,877,934	81,527,115
Death	26,999,440	29,777,628
Withdrawal	<u>36,022,192</u>	<u>40,229,243</u>
Total active PVB	1,041,560,630	1,127,039,098
Retirees and Survivors		
Retirees	1,540,818,585	1,517,797,495
Disabled retirees	86,137,309	88,985,958
Survivors	<u>149,324,534</u>	<u>143,438,575</u>
Total retirees and survivors	1,776,280,428	1,750,222,028
Terminated and inactive members	12,527,060	10,700,880
Total PVB	\$ 2,830,368,118	\$ 2,887,962,006
<b>Present Value of Future Normal Cost</b>		
Active employees –		
Retirement	\$ 176,336,026	\$ 206,917,438
Disability	32,273,529	37,920,546
Death	13,178,382	14,996,589
Withdrawal	<u>25,213,917</u>	<u>28,380,636</u>
Total active PVFNC	\$ 247,001,854	\$ 288,215,209
<b>Accrued Liability</b>		
Active members	\$ 794,558,776	\$ 838,823,889
Retirees and survivors	1,776,280,428	1,750,222,028
Terminations and inactives	<u>12,527,060</u>	<u>10,700,880</u>
Total accrued liability	\$ 2,583,366,264	\$ 2,599,746,797



## SECTION IV. VALUATION EXHIBITS

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### Exhibit 12. Calculation of Unfunded Accrued Liability

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

	<u>9/30/2005</u>	<u>9/30/2004</u>
<b>Accrued Liability</b>		
Active members	\$ 794,558,776	\$ 838,823,889
Retirees and survivors	1,776,280,428	1,750,222,028
Terminations and inactives	<u>12,527,060</u>	<u>10,700,880</u>
Total accrued liability	\$ 2,583,366,264	\$ 2,599,746,797
<b>Actuarial Value of Assets</b>	1,293,563,674	1,245,305,474
<b>Unfunded accrued liability</b>	\$ 1,289,802,590	\$ 1,354,441,323
<b>Security Ratio = (Assets/AL)</b>	50.07%	47.90%

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## SECTION IV. VALUATION EXHIBITS

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### Exhibit 13. Calculation of Actuarial Gain/Loss

	<u>9/30/2005</u>	<u>9/30/2004</u>
<b>Unfunded Accrued Liability, beginning of year</b>	\$ 1,354,441,323	\$ 1,407,929,271
<b>Additions:</b>		
Normal cost	15,312,472	17,869,769
Interest to end of year	<u>95,882,766</u>	<u>99,805,933</u>
Total additions	111,195,238	117,675,702
<b>Deductions:</b>		
Employer contributions for year	70,657,901	63,387,675
Interest on contributions	<u>2,431,200</u>	<u>2,181,046</u>
Total deductions	73,089,101	65,568,721
<b>Other Changes:</b>		
Plan amendments	0	0
Changes in assumptions	<u>0</u>	<u>0</u>
Net other changes	0	0
<b>Expected UAL, end of year</b>	\$ 1,392,547,460	\$ 1,460,036,252
<b>Actual UAL, end of year</b>	<u>1,289,802,590</u>	<u>1,354,441,323</u>
<b>Actuarial Gain/(Loss)</b>	\$ 102,744,870	\$ 105,594,930
<b>Components of Actuarial Gain/(Loss):</b>		
Investment gain/(loss)	\$ 46,916,896	\$ 41,687,678
Other changes	<u>55,827,974</u>	<u>63,907,252</u>
Total actuarial gain/(loss)	\$ 102,744,870	\$ 105,594,930

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## SECTION IV. VALUATION EXHIBITS

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### Exhibit 14. Normal Cost

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

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	<u>9/30/2005</u>		<u>9/30/2004</u>
<b>Expected defined benefit payroll for fiscal year following</b>	\$ 180,457,948		\$ 203,634,762
<b>Normal cost</b> <sup>1</sup> –		<i>% of DB Payroll</i>	<i>% of DB Payroll</i>
Retirement	\$ 21,570,723	11.95%	\$ 24,402,403
Disability	3,748,083	2.08%	4,226,771
Withdrawal	3,104,863	1.72%	3,361,743
Death	<u>1,563,765</u>	<u>0.87%</u>	<u>1,715,256</u>
Total active normal cost	\$ 29,987,434	16.62%	\$ 37,502,368
<b>Assumed administrative expenses</b>	<u>2,880,522</u>	<u>1.60%</u>	<u>2,599,657</u>
<b>Total normal cost and expenses</b>	\$ 32,867,956	18.21%	\$ 36,305,830
<b>Expected member contributions</b>	<u>(17,143,505)</u>	<u>(9.50%)</u>	<u>(19,345,301)</u>
<b>Government portion of normal cost</b>	\$ 15,724,451	8.71%	\$ 16,960,529

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<sup>1</sup> Includes interest to mid-year.



## SECTION IV. VALUATION EXHIBITS

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### Exhibit 15. Amortization of Unfunded Liability

Pursuant to GCA Section 8137, the unfunded liabilities of the Government of Guam Retirement Fund are to be completed funded within 80 years from May 1, 1951. As of September 30, 2005, there are 25.58 years remaining in the funding period. The amortization of the unfunded liability is calculated as a constant percentage of total payroll, which is assumed to grow at 3.5% per year.

	<u>9/30/2005</u>	<u>9/30/2004</u>
Total payroll (DB and DC) for fiscal year following	\$ 368,712,267	\$ 365,592,458
Unfunded accrued liability	1,289,802,590	1,354,441,323
Remaining funding period	25.58 years	26.58 years
Annual amortization	76,177,410	78,090,704
As % of total payroll (DB and DC)	20.66%	21.36%



## SECTION IV. VALUATION EXHIBITS

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### 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 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.

Note that the contribution rate actually received by the defined benefit plan from defined contribution payroll will be 5% less than the total contribution rate shown below, since 5% of defined contribution payroll is deposited into the defined contribution plan.

	<u>9/30/2005</u>	<u>9/30/2004</u>
Expected payroll for next fiscal year		
Defined benefit (DB)	\$ 180,457,948	\$ 203,634,752
Defined contribution (DC)	<u>188,254,319</u>	<u>161,957,706</u>
Total payroll (DB and DC)	\$ 368,712,267	\$ 365,592,458
Government normal cost (DB)	15,724,451	16,960,529
As % of DB payroll	8.71%	8.33%
As % of total payroll (DB and DC)	4.26%	4.64%
Amortization of Unfunded Liability (DB)	76,177,410	78,090,704
As % of total payroll (DB and DC)	20.66%	21.36%
Government DC contributions	9,412,716	8,097,885
As % of DC payroll	5.00%	5.00%
As % of total payroll (DB and DC)	2.55%	2.22%
Total DB and DC contributions	\$ 101,314,577	\$ 103,149,118
% of total payroll (DB and DC)	27.48%	28.21%

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## SECTION IV. VALUATION EXHIBITS

### Exhibit 17. GASB No. 25 Schedule of Funding Progress

Government Accounting Standards Board (GASB) Statement No. 25 – Financial Reporting for Defined Benefit Pension Plans requires disclosure of the Schedule of Funding Progress.

<i>Actuarial Valuation Date</i>	<i>Actuarial Value of Assets</i>	<i>Entry Age Normal Actuarial Accrued Liability (AAL)</i>	<i>Unfunded Actuarial Accrued Liability (UAAL)</i>	<i>Funded Ratio</i>	<i>Total Government Covered Payroll</i>	<i>UAAL as a Percentage of Covered Payroll</i>
9/30/1989	\$ 372,820,000	\$ 934,253,000	\$ 561,432,000	39.9%	\$272,710,000	205.9%
9/30/1991	532,031,000	1,151,610,000	619,578,000	46.2%	321,580,000	192.7%
9/30/1993	703,443,000	1,429,839,000	726,395,000	49.2%	368,900,000	196.9%
9/30/1995	865,014,000	1,417,190,000	552,176,000	61.0%	356,990,000	154.7%
9/30/1997	1,213,706,000	1,824,868,000	611,161,000	66.5%	390,000,000	156.7%
9/30/1998	1,287,157,000	1,770,852,000	483,694,000	72.6%	407,550,000	118.7%
9/30/1999	1,346,205,000	2,096,617,000	750,412,000	64.2%	363,711,000	206.3%
9/30/2000	1,348,761,000	2,126,150,000	777,389,000	63.4%	374,551,000	207.6%
9/30/2001	1,265,001,000	2,333,862,000	1,068,861,000	54.2%	403,061,000	265.2%
9/30/2002	1,135,666,000	2,378,399,000	1,242,733,000	47.7%	395,967,000	313.8%
9/30/2003	1,206,911,000	2,614,840,000	1,407,929,000	46.2%	398,112,000	353.7%
9/30/2004	1,245,305,000	2,599,747,000	1,354,442,000	47.9%	365,592,000	370.5%
9/30/2005	1,293,564,000	2,583,366,000	1,289,802,000	50.1%	368,712,000	349.8%



## SECTION IV. VALUATION EXHIBITS

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### Exhibit 18. GASB No. 25 Schedule of Employer Contributions

Government Accounting Standards Board (GASB) Statement No. 25 – Financial Reporting for Defined Benefit Pension Plans requires disclosure of the Schedule of Employer Contributions.

<i>Fiscal Year Ending</i>	<i>Annual Required Contribution</i>	<i>Employer Contribution</i>	<i>Percentage Contributed</i>
September 30, 1989	\$ 56,145,000	\$ 33,799,000	60.2%
September 30, 1990	58,952,000	39,441,000	66.9%
September 30, 1991	83,988,000	51,612,000	61.5%
September 30, 1992	88,187,000	54,111,000	61.4%
September 30, 1993	94,552,000	59,117,000	62.5%
September 30, 1994	99,280,000	80,965,000	81.6%
September 30, 1995	67,650,000	66,904,000	98.9%
September 30, 1996	71,187,000	68,969,000	96.9%
September 30, 1997	67,521,000	81,546,000	120.8%
September 30, 1998	61,929,000	81,877,000	132.2%
September 30, 1999	63,985,000	96,134,000	150.2%
September 30, 2000	52,463,000	85,831,000	163.6%
September 30, 2001	75,494,000	73,386,000	97.2%
September 30, 2002	75,906,000	78,087,000	102.9%
September 30, 2003	98,630,000	63,486,000	64.4%
September 30, 2004	115,978,000	63,388,000	54.7%
September 30, 2005	113,979,000	70,658,000	62.0%



## SECTION IV. VALUATION EXHIBITS

**Exhibit 19. 40-Year Projection of Fund Balance (\$\$millions)**

<i>Year Ending</i>	<i>Payroll</i> <sup>1</sup>	<i>ER+EE Contributions</i>		<i>Investment Gain</i> <sup>2</sup>	<i>Benefits &amp; Expenses</i>	<i>DB Fund Balance</i>
		<i>ER Rate</i>	<i>Total DB Contribs</i>			
2005						\$ 1,293.56
2006	\$ 368.71	20.81%	\$ 84.50	86.88	(167.64)	1,297.30
2007	381.62	21.81%	89.61	87.11	(172.95)	1,301.06
2008	394.97	27.57%	113.99	88.03	(177.44)	1,325.65
2009	408.80	27.81%	117.57	89.73	(181.19)	1,351.76
2010	423.11	27.71%	119.87	91.51	(184.51)	1,378.63
2011	437.91	27.64%	122.33	93.34	(187.90)	1,406.40
2012	453.24	27.54%	124.77	95.24	(191.19)	1,435.22
2013	469.10	27.49%	127.25	97.18	(195.25)	1,464.40
2014	485.52	27.43%	129.67	99.12	(200.07)	1,493.13
2015	502.52	27.37%	132.03	101.01	(205.26)	1,520.91
2016	520.11	27.31%	134.44	102.82	(210.57)	1,547.60
2017	538.31	27.25%	137.00	104.58	(215.73)	1,573.46
2018	557.15	27.19%	139.63	106.29	(220.54)	1,598.83
2019	576.65	27.15%	142.29	107.94	(226.05)	1,623.02
2020	596.83	27.12%	145.11	109.50	(232.02)	1,645.61
2021	617.72	27.09%	147.88	110.93	(238.30)	1,666.11
2022	639.34	27.08%	150.84	112.22	(244.57)	1,684.60
2023	661.72	27.05%	153.96	113.40	(250.09)	1,701.87
2024	684.88	27.03%	157.37	114.56	(254.38)	1,719.42
2025	708.85	26.99%	161.03	115.80	(257.13)	1,739.12
2026	733.66	26.97%	165.15	117.28	(258.32)	1,763.23
2027	759.34	26.93%	169.62	119.15	(257.47)	1,794.53
2028	785.91	26.90%	174.50	121.60	(255.13)	1,835.51
2029	813.42	26.86%	179.74	124.79	(251.74)	1,888.29
2030	841.89	26.84%	185.29	128.85	(247.23)	1,955.20
2031	871.36	18.29%	116.92	131.39	(241.92)	1,961.59
2032	901.85	5.34%	3.88	128.19	(235.83)	1,857.83
2033	933.42	5.33%	3.64	121.18	(229.08)	1,753.57
2034	966.09	5.31%	3.45	114.17	(221.69)	1,649.50
2035	999.90	5.30%	3.31	107.19	(213.71)	1,546.30
2036	1,034.90	5.29%	3.20	100.29	(205.36)	1,444.43
2037	1,071.12	5.28%	3.13	93.51	(196.50)	1,344.57
2038	1,108.61	5.27%	3.08	86.87	(187.42)	1,247.09
2039	1,147.41	5.26%	3.05	80.42	(177.97)	1,152.59
2040	1,187.57	5.25%	3.02	74.18	(168.40)	1,061.39
2041	1,229.14	5.24%	3.01	68.17	(158.75)	973.82
2042	1,272.16	5.23%	3.00	62.42	(149.08)	890.15
2043	1,316.68	5.23%	2.99	56.94	(139.48)	810.60
2044	1,362.76	5.22%	2.98	51.75	(130.00)	735.34

<sup>1</sup> Payroll is assumed to increase 3.5% per year.

<sup>2</sup> Investment earnings are assumed to be 7.0% per year.



## SECTION IV. VALUATION EXHIBITS

**Exhibit 20. 40-Year Projection of Security Ratio**

<i>Year Ending</i>	<i>Employer Contributions</i>			<i>Fund Balance <sup>2</sup></i>	<i>Accrued Liability</i>	<i>Security Ratio</i>
	<i>Payroll <sup>1</sup></i>	<i>ER Rate</i>	<i>ER DB Contribs</i>			
2005				\$ 1,293.56	\$ 2,583.37	50.07%
2006	\$ 368.71	20.81%	\$ 67.32	1,297.30	2,624.07	49.44%
2007	381.62	21.81%	72.92	1,301.06	2,660.89	48.90%
2008	394.97	27.57%	97.70	1,325.65	2,694.67	49.20%
2009	408.80	27.81%	101.63	1,351.76	2,726.01	49.59%
2010	423.11	27.71%	104.28	1,378.63	2,755.38	50.03%
2011	437.91	27.64%	107.12	1,406.40	2,782.43	50.55%
2012	453.24	27.54%	109.96	1,435.22	2,807.19	51.13%
2013	469.10	27.49%	112.98	1,464.40	2,828.49	51.77%
2014	485.52	27.43%	116.06	1,493.13	2,845.02	52.48%
2015	502.52	27.37%	119.17	1,520.91	2,855.92	53.25%
2016	520.11	27.31%	122.35	1,547.60	2,860.68	54.10%
2017	538.31	27.25%	125.71	1,573.46	2,858.89	55.04%
2018	557.15	27.19%	129.14	1,598.83	2,850.56	56.09%
2019	576.65	27.15%	132.72	1,623.02	2,834.44	57.26%
2020	596.83	27.12%	136.53	1,645.61	2,809.27	58.58%
2021	617.72	27.09%	140.38	1,666.11	2,774.10	60.06%
2022	639.34	27.08%	144.47	1,684.60	2,728.07	61.75%
2023	661.72	27.05%	148.67	1,701.87	2,671.28	63.71%
2024	684.88	27.03%	153.09	1,719.42	2,604.30	66.02%
2025	708.85	26.99%	157.63	1,739.12	2,528.33	68.79%
2026	733.66	26.97%	162.52	1,763.23	2,444.40	72.13%
2027	759.34	26.93%	167.57	1,794.53	2,354.46	76.22%
2028	785.91	26.90%	172.90	1,835.51	2,259.85	81.22%
2029	813.42	26.86%	178.49	1,888.29	2,161.51	87.36%
2030	841.89	26.84%	184.33	1,955.20	2,060.50	94.89%
2031	871.36	18.29%	116.19	1,961.59	1,957.54	100.21%
2032	901.85	5.34%	3.33	1,857.83	1,853.39	100.24%
2033	933.42	5.33%	3.24	1,753.57	1,748.71	100.28%
2034	966.09	5.31%	3.16	1,649.50	1,644.20	100.32%
2035	999.90	5.30%	3.11	1,546.30	1,540.51	100.38%
2036	1,034.90	5.29%	3.06	1,444.43	1,438.13	100.44%
2037	1,071.12	5.28%	3.04	1,344.57	1,337.72	100.51%
2038	1,108.61	5.27%	3.02	1,247.09	1,239.66	100.60%
2039	1,147.41	5.26%	3.01	1,152.59	1,144.53	100.70%
2040	1,187.57	5.25%	3.00	1,061.39	1,052.66	100.83%
2041	1,229.14	5.24%	2.99	973.82	964.38	100.98%
2042	1,272.16	5.23%	2.99	890.15	879.95	101.16%
2043	1,316.68	5.23%	2.98	810.60	799.58	101.38%
2044	1,362.76	5.22%	2.98	735.34	723.44	101.64%

<sup>1</sup> Payroll is assumed to increase 3.5% per year.

<sup>2</sup> Investment earnings are assumed to be 7.0% per year.



## SECTION V. APPENDICES

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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 V. APPENDICES

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- 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 12 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:** If entrance to service was prior to October 1, 1981, vesting occurs after at least 3 years of service. If entrance to service was on or after October 1, 1981, 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 20 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.



## SECTION V. APPENDICES

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- c) Any member, whether in an active or inactive status, may retire after 25 years of service, at any age, on an annuity reduced  $\frac{1}{4}$  of 1% per month (3% per year) for each month member's age is less than 60.

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  $66\frac{2}{3}\%$  of the



## SECTION V. APPENDICES

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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.

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 24, if they are full-time students in an accredited educational institution and for disabled children regardless of age, if disability occurred before age 21.

If only a spouse survives the active or retired member, the annuity payable is 50% 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 \$2,160 per year, subject to a maximum payment to five or more minor children of \$10,800 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





## SECTION V. APPENDICES

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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 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 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.



## SECTION V. APPENDICES

### Appendix B. Actuarial Cost Method and Assumptions

	<i>September 30, 2005</i>		<i>September 30, 2004</i>	
<b>Actuarial Cost Method</b>	Entry Age Normal		Entry Age Normal	
<b>Interest Rate</b>	7.00%		7.00%	
<b>Salary Increases</b>	<u>Service</u>	<u>% Increase</u>	<u>Service</u>	<u>% Increase</u>
	0 – 5	8.5%	0 – 5	8.5%
	6 – 10	7.0%	6 – 10	7.0%
	11 – 15	6.0%	11 – 15	6.0%
	16 – 20	5.0%	16 – 20	5.0%
	Over 20	4.0%	Over 20	4.0%
<b>Total Payroll Growth</b>	3.50%		3.50%	
<b>Cost of Living Adjustment</b>	Specified in Plan		Specified in Plan	
<b>Mortality</b>	1994 U.S. Uninsured Pensioners for Males +2 for males +0 for females		1994 U.S. Uninsured Pensioners for Males +2 for males +0 for females	
<b>Disability Incidence</b>	1974-78 SOA LTD Non-Jumbo with rates increased for males by 30%		1974-78 SOA LTD Non-Jumbo with rates increased for males by 30%	
<b>Post-disability mortality</b>	1984 U.S. Uninsured Pensioners +10 for males +8 for females		1984 U.S. Uninsured Pensioners +10 for males +8 for females	
<b>Withdrawal Rates</b>	Graded rates based on actual experience (see attached)		Graded rates based on actual experience (see attached)	
<b>Retirement Age</b>	50% assumed to retire at earliest eligibility for unreduced benefits.		50% assumed to retire at earliest eligibility for unreduced benefits.	
	20% per year thereafter until age 70		20% per year thereafter until age 70	
	100% at age 70		100% at age 70	



## SECTION V. APPENDICES

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	<i>September 30, 2005</i>	<i>September 30, 2004</i>
<b>Return of Contributions</b>	<p>100% withdrawing before retirement with less than 20 years of service are assumed to elect a return of contributions</p> <p>All employees who have previously withdrawn are assumed to elect a return of contributions.</p> <p>Contributions earn 4.5% interest</p>	<p>100% withdrawing before retirement with less than 20 years of service are assumed to elect a return of contributions</p> <p>All employees who have previously withdrawn are assumed to elect a return of contributions.</p> <p>Contributions earn 4.5% interest</p>
<b>Marital Status</b>	<p>Retiree data included spouse information. 65% of non-retirees are assumed to have spouses</p>	<p>Retiree data included spouse information. 65% of non-retirees are assumed to have spouses</p>
<b>Sick Leave Adjustments</b>	<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>
<b>Administrative Expenses</b>	<p>\$2,880,522 per year, net of adjustment for bad debts</p>	<p>\$2,599,657 per year, net of adjustment for bad debts</p>
<b>Asset Valuation Method</b>	<p>Market, except fixed income investments at amortized cost</p>	<p>Market, except fixed income investments at amortized cost</p>
<b>Data Inconsistencies</b>	<p>None</p>	<p>None</p>

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## SECTION V. APPENDICES

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### Probabilities of Separation from Active Service

(per 10,000 working at each age)

<i>Male</i>				<i>Female</i>			
<u>Age</u>	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Age</u>	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>
20	731	6	13	20	967	5	10
21	699	6	13	21	936	6	10
22	671	7	13	22	901	6	10
23	641	7	13	23	866	6	10
24	619	7	13	24	832	7	10
25	599	8	13	25	797	7	10
26	578	8	13	26	761	7	10
27	559	8	13	27	731	8	10
28	542	9	13	28	704	8	10
29	526	9	13	29	680	8	10
30	512	9	13	30	658	9	10
31	497	9	13	31	637	9	10
32	483	9	13	32	616	9	10
33	469	9	13	33	596	9	10
34	454	9	13	34	578	9	10
35	439	10	13	35	560	9	10
36	422	10	13	36	543	9	10
37	404	11	13	37	527	10	10
38	386	12	13	38	511	10	10
39	367	12	13	39	495	11	10
40	348	13	26	40	480	12	20
41	336	15	26	41	465	12	20
42	329	16	26	42	457	13	20
43	323	17	26	43	436	15	20
44	318	19	26	44	422	16	20
45	313	20	47	45	407	17	36
46	299	23	47	46	392	19	36
47	280	25	47	47	375	20	36
48	259	28	47	48	356	23	36
49	236	31	47	49	325	25	36
50	211	35	82	50	287	28	63
51	176	39	82	51	244	31	63
52	136	43	82	52	202	35	63
53	95	48	82	53	163	39	63
54	64	53	82	54	132	43	63
55	42	60	138	55	108	48	106
56	0	68	138	56	0	53	106
57	0	76	138	57	0	60	106
58	0	86	138	58	0	68	106
59	0	97	138	59	0	76	106
60	0	109	196	60	0	86	151
61	0	123	196	61	0	97	151
62	0	139	196	62	0	109	151
63	0	156	196	63	0	123	151
64	0	175	196	64	0	156	151



## SECTION V. APPENDICES

### Appendix C. Summary of Participant Data

#### *Active Non-Uniformed*

<i>Age</i>	<i>Count</i>			<i>Annual Salaries</i>		
	<i>Males</i>	<i>Females</i>	<i>Total</i>	<i>Males</i>	<i>Females</i>	<i>Total</i>
Under 20	-	-	-	-	-	-
20 – 24	-	-	-	-	-	-
25 – 29	11	4	15	*	*	*
30 – 34	136	121	257	3,460,442	3,607,888	7,068,330
35 – 39	300	306	606	9,750,739	10,321,268	20,072,007
40 – 44	434	470	904	16,182,031	17,165,007	33,347,038
45 – 49	416	445	861	16,289,296	17,201,826	33,491,122
50 – 54	325	407	732	13,736,012	15,619,994	29,356,006
55 – 59	213	309	522	9,431,968	11,659,686	21,091,654
60 – 64	86	131	217	4,041,451	5,068,918	9,110,369
65 – 69	53	60	113	2,457,706	2,426,812	4,884,518
70 & Over	25	34	59	1,179,252	1,474,513	2,653,765
<b>Total</b>	<b>1,999</b>	<b>2,287</b>	<b>4,286</b>	<b>76,796,779</b>	<b>84,650,074</b>	<b>161,446,853</b>

\* Not shown if less than 20 members.

<i>Age</i>	<i>Service</i>									
	<i>0 - 4</i>	<i>5 - 9</i>	<i>10-14</i>	<i>15-19</i>	<i>20-24</i>	<i>25-29</i>	<i>30-34</i>	<i>35-39</i>	<i>40+</i>	<i>Total</i>
Under 20	-	-	-	-	-	-	-	-	-	-
20 – 24	-	-	-	-	-	-	-	-	-	-
25 – 29	1	1	12	1	-	-	-	-	-	15
30 – 34	20	29	183	24	1	-	-	-	-	257
35 – 39	8	20	313	238	27	-	-	-	-	606
40 – 44	17	32	242	359	236	17	1	-	-	904
45 – 49	10	24	199	241	235	139	12	1	-	861
50 – 54	3	17	151	189	161	146	61	4	-	732
55 – 59	2	15	110	170	120	58	33	14	-	522
60 – 64	3	4	44	57	59	30	13	5	2	217
65 – 69	-	1	21	44	22	14	5	4	2	113
70 & Over	-	-	17	12	10	14	3	1	2	59
<b>Total</b>	<b>64</b>	<b>143</b>	<b>1,292</b>	<b>1,335</b>	<b>871</b>	<b>418</b>	<b>128</b>	<b>29</b>	<b>6</b>	<b>4,286</b>



## SECTION V. APPENDICES

### Active Uniformed

Age	Count			Annual Salaries		
	Males	Females	Total	Males	Females	Total
Under 20	-	-	-	-	-	-
20 – 24	-	-	-	-	-	-
25 – 29	1	-	1	*	-	*
30 – 34	42	2	44	1,388,681	*	1,450,782
35 – 39	99	3	102	4,428,526	*	4,549,165
40 – 44	127	9	136	6,389,985	*	6,763,191
45 – 49	84	2	86	4,558,491	*	4,645,109
50 – 54	36	-	36	1,880,530	-	1,880,530
55 – 59	8	-	8	*	-	*
60 – 64	5	-	5	*	-	*
65 – 69	1	-	1	*	-	*
70 & Over	-	-	-	-	-	-
<b>Total</b>	<b>403</b>	<b>16</b>	<b>419</b>	<b>19,329,543</b>	<b>-</b>	<b>19,972,107</b>

\* Not shown if less than 20 members.

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	-	-	1	-	-	-	-	-	-	1
30 – 34	-	8	33	3	-	-	-	-	-	44
35 – 39	-	1	43	50	7	1	-	-	-	102
40 – 44	-	1	24	46	61	4	-	-	-	136
45 – 49	-	-	13	19	33	19	2	-	-	86
50 – 54	-	1	7	6	12	8	2	-	-	36
55 – 59	-	-	-	5	1	2	-	-	-	8
60 – 64	-	-	-	1	2	1	1	-	-	5
65 – 69	-	-	-	-	-	1	-	-	-	1
70 & Over	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>-</b>	<b>11</b>	<b>121</b>	<b>130</b>	<b>116</b>	<b>36</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>419</b>



## SECTION V. APPENDICES

### Active Total

Age	Count			Annual Salaries		
	Males	Females	Total	Males	Females	Total
Under 20	-	-	-	-	-	-
20 – 24	-	-	-	-	-	-
25 – 29	12	4	16	*	*	*
30 – 34	178	123	301	4,849,123	3,669,989	8,519,112
35 – 39	399	309	708	14,179,265	10,441,907	24,621,172
40 – 44	561	479	1,040	22,572,016	17,538,213	40,110,229
45 – 49	500	447	947	20,847,787	17,288,444	38,136,231
50 – 54	361	407	768	15,616,542	15,619,994	31,236,536
55 – 59	221	309	530	9,774,444	11,659,686	21,434,130
60 – 64	91	131	222	4,291,897	5,068,918	9,360,815
65 – 69	54	60	114	2,523,807	2,426,812	4,950,619
70 & Over	25	34	59	1,179,252	1,474,513	2,653,765
<b>Total</b>	<b>2,402</b>	<b>2,303</b>	<b>4,705</b>	<b>96,126,322</b>	<b>85,292,638</b>	<b>181,418,960</b>

\* Not shown if less than 20 members.

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	1	1	13	1	-	-	-	-	-	16
30 – 34	20	37	216	27	1	-	-	-	-	301
35 – 39	8	21	356	288	34	1	-	-	-	708
40 – 44	17	33	266	405	297	21	1	-	-	1,040
45 – 49	10	24	212	260	268	158	14	1	-	947
50 – 54	3	18	158	195	173	154	63	4	-	768
55 – 59	2	15	110	175	121	60	33	14	-	530
60 – 64	3	4	44	58	61	31	14	5	2	222
65 – 69	-	1	21	44	22	15	5	4	2	114
70 & Over	-	-	17	12	10	14	3	1	2	59
<b>Total</b>	<b>64</b>	<b>154</b>	<b>1,413</b>	<b>1,465</b>	<b>987</b>	<b>454</b>	<b>133</b>	<b>29</b>	<b>6</b>	<b>4,705</b>



## SECTION V. APPENDICES

### Service Retirees

Age	Count			Annual Benefits		
	Males	Females	Total	Males	Females	Total
Under 25	-	-	-	-	-	-
25 – 29	-	-	-	-	-	-
30 – 34	-	-	-	-	-	-
35 – 39	3	2	5	*	*	*
40 – 44	24	9	33	625,045	*	905,860
45 – 49	138	91	229	4,645,805	2,447,980	7,093,785
50 – 54	414	337	751	14,715,202	9,477,432	24,192,634
55 – 59	495	431	926	17,151,961	12,694,243	29,846,204
60 – 64	426	408	834	14,400,518	11,125,364	25,525,882
65 – 69	398	374	772	11,671,623	8,558,804	20,230,427
70 – 74	324	308	632	7,699,949	6,654,699	14,354,648
75 – 79	223	200	423	4,822,052	3,917,762	8,739,814
80 – 84	121	108	229	2,197,070	1,782,410	3,979,480
85 – 89	32	43	75	580,218	610,778	1,190,996
90 & Over	9	13	22	*	*	*
<b>Total</b>	<b>2,607</b>	<b>2,324</b>	<b>4,931</b>	<b>78,755,601</b>	<b>57,789,433</b>	<b>136,545,034</b>

\* Not shown if less than 20 members.

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	3	-	-	-	5
40 – 44	-	2	2	2	7	7	11	2	-	33
45 – 49	-	11	11	22	38	33	64	33	17	229
50 – 54	2	24	29	60	115	134	213	107	67	751
55 – 59	-	12	53	70	165	168	253	119	86	926
60 – 64	1	13	72	102	140	159	173	96	78	834
65 – 69	6	50	122	124	123	104	133	57	53	772
70 – 74	1	53	161	110	100	79	75	30	23	632
75 – 79	-	36	144	83	48	40	44	11	17	423
80 – 84	-	23	99	58	19	16	7	3	4	229
85 – 89	-	1	52	11	4	1	3	2	1	75
90 & Over	-	-	13	5	3	-	-	-	1	22
<b>Total</b>	<b>10</b>	<b>225</b>	<b>758</b>	<b>648</b>	<b>763</b>	<b>744</b>	<b>976</b>	<b>460</b>	<b>347</b>	<b>4,931</b>





## SECTION V. APPENDICES

### Disabled Retirees

Age	Count			Annual Benefits		
	Males	Females	Total	Males	Females	Total
Under 25	-	-	-	-	-	-
25 – 29	-	-	-	-	-	-
30 – 34	-	1	1	-	*	*
35 – 39	4	3	7	*	*	*
40 – 44	9	4	13	*	*	*
45 – 49	26	18	44	580,136	*	960,082
50 – 54	32	32	64	653,368	623,442	1,276,810
55 – 59	37	39	76	843,234	764,514	1,607,748
60 – 64	54	36	90	1,121,810	632,325	1,754,135
65 – 69	44	32	76	882,070	572,459	1,454,529
70 – 74	22	36	58	396,455	571,613	968,068
75 – 79	14	20	34	*	291,406	501,793
80 – 84	5	8	13	*	*	*
85 – 89	2	3	5	*	*	*
90 & Over	-	1	1	-	*	*
<b>Total</b>	<b>249</b>	<b>233</b>	<b>482</b>	<b>5,086,036</b>	<b>4,151,828</b>	<b>9,237,864</b>

\* Not shown if less than 20 members.

Age	Annual Benefit Level									Total
	<\$5k	\$5-10k	\$10-15k	\$15-20k	\$20-25k	\$25-30k	\$30-40k	\$40-50k	\$50k +	
Under 40	-	-	-	5	-	2	1	-	-	8
40 – 44	-	-	2	3	3	1	4	-	-	13
45 – 49	-	-	3	20	9	7	2	2	1	44
50 – 54	-	-	15	24	14	5	4	2	-	64
55 – 59	-	-	11	31	19	6	7	2	-	76
60 – 64	-	6	23	23	21	11	4	1	1	90
65 – 69	-	4	18	22	18	7	7	-	-	76
70 – 74	1	2	23	16	9	5	2	-	-	58
75 – 79	-	-	22	5	6	1	-	-	-	34
80 – 84	-	1	8	3	-	1	-	-	-	13
85 – 89	-	-	5	-	-	-	-	-	-	5
90 & Over	-	-	1	-	-	-	-	-	-	1
<b>Total</b>	<b>1</b>	<b>13</b>	<b>131</b>	<b>152</b>	<b>99</b>	<b>46</b>	<b>31</b>	<b>7</b>	<b>2</b>	<b>482</b>



## SECTION V. APPENDICES

### *Surviving Spouses and Child Pensioners*

<i>Age</i>	<i>Count</i>			<i>Annual Benefits</i>		
	<i>Males</i>	<i>Females</i>	<i>Total</i>	<i>Males</i>	<i>Females</i>	<i>Total</i>
Under 25	115	132	247	251,838	401,418	653,256
25 – 29	2	2	4	*	*	*
30 – 34	2	3	5	*	*	*
35 – 39	-	12	12	-	*	*
40 – 44	6	33	39	*	320,902	368,541
45 – 49	8	51	59	*	736,478	814,822
50 – 54	14	76	90	*	973,582	1,113,800
55 – 59	19	107	126	*	1,262,877	1,454,180
60 – 64	23	119	142	267,775	1,570,430	1,838,205
65 – 69	30	136	166	336,650	1,566,707	1,903,357
70 – 74	38	144	182	382,046	1,546,876	1,928,922
75 – 79	32	129	161	326,152	1,355,480	1,681,632
80 – 84	27	107	134	289,292	1,088,215	1,377,507
85 – 89	4	46	50	*	456,632	492,283
90 & Over	1	21	22	*	220,862	228,232
<b>Total</b>	<b>321</b>	<b>1,118</b>	<b>1,439</b>	<b>2,362,918</b>	<b>11,637,907</b>	<b>14,000,825</b>

\* Not shown if less than 20 members.

### *Surviving Spouses Only*

<i>Age</i>	<i>Annual Benefit Level</i>									<i>Total</i>
	<i>&lt;\$5k</i>	<i>\$5-10k</i>	<i>\$10-15k</i>	<i>\$15-20k</i>	<i>\$20-25k</i>	<i>\$25-30k</i>	<i>\$30-40k</i>	<i>\$40-50k</i>	<i>\$50k +</i>	
Under 40	1	10	4	1	-	-	-	-	-	16
40 – 44	3	23	7	2	1	1	-	-	-	37
45 – 49	3	18	21	9	4	-	-	1	1	57
50 – 54	3	34	32	11	7	2	1	-	-	90
55 – 59	5	45	49	17	4	2	1	-	-	123
60 – 64	1	39	65	20	12	3	2	-	-	142
65 – 69	-	70	69	15	6	3	2	-	-	165
70 – 74	4	82	78	13	3	1	1	-	-	182
75 – 79	1	75	75	7	3	-	-	-	-	161
80 – 84	1	74	53	3	1	1	1	-	-	134
85 – 89	-	24	23	3	-	-	-	-	-	50
90 & Over	-	7	15	-	-	-	-	-	-	22
<b>Total</b>	<b>22</b>	<b>501</b>	<b>491</b>	<b>101</b>	<b>41</b>	<b>13</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>1,179</b>



## SECTION V. APPENDICES

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### Appendix D. Glossary of Key Terms

**Accrued Liability.** The Present Value of Future Benefits allocated to past service in accordance with the actuarial cost method.

**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 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 smooths gains and losses that occur in the market value.

**GASB.** Government Accounting Standards Board. GASB No. 25 and No. 27 are accounting standards issued by GASB that require certain items be disclosed in the Fund's financial statements.

**Normal 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 Accrued Liability.

**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 Accrued Liability that is funded by the Fund assets. A fully funded plan will have a security ratio of 100%.

**Unfunded Accrued Liability.** The dollar value of the Accrued Liability that exceeds the value of the Fund assets. A fully funded plan will have no unfunded accrued liability.