

GOVERNMENT OF GUAM RETIREMENT FUND

FINANCIAL STATEMENTS

September 30, 2022
(with Comparative Information for 2021)

(Together with Independent Auditors' Report Thereon)

GOVERNMENT OF GUAM RETIREMENT FUND

September 30, 2022
(with Comparative Information for 2021)

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INDEPENDENT AUDITORS' REPORT

To the Board of Trustees
Government of Guam Retirement Fund:

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Government of Guam Retirement Fund (the "Fund"), a component unit of the Government of Guam, administered by the Government of Guam Retirement Fund Board of Trustees (the "Board") which comprise the statement of fiduciary net position and statement of changes in fiduciary net position, as of and for the year ended September 30, 2022, and the related notes to the financial statements, which collectively comprise the Government of Guam Retirement Fund's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Government of Guam Retirement Fund as of September 30, 2022, and the changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Government of Guam Retirement Fund and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Government of Guam Retirement Fund's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Government of Guam Retirement Fund's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Government of Guam Retirement Fund's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 4 through 23, the Schedule of Changes in Net Pension Liability on pages 62 and 63, the Schedule of Employer Allocations by Component Unit on pages 64 and 65, the Schedule of Contributions on page 66, the Schedule of Investment Returns on page 67, the Schedule of Changes in Total Other Post Employment Benefits (OPEB) Liability on page 68, the Schedule of Other Post Employment Benefits (OPEB) Liability on page 69, and the Schedule of Employer Contributions (OPEB) on page 70 be presented to supplement the basic financial statements.

Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Government of Guam Retirement Fund's basic financial statements. The accompanying information listed as supplemental schedules on pages 71 to 76 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplemental schedules on pages 70 to 76 are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated August 24, 2023, on our consideration of the Government of Guam Retirement Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Government of Guam Retirement Fund's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Government of Guam Retirement Fund's internal control over financial reporting and compliance.



Tamuning, Guam ,
August 24, 2023

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis

September 30, 2022

Management of the Government of Guam Retirement Fund (“GGRF”) offers readers of the financial statements the following discussion and analysis of GGRF’s financial activities for the fiscal year ended September 30, 2022. This narrative should be reviewed in conjunction with the financial statements and related notes, which follow this section. It provides management’s insight into the results of operations of the last two fiscal years, and highlights specific factors that contributed to those results.

(1) Financial Highlights

- **DB Plan and DC Plan Investments**

Defined Benefit (DB) Plan			Defined Contribution (DC) Plan		
Period	Investment Balance (in billions)	Rate of Return	As of	Investment Balance (in millions)	Rate of Return
Fiscal Year Ended 9/30/2021	\$2.26	19.04%	9/30/2021	\$488	Not Applicable (refer to comments below)
Quarter Ended 12/31/2021	\$2.33	4.66%	12/31/2021	\$511	
Quarter Ended 3/31/2022	\$2.19	-5.13%	3/31/2022	\$483	
Quarter Ended 6/30/2022	\$1.90	-12.11%	6/30/2022	\$427	
Quarter Ended 9/30/2022	\$1.76	-6.10%	9/30/2022	\$406	
Fiscal Year Ended 9/30/2022		-18.04%			

The DB Plan Investment portfolio experienced a negative return of -18.04% for the fiscal year ended September 30, 2022 compared to the prior year positive return of 19.04%. However, as reflected in the **Subsequent Events Table below**, the DB Plan achieved positive returns of 7.55% and 4.43% for the quarters ended December 31, 2022 and March 31, 2023, respectively. Although the return for the quarter ended June 30, 2023 is not currently available investments did increase from \$1.93B from March 31, 2023 to \$1.96B at June 30, 2023.

The **DC Plan** ended fiscal year ended September 30, 2022 with investments totaling \$406 million, compared to the September 30, 2021 balance of \$488 million. This represented a decrease of \$82M or 16.8%. However, as reflected in the **Subsequent Events Table below**, DC Plan investments increased during the following quarters from \$406M at September 30, 2022 to \$488M at June 30, 2023.

Subsequent Events – DB Plan and DC Plan

Defined Benefit (DB) Plan			Defined Contribution (DC) Plan		
Period	Investment Balance (in billions)	Rate of Return	As of	Investment Balance (in millions)	Rate of Return
Quarter Ended 12/31/2022	\$1.88	7.55%	12/31/2022	\$440	Not Applicable
Quarter Ended 3/31/2023	\$1.93	4.43%	3/31/2023	\$467	
Quarter Ended 6/30/2023	\$1.96	Not Available	6/30/2023	\$488	

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(1) Financial Highlights, continued

Comparison of DB Plan and DC Plan

The DB Plan investments are managed as a single portfolio because the Plan is expected to exist in perpetuity. *As such, as reflected above, it is possible to calculate the rate of return on the DB Plan investments over various investment periods.*

The DC Plan, on the other hand, is not managed as a single portfolio. Each participant selects their own investment strategy, *so it is not possible to state what the "return" is for the DC plan over a particular time period.* Therefore, as reflected above, the focus is on the change in the DC Plan investment balance as an alternative to a "return" over various investment periods.

2022 DB Plan - Highlights

The DB Plan Investment portfolio experienced a negative return of -18.04% for the fiscal year ended September 30, 2022 compared to the prior year positive return of 19.04%.

- According to Wilshire our DB Plan Investment Consultant, while inflation indicators started to heat up during the quarter ending 12/31/2021, the Federal Reserve and the US Treasury officials continued to signal to the market that they believed the rise in inflation would be transitory and short lived. As a result, by the end of 2021, the US risk free rate was at 0.25% and the market had only priced in a total of 50 basis points of rate hikes for the entire year of 2022.
- When we entered 2022, however, inflation in the US, UK and European Union countries shot up to levels the major economies had not seen for over 30 years. Russia's invasion to Ukraine and China's COVID disruption to global supply chain further exacerbated the demand/supply imbalances, leading to more inflation pressure. Realizing being late in action, the Federal Reserve took unprecedented aggressive moves in lifting US short term Interest rate, to 4.5% within a 9 month period. This dramatic increase in cost of capital led to a wide range of re-pricing of all major asset classes, with stocks, bonds, real estate securities all selling off double digits at the same time, causing severe losses of institutional portfolios that a stock/bond diversified portfolio had not experienced for over 100 years. In this adverse market environment, the Fund had a -18.04% annual return for FY2022.

2022 DC Plan - Highlights

The DC Plan ended fiscal year ended September 30, 2022 with investments totaling \$406 million, compared to the September 30, 2021 balance of \$488 million. This represented a decrease of \$82M or 16.8%.

- According to Mercer, our DC Plan Investment Consultant, 2022 was a challenging period as markets contended with slowing global growth, multi decade highs in inflation, and geopolitical tensions. The year started on a strong note as markets focused on post-pandemic normalization and strong economic and earnings growth.
- However, as the year progressed, the outlook and investor sentiment deteriorated materially. A significant acceleration in inflation, and a recognition that inflationary pressures were caused by a broader set of drivers than just rising commodity prices and supply chain disruptions prompted the markets to price in a significant acceleration in monetary tightening, ultimately culminating in the US Federal Reserve raising interest rates more rapidly than in any prior cycle.

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(1) Financial Highlights, continued

2022 DC Plan - Highlights

- Economic conditions were further complicated by the military conflict between Russia and Ukraine, given both economies are key producers of commodities, while ongoing geopolitical tensions between the US and China prompted concerns over deglobalization. Conditions in China also slowed materially as authorities continued to pursue its zero covid strategy and strict policies to delever property developers.
- Collectively, this led to a significant increase in bond yields, and therefore negative returns for fixed income asset classes. These higher bond yields translated into higher discount rates for stocks, particularly growth stocks, which were also hurt by softer earnings growth expectations. Over the financial year, double digit negative returns were recorded across all major asset classes. All funds on the plan line up also delivered negative returns, with the exception of Stable Value.
- **Critical Issue – Impact of Market Volatility on the DB Plan Unfunded Liability**

The unfunded liability is the present value of future benefits payable that are not covered by the actuarial value of assets as of the valuation date. The unfunded liability decreased from \$1.17 billion (based on the 2020 actuarial valuation) to \$1.14 billion (based on the 2021 actuarial valuation), and the actuarially determined contribution rate increased from 28.32% to 28.43%. The primary reason for the increase in the contribution rate was due to the net recognition of investment gains and losses over the last three years.

The defined benefit payroll for the 2020-21 fiscal year was \$251.4 million (which includes \$160.6 million for DB 1.75) compared with \$263.2 million (which includes \$161.7 million for DB 1.75) for the 2019-20 fiscal year.

The total defined benefit and defined contribution payroll for the 2020-2021 fiscal year was \$532.5 million compared with \$519.5 million for the 2019-2020 fiscal year, an increase of 2.50%. Overall, the unfunded liability has grown from \$552 million at September 30, 1995 to \$1.14 billion at September 30, 2021. This represents a decrease in the security ratio, from 66.5% in 1997 to 65.04% in 2021, and an increase in the unfunded liability ratio from 33.5% in 1995 to 34.96% in 2021. The security ratio is the ratio of assets to liabilities.

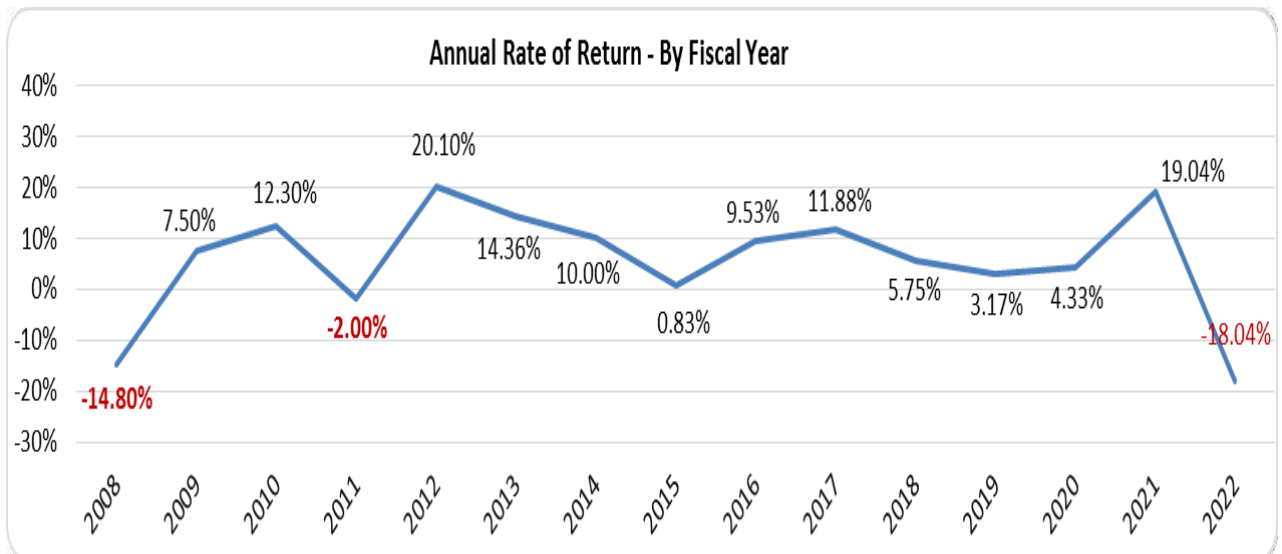
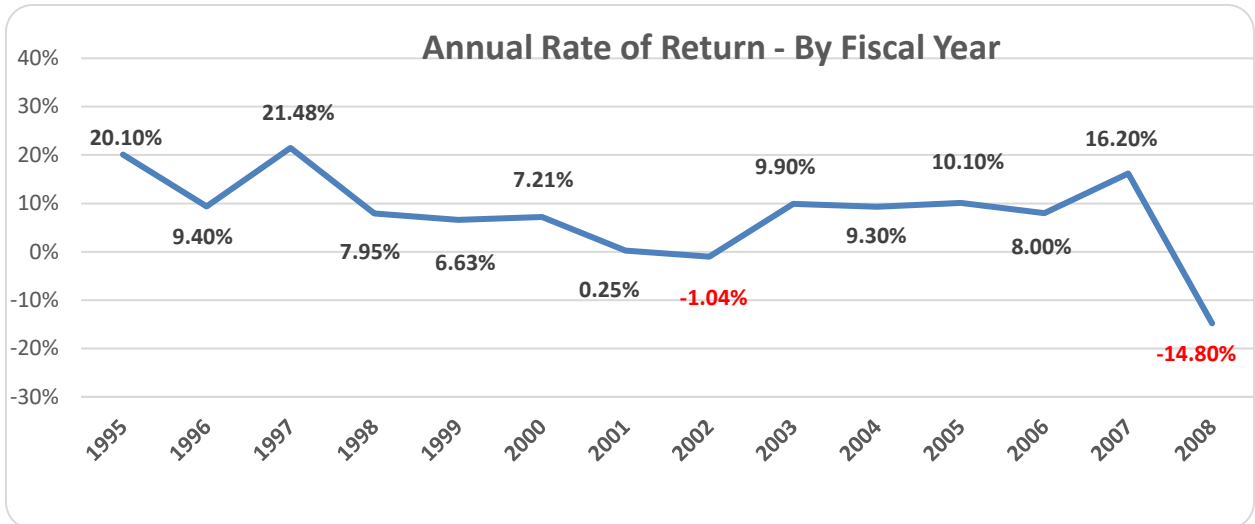
GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(1) Financial Highlights, continued

The **annual rate of return** for the DB Plan investments from 1995 to 2022 are reflected below. Over that period, there have been five years with negative returns. GGRF investment returns averaged 7.48% percent from 1995 through 2022.



GOVERNMENT OF GUAM RETIREMENT FUND

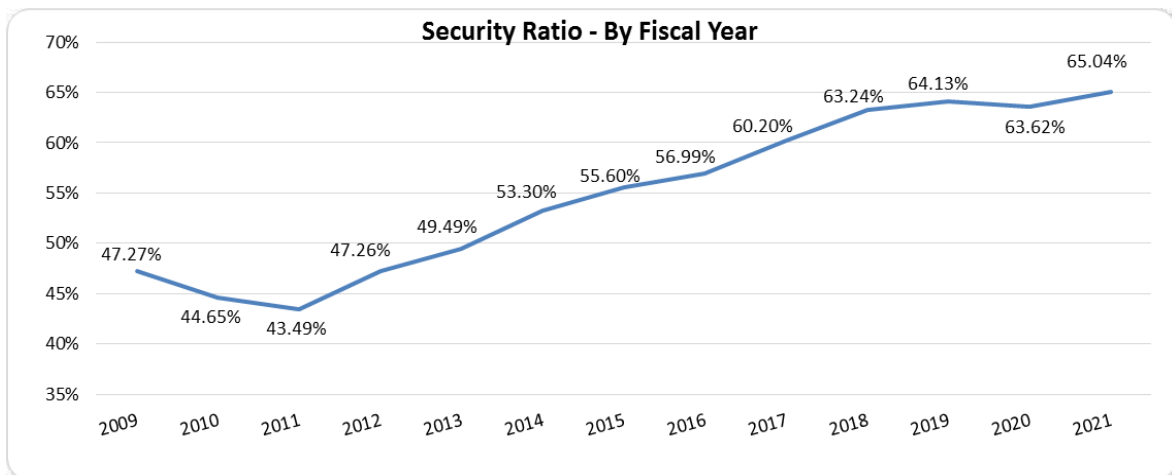
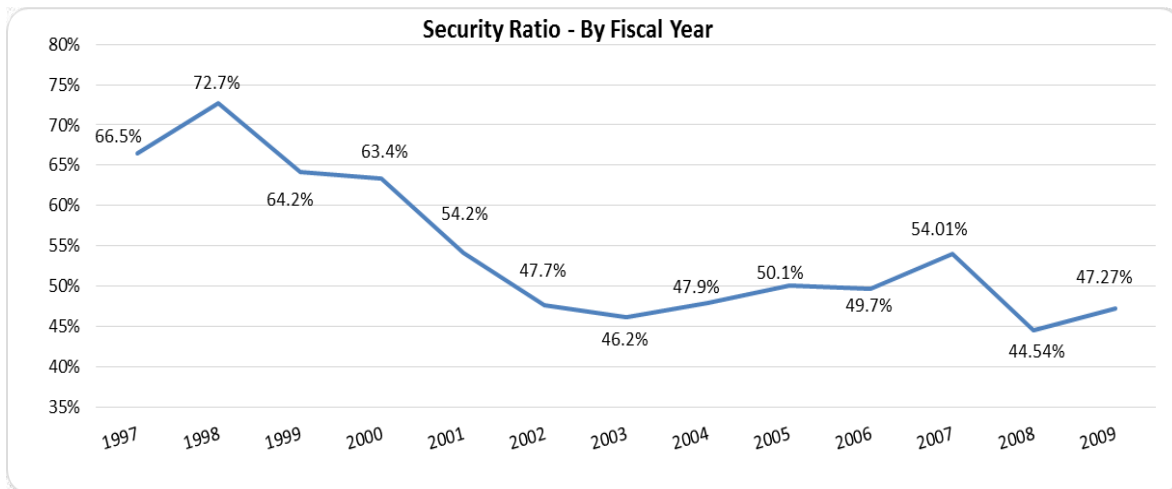
Management's Discussion and Analysis, continued

September 30, 2022

(1) Financial Highlights, continued

- Critical Issue – Impact of Market Volatility on the DB Plan Unfunded Liability, continued**

As indicated below, the security ratio (fund assets as a percentage of accrued liability) for the past twenty-five years has ranged from 43.49% to 72.7%, representing an average of 55.25% per year.



According to our actuary Milliman Inc., security ratios for public pension funds vary depending upon the assumed rate of future investment returns as well as the period over which investment gains and losses are recognized. In addition, security ratios for public pension plans in the U.S. tend to range from 60% to 90%, with an average of about 75%. GGRF has a lower security ratio than the average U.S. funds.

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(1) Financial Highlights, continued

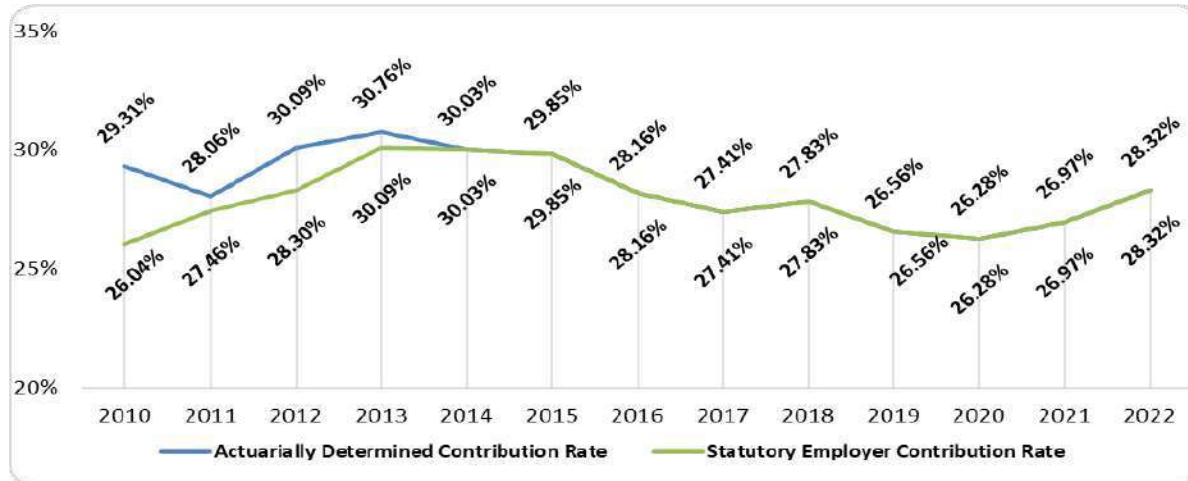
- **Critical Issue – Impact of Market Volatility on the DB Plan Unfunded Liability**

Pursuant to 4 GCA Chapter 8, Section 8137, the unfunded liability is to be completely funded within 80 years from May 1, 1951, and this was extended two years by Public Law 33-186. Based on the 2021 valuation, there are 11.58 years remaining in the funding period.

Management continues to recommend that the Guam Legislature fully fund the actuarially determined contribution rate each year. The uncertainties in the investment markets, and the years remaining in the funding period underscores the need for the Guam Legislature to continue to provide full funding each year.

According to Milliman Inc., employer contribution rates vary widely among public pension funds due to the level of benefits provided, the security ratio (funded percentage), the assumed rate of future investment returns, and the period of time over which unfunded liabilities are amortized. In addition, typical employer contribution rates range from 12.5% to 35% or more. GGRF's contribution rate is at the high end of the range, due to a lower security ratio (funded percentage) than the average U.S. funds.

A comparison of the actuarially determined contribution rates versus the statutory employer contribution rates for 2010 to 2022 are reflected below.



Pursuant to 4GCA Chapter 8, Section 8137, if future contributions equal the actuarially determined contribution rate, and plan investments earn 7% each year, the DB Plan is expected to become fully funded in 2031. Public Law 33-186 extended this period by 2 years to 2033.

The Guam Legislature's efforts toward full funding since 2007 have definitely narrowed the gap between the statutory and actuarially determined contribution rate. The increase in the gap from .82% in 2009 to 3.27% in 2010 is due largely to the negative return of 14.8% in 2008. Since 2014 the statutory rate is equal to the actuarially determined contribution rate. Management encourages the Guam Legislature to continue to set the statutory rate at the actuarially determined contribution rate until full funding is achieved.

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(1) Financial Highlights, continued

- **Governmental Accounting Standards Board (GASB) Statement No. 73.**

The Government of Guam and all component units must present pension information related to supplemental benefits and cost of living allowances (COLA). These benefits are not funded through the accumulation of assets purchased with employer or member contributions; rather, they are funded by Legislative appropriations with the General Fund as funding source. The supplemental benefit is an amount which, when added to a retiree's annuity, increases the annual annuity to Forty Thousand Dollars (\$40,000). This supplemental annuity only applies to retirees who retired under the defined benefit plan.

Public Law 36-107, signed into law in September 2022, increased the COLA payment from \$2,000 to \$2,200 effective with the COLA payments made in October 2022. The COLA benefit applies to both defined benefit retirees and defined contribution retirees.

In accordance with GASB Statement No. 73, as of September 30, 2022 and 2021, GGRF recorded net pension liability of \$4,576,811 and \$6,152,247, respectively.

- **Governmental Accounting Standards Board (GASB) Statement No. 75.**

The Government of Guam contributes a portion of the medical and dental premiums, based on a schedule of semi-monthly rates, and reimburses certain Medicare premiums to eligible retirees. Retirees are also required to pay a portion of the medical and dental insurance premiums. Retirees and surviving spouses do not share in the cost of the basic life insurance benefit. This benefit applies to both defined benefit retirees and defined contribution retirees.

In accordance with GASB Statement No. 75, as of September 30, 2022 and 2021, GGRF recorded net OPEB liability of \$11,217,168 and \$10,883,182, respectively. This reflects postemployment medical, dental, and life insurance benefits of retirees, spouses, children, and survivors.

(2) Description of the Financial Statements

This section of the MD&A is intended to serve as an introduction to the GGRF financial statements, which include the following components:

1. Basic Financial Statements,
2. Notes to the Basic Financial Statements,
3. Required Supplementary Information,
4. Other Supplementary Schedules.

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(2) Description of the Financial Statements, continued

Collectively, this information presents the net position held in trust for pension benefits. This information also summarizes the changes in net position held in trust for pension benefits for the year then ended. The information in these components is briefly summarized as follows:

- **Basic Financial Statements**

The Statement of Fiduciary Net Position is presented for September 30, 2022, with comparative information at September 30, 2021. These financial statements reflect resources available to pay benefits to members, including retirees and beneficiaries, at the end of the years reported. The Statement of Changes in Fiduciary Net Position is presented for the year ended September 30, 2022, with comparative information for the year ended September 30, 2021. These financial statements reflect the changes in resources available to pay benefits to members, including retirees and beneficiaries, for fiscal years 2022 and 2021.

- **Notes to the Basic Financial Statements**

The Notes to the Basic Financial Statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements. Information in the Notes to the Basic Financial Statements includes the following: a general description of GGRF, a summary of significant accounting policies, a description of deposit and investment risk, an explanation of property and equipment, information about net pension liability of the Agencies and information about pension plan participation.

- **Required Supplementary Information**

The Required Supplementary Information consists of the following schedules: changes in net pension liability, net pension liability by agency, employer contributions, and the annual money-weighted rate of return, net of investment expense.

- **Other Supplementary Schedules**

Other schedules include schedules of administrative and general expenses, personnel costs, personnel count, receivables by GovGuam Agency, and other receivables.

(3) Defined Benefit Plan

The DB Plan provides for retirement, disability, and survivor benefits to members of the Plan prior to October 1, 1995. All new employees whose employment commences on or after October 1, 1995 are required to participate in the DC Plan.

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(3) Defined Benefit Plan, continued

DB Plan Net Position as of September 30, 2022 and 2021 are as follows:

			Increase (Decrease)	
			From	
	2022	2021	2021 to 2022	
			\$	%
Cash and Equivalents	\$6,191,045	\$4,400,362	1,790,683	40.7%
Receivables	29,951,513	23,159,616	6,791,897	29.3%
Investments	1,758,520,401	2,258,928,162	(500,407,761)	-22.2%
Prepaid Expenses	18,750	0	18,750	0.0%
Property and Equipment	560,804	536,969	23,835	4.4%
Deferred Outflows	2,624,263	3,950,186	(1,325,923)	-33.6%
Total Assets and Deferred Outflows	1,797,866,776	2,290,975,295	(493,108,519)	-21.5%
Total Liabilities	33,126,533	39,904,997	(6,778,464)	-17.0%
Deferred Inflows	3,840,696	4,259,792	(419,096)	-9.8%
Net Position, End of Year	1,760,899,547	2,246,810,506	(485,910,959)	-21.6%
Net Position, Beginning of Year	2,246,810,506	1,978,163,318		
Net Increase (Decrease) in Net Position	(\$485,910,959)	\$268,647,188		

DB Plan Investments as of September 30, 2022 and 2021 are as follows:

			Increase (Decrease)	
			From	
	2022	2021	2021 to 2022	
			\$	%
Common Stocks	\$1,200,878,984	\$1,569,712,500	(368,833,516)	-23.5%
U.S. Government Securities	245,915,400	290,366,005	(44,450,605)	-15.3%
Corporate Bonds and Notes	254,638,296	311,990,454	(57,352,158)	-18.4%
Money Market Funds	26,925,878	41,646,341	(14,720,463)	-35.3%
Mutual Funds	30,161,843	45,212,862	(15,051,019)	-33.3%
Total	\$1,758,520,401	\$2,258,928,162	(500,407,761)	-22.2%

During 2022, DB Plan investments decreased by \$500 million compared to 2021, due largely to market fluctuations. The decrease in investments resulted in a corresponding reduction in DB Plan net position of \$486 million in 2022.

The DB Plan investments provide for long-term growth, while also ensuring a reliable cash flow that meets current pension benefit payments. Equity investments are included for their long-term return and growth characteristics, while fixed income assets control investment risk.

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(3) Defined Benefit Plan, continued

In line with the Board's long-term goal of achieving, at a minimum, a 7.0% rate of return, investments are allocated amongst various asset classes. Each asset class reacts differently under the same market conditions. Often when one asset class has strong returns, another will have lower or even negative returns. This diversification of investments across a number of asset classes ensures a better return under a range of market conditions, while lowering the overall portfolio risk.

GGRF's target allocation versus the market allocation as of September 30, 2022, is as follows:

	Target Allocation	Market Allocation	Over/(Under)
Domestic Large Cap Equity	30.0%	30.9%	0.9%
Non-U.S. Equity	20.0%	19.1%	-0.9%
Fixed Income	22.0%	20.5%	-1.5%
Global Real Estate (REITs)	2.5%	1.8%	-0.7%
Risk Parity	8.0%	8.3%	0.3%
High Yield	8.0%	8.6%	0.6%
Global Equity	7.0%	7.8%	0.8%
Global Infrastructure	2.5%	2.5%	0.0%
Cash	0.0%	0.5%	0.5%
Total	100%	100%	0.00%

The table below shows portfolio returns and indices, which are reflective of the market environment for 2022 and 2021.

	2022	2021
Total Portfolio	-18.04%	19.04%
Blended Index	-18.79%	19.43%
Domestic Equity	-16.21%	34.46%
Benchmark Index	-17.57%	33.07%
International Equity	-26.28%	24.47%
Benchmark Index	-26.11%	24.45%
Fixed Income	-15.70%	-2.22%
Benchmark Index	-16.49%	-2.32%
High Yield	-13.62%	13.79%
Benchmark Index	-14.15%	11.27%
Global REITs	-19.99%	27.47%
Benchmark Index	-20.49%	31.61%
Risk Parity	-22.34%	17.25%
Benchmark Index	-17.14%	18.49%
Global Equity	-9.95%	15.77%
Benchmark Index	-21.18%	28.92%

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

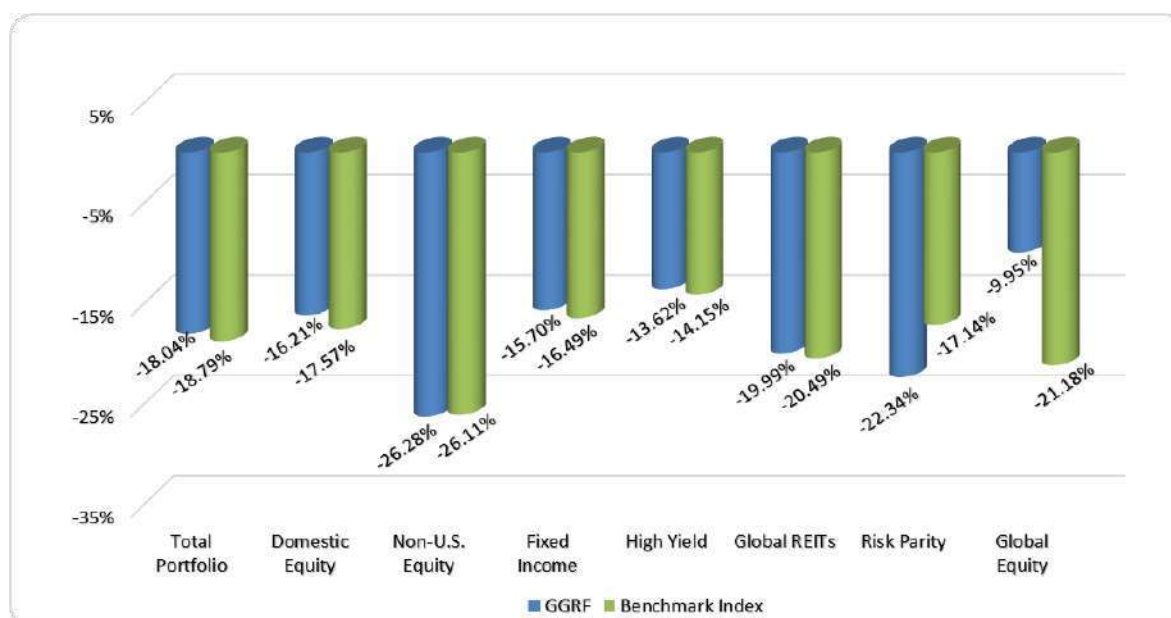
September 30, 2022

(3) Defined Benefit Plan, continued

Total Portfolio Return

For 2022, the GGRF Portfolio had a negative return of -18.04% outperforming the benchmark index with a return of -18.79%.

The following reflects the 2022 investment performance for the total portfolio, and for each investment mandate.



GOVERNMENT OF GUAM RETIREMENT FUND

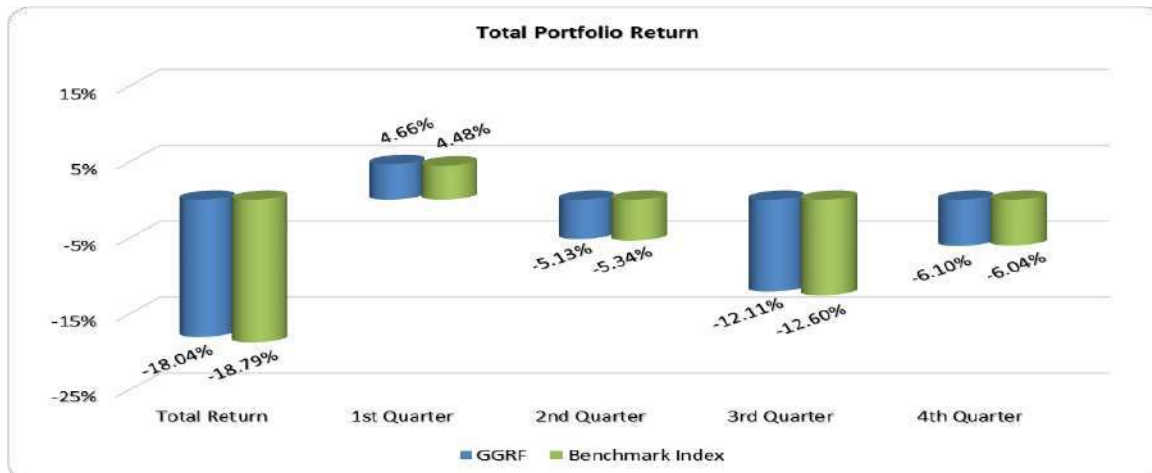
Management's Discussion and Analysis, continued

September 30, 2022

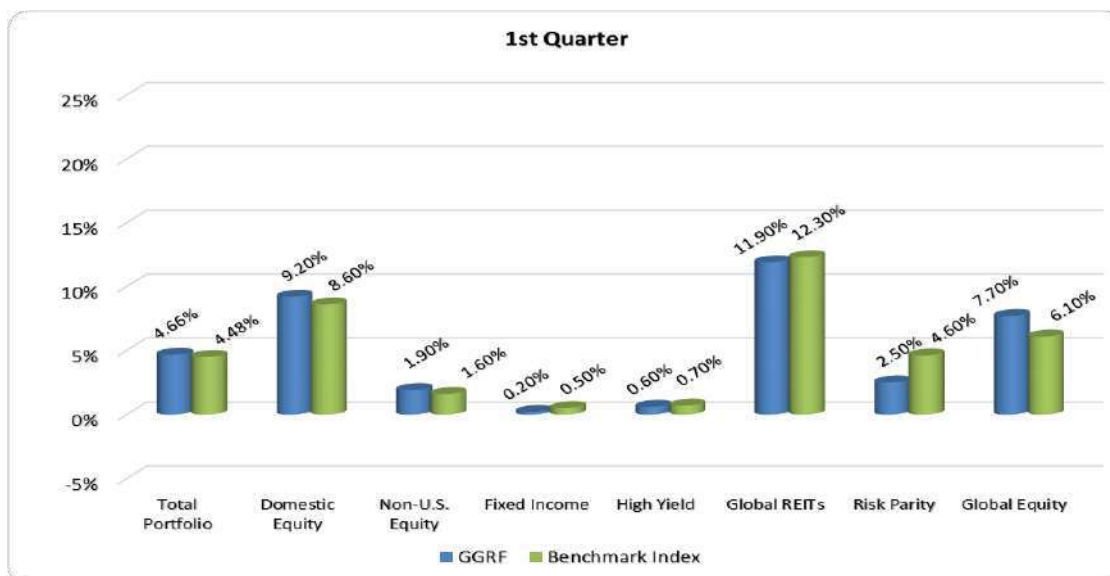
(3) Defined Benefit Plan, continued

2022 Portfolio Returns by Quarter

The following reflects the 2022 total and quarterly returns.



- During the **first quarter** of 2022, the GGRF portfolio returned 4.66%, compared to the benchmark return of 4.46%, ranking at the 10th percentile of Wilshire's peer group universe for the quarter. Domestic, Non-U.S. and Global Equity outperformed their benchmarks over the quarter.



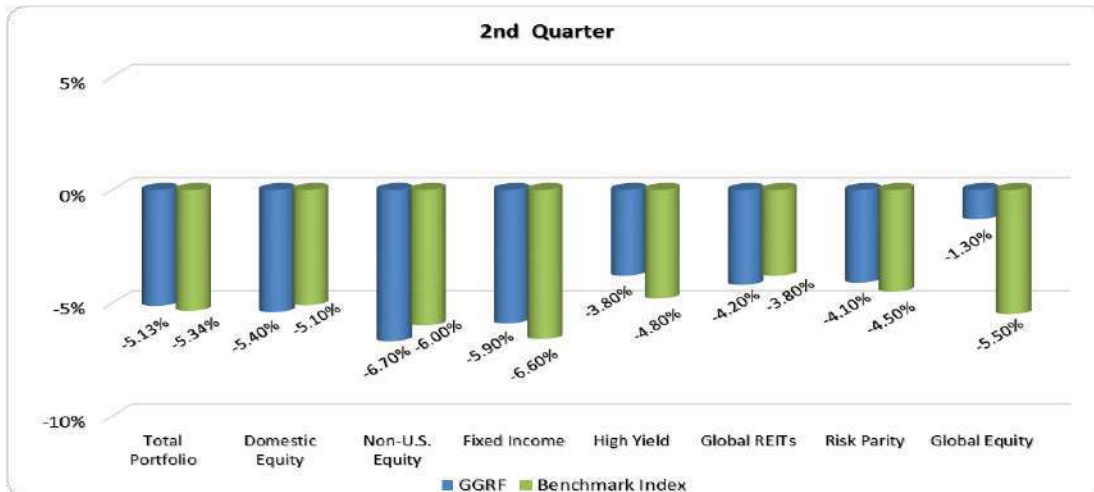
GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

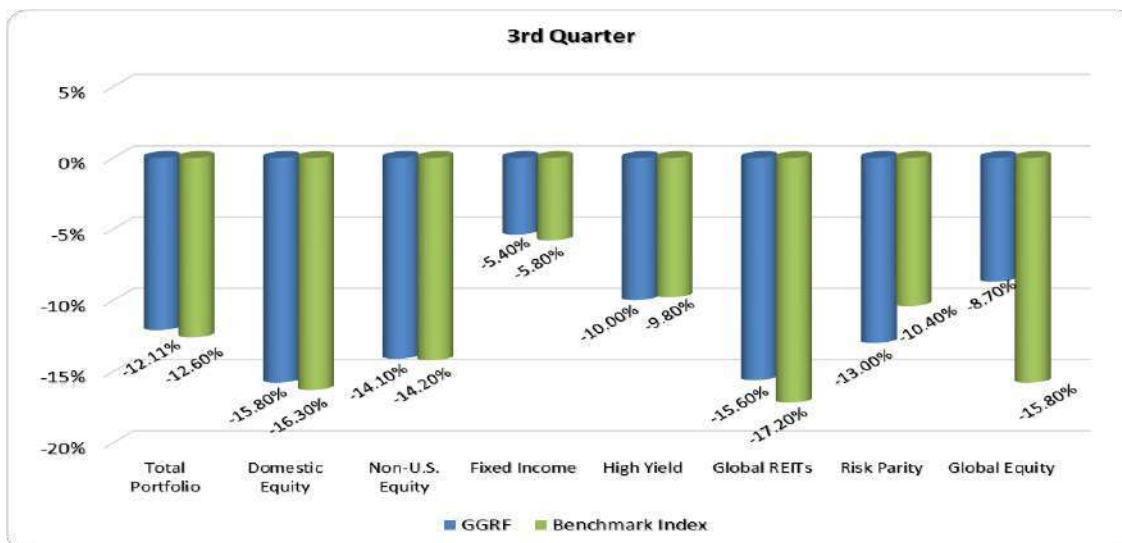
September 30, 2022

(3) Defined Benefit Plan, continued

- During the **second quarter**, the GGRF portfolio had a negative return of -5.13%, compared to the benchmark return of -5.34%, ranking at the 45th percentile of Wilshire's peer group universe for the quarter. Domestic Equity, Non-U.S. Equity and Global REITs were detractors.



- During the **third quarter**, the GGRF portfolio had a negative return of -12.11%, compared to the benchmark index of -12.60%, ranking at the 42nd percentile of Wilshire's peer group universe for the quarter. High Yield and Risk Parity underperformed their benchmarks.



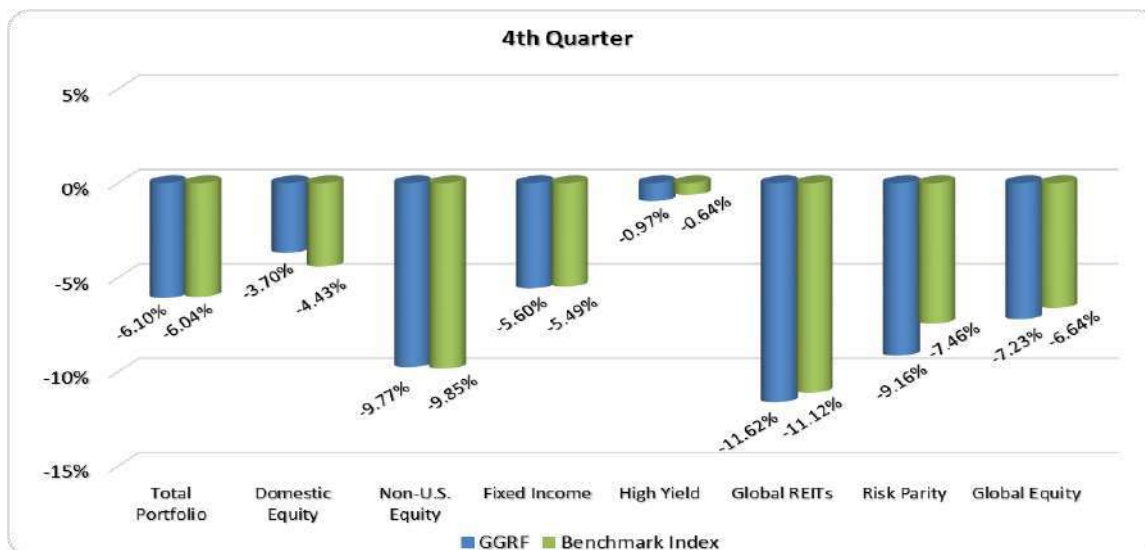
GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(3) Defined Benefit Plan, continued

During the **fourth quarter**, the GGRF portfolio had a negative return of -6.1%, compared to the benchmark index of negative -6.04%, ranking at the 50th percentile of Wilshire's peer group universe for the quarter. U.S. and Non-U.S. Equity outperformed their benchmarks. All other mandates underperformed their benchmarks.



Mitigating the Effects of Market Volatility through Diversification

GGRF's portfolio remains fully diversified across the different asset classes. A number of investment managers are utilized within each asset class, allowing the portfolio to achieve broad exposure to the market while minimizing overall risk. This broad diversification serves as the best defense against the uncertainty of volatile investment markets.

To mitigate other risks, the Board, with the guidance of GGRF's investment consultant, Wilshire Consulting consistently evaluates the relative performance of each mandate and individual managers, and rebalances the portfolio accordingly.

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(3) Defined Benefit Plan, continued

Additions and Deductions to DB Plan Net Position for the years ended September 30, 2022 and 2021 are as follows:

			Increase (Decrease)	
			From	
	2022	2021	2021 to 2022	
			\$	%
Net Appreciation in Fair Value				
of Investments	(\$427,351,840)	\$340,457,123	(767,808,963)	-225.5%
Interest, Dividends & Other				
Investment Income	41,156,659	36,555,180	4,601,479	12.6%
Less Investment Expenses	5,522,446	5,441,584	80,862	1.5%
Net Investment Income	(391,717,627)	371,570,719	(763,288,346)	-205.4%
Employer Contributions	134,834,836	120,017,766	14,817,070	12.3%
Member Contributions	25,342,204	24,649,425	692,779	2.8%
Total Contributions	160,177,040	144,667,191	15,509,849	10.7%
Total Additions	(231,540,587)	516,237,910	(747,778,497)	-144.9%
Benefit Payments	248,745,287	241,590,111	7,155,176	3.0%
Refunds	2,155,285	1,940,106	215,179	11.1%
Interest on Refunds	475,244	630,421	(155,177)	-24.6%
Administrative Expenses	2,994,556	3,430,084	(435,528)	-12.7%
Total Deductions	254,370,372	247,590,722	6,779,650	2.7%
Net Increase (Decrease) in Net Position	(\$485,910,959)	\$268,647,188		

Additions to DB Plan Net Position

During 2022, the net depreciation in fair value of investments was approximately \$427M compared to the \$340M appreciation in fair value of investments in 2021. This was due largely to market fluctuations, which also resulted in the negative investment portfolio return of -18.04% for 2022.

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(3) Defined Benefit Plan, continued

Deductions to DB Plan Net Position

GGRF was created to provide retirement, survivor and disability benefits to qualified members and their beneficiaries. The cost of such programs includes recurring benefit payments, elective refunds of contributions to employees who terminate employment, and the cost of administering the Plan. For 2022, deductions totaled \$254.4 million, an increase of 2.7% over 2021.

Benefit payments to current retirees and their beneficiaries over the last two years averaged 97% of total deductions. For 2022, benefit payments increased by \$7.2 million or 3.0%, consisting of a \$6.3 million increase in age and service annuities, a \$1,100,000 increase in survivor annuities, and a \$200,000 decrease in disability annuities. Benefit payments for DB Plan retirees are not affected by the market downturn as they are based on a formula reflecting years of service and average annual salary. DB Plan investments, combined with future earnings and additional member and employer contributions, will be used to pay retirement benefits.

DB Plan membership as of September 30, 2022 and 2021 is as follows:

	2022	2021	Increase (Decrease) from 2021 to 2022
Retirees and Beneficiaries			
Receiving Benefits	7,435	7,440	(5)
Terminated Members entitled to, but not Receiving Benefits	3,022	3,113	(91)
Active - DB Members	1,031	1,215	(184)
Active - DB 1.75 Members	2,662	2,763	(101)
Total Membership	14,150	14,531	(381)

Liquidations

During 2022, \$98 million in investments were liquidated in order to meet benefit payment obligations, compared to \$95 million in 2021. The \$98M and \$95M included \$39M and \$46M of interest and dividend income, respectively.

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(4) Defined Contribution Plan

The DC Plan was created by Public Law 23-42:3. All new employees whose employment commences on or after October 1, 1995 are required to participate in the DC Plan.

DC Plan Net Position as of September 30, 2022 and 2021 are as follows:

	2022	2021	Increase (Decrease)	
			From	
			2021 to 2022	
			\$	%
Cash and Equivalents	\$1,760,256	\$3,930,671	(2,170,415)	-55.2%
Receivables	1,502,451	1,497,293	5,158	0.3%
Investments	406,068,911	487,910,003	(81,841,092)	-16.8%
Property and Equipment	23,656	14,050	9,606	68.4%
Deferred Outflows	296,295	226,183	70,112	100.0%
Total Assets and Deferred Outflows	409,651,569	493,578,200	(83,926,631)	-17.0%
Total Liabilities	1,206,530	1,094,577	111,953	10.2%
Deferred Inflows	182,137	194,689	(12,552)	100.0%
Net Position, End of Year	408,262,902	492,288,934	(84,026,032)	-17.1%
Net Position, Beginning of Year	492,288,934	399,634,063		
Net Increase (Decrease) in Position	(\$84,026,032)	\$92,654,871		

During 2022, DC Plan investments decreased by approximately \$82 million or 16.8% from the 2021 total due largely to market fluctuations. The decrease in investments resulted in a corresponding reduction in DC Plan net position of \$84 million in 2022.

DC Plan investments include core mutual funds, and target date funds. The core mutual funds allow members to create their own portfolios based on the type of investments that best fit their time horizon, risk tolerance and investment goals. During FY2021 a number of changes were made to the plan's line-up of investment choices. Participants invested in the 2030-2055 Great-West Secure Foundation Lifetime Funds were transitioned into the State Street Target Date Retirement Funds, as the first phase of removing the Secure Foundation Lifetime Funds from the plan. Within International Equity, the Transamerica International Equity Fund was replaced with the Mercer International Stock Fund, while the Touchstone International Small Cap Fund was replaced with the Grandeur Peak International Stalwarts Fund. Finally, within International Fixed Income, the BNY Mellon Global Fixed Income Fund was replaced with the AB Global Fixed Income Fund.

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(4) Defined Contribution Plan, continued

Additions and Deductions to DC Plan Net Position for the years ended September 30, 2022 and 2021 are as follows:

			Increase (Decrease)	
			From	
	2022	2021	2021 to 2022	
			\$	%
Net Appreciation in Fair Value				
of Investments	(\$115,508,532)	\$73,609,791	(189,118,323)	-256.9%
Interest, Dividends & Other				
Investment Income	23,859,379	14,195,417	9,663,962	68.1%
Less Investment Expenses	145,178	139,594	5,584	4.0%
Net Investment Income	(91,794,331)	87,665,614	(179,459,945)	-204.7%
Employer Contributions	19,094,610	18,143,351	951,259	5.2%
Member Contributions	19,021,591	18,054,281	967,310	5.4%
Total Contributions	38,116,201	36,197,632	1,918,569	5.3%
Total Additions	(53,678,130)	123,863,246	(177,541,376)	-143.3%
Refunds	28,205,191	28,972,455	(767,264)	-2.6%
Administrative Expenses	2,142,711	2,235,920	(93,209)	-4.2%
Total Deductions	30,347,902	31,208,375	(860,473)	-2.8%
Net Increase (Decrease) in Net Position	(\$84,026,032)	\$92,654,871		

Additions (deductions) to DC Plan Net Position

During 2022, the net depreciation in fair value of investments was \$116M compared to the \$74M appreciation in fair value of investments in 2021. The depreciation in investments was due largely to market fluctuations. Interest and dividends received on plan investments increased from \$14M in 2021 to \$24M in 2022. During 2021, higher dividends from stocks were offset by lower interest from bond and Stable Value investments.

Employee contributions to the DC Plan are based on an automatic deduction of 6.2% of the member's regular base pay. Statutory contributions are determined using the same rates as the DB Plan. Of the amount contributed by the employer, only 6.2% of the member's regular base pay is deposited into the member's individual account. The remaining amount is contributed towards the unfunded liability of the DB Plan. Members who have completed five years of service are fully vested in employer contributions plus any earnings thereon.

Refunds of member contributions are at the discretion of the member and vary from year to year.

GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(4) Defined Contribution Plan, continued

DC Plan membership as of September 30, 2022 and 2021 is as follows:

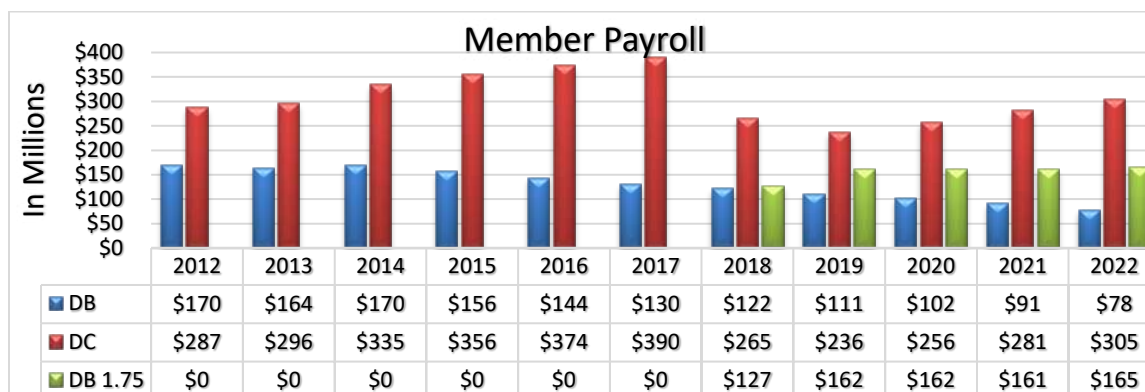
	2022	2021	Increase (Decrease) from 2021 to 2022
Active (Contributing) Members	7,571	7,070	501
Inactive (Non-Contributing) Members with Account Balances	7,945	7,523	422
Total Membership	15,516	14,593	923

(5) Future Outlook



Active membership in the DB and DB 1.75 Plans will continue to decrease as members retire, while membership in the DC Plan will continue to increase as a result of the recruitment of new employees. The decrease in the DC Plan in 2018 was due to the transfer of DC Plan participants to the DB 1.75 Plan effective January 1, 2018.

The corresponding increases (decreases) in Member Payroll are reflected below.



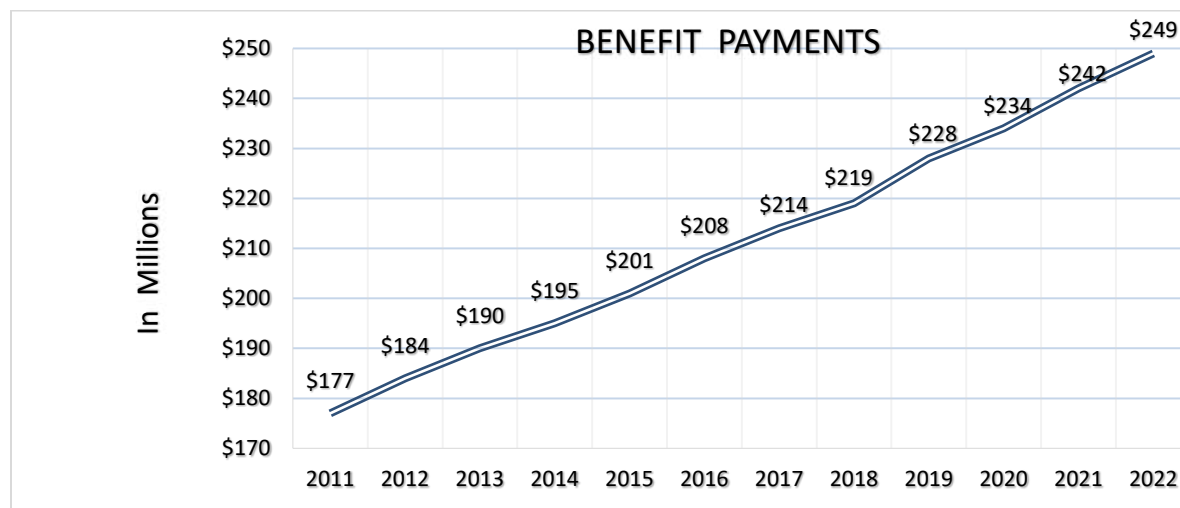
GOVERNMENT OF GUAM RETIREMENT FUND

Management's Discussion and Analysis, continued

September 30, 2022

(5) Future Outlook, continued

DB Benefit Payments



The number of retired DB and DB 1.75 members has increased from 7,117 in 2011, to an estimated 7,435 in 2022. Annual benefit payments have also increased from \$177 million in 2011, to an estimated \$249 million in 2022. **Looking ahead**, benefit payments for DB retirees are expected to increase as active members continue to retire.

Defined Benefit Plan

The GGRF Board will continue to revisit on an annual basis the asset allocation policy of the Defined Benefit Plan, related statutes, and the overall structure for managing GGRF assets, to ensure assets are managed in accordance with the following objectives:

1. Ensuring payment of all benefit and expense obligations when due.
2. Maximizing expected return within reasonable and prudent risk levels.
3. Maximizing the probability of achieving the actuarial rate of return assumption.
4. Controlling costs of administering GGRF and managing the investments.

Relative to the above objectives, the Board will perform quarterly investment performance reviews and rebalance GGRF's investment portfolio accordingly.

Looking Forward

As we enter Fiscal Year 2023, our focus will be to continue to navigate the rapidly changing economy by working with our Investment Consultants (for both the DB and DC Plans) to strengthen the Fund. It should be noted that at March 31, 2023 the DB Plan investments posted a positive return of 4.43% for the quarter, while DC Plan investments increased to \$467 million. Refer to the Subsequent Events Table on the bottom of page 4 for additional subsequent events comments through June 30, 2023.

GOVERNMENT OF GUAM RETIREMENT FUND

Statement of Fiduciary Net Position

September 30, 2022 (with Comparative Totals for 2021)

	Defined Benefit	Defined Contribution	2022 Total	2021 Total
<u>ASSETS</u>				
Investments, at fair value:				
Common and preferred stocks	\$ 1,200,878,984	\$ -	\$ 1,200,878,984	\$ 1,569,712,500
U.S. Government securities	245,915,400	-	245,915,400	290,366,005
Corporate bonds and notes	254,638,296	-	254,638,296	311,990,454
Money market funds	26,925,878	-	26,925,878	41,646,341
Mutual funds	30,161,843	399,292,396	429,454,239	526,765,650
Mutual funds - DC plan forfeitures	-	6,776,515	6,776,515	6,357,215
Total investments	1,758,520,401	406,068,911	2,164,589,312	2,746,838,165
Receivables:				
Contributions, Interest & Penalties:				
Employer contributions, net	2,166,632	679,369	2,846,001	3,039,152
Employer contributions, unfunded liability	2,432,115	-	2,432,115	2,270,797
Member contributions	737,078	677,888	1,414,966	1,521,663
Interest and penalties on contributions	95,356	-	95,356	341,264
Supplemental/Insurance benefits advanced	1,996,097	-	1,996,097	1,996,097
	7,427,278	1,357,257	8,784,535	9,168,973
Member Notes: Service Credits	985,143	-	985,143	1,433,490
Other:				
Deferred receivables - Supplemental/COLA benefits	-	-	-	1,698,785
Accrued interest and dividends on investments	6,392,661	-	6,392,661	5,533,557
Other receivables	629,765	145,194	774,959	889,753
Due from brokers for unsettled trades	14,255,724	-	14,255,724	5,669,029
Due from DC plan	260,942	-	260,942	263,322
	21,539,092	145,194	21,684,286	14,054,446
Total receivables	29,951,513	1,502,451	31,453,964	24,656,909
Cash and cash equivalents	6,191,045	1,760,256	7,951,301	8,331,033
Prepaid expenses	18,750	-	18,750	-
Property and equipment	560,804	23,656	584,460	551,019
Total assets	1,795,242,513	409,355,274	2,204,597,787	2,780,377,126
<u>DEFERRED OUTFLOWS OF RESOURCES</u>				
Deferred outflows of resources from pension	473,079	296,295	769,374	1,173,727
Deferred outflows - OPEB	2,151,184	-	2,151,184	3,002,642
Total deferred outflows of resources	2,624,263	296,295	2,920,558	4,176,369
Total assets and deferred outflows	1,797,866,776	409,651,569	2,207,518,345	2,784,553,495
<u>LIABILITIES</u>				
Accounts payable and accrued expenses	4,253,796	592,260	4,846,056	5,786,696
Due to brokers for unsettled trades	13,432,086	-	13,432,086	17,914,127
Due to DB plan	-	260,942	260,942	263,322
Total current liabilities	17,685,882	853,202	18,539,084	23,964,145
Net pension liability	4,223,483	353,328	4,576,811	6,152,247
Net OPEB liability	11,217,168	-	11,217,168	10,883,182
Total liabilities	33,126,533	1,206,530	34,333,063	40,999,574
<u>DEFERRED INFLOWS OF RESOURCES</u>				
Deferred inflows from pension	962,338	182,137	1,144,475	409,314
Deferred inflows - OPEB	2,878,358	-	2,878,358	4,045,167
Total deferred inflows of resources	3,840,696	182,137	4,022,833	4,454,481
Net position restricted for pensions (See required supplemental schedule of funding progress)	\$ 1,760,899,547	\$ 408,262,902	\$ 2,169,162,449	\$ 2,739,099,440

The accompanying notes are an integral part of these financial statements.

GOVERNMENT OF GUAM RETIREMENT FUND

Statement of Changes in Fiduciary Net Position

Year ended September 30, 2022 (with Comparative Totals for 2021)

	Defined <u>Benefit</u>	Defined <u>Contribution</u>	2022 <u>Total</u>	2021 <u>Total</u>
Investment income				
Net appreciation (depreciation) in fair value of investments	\$ (427,351,840)	\$ (115,508,532)	\$ (542,860,372)	\$ 414,066,914
Interest	22,012,419	23,607,214	45,619,633	36,130,522
Dividends	18,486,701	-	18,486,701	13,838,784
Other investment income	657,539	252,165	909,704	781,291
	(386,195,181)	(91,649,153)	(477,844,334)	464,817,511
Less investment expenses	5,522,446	145,178	5,667,624	5,581,178
Net investment income	<u>(391,717,627)</u>	<u>(91,794,331)</u>	<u>(483,511,958)</u>	<u>459,236,333</u>
Contributions				
Employer	134,834,836	19,094,610	153,929,446	138,161,117
Member	25,342,204	19,021,591	44,363,795	42,703,706
Total contributions	<u>160,177,040</u>	<u>38,116,201</u>	<u>198,293,241</u>	<u>180,864,823</u>
TOTAL ADDITIONS	<u>(231,540,587)</u>	<u>(53,678,130)</u>	<u>(285,218,717)</u>	<u>640,101,156</u>
Benefit payments				
Age and service annuities	211,752,842	-	211,752,842	205,464,871
Survivor annuities	32,575,864	-	32,575,864	31,490,298
Disability annuities	4,416,581	-	4,416,581	4,634,942
Total benefit payments	<u>248,745,287</u>	<u>-</u>	<u>248,745,287</u>	<u>241,590,111</u>
Refunds to separated employees and withdrawals	2,155,285	28,205,191	30,360,476	30,912,561
Administrative and general expenses	2,994,556	2,142,711	5,137,267	5,666,004
Interest on refunded contributions	<u>475,244</u>	<u>-</u>	<u>475,244</u>	<u>630,421</u>
TOTAL DEDUCTIONS	<u>254,370,372</u>	<u>30,347,902</u>	<u>284,718,274</u>	<u>278,799,097</u>
Net increase (decrease) in plan net position	(485,910,959)	(84,026,032)	(569,936,991)	361,302,059
Net position restricted for pensions, beginning of year	<u>2,246,810,506</u>	<u>492,288,934</u>	<u>2,739,099,440</u>	<u>2,377,797,381</u>
Net position restricted for pensions, end of year	<u>\$ 1,760,899,547</u>	<u>\$ 408,262,902</u>	<u>\$ 2,169,162,449</u>	<u>\$ 2,739,099,440</u>

The accompanying notes are an integral part of these financial statements.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements

September 30, 2022

(1) Description of the Fund

The following brief description of the Government of Guam Retirement Fund (GGRF) is provided for general information purposes only. Members should refer to Title 4, Chapter 8, Articles 1 and 2 of the Guam Code Annotated (GCA) for more complete information.

Purpose

The Government of Guam Retirement Fund was established and became operative on May 1, 1951 to provide retirement annuities and other benefits to employees of the Government of Guam. The Board of Trustees (the “Board”) is responsible for the general administration and proper operation of the Fund. With the passage of Public Law 27-43, effective November 14, 2003 the Board of Trustees comprises seven members, four of whom are elected and three of whom are appointed by the Governor with the advice and consent of the Legislature. Two of the elected members must be GGRF retirees domiciled in Guam. These two members are elected by GGRF retirees. The other two elected members must be GGRF members with at least five years of employment by the Government of Guam. These two members are elected by GGRF active members. The GGRF is accounted for as a blended component unit, fiduciary fund type, pension trust fund of the Government of Guam.

(2) Description of the Defined Benefit Plan

Membership

The Defined Benefit Plan (DB) is a single-employer defined benefit pension plan and membership is mandatory for all employees in the service of the Government of Guam on the operative date. The DB plan provides for retirement, disability, and survivor benefits to members of the Plan prior to October 1, 1995. All new employees whose employment commences on or after October 1, 1995 are required to participate in the Defined Contribution Plan.

The following employees have the option of accepting or rejecting membership and become members only upon submission of a written request to the Board for membership:

1. Employees hired for a definite agreed term or who at the time of employment are not domiciled on Guam.
2. Employees of a public corporation of the Government of Guam or of the University of Guam.
3. Any employee whose employment is purely temporary, seasonal, intermittent or part time.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(2) Description of the Defined Benefit Plan, continued

Ineligible Persons

The following employees are not eligible for membership:

1. Persons whose services are compensated on a fee basis.
2. Independent contractors.
3. Persons whose employment is for a specific project.
4. Persons who are employed in the Senior Citizens Community Employment Program.

At September 30, 2022, membership is as follows:

Retirees and beneficiaries receiving benefits	7,435
Terminated members entitled to, but not yet receiving benefits	3,022
Active plan members-DB	1,031
Active plan members-DB 1.75	<u>2,662</u>
	<u>14,150</u>

The Defined Benefit 1.75 Plan (DB 1.75) became effective January 1, 2018. All employees who were in the Defined Contribution Plan and were still employed had the option to transfer to the DB 1.75 Plan effective January 1, 2018. Employees hired on or after January 1, 2018 are not eligible for the DB or DB 1.75 Plans.

Contributions

Contributions are set by law. Member contributions are required at 9.5% of base pay.

Based on the actuarial valuation as of September 30, 2021, which was issued in May 2022, the employer's actuarially determined contribution rate for the fiscal year ended September 30, 2022 was 28.43% of covered payroll.

The established statutory rates at September 30, 2022 was 28.32%.

Retirement, Disability and Survivor Benefits

Under the defined benefit plan, retirement benefits are based on age and/or years of credited service and an average of the three highest annual salaries received by a member during years of credited service, or \$6,000, whichever is greater.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(2) Description of the Defined Benefit Plan, continued

Members who joined the DB plan prior to October 1, 1981 may retire with 10 years of service at age 60 (age 55 for uniformed personnel); or 20 to 24 years of service regardless of age with a reduced benefit if the member is under age 60; or completion of 25 years of service at any age.

Members who joined the DB plan on or after October 1, 1981 and prior to August 22, 1984 may retire with 15 years of service at age 60 (age 55 for uniformed personnel); or 25 to 29 years of service regardless of age with a reduced benefit if the member is under age 60; or completion of 30 years of service at any age.

Members who joined the DB plan after August 22, 1984 may retire with 15 years of service at age 65 (age 60 for uniformed personnel); or 25 to 29 years of service regardless of age with a reduced benefit if the member is under age 65; or completion of 30 years of service at any age.

Service Benefit Formula

The basic retirement benefit for the DB Plan is computed as the sum of the following:

1. An amount equal to two percent (2%) of the average annual salary for each of the first ten years of credited service and two and one-half percent (2.5%) of average annual salary for each year or part thereof of credited service over ten years.
2. An amount equal to twenty dollars (\$20) multiplied by each year of credited service, the total of which is reduced by an amount equal to a hundredth of one percent (.01%) of said total for each one dollar (\$1) that a member's average annual salary exceeds six thousand dollars (\$6,000).

The basic annuity is limited to a maximum of eighty-five percent (85%) of the average annual salary, and cannot be less than one thousand two hundred dollars (\$1,200) per year.

Disability

Members under the age of 65 with six or more years of credited service who are not entitled to receive disability payments from the United States Government are eligible to receive sixty six and two-thirds percent (66-2/3%) of the average of their three highest annual salaries received during years of credited service.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(2) Description of the Defined Benefit Plan, continued

Survivor

In the event of death of a member who completed at least 3 years of total service, the following benefits are payable:

1. Spouse – annual benefit is equal to sixty percent (60%) of the disability or service retirement benefit earned by the member.
2. Minor children – Basic benefit is \$2,880 per year for a minor child up to 18 years of age (age 24 if a full-time student).

Separation from the DB Plan

Upon complete separation from service before attaining at least 25 years of total service, a member is entitled to receive a refund of total contributions including interest. Public Law 27-68 raised the time frame under which a refund was available from 20 years to 25 years, effective February 6, 2004.

A member who terminates after completing at least 5 years of service has the option of leaving contributions in the GGFR and receiving a service retirement benefit upon attainment of the age of 60 years.

DB 1.75 Plan

In accordance with Public Law 33-186:

The Defined Benefit 1.75 Plan became effective on January 1, 2018. DB 1.75 Plan members are required to contribute 9.5% of their base salary to the DB 1.75 Plan and 1% of base salary to the 457 Plan, and are fully vested for benefits upon attaining five (5) years of credited service. Members may retire with full benefits at age 62 and 5 years of credited service, or at age 55 with 25 years of credited service with reduced benefits, or at age 60 and 5 years of credited service without survivor benefits.

For the DB 1.75 Plan, a basic annuity of 1.75% of “average annual salary” is provided for each year of credited service. The annuity is limited to a maximum of eighty-five percent (85%) of the average annual salary, and cannot be less than one thousand two hundred dollars (\$1,200) per year.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(3) Description of the Defined Contribution Retirement System

Purpose

The Defined Contribution Retirement System (DCRS) was created by Public Law 23-42:3 to provide an individual account retirement system for any person who is employed in the Government of Guam. The GGRF Board of Trustees is responsible for the general administration and operation of the fund. The DCRS, by its nature, is fully funded on a current basis from employer and member contributions.

Membership

The DCRS is a single-employer pension plan and shall be the single retirement program for all new employees whose employment commences on or after October 1, 1995.

Effective October 1, 1995, existing members of the DB plan with less than 20 years of service credit may, upon written election, voluntarily elect membership in the DCRS. This option was available for sixty five (65) months after enactment of the legislation, and is available between March 1 and May 31 of every year, beginning in the year 2002. After making the election to transfer, the employee may not change the election or again become a member of the DB plan.

At September 30, 2022, membership is as follows:

Active contributing members	7,571
Inactive members with account balances	<u>7,945</u>
	<u>15,516</u>

Contributions

Effective October 1, 1995, DC Plan member and employer contributions were set by law at five percent (5%) of base pay. In accordance with Public Law 33-186, effective January 1, 2018, member and employer contribution rates increased from five percent (5%) to six and two-tenths percent (6.2%) of base pay.

Separation from the DCRS

Any member who leaves government service after attaining 5 years of total service is entitled to receive their total contribution plus 100% of the employer contribution and any earnings thereon.

Any member who leaves government service with less than 5 years of total service is entitled to receive their total contribution plus any earnings thereon.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies

Method of Accounting

The financial statements presented herein have been prepared on the accrual basis of accounting under which expenses are recorded when the liability is incurred and revenues are recorded in the accounting period in which they are earned.

Employee contributions are recognized in the period in which contributions are due. Employer contributions are recognized when the employer has made a formal commitment to provide the contributions pursuant to legal requirements. Contributions from employees and employers for service through September 30, 2022 are accrued.

These contributions are considered fully collectible; accordingly, no allowance for uncollectible receivables is reflected in the financial statements. Benefits and refunds are recognized when due and payable in accordance with provisions set forth in the Guam Code Annotated.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual results could differ from those estimates.

Comparative Totals

The basic financial statements include certain prior year summarized comparative information in total but not at the level of detail required for a presentation in conformity with U.S. generally accepted accounting principles. Accordingly, such information should be read in conjunction with the GGRF financial statements for the fiscal year ended September 30, 2021, from which the summarized information was derived.

Cash

At September 30, 2022, the GGRF has cash balances in banks of approximately \$10.1M, of which \$250,000 is insured by the Federal Deposit Insurance Corporation, and of which includes approximately \$2.2M in outstanding checks. The remaining balances are collateralized by securities held by a trustee in the name of the financial institution.

Investments

Investments include U.S. Federal Government and agency obligations, foreign government obligations, real estate, commercial mortgages, corporate debt, mutual funds, and equity instruments. Investments are reported at fair value. Securities transactions and any resulting gains or losses are accounted for on a trade date basis.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies, continued

Investments other than real estate, commercial mortgages and other loans, and municipal revenue bonds are reported at market values determined by the custodial agents. The agent's determination of market values includes, among other things, using pricing services or prices quoted by independent brokers at current exchange rates.

Commercial mortgages and other loans and municipal revenue bonds have been valued on an amortized cost basis, which approximates market or fair value. No allowance for loan loss has been provided as all loans and bonds are considered by management to be fully collectible. Short-term investments are reported at cost, which approximates market value.

For investments where no readily ascertainable market value exists, management, in consultation with their investment advisors, has determined the fair values for the individual investments based on anticipated maturity dates and current interest rates commensurate with the investment's degree of risk.

Northern Trust Company held the investments as custodian in the Fund's name through September 30, 2022. In addition, the Fund has selected investment managers who are given authority to purchase and sell securities in accordance with the following guidelines:

- A. Investment managers may invest in U.S. and non-U.S. common stocks, American Depositary Receipts (ADRs), convertible bonds, preferred stocks, fixed-income securities, mutual funds and short-term securities.
 - 1. U.S. equities:
 - a. Equity holdings are restricted to readily marketable securities of corporations that are actively traded on the major U.S. exchanges and over the counter.
 - b. Common and preferred stock:
 - i. The issuing institution has reported a profit in at least four of the five fiscal years preceding the date of investment, or alternatively, in at least seven of the ten fiscal years preceding the date of investment.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies, continued

- ii. The issuing institution has paid a cash dividend on its common or capital stock in at least four of the five years preceding the date of investment, or alternatively, in at least seven of the ten fiscal years preceding the date of investment.
 - iii. Total cash dividends have not exceeded total earnings in five years preceding the date of investment.
 - iv. On the date of investment, the issuer is not in default in payment of principal or interest on any of its publicly held bonds or other evidence of indebtedness, and any contingent interest, cumulative and non-cumulative preferred dividends and dividends on prior common or capital stock have been paid in full.
 - v. Preferred stock must also adhere to the following:
The net earnings of the institution available for fixed charges over a period of five fiscal years preceding the date of investment have averaged per year, and during either of the last two years have been, after depreciation and income taxes, no less than:
 - 1. Two times its average annual fixed charges, maximum contingent interest and preferred dividend requirements over the same period, in the case of any public utility company; or,
 - 2. Three times its average annual fixed charges, maximum contingent interest and preferred dividend requirements over the same period, in the case of any other company.
2. U.S. Fixed Income:
- a. All fixed income securities held in the portfolio must have a Moody's, Standard & Poor's and/or a Fitch's credit quality rating of no less than "BBB". U.S. Treasury and U.S. Government agencies are qualified for inclusion in the portfolio.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies, continued

- b. No more than twenty percent (20%) of the market value of the portfolio may be rated less than single “A” quality, unless the manager has specific written authorization. Eighty percent (80%) of the fixed income portfolio must be in bonds of credit quality of no less than “A”.
 - c. Total portfolio quality (capitalization weighted) must maintain an “A” minimum rating.
 - d. In case such bonds or other evidence of indebtedness are not so rated by two nationally recognized and published rating services, the net earnings available for fixed charges over a period of five fiscal years preceding the date of investment have averaged per year and during either of the last two years have been, after depreciation and taxes, not less than:
 - i. Two times its average annual fixed charges over the same period, in the case of any public utility company;
 - ii. One and one-half times its average annual fixed charges over the same period, in the case of any financial company; or,
 - iii. Three times its average annual fixed charges over the same period, in the case of any other company.
 - e. With the written petition and subsequent written approval of the Trustees, opportunistic investment bonds issued by national governments other than the United States or foreign corporations may comprise up to six percent (6%) of each fixed-income manager’s portfolio. In no case shall these investments exceed three and one-half percent (3.5%) of the total GGRF investments. All non-U.S. securities will be, in the judgment of the investment managers, of credit quality equal to or superior to the standards described above.
3. Non-U.S. Equities
- a. Common or capital stock of any institution or entity created or existing under the laws of any foreign country are permissible investments, provided that:

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies, continued

- i. The issuing institution has reported a profit in at least four of the five fiscal years preceding the date of investment, or alternatively, in at least seven of the ten fiscal years preceding the date of investment.
 - ii. The issuing institution has paid a cash dividend on its common or capital stock in at least four of the five years preceding the date of investment, or alternatively, in at least seven of the ten fiscal years preceding the date of investment.
 - iii. Total cash dividends have not exceeded total earnings in five years preceding the date of investment.
 - iv. On the date of investment, the issuer is not in default in payment of principal or interest on any of its publicly held bonds or other evidences of indebtedness, and any contingent interest, cumulative and non-cumulative preferred dividends and dividends on prior common or capital stock have been paid in full.
- b. Consistent with the desire to maintain broad diversification, allocations to any country, industry or other economic sector should not be excessive.

4. Cash and Cash Equivalents

- a. Cash equivalent reserves must consist of cash instruments having a quality rating of A-2, P-2 or higher. Eurodollar Certificates of Deposit, time deposits, and repurchase agreements are also acceptable investment vehicles. All other securities will be, in the judgment of the investment managers, of credit quality equal to or superior to the standards described above.
 - b. No single issue shall have a maturity of greater than two years.
 - c. The cash portfolio shall have a maturity of less than one year.
 - d. Any idle cash not invested by the investment managers shall be invested daily through an automatic sweep managed by the custodian.
- B. No investment management organization shall have more than twenty-five percent (25%) of the GGRF's assets under its direction.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies, continued

- C. No individual security of any issuer, other than that of the United States government or Government of Guam, shall constitute more than five percent (5%), at cost, of the total GGRF or of any investment manager's portfolio.
- D. Holdings of any issuer must constitute no more than five percent (5%) of the outstanding securities of such issuer.
- E. Investments in a registered mutual fund managed by the investment manager are subject to prior approval of the Board of Trustees.
- F. The following securities and transactions are not authorized: letter stock and other unregistered securities; non-negotiable securities; commodities or other commodity contracts; and, short sales origin transactions. Options and futures are restricted, except by petition to the Trustees for approval.

Investment policy

GGRF's investment policy in regard to the allocation of invested assets is established by mandates of public laws as enacted from time to time, as codified at 4GCA Title 4, Chapter 9, Article 1. GGRF's strategic asset allocation is based on the Fund's time horizon, risk tolerances, investment objectives, and asset class preferences.

The following was the Board's adopted asset allocation policy as of September 30, 2022:

Asset Class	Target Allocation
U.S. Equities (Large Cap)	26.00%
U.S. Equities (Small Cap)	4.00%
Non-U.S. Equities	20.00%
Global Equity	7.00%
U.S. Fixed Income (Aggregate)	22.00%
High Yield Bonds	8.00%
Risk Parity	8.00%
Global Infrastructure	2.50%
Global Real Estate (REITs)	2.50%
	<u>100.00%</u>

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies, continued

Rate of return

For the year ended September 30, 2022 the annual money-weighted rate of return on DB plan investments (net of expenses) was negative 17.69%. The money-weighted rate of return expresses investment performance, net of investment expense.

Due to/from Brokers

Amounts due to/from brokers for unsettled trades consists of securities purchased or sold, which have not yet settled.

Income Taxes

The Fund is a public employees' retirement system and an autonomous agency of the Government of Guam. Accordingly, the Fund is not subject to income taxes.

Actuarial Present Value of Accumulated Plan Benefits

Accumulated plan benefits are those future periodic payments, including lump-sum distributions that are attributable under the Fund's provisions to the service members have rendered through the most recent actuarial valuation date (September 30, 2021, rolled forward to September 30, 2022).

Accumulated plan benefits include benefits expected to be paid to (i) retired, disabled, and terminated employees and their beneficiaries, (ii) beneficiaries of employees who have died, and to (iii) present employees and their beneficiaries. Benefits payable under all circumstances - retirement, death, disability, and termination of employment - are included, to the extent they are deemed attributable to employee service rendered through September 30, 2021, rolled forward to September 30, 2022.

The actuarial present value of accumulated plan benefits is determined by an independent actuarial firm and is the amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements such as for death, disability, withdrawals, or retirement) between the most recent actuarial valuation date (September 30, 2021, rolled forward to September 30, 2022), and the expected date of payment.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies, continued

Recently Adopted Accounting Pronouncements

During the fiscal year ended September 30, 2022, the Fund implemented the following GASB pronouncements:

- In June 2017, GASB issued Statement No. 87, *Leases*, which is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. GASB Statement No. 87 was effective for the fiscal year ending September 30, 2021. However, GASB Statement No. 95, *Postponement of the effective Dates of Certain Authoritative Guidance* postponed the effective date by 18 months.
- In June 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, which requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. The provisions in Statement No. 89 were effective for fiscal years beginning after December 15, 2019 but were delayed by GASB Statement No. 95 for one year. Management does not believe that the implementation of this statement had a material effect on the financial statements.
- In March 2020, GASB issued statement No. 93, *Replace of Interbank Offered Rates*, which addresses those and other accounting and financial reporting implications that result from the replacement of an IBOR. This Statement achieves that objective by clarifying the hedge accounting termination provisions when a hedged item is amended to replace the reference rate. The provisions of Statement No. 93 are effective for periods ending after December 31, 2021. All other requirements of this statement are effective for reporting periods beginning after June 15, 2020 but were delayed by GASB Statement No. 95 for one year. Earlier application was encouraged. Management does not believe that the implementation of this statement had a material effect on the financial statements.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies, continued

Recently Adopted Accounting Pronouncements, continued

- In June 2020, the GASB issued Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*, which is intended to improve the consistency of the reporting of fiduciary component units, and enhance the comparability in the application of accounting and financial reporting requirements for deferred compensation plans. The provisions in Statement No. 97 that are related to the accounting and financial reporting for Section 457 plans are effective for fiscal years beginning after June 15, 2021. Earlier application was encouraged. Management does not believe that the implementation of this statement had a material effect on the financial statements.

Upcoming Accounting Pronouncements

- In May 2019, GASB issued Statement No. 91, *Conduit Debt Obligations*, which clarifies the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures. The provisions in Statement No. 91 were effective for fiscal years beginning after December 15, 2020 but were delayed by GASB Statement No. 95 for one year. Management does not believe that the implementation of this statement had a material effect on the financial statements. GASB Statement No. 91 will be effective for fiscal year ending September 30, 2023.
- In March 2020, GASB issued statement No. 94, *Public-private and Public-Public Partnerships and Availability Payment Arrangements*, to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements. This Statement also provides guidance for accounting and financial reporting for availability payment arrangements. The provisions of Statement No. 94, are effective for fiscal years beginning after June 15, 2022, and all reporting periods thereafter. Earlier application is encouraged. Statement No. 95 did not extend this implementation date. Management does not believe that the implementation of this statement will have a material effect on the financial statements. GASB Statement No. 94 will be effective for fiscal year ending September 30, 2023.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies, continued

Upcoming Accounting Pronouncements, continued

- In May 2020, GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements (SBITAs)*, which provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) for government end users (governments). The provisions of Statement No. 96 are effective for fiscal years beginning after June 15, 2022, and all reporting periods thereafter. Earlier application is encouraged. Management does not believe that the implementation of this statement will have a material effect on the financial statements. Management does not believe that the implementation of this statement had a material effect on the financial statements. GASB Statement No. 96 will be effective for fiscal year ending September 30, 2023.
- In April 2022, GASB issued statement No. 99, *Omnibus 2022*, to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. The requirements of this Statement that are effective as follows: (a) The requirements related to extension of the use of London Interbank Offered Rate (LIBOR), accounting for Supplemental Nutrition Assistance program (SNAP) distributions, disclosures of nonmonetary transactions, pledges of future revenues by pledging governments, clarification of certain provisions in Statement 34, as amended, and terminology updates related to Statement 53 and Statement 63 are effective upon issuance. (b) The requirements related to leases, public-private partnerships (PPP)s, and subscription based information technology arrangement (SBITAs) are effective for fiscal years beginning after June 15, 2022, and all reporting periods thereafter. (c) The requirements related to financial guarantees and the classification and reporting of derivative instruments within the scope of Statement 53 are effective for fiscal years beginning after June 15, 2023, and all reporting periods thereafter. GASB Statement No. 99 will be effective for fiscal years ending through September 30, 2024.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies, continued

Upcoming Accounting Pronouncements, continued

- In April 2022, GASB issued statement No. 100, *Accounting Changes and Error Corrections*, to enhance accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. This Statement requires disclosure in notes to financial statements of descriptive information about accounting changes and error corrections, such as their nature. In addition, information about the quantitative effects on beginning balances of each accounting change and error correction should be disclosed by reporting unit in a tabular format to reconcile beginning balances as previously reported to beginning balances as restated. Furthermore, this Statement addresses how information that is affected by a change in accounting principle or error correction should be presented in required supplementary information (RSI) and supplementary information (SI). For periods that are earlier than those included in the basic financial statements, information presented in RSI or SI should be restated for error corrections, if practicable, but not for changes in accounting principles. The requirements of this Statement are effective for accounting changes and error corrections made in fiscal years beginning after June 15, 2023, and all reporting periods thereafter. Earlier application is encouraged. GASB Statement No. 100 will be effective for fiscal year ending September 30, 2024.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(4) Summary of Significant Accounting Policies, continued

Upcoming Accounting Pronouncements, continued

- In June 2022, GASB issued statement No. 101, *Compensated Absences*, to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. That objective is achieved by aligning the recognition and measurement guidance under a unified model and by amending certain previously required disclosures. This Statement requires that liabilities for compensated absences be recognized for (1) leave that has not been used and (2) leave that has been used but not yet paid in cash or settled through noncash means. This Statement requires that a liability for certain types of compensated absences—including parental leave, military leave, and jury duty leave—not be recognized until the leave commences. This Statement also requires that a liability for specific types of compensated absences not be recognized until the leave is used. This Statement amends the existing requirement to disclose the gross increases and decreases in a liability for compensated absences to allow governments to disclose only the net change in the liability (as long as they identify it as a net change). In addition, governments are no longer required to disclose which governmental funds typically have been used to liquidate the liability for compensated absences. The requirements of this Statement are effective for fiscal years beginning after December 15, 2023, and all reporting periods thereafter. Earlier application is encouraged.

Capital Assets and Depreciation

The Fund capitalizes buildings, improvements and equipment that have a cost of \$500 or more and an estimated useful life of at least three years. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets, as follows:

Furniture and fixtures	3 years
Automobiles	5 years
Buildings	30 years
Improvements	5-10 years
Equipment	1-5 years

Administrative expenses include depreciation and amortization expense of \$30,733 in 2022.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(5a) Net Pension Liability

The components of the collective net pension liability of the Government of Guam and its participating component units at September 30, 2022 (based on the 2021 valuation) were as follows:

	DEFINED BENEFIT PLAN			Defined Contribution Plan
	Retirement	COLA and Supplemental	Other Pension	
	Annuity	Annuity	Appropriations	
Total pension liability	\$ 3,264,340,213	\$ 255,529,368	\$ 6,008,209	\$ 60,166,090
Plan fiduciary net position	1,777,556,631	-	-	-
Net pension liability	\$ 1,486,783,582	\$ 255,529,368	\$ 6,008,209	\$ 60,166,090
Plan fiduciary net position as a percentage of total pension liability	54.45%	0.00%	0.00%	0.00%

The actuarial valuation of the DB Plan involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

The Schedule of Employers' Net Pension Liability presents multi-year trend information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the Required Supplementary Information section. The Total Pension Liability as of September 30, 2022, is based on the results of an actuarial valuation date of September 30, 2021, rolled forward to September 30, 2022 using standard actuarial update techniques.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(5a) Net Pension Liability, continued

A summary of the actuarial assumptions as of the latest actuarial valuation dated 2021 rolled forward to 2022 is shown below and are based on the assumption that the Fund will continue in operation. If the Fund were to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits. These assumptions are based on the 2011 – 2015 experience study.

Valuation Date:	9/30/2021
Measurement Date:	9/30/2022
Actuarial Cost Method:	Entry age normal
Valuation of Assets:	3-year phase in of gains/losses relative to interest rate assumption.
Discount Rate:	7% per year for funded benefits and 4.02% for unfunded benefits.
Salary Increase:	Graduated based on service with the Government ranging from 4.0% for service in excess of 15 years to 7.5% for service from zero to five years.
Inflation Assumption:	2.5%
Total Payroll Growth:	2.75%
Mortality:	RP 2000 Healthy table set forward 3 years for males and set forward 2 years for females
Disability:	1974-78 SOA LTD Non-Jumbo, with rates reduced by 50% for males and 75% for females
Retirement Age:	DB Plan, Justices and Judges: 50% probability of retirement at earliest age of eligibility for unreduced retirement benefits; 20% per year thereafter until age 75, 100% at age 75 DC Plan: 5% per year from age 55 to 64; 10% per year from age 65 to age 74; 100% at age 75 Governors and Lt. Governors: 37.5% after 4 years of service, and 100% after 8 years of service
Return of Contributions:	100% withdrawing before retirement with less than 20 years of service assumed to elect a return of contributions. All those who have previously withdrawn assumed to elect a return of contributions. Contributions earn 4.5% interest.
Amortization Method:	Constant percentage of total payroll, which is assumed to grow at 2.75% per year.
Amortization Period:	In accordance with 4GCA§8137, complete funding is to be achieved by April 30, 2031. Public Law 33-186 extended this period by 2 years to 2033. At September 30, 2021 the remaining period is 11.58 years.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(5a) Net Pension Liability, continued

Long-term expected rate of return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The Fund has a target asset allocation based on the investment policy adopted by the Board of Trustees. The target allocation and best estimates of the expected nominal return for each major asset class are summarized as follows:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Nominal Return</u>	<u>Component Return</u>
U.S. Equities (large cap)	26%	7.44%	1.93%
U.S. Equities (small cap)	4%	9.23%	0.37%
Non-U.S. Equities	17%	9.28%	1.58%
Non-U.S. Equities (emerging markets)	3%	11.32%	0.34%
U.S. Fixed Income (aggregate)	22%	3.89%	0.86%
Risk parity	8%	5.92%	0.47%
High yield bonds	8%	6.42%	0.51%
Global Real Estate (REITs)	2.5%	8.55%	0.21%
Global Equity	7%	8.20%	0.57%
Global Infrastructure	2.5%	7.58%	0.18%
Expected average return for one year			7.04%
Expected geometric mean (50 years)			6.36%

Discount rate – Pension Liability For Retirement Benefits

The discount rate used to measure the total pension liability for retirement benefits was 7%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the Fund's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(5a) Net Pension Liability, continued

Discount rate – Ad Hoc Supplemental Benefits and Cost of Living Allowance (SB/COLA) and Other Pension Appropriations

Members of the DB Plan also receive ad hoc supplemental annuity benefits and cost of living allowance that are appropriated by the Guam Legislature. Those benefits are deemed to be substantively automatic, requiring reporting under GASB Statement No. 73. Supplemental Annuity Payments of \$4,238 (subject to an aggregate limitation of \$40,000 per year when combined with the member's regular retirement annuity) are provided to DB Plan retirees. COLA payments of \$2,000 per year are provided to DB and DC Plan retirees.

The discount rate used to measure the Ad hoc Supplemental Benefits and Cost of Living Allowance (COLA) was a municipal bond rate of 4.02% (based on the Bond Buyer 20-Bond GO Index published on September 30, 2021). This rate was used as these two benefits are not funded with the accumulation of assets; they have been funded historically through appropriations from the Government of Guam.

Discount rate – Other Pension Appropriations

Pension payments to Governors/Lt. Governors and Justices/Judges are also appropriated by the Guam Legislature. These payments are anticipated to continue in future years, requiring reporting under GASB 73. The discount rate used to measure Other Pension Appropriations was also 4.02% (based on the Bond Buyer 20-Bond GO Index published on September 30, 2021).

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(5a) Net Pension Liability, continued

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability as of September 30, 2022, calculated using the current discount rate of 7.0% for the defined benefit annuities and 4.02% for the COLA/supplemental annuities, 4.02% for other pension appropriations, as well as the net pension liability calculated using a discount rate that is one percentage point (1.0%) lower or 1% higher than the current rate:

DEFINED BENEFIT PLAN - Retirement Benefits			
	1% Decrease	Current Discount Rate	1% Increase
	6.00%	7.00%	8.00%
Total pension liability	\$3,525,874,766	\$3,264,340,213	\$2,940,178,281
Plan fiduciary net position	\$1,777,556,631	\$1,777,556,631	\$1,777,556,631
Net pension liability	\$1,748,318,135	\$1,486,783,582	\$1,162,621,650
DEFINED BENEFIT PLAN - AdHoc COLA/Supplemental Annuity			
	1% Decrease	Current Discount Rate	1% Increase
	3.02%	4.02%	5.02%
Total pension liability	\$280,461,010	\$255,529,368	\$233,733,145
Plan fiduciary net position	-	-	-
Net pension liability	\$280,461,010	\$255,529,368	\$233,733,145
DEFINED BENEFIT PLAN - Other Pension Appropriations			
	1% Decrease	Current Discount Rate	1% Increase
	3.02%	4.02%	5.02%
Total pension liability	\$6,605,898	\$6,008,209	\$5,498,803
Plan fiduciary net position	-	-	-
Net pension liability	\$6,605,898	\$6,008,209	\$5,498,803
DEFINED CONTRIBUTION PLAN - AdHoc COLA/Supplemental Annuity			
	1% Decrease	Current Discount Rate	1% Increase
	3.02%	4.02%	5.02%
Total pension liability	\$68,179,226	\$60,166,090	\$53,305,364
Plan fiduciary net position	-	-	-
Net pension liability	\$68,179,226	\$60,166,090	\$53,305,364

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(5b) Net Pension Liability of the Retirement Fund as an Employer

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources

At September 30, 2022, the Fund reported a liability of \$4,576,811 for its proportionate share of the net pension liability. The Fund's proportion of the net pension liability was based on projection of the Fund's long-term share of contributions to the pension plan relative to the projected contributions of the Government of Guam and its component units, actuarially determined. At September 30, 2022 the Fund's proportion of the GovGuam overall liability was .32%.

At September 30, 2022, the Fund reported deferred outflows of resources and deferred inflows of resources as follows:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$ 43,848	\$ 53,971
Net difference between projected and actual earnings on pension plan investments	-	375,720
Changes of assumptions	102,099	26,606
Contributions subsequent to the measurement date	477,393	-
Changes in proportion and difference between GGRF contributions and proportionate share	146,034	688,178
	<u>\$ 769,374</u>	<u>\$ 1,144,475</u>

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(5b) Net Pension Liability of the Retirement Fund as an Employer, continued

Deferred outflows resulting from contributions subsequent to measurement date will be recognized as a reduction of the net pension liability in the following year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions at September 30, 2022 will be recognized in pension expense (recovery) as follows:

<u>Year Ending</u> <u>September 30,</u>	<u>Amount</u>
2023	\$ 378,603
2024	(170,682)
2025	(252,161)
2026	(330,861)
2027	-
Thereafter	-
	<u><u>\$(375,101)</u></u>

(6) Deposit and Investment Risk Disclosure

Cash and investments as of September 30, 2022 are classified in the accompanying statement of fiduciary net position as follows:

	<u>DB Plan</u>	<u>DC Plan</u>
Cash	\$ 6,191,045	1,760,256
Common stocks	1,200,878,984	-
U.S. government securities	245,915,400	-
Corporate bonds and notes	254,638,296	-
Money market funds	26,925,878	-
Mutual funds	<u>30,161,843</u>	<u>406,068,911</u>
Total cash and investments	\$ <u>1,764,711,446</u>	<u>407,829,167</u>

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(6) Deposit and Investment Risk Disclosure, continued

Investments Authorized by the Guam Code Annotated and the Fund's Investment Policy

Investments that are authorized by the Guam Code Annotated and by the Fund's investment policy are described in Note 4 above. There are no maximum maturities set for investments, with the exception of cash and cash equivalents as specified in Note 4 above. The only limitation on the maximum percentage of the portfolio that may be invested in any one type is with international government or corporate bonds as specified in Note 4 above. The maximum percentage of each issue that may be made is five percent, as specified in Note 4 above.

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that the Fund manages its exposure to interest rate risk is by purchasing a combination of shorter term and longer term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturity evenly over time as necessary to provide the cash flow and liquidity needed for operations.

Information about the sensitivity of the fair values of the Fund's investments (including investments held by bond trustee) to market interest rate fluctuations is provided by the following table that shows the distribution of the Fund's DB plan investments at September 30, 2022 by maturity:

Investment Type		Remaining Maturity in Years				Total
		Less than 1	1 to 5	6 to 10	Greater than 10	
U.S. Treasury securities	\$	-	15,176,117	66,987,515	97,356,171	179,519,803
Federal Agency securities		-	6,212,998	7,243,289	52,939,310	66,395,597
Corporate bonds and notes		3,208,747	99,762,292	111,917,848	39,749,409	254,638,296
Totals	\$	3,208,747	121,151,407	186,148,652	190,044,890	500,553,696

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(6) Deposit and Investment Risk Disclosure, continued

Investments with Fair Values Highly Sensitive to Interest Rate Fluctuations

The Fund's investments are typically made in corporate equities, U.S. Treasury obligations, and commercial paper. These types of investments are not more sensitive to interest rate fluctuations than as already indicated above. Investments that are highly sensitive to interest rate fluctuations include Federal agency securities with coupon multipliers that are reset frequently, mortgage-backed securities, and Federal agency securities with interest rates that vary inversely to a benchmark set quarterly.

The Fund has invested in mortgage backed securities, which are more sensitive to fluctuations in interest rates than already indicated in the information provided above. Such securities are subject to early payment in a period of declining interest rates. The resultant reduction in expected total cash flows affects the fair value of these securities and makes the fair values of these securities highly sensitive to changes in interest rates.

At September 30, 2022, the Fund held mortgage-backed securities valued at approximately \$67.9 million.

Disclosures Relating to Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization.

The Fund's credit quality distribution for debt securities at September 30, 2022 is as follows:

<u>Investment Type</u>	Standard & Poor's /Moody's <u>Credit Rating</u>	<u>Amount</u>
Government Bonds	Aaa/Aa/A	\$ 60,071,042
Corporate Bonds	Baa/Ba/B	167,273,078
Corporate Bonds	Caa/Ca/C	12,063,012
Corporate Bonds	D	1,116,453
U.S. Government Guaranteed	Not Applicable	245,470,333
Not Rated	Not Rated	<u>14,559,778</u>
		<u>\$500,553,696</u>

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(6) Deposit and Investment Risk Disclosure, continued

Concentration of Credit Risk

The Fund's investment policy contains limits on the amount that can be invested in any one issuer. At September 30, 2022, the Fund did not hold any investments in any one issuer (other than U.S. Treasury securities, mutual funds, and external investment pools) that represents 5% or more of total Fund investments.

Foreign Currency Risk

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair values of an investment or deposit. At September 30, 2022, the Fund held approximately \$26 million in corporate bonds issued by companies organized in various foreign countries.

The countries of incorporation and the dollar amount of the bonds issued were as follows at September 30, 2022:

Canada	\$ 7 million
United Kingdom	3
Australia	3
Netherlands	2
France	2
Others – 17 countries	<u>9</u>
Total	\$ <u>26</u> million

At September 30, 2022, the Fund held investments (generally U.S. dollar denominated ADRs) in corporate stocks issued by companies organized in various foreign countries. These ADRs are indirectly affected by fluctuations in currency exchange rates.

The market value of these investments at September 30, 2022 was approximately \$149 million. The functional currencies of the companies that issued the stocks (and the market value in millions of U.S. dollars) were as follows at September 30, 2022:

Euros	\$ 40 million
Japanese Yen	35
British Pound	20
Australian Dollar	12
Swiss Franc	9
Others – 8 countries	<u>33</u>
Total	\$ <u>149</u> million

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(6) Deposit and Investment Risk Disclosure, continued

Investments at Fair Value

GASB 72 requires all investments be categorized under a fair value hierarchy. The Fund determines fair value of its investments based upon both observable and unobservable inputs. The Fund categorizes its fair value measurements within the fair value hierarchy established by accounting principles generally accepted in the United States of America – levels within the hierarchy are as follows:

- Level 1 – quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date.
- Level 2 – inputs (other than quoted prices included within Level 1) that are observable for an asset or liability, either directly or indirectly. These inputs can include quoted prices for similar assets or liabilities in active or inactive markets, or market-corroborated inputs.
- Level 3 – unobservable inputs for an asset or liability, which generally results in a government using the best information available and may include the government’s own data.

The remaining investments not categorized under the fair value hierarchy are shown at NAV. These are investments in non-governmental entities for which a readily determinable fair value is not available, such as member units or an ownership interest in partners’ capital to which a proportionate share of net assets is attributed. Investments at NAV are commonly calculated by subtracting the fair value of liabilities from the fair value of assets.

DB Plan			
		Quoted Prices in	Significant
		Active Markets for	Other Observable
	Fair Value	Identical Assets	Inputs
Investment	Sep. 30, 2022	(Level 1)	(Level 2)
Equity Securities:			
Domestic Equity	\$ 606,463,810	\$ 606,463,810	-
International Equity	594,415,174	594,415,174	-
Total equity securities	1,200,878,984	1,200,878,984	-
Debt Securities:			
U.S. Treasury Securities	179,519,803	-	179,519,803
Federal Agency Securities	66,395,597	-	66,395,597
Corporate Bonds and Notes	254,638,296	-	254,638,296
Total debt securities	500,553,696	-	500,553,696
Other	57,087,721	57,087,721	-
Total Investments By Fair Value Level	\$ 1,758,520,401	\$ 1,257,966,705	\$ 500,553,696
DC Plan			
Mutual Funds	\$ 406,068,911	\$ 406,068,911	-
Total Investments By Fair Value Level	\$ 406,068,911	\$ 406,068,911	\$ 4,329,178,624

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(6) Deposit and Investment Risk Disclosure, continued

Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party.

The Guam Code Annotated and the Fund's investment policy contain legal requirements that limit the exposure to custodial credit risk for deposits and investments, as follows:

The Guam Code Annotated requires that a financial institution secure deposits made by Government of Guam agencies by pledging securities in: "(a) Treasury notes or bonds of the United States, or those for which the faith and credit of the United States are pledged for the payment of principal and interest, (b) any evidence of indebtedness of the government of Guam, (c) Investment certificates of the Federal Home Loan Bank, or (d) such other securities as may be ... approved by the Director of Administration and the Governor of Guam." The fair market value of the pledged securities must be at least ten percent (10%) in excess of the amount of monies deposited with the bank.

Further, to address custodial risk, the Guam Code Annotated requires the custodian to have been in the business of rendering trust custody services for ten or more years, to be organized under the laws of the United States or a state or territory thereof, to have capital and surplus in excess of ten million dollars (\$10,000,000), and to be a member of the Federal Reserve System whose deposits are insured by the Federal Deposit Insurance Corporation. Regardless of the above, any locally chartered bank may act as custodian for the Fund.

(7) Related Party Transactions

At September 30, 2022, GGRF was owed employer and member contributions, and interest and penalties by various Government of Guam agencies. At September 30, 2022, employer contributions receivable including the unfunded liability totaled \$5,278,116, member contributions receivable totaled \$1,414,966, and interest and penalties receivable totaled \$95,356.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(8) Property, Equipment and Land

Property, equipment and land at September 30, 2022 were as follows:

Building	\$	1,290,889
Improvements		855,474
Land		439,428
Equipment		548,396
Automobiles		22,732
Furniture and fixtures		15,887
Other		7,000
		<hr/>
Sub-total		3,179,806
Less: Accumulated depreciation	(2,595,346)
		<hr/>
Total	\$	<u>584,460</u>

(9) Supplemental Annuities and COLA Payments

Public Law 25-72, passed in September 1999, required the payment of supplemental annuities and cost of living allowances (COLA) to retirees. P.L. 25-72 also specified that these payments were an obligation of the employer and not of the GGRF. The cost of these benefits is to be paid through increased contributions over a period of twenty years.

The GGRF paid certain of these benefits on behalf of the General Fund and autonomous agencies, and collected certain amounts from the General Fund and from autonomous agencies. The excess of the amount paid out over the amount collected was recorded as "Supplemental/COLA benefits receivable" by the GGRF.

During fiscal year 1999, the Government of Guam appropriated \$12 million to pay for a portion of the \$31.4 million that the GGRF paid for supplemental annuities and COLA payments.

However, Public Law 25-122, passed in May 2000, reallocated the \$12 million appropriation collected by GGRF to regular employer contributions. Since the \$12 million reduced the receivable balance in fiscal year 1999, this reallocation resulted in a \$12 million increase in the receivable balance in fiscal year 2000. The offset was recorded as a reduction of employer contributions receivable from the Government of Guam for fiscal year 2000.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(9) Supplemental Annuities and COLA Payments, continued

Beginning in fiscal year 2000, the receivable for supplemental annuities and COLA payments is being reduced by a portion of the employer contributions received. The percentage used for fiscal years 2022 was 1.2016% of covered payroll.

GGRF had Supplemental/COLA benefits receivable of \$1,698,785 in 2021. During the fiscal year 2022 this receivable was paid in full.

For financial statement presentation purposes these receivables were reflected as Deferred Assets in the Statements of Fiduciary Net Position. A history of the transactions follows (amounts rounded to the nearest hundred thousand):

Fiscal Year	Payment of Benefits by GGRF	Collections	Other	Balance
1999	\$31,400,000	(\$4,500,000)	(\$12,000,000)	\$14,900,000
2000	32,300,000	(4,300,000)	\$12,000,000	54,900,000
2001	34,000,000	(4,700,000)		84,200,000
2002	27,500,000	(3,600,000)		108,100,000
2003 to 2021		(106,401,000)		1,699,000
2022		(1,699,000)		0
	\$125,200,000	(125,200,000)	\$ -	

The \$106,401,000 in collections above ranged from \$4.4M in 2003 to \$6.4M in 2021.

(10) DB 1.75 Repayment of Contributions for Service Credit

Relative to the implementation of the DB 1.75 Plan effective January 1, 2018, members who elected to participate in the Plan were allowed to repay contributions, which were previously withdrawn as members of the DC Plan, in order to obtain credit for service to which the withdrawals relate. To reclaim such service, members are required to repay to the Retirement Fund the a) total amount(s) withdrawn, plus b) interest commencing on the date(s) of the withdrawal(s) to the date of repayment. The repayment shall be made by (1) single cash payment, (2) transfer of the members' Excess Account Balance in the DC Plan, if any, (3) transfer of funds from the members Deferred Compensation account, if applicable, (4) installment payments to the Retirement Fund in accordance with established rules, or (5) any combination of option numbers 2, 3, and 4. By no later than June 30, 2018, as applicable, full payment or arrangements for repayment in installments, were required to be made with the Retirement Fund.

At September 30, 2022, the amount owed under these notes was \$985,143.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(11) Supplemental/COLA Benefit Owed by Government of Guam Agencies

All Government of Guam agencies are obligated to pay retirees for supplemental and COLA benefits. GGRF paid certain supplemental and COLA benefits for other Government of Guam agencies. GGRF will be reimbursed for these benefit payments; accordingly, these benefit payments are reflected as “Supplemental/insurance benefits advanced” in the accompanying statement of net assets.

At September 30, 2022, the GGRF had \$1,996,097 in Supplemental/insurance benefits receivable from three Government of Guam agencies.

(12) Risk Management

The Government of Guam Retirement Fund is subject to various risks in the normal course of operations. The Fund protects itself against such risks by purchasing liability insurance from a private company in Guam.

Further, the Fund purchases Directors and Officers Liability insurance from a private company in Guam to protect the Board of Trustees against liability for official actions they take in their capacities as Board members.

(13) Other Post-Employment Benefits (OPEB) Liability

OPEB Plan Description:

The Government of Guam (GovGuam) administers the retiree health care benefits program a single-employer defined benefit plan that is used to provide postemployment benefits other than pensions (OPEB) for eligible employees. GovGuam provides health care benefits for retirees and their dependents. Benefits are provided through the Government of Guam, and the full cost of benefits is shared between the Government and retirees. GovGuam issues a publicly available financial report that includes financial statements and required supplementary information for the OPEB Plan. That report may be obtained by writing the Government of Guam Department of Administration ITC Building Suite 224, 590 South Marine Corps Drive, Tamuning, Guam 96913, or by visiting doa.guam.gov.

GASB 75 allows for measurement of the Total OPEB Liability no earlier than the end of the employer’s prior fiscal year and no later than the end of the employer’s current fiscal year, consistently applied from period to period. The Government of Guam has elected to report results under GASB 75 with a measurement date of September 30, 2021 for the September 30, 2022 reporting date, the earliest measurement date permitted.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(13) Other Post-Employment Benefits (OPEB) Liability, continued

Plan Membership: As of September 30, 2021 (the measurement date and actuarial valuation date) OPEB plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments	8,638
Active plan members	11,118
Total members	<u>19,756</u>

Benefits Provided: The Government of Guam provides postemployment medical, dental and life insurance benefits to Government retirees, spouses, children, and survivors. Active employees and retirees who waive medical and dental coverage are considered eligible for the life insurance benefit only. GovGuam contributes a portion of the medical and dental premiums, based on a schedule of semi-monthly rates, and reimburses certain Medicare premiums to eligible retirees. Retirees may also pay a portion of the medical and dental insurance premiums, depending on the plan and coverage selected.

Contributions: No employer contributions are assumed to be made since an OPEB trust has not been established.

Actuarial Assumptions: The total OPEB liability was determined by an actuarial valuation as of September 30, 2021, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Discount rate	2.26%
Healthcare cost trend rate	6.0% for FY2021 through FY2023, decreasing 0.25% per year to an ultimate rate of 4.25% for FY2030 and later years.
Dental trend rates	4.25% per year, based on a blend of historical retiree premium rate increases as well as observed U.S. national trends
Healthy Retiree mortality rates	RP-2000 Combined Healthy Mortality table, set forward 3 years and 2 years for males and females, respectively, projected generationally using 30% of Scale BB.
Disabled Mortality rates	RP-2000 Disabled Mortality Table, set forward 6 years and 4 years for males and females, respectively, projected generationally using 30% of Scale BB.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(13) Other Post-Employment Benefits (OPEB) Liability, continued

Discount Rate: The discount rate used to measure the total OPEB liability was 2.26%. The projection of cash flows used to determine the discount rate assumed that contributions from the Government will be made in accordance with the plan's funding policy. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be insufficient to make all projected benefit payments of current plan members. Therefore, the 2.26% municipal bond rate was applied to all periods to determine the total OPEB liability. The 2.26 % is based on the Bond Buyer 20-Bond GO Index published on September 30, 2021.

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate:

The following presents the total OPEB liability calculated using the current discount rate of 2.26%, as well as what the total OPEB liability would be if it were calculated using a discount rate 1% point lower (1.26%) or 1% higher (3.26%) than the current rate:

	1% Decrease 1.26%	Discount Rate 2.26%	1% Increase 3.26%
OPEB Liability for the Fund	\$ 13,279,472	\$ 11,217,168	\$ 9,570,095

Sensitivity of the Total OPEB Liability to Changes in Healthcare Cost Trend Rates:

The following presents the total OPEB liability as calculated using the current healthcare cost trend rates as well as what the total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1% point lower or 1% point higher than the current healthcare cost trend rates:

	1% Decrease	Healthcare Cost Trend Rates	1% Increase
OPEB Liability for the Fund:	\$ 9,283,565	\$ 11,217,168	\$ 13,741,256

OPEB Liabilities, OPEB Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB:

During the years ended September 30, 2022 and 2021, the Fund's required contributions to this plan totaled approximately \$235,395 and \$235,729 for each year, respectively.

At September 30, 2022, the Fund reported a liability of \$11,217,168 for its proportionate share of the OPEB Liability. The basis of the Fund's allocation of the collective OPEB amount is based on the Total OPEB Liability as of the end of the measurement period. At September 30, 2022, the Fund's proportion of the Total OPEB Liability was .43%.

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(13) Other Post-Employment Benefits (OPEB) Liability, continued

For the year ended September 30, 2022, the Fund's OPEB expense was \$288,720. At September 30, 2022, the Fund reported deferred outflows of resources and deferred inflows of resources as follows:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of assumptions	\$1,134,298	\$1,757,947
Differences between expected and actual experience	781,491	635,400
Contributions subsequent to the measurement date	235,395	-
Changes in proportion and difference between GGRF contributions and proportionate share	-	485,011
	<u>\$2,151,184</u>	<u>\$2,878,358</u>

The OPEB Expense and deferred outflows and inflows of resources primarily result from changes in the components of the Total OPEB liability (TOL). Most changes in the TOL are included in the OPEB Expense in the period of the change, including service cost, interest on total OPEB liability and changes in benefit terms. Other changes in the total OPEB liability are included in OPEB Expense over the current and future periods. These include the effects on the total OPEB liability of changes of economic and demographic assumptions and differences between expected and actual experience.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEBs at September 30, 2022 that will be subsequently recognized in OPEB expense are as follows:

<u>Year Ending</u> <u>September 30,</u>	<u>Amount</u>
2023	\$ (627,030)
2024	(163,488)
2025	4,384
2026	(160,022)
2027	(16,413)
Thereafter	-
	<u>\$ (962,569)</u>

GOVERNMENT OF GUAM RETIREMENT FUND

Notes to Financial Statements, continued

September 30, 2022

(14) Contingencies

Five government of Guam employees who are members of the Fund, through the United States of America (the “USA”), filed a complaint against the Government of Guam and the Fund, alleging that the Fund failed to provide the members with service credits for the time they were on the Government of Guam Leave Sharing Program (the “Program”). The USA filed the Complaint on behalf of those five employees and all other employees who were denied service credit for their service time on the Program.

The Fund’s position is that the Leave Sharing Statute does not allow for service credit while a member is on leave sharing. In addition, the Fund cannot provide service credits unless fully funded. The government of Guam’s position is that the employees are not entitled to retirement service credit under the law. The USA’s position is that the Leave Sharing Statute violates the Uniformed Services Employment and Reemployment Rights Act of 1994 (“USERRA”). The Fund may have to assess any potential exposure upon a final court decision.

(15) Subsequent Events

Investments

The market value of the Fund’s invested assets in the DB plan increased from \$1.76 billion at September 30, 2022 to approximately \$1.96 billion at June 30, 2023. This is an increase of approximately \$200 million, or about 11.36%.

DC plan investments increased from \$406 million at September 30, 2022 to \$488 million at June 30, 2023, an increase of \$82 million, or about 20.20%.

These increases are due largely to market fluctuations.

Other Subsequent Events

On December 27, 2022, Public Law 36-130 was enacted into law and will be implemented effective January 1, 2024. It allows current DC plan members to elect to transfer to the DB 1.75 during the election period of June 1, 2023 to December 31, 2023. It also gives new employees hired the option to choose between the DC plan and the DB 1.75 plan.

All agencies have remained current in remitting contributions except for the Guam Memorial Hospital (GMH). GMH was delinquent for several payperiods since payperiod ended December 3, 2022, and December 31, 2022. GMH has remitted delinquent contributions and is now current.

The Fund has evaluated subsequent events through August 24, 2023 which is also the date the financial statements were available to be issued.

GOVERNMENT OF GUAM RETIREMENT FUND

Schedule of Changes in Net Pension Liability - DB Plan

September 30, 2013 to 2021

	2013 <u>Valuation</u>	2014 <u>Valuation</u>	2015 <u>Valuation</u>	2016 <u>Valuation</u>	2017 <u>Valuation</u>	2018 <u>Valuation</u>	2019 <u>Valuation</u>	2020 <u>Valuation</u>	2021 <u>Valuation</u>
	<i>(See Note 1)</i>								<i>(Measurement Date 9/30/2021)</i>
Total Pension Liability - Beginning of Year	\$ 2,811,399,525	\$ 2,829,439,663	\$ 3,112,295,398	\$ 3,249,042,023	\$ 3,245,313,070	\$ 3,189,586,194	\$ 3,501,413,210	\$ 3,541,428,933	\$ 3,557,210,676
Service cost	21,089,199	22,323,496	23,167,161	22,042,055	19,309,007	38,775,474	37,800,095	36,473,721	34,964,797
Member contributions	-	-	-	-	-	-	-	-	-
Interest on the total pension liability	190,558,974	191,594,023	213,116,889	210,570,472	210,182,547	206,798,237	231,018,790	227,705,047	227,093,537
Changes of benefit terms	-	-	-	-	-	313,869,755	-	-	-
Differences between actual and expected experience with regard to economic or demographic factors	-	27,739,034	58,338,457	(19,460,258)	(11,851,500)	11,243,579	(16,876,866)	(2,397,386)	(15,491,396)
Changes of assumptions	-	-	71,752,411	17,912,379	(33,969,738)	(14,202,705)	41,761,635	12,978,647	(1,395,530)
Benefit payments	(193,608,035)	(199,534,108)	(229,628,293)	(234,793,601)	(239,397,192)	(244,657,324)	(253,687,931)	(258,978,286)	(266,714,553)
Total changes	18,040,138	42,122,445	136,746,625	(3,728,953)	(55,726,876)	311,827,016	40,015,723	15,781,743	(21,543,145)
Total Pension Liability - End of Year	<u>\$ 2,829,439,663</u>	<u>\$ 2,871,562,108</u>	<u>\$ 3,249,042,023</u>	<u>\$ 3,245,313,070</u>	<u>\$ 3,189,586,194</u>	<u>\$ 3,501,413,210</u>	<u>\$ 3,541,428,933</u>	<u>\$ 3,557,210,676</u>	<u>\$ 3,535,667,531</u>
Fiduciary Net Position - Beginning of Year	\$ 1,391,421,887	\$ 1,526,135,027	\$ 1,625,255,354	\$ 1,576,428,084	\$ 1,647,181,257	\$ 1,759,189,680	\$ 2,032,344,992	\$ 2,002,773,533	\$ 1,988,983,810
Contributions from employers	121,940,930	134,106,867	159,053,013	148,395,481	148,981,296	159,154,291	144,101,751	141,728,762	148,413,709
Member contributions	16,290,014	16,626,009	15,245,935	13,812,825	13,476,517	28,895,275	27,012,032	25,864,221	24,649,425
Net investment income	192,776,061	150,599,955	9,560,987	146,235,031	192,765,573	93,616,115	56,758,490	80,879,016	371,570,719
Benefit payments	(193,608,035)	(199,534,108)	(229,628,293)	(234,793,601)	(239,397,192)	(244,657,324)	(253,687,931)	(258,978,286)	(266,714,553)
Administrative expense	(2,685,830)	(2,678,396)	(3,058,912)	(2,896,563)	(3,817,771)	(3,794,742)	(3,755,801)	(3,283,436)	(3,155,088)
Changes of benefit terms	-	-	-	-	-	239,941,697	-	-	-
Total changes	134,713,140	99,120,327	(48,827,270)	70,753,173	112,008,423	273,155,312	(29,571,459)	(13,789,723)	274,764,212
Fiduciary Net Position - End of Year	<u>\$ 1,526,135,027</u>	<u>\$ 1,625,255,354</u>	<u>\$ 1,576,428,084</u>	<u>\$ 1,647,181,257</u>	<u>\$ 1,759,189,680</u>	<u>\$ 2,032,344,992</u>	<u>\$ 2,002,773,533</u>	<u>\$ 1,988,983,810</u>	<u>\$ 2,263,748,022</u>
Net Pension Liability - End of Year	<u>\$ 1,303,304,636</u>	<u>\$ 1,246,306,754</u>	<u>\$ 1,672,613,939</u>	<u>\$ 1,598,131,813</u>	<u>\$ 1,430,396,514</u>	<u>\$ 1,469,068,218</u>	<u>\$ 1,538,655,400</u>	<u>\$ 1,568,226,866</u>	<u>\$ 1,271,919,509</u>
Fiduciary Net Position as a % of Total Pension Liability	53.94%	56.60%	48.52%	50.76%	55.15%	58.04%	56.55%	55.91%	64.03%
Covered employee payroll	\$ 460,347,780	\$ 504,943,471	\$ 511,366,411	\$ 506,322,283	\$ 508,300,483	\$ 513,866,473	\$ 509,497,662	\$ 522,644,057	\$ 532,481,055
Net Pension Liability as a % of Covered Employee Payroll	283.11%	246.82%	327.09%	315.64%	281.41%	285.89%	301.99%	300.06%	238.87%

Note 1 - Liabilities are shown in this column as originally reported as of 9/30/14, without regards to Ad Hoc COLAs or Supplemental Annuity Payments.

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Schedule of Changes in Net Pension Liability - DC Plan

September 30, 2013 to 2021

	2013	2014	2015	2016	2017	2018	2019	2020	2021
	<u>Valuation</u>	<u>Valuation</u>	<u>Valuation</u>	<u>Valuation</u>	<u>Valuation</u>	<u>Valuation</u>	<u>Valuation</u>	<u>Valuation</u>	<u>Valuation</u>
Total Pension Liability - Beginning of Year	\$ n/a	\$ n/a	\$ 46,880,986	\$ 52,115,736	\$ 61,688,067	\$ 62,445,490	\$ 49,342,424	\$ 59,884,407	\$ 66,393,472
Service cost	n/a	n/a	2,623,748	3,074,446	3,136,456	1,963,058	1,779,688	2,600,513	2,979,592
Member contributions	n/a	n/a	-	-	-	-	-	-	-
Interest on the total pension liability	n/a	n/a	1,885,957	1,851,695	1,957,356	2,310,669	2,098,759	1,632,077	1,506,814
Changes of benefit terms	n/a	n/a	-	-	-	(17,328,556)	-	-	-
Differences between actual and expected experience with regard to economic or demographic factors	n/a	n/a	(587,552)	1,265,643	1,904,493	5,034,446	(1,471,219)	985,969	2,505,793
Changes of assumptions	n/a	n/a	2,510,997	4,802,047	(4,594,882)	(3,208,683)	9,978,755	3,562,706	(441,821)
Benefit payments	n/a	n/a	(1,198,400)	(1,421,500)	(1,646,000)	(1,874,000)	(1,844,000)	(2,272,200)	(2,396,000)
Total changes	n/a	n/a	5,234,750	9,572,331	757,423	(13,103,066)	10,541,983	6,509,065	4,154,378
Total Pension Liability - End of Year	<u>\$ n/a</u>	<u>\$ n/a</u>	<u>\$ 52,115,736</u>	<u>\$ 61,688,067</u>	<u>\$ 62,445,490</u>	<u>\$ 49,342,424</u>	<u>\$ 59,884,407</u>	<u>\$ 66,393,472</u>	<u>\$ 70,547,850</u>
Fiduciary Net Position - Beginning of Year	\$ n/a	\$ n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributions from employers	n/a	n/a	1,198,400	1,421,500	1,646,000	1,874,000	1,844,000	2,272,200	2,396,000
Member contributions	n/a	n/a	-	-	-	-	-	-	-
Net investment income	n/a	n/a	-	-	-	-	-	-	-
Benefit payments	n/a	n/a	(1,198,400)	(1,421,500)	(1,646,000)	(1,874,000)	(1,844,000)	(2,272,200)	(2,396,000)
Administrative expense	n/a	n/a	-	-	-	-	-	-	-
Total changes	n/a	n/a	-	-	-	-	-	-	-
Fiduciary Net Position - End of Year	<u>\$ n/a</u>	<u>\$ n/a</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Net Pension Liability - End of Year	<u>\$ n/a</u>	<u>\$ n/a</u>	<u>\$ 52,115,736</u>	<u>\$ 61,688,067</u>	<u>\$ 62,445,490</u>	<u>\$ 49,342,424</u>	<u>\$ 59,884,407</u>	<u>\$ 66,393,472</u>	<u>\$ 70,547,850</u>
Fiduciary Net Position as a % of Total Pension Liability	n/a	n/a	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Covered employee payroll	n/a	n/a	355,895,521	365,069,550	376,785,976	264,475,579	235,505,301	259,284,046	281,174,905
Net Pension Liability as a % of Covered Employee Payroll	n/a	n/a	14.64%	16.90%	16.57%	18.66%	25.43%	25.61%	25.09%

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Schedule of Employer Allocations by Component Unit - DB Plan

For the year ended September 30, 2021

DEFINED BENEFIT PLAN

<u>Component Unit (Employer)</u>	<u>Expected Defined Benefit Plan Contributions</u>	<u>% Share</u>	<u>Allocated Net Pension Liability for Retirement Annuity Only</u>	<u>Ad hoc COLA/ Supplemental Annuity Contributions</u>	<u>% Share</u>	<u>Allocated Net Pension for Ad Hoc COLA and Supplemental Annuity</u>	<u>Ad hoc COLA/ Supplemental Annuity Contributions</u>	<u>% Share</u>	<u>Allocated Net Pension for Ad Hoc COLA and Supplemental Annuity</u>	<u>Combined Allocated Net Pension Liability</u>
Government of Guam General Fund	\$ 35,896,217	28.45%	\$ 274,128,741	\$ 8,405,720	37.27%	\$ 114,916,970	\$ 320,000	58.33%	\$ 4,182,560	\$ 393,228,271
Office of the Attorney General	2,541,593	2.01%	19,409,390	159,426	0.71%	2,179,559	-	0.00%	-	21,588,949
Mayors' Council of Guam	1,769,108	1.40%	13,510,152	95,426	0.42%	1,304,597	-	0.00%	-	14,814,749
Department of Chamorro Affairs	391,024	0.31%	2,986,134	119,789	0.53%	1,637,674	-	0.00%	-	4,623,808
Guam Educational Telecommunications Corporation	63,282	0.05%	483,266	12,000	0.05%	164,055	-	0.00%	-	647,321
Government of Guam Retirement Fund	407,281	0.32%	3,110,284	81,426	0.36%	1,113,199	-	0.00%	-	4,223,483
Guam Community College	2,957,670	2.34%	22,586,847	621,506	2.76%	8,496,780	-	0.00%	-	31,083,627
Guam Department of Education	35,124,624	27.84%	268,236,314	6,217,824	27.57%	85,005,642	-	0.00%	-	353,241,956
Guam Economic Development Authority	428,808	0.34%	3,274,679	32,713	0.15%	447,229	-	0.00%	-	3,721,908
Guam Housing and Urban Renewal Authority	1,352,252	1.07%	10,326,747	136,303	0.60%	1,863,441	-	0.00%	-	12,190,188
Guam Housing Corporation	292,177	0.23%	2,231,269	52,951	0.23%	723,904	-	0.00%	-	2,955,173
Guam International Airport Authority	3,201,249	2.54%	24,446,987	232,785	1.03%	3,182,469	-	0.00%	-	27,629,456
Guam Legislature	574,277	0.46%	4,385,583	380,798	1.69%	5,205,997	-	0.00%	-	9,591,580
Guam Memorial Hospital Authority	11,764,172	9.32%	89,839,485	1,445,101	6.41%	19,756,393	-	0.00%	-	109,595,878
Guam Power Authority	6,699,734	5.31%	51,163,877	1,162,168	5.15%	15,888,333	-	0.00%	-	67,052,210
Guam Visitors Bureau	442,780	0.35%	3,381,379	34,000	0.15%	464,824	-	0.00%	-	3,846,203
Guam Waterworks Authority	4,263,160	3.38%	32,556,486	856,921	3.80%	11,715,208	-	0.00%	-	44,271,694
Judiciary of Guam	4,920,890	3.90%	37,579,374	528,522	2.34%	7,225,579	228,600	41.67%	2,987,919	47,792,872
Port Authority of Guam	5,111,948	4.05%	39,038,428	911,091	4.04%	12,455,789	-	0.00%	-	51,494,217
Office of Public Accountability	197,583	0.16%	1,508,883	6,000	0.03%	82,028	-	0.00%	-	1,590,911
University of Guam	7,777,468	6.16%	59,394,212	1,061,445	4.71%	14,511,322	-	0.00%	-	73,905,534
	<u>\$ 126,177,297</u>	<u>100.00%</u>	<u>\$ 963,578,517</u>	<u>\$ 22,553,915</u>	<u>100.00%</u>	<u>\$ 308,340,992</u>	<u>\$ 548,600</u>	<u>100.00%</u>	<u>\$ 7,170,479</u>	<u>\$ 1,279,089,988</u>

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Schedule of Employer Allocations by Component Unit - DC plan

For the year ended September 30, 2021

<u>Component Unit (Employer)</u>	<u>Actual DC Ad hoc COLA Contributions</u>	<u>Allocation Percentage</u>	<u>Allocated Net Pension Liability</u>
Government of Guam General Fund	\$ 786,000	32.80%	\$ 23,142,995
Office of the Attorney General	38,000	1.59%	1,118,872
Mayors' Council of Guam	66,000	2.75%	1,943,305
Department of Chamorro Affairs	32,000	1.34%	942,208
Guam Educational Telecommunications Corporation	2,000	0.08%	58,888
Government of Guam Retirement Fund	12,000	0.50%	353,328
Guam Community College	56,000	2.34%	1,648,865
Guam Department of Education	634,000	26.46%	18,667,503
Guam Economic Development Authority	10,000	0.42%	294,440
Guam Housing and Urban Renewal Authority	28,000	1.17%	824,432
Guam Housing Corporation	12,000	0.50%	353,328
Guam International Airport Authority	38,000	1.59%	1,118,872
Guam Legislature	24,000	1.00%	706,656
Guam Memorial Hospital Authority	204,000	8.51%	6,006,578
Guam Power Authority	116,000	4.84%	3,415,505
Guam Visitors Bureau	6,000	0.25%	176,664
Guam Waterworks Authority	60,000	2.50%	1,766,641
Judiciary of Guam	40,000	1.67%	1,177,760
Port Authority of Guam	110,000	4.59%	3,238,841
Office of Public Accountability	2,000	0.08%	58,888
University of Guam	<u>120,000</u>	<u>5.01%</u>	<u>3,533,281</u>
	<u>\$ 2,396,000</u>	<u>100.00%</u>	<u>\$ 70,547,850</u>

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Schedule of Contributions

September 30, 2013 to 2021

Plan Year Ending September 30	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contribution as a % of Covered Payroll
2021	\$ 125,859,794	\$ 125,859,794	\$ -	\$ 532,481,055	23.64%
2020	118,982,000	118,982,000	-	522,644,057	22.77%
2019	121,557,000	121,557,000	-	509,497,662	23.86%
2018	135,851,000	135,851,000	-	513,866,000	26.44%
2017	125,275,000	125,275,000	-	508,300,000	24.65%
2016	124,419,000	124,419,000	-	506,322,000	24.57%
2015	134,506,000	134,506,000	-	511,366,000	26.30%
2014	134,107,000	134,107,000	-	504,943,000	26.56%
2013	121,698,000	121,941,000	(243,000)	460,348,000	26.49%

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, 2033 (12.58 years remaining as of September 30, 2020)
Asset valuation method	3-year smoothed market value (effective September 30, 2009)
Inflation	2.50% per year
Total payroll growth	2.75% 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 4.0% for service over 15 years.
Investment rate of return	7.00%, net of investment expenses, including inflation of 2.50%
Retirement age	50% probability of retirement upon first eligibility for unreduced retirement. Thereafter, the probability of retirement is 20% for each year until age 75, and increases to 100% at age 70.
Mortality	RP-2000 healthy mortality table (males + 3, females +2). Mortality for disabled lives is the RP 2000 disability mortality (males +6, females +4). Both tables are projected generationally from 2016 using 30% of Scale BB.
Other information	Actuarial assumptions are based upon periodic experience studies. The last experience study reviewed experience from 2011-2015.

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Schedule of Investment Returns

September 30, 2013 to 2021

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Annual money-weighted rate of return, net of investment expense	14.14%	10.04%	0.60%	9.51%	11.99%	5.54%	2.85%	4.13%	19.13%

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Schedule of Changes in Total Other Post Employment Benefits (OPEB) Liability

September 30, 2016 to 2021 Measurement Dates

	2016 <u>Valuation</u>	2017 <u>Valuation</u>	2018 <u>Valuation</u>	2019 <u>Valuation</u>	2020 <u>Valuation</u>	2021 <u>Valuation</u>
Total OPEB Liability - Beginning of Year	\$ 2,133,923,275	\$ 2,532,753,040	\$ 2,431,048,672	\$ 1,874,970,335	\$ 2,553,523,376	\$ 2,518,489,145
Service cost	87,158,663	108,634,675	96,368,122	74,240,508	115,449,264	95,471,040
Interest	81,647,699	80,151,782	90,927,141	80,558,352	70,456,948	57,210,297
Changes of benefit terms	-	-	-	-	-	-
Differences between actual and expected experience	-	-	(522,357,892)	-	280,042,921	-
Changes of assumptions	270,694,071	(249,820,157)	(175,941,955)	567,709,274	(460,552,874)	(21,400,207)
Benefit payments	<u>(40,670,668)</u>	<u>(40,670,668)</u>	<u>(45,073,753)</u>	<u>(43,955,093)</u>	<u>(40,430,490)</u>	<u>(50,517,963)</u>
Total Changes	<u>398,829,765</u>	<u>(101,704,368)</u>	<u>(556,078,337)</u>	<u>678,553,041</u>	<u>(35,034,231)</u>	<u>80,763,167</u>
Total OPEB Liability - End of Year	<u><u>\$ 2,532,753,040</u></u>	<u><u>\$ 2,431,048,672</u></u>	<u><u>\$ 1,874,970,335</u></u>	<u><u>\$ 2,553,523,376</u></u>	<u><u>\$ 2,518,489,145</u></u>	<u><u>\$ 2,599,252,312</u></u>
Covered payroll as of valuation date	\$ 474,098,955	\$ 474,098,955	\$ 494,595,522	\$ 479,551,309	\$ 510,872,087	\$ 642,926,286
Total OPEB liability as a percentage of covered payroll	534.22%	512.77%	379.09%	532.48%	492.98%	404.28%
Discount rate	3.06%	3.63%	4.18%	2.66%	2.21%	2.26%

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Schedule of Other Post Employment Benefits (OPEB) Liability

For the year ended September 30, 2021

Component Unit (Employer)	Proportionate Share	Total OPEB Share
<u>Primary Government:</u>		
GovGuam Line Agencies	33.76%	877,634,013
GovGuam Retirement Fund	0.43%	11,217,168
Guam Legislature	0.57%	14,779,309
Guam Department of Education	27.98%	727,320,212
Public Defender Service Corporation	0.55%	14,217,430
Unified Courts of Guam	3.34%	86,752,573
Guam Telephone Authority	1.04%	26,982,059
Total Primary Government	67.67%	1,758,902,764
<u>Component Units:</u>		
Antionio B. Won Pat International Airport Authority	1.83%	47,475,666
Guam Community College	2.23%	57,994,347
Guam Economic Development Authority	0.22%	5,822,256
Guam Housing Corporation	0.27%	7,111,003
Guam Housing and Urban Renewal Authority	0.68%	17,781,924
Guam Memorial Hospital Authority	7.67%	199,304,296
Guam Power Authority	6.31%	163,946,007
Guam Visitors Bureau	0.27%	6,927,554
Guam Waterworks Authority	4.21%	109,298,971
Port Authority of Guam	3.87%	100,532,257
University of Guam	4.72%	122,618,854
KGTF	0.06%	1,536,413
Total Component Units	32.33%	840,349,548
	100.00%	\$ 2,599,252,312

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Schedule of Employer Contributions (OPEB)

September 30, 2016 to 2021

Plan Year Ending September 30	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contribution as a % of Covered Payroll
2021	\$ 213,325,003	\$ 50,517,963	\$ 162,807,040	\$ 642,926,286	7.86%
2020	\$ 243,113,708	\$ 40,430,490	\$ 202,683,218	\$ 510,872,087	7.91%
2019	\$ 188,140,363	\$ 43,955,093	\$ 144,185,270	\$ 479,551,309	9.17%
2018	\$ 234,228,724	\$ 45,073,753	\$ 189,154,971	\$ 494,595,522	9.11%
2017	\$ 242,141,492	\$ 40,670,668	\$ 201,470,824	\$ 474,098,955	8.58%
2016	\$ 209,503,758	\$ 40,670,668	\$ 168,833,090	\$ 474,098,955	8.58%

Actuarially determined contributions are determined as of October 1, one year prior to the end of the fiscal year in which contributions are reported. Methods and assumptions used to determine contributions are as follows:

Actuarial cost method	Entry age normal
Amortization method	Level dollar amount over 30 years on an open amortization period
Amortization period	30 years
Asset valuation method	Market value
Inflation	2.75%
Healthcare cost trend rates	6% for FY2021 through FY2023, decreasing 0.25 percent per year to an ultimate rate of 4.25 percent for FY2030 and later years.
Dental trend rates	4.25% per year, based on a blend of historical retiree premium rate increases as well as observed U.S. national trends.

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Supplementary Schedule of Administrative and General Expenses

September 30, 2022
(with Comparative Totals for 2021)

	Defined Benefit Plan	Defined Contribution Plan	Total 2022	Total 2021
Salaries and wages	\$ 1,378,658	380,483	1,759,141	1,707,122
Third party administrator fees	-	1,116,820	1,116,820	1,094,362
Insurance	449,567	313,614	763,181	736,658
Computer program services/maintenance	297,000	33,000	330,000	330,000
OPEB expense	254,030	34,690	288,720	497,196
Legal fees	211,689	-	211,689	145,167
Actuary fees	95,418	10,107	105,525	196,793
Utilities	58,839	34,711	93,550	77,415
Repairs and maintenance	49,039	25,612	74,651	66,454
Audit fees	46,775	13,425	60,200	69,000
Pension (benefit) expense	(98,676)	140,147	41,471	468,288
Depreciation and amortization	27,877	2,856	30,733	31,842
Communications	25,665	4,062	29,727	23,007
Medicare contribution	19,918	5,497	25,415	24,675
Miscellaneous	20,090	5,284	25,374	18,990
Postage	18,399	6,113	24,512	22,642
Printing and publications	21,041	1,619	22,660	22,662
Office supplies	20,908	1,272	22,180	10,822
Equipment rental	15,573	5,137	20,710	17,606
Proxy voting services	17,308	-	17,308	33,655
Computers supplies and software	15,251	-	15,251	1,781
Travel and transportation	15,046	-	15,046	13,265
COVID - 19 expenses	13,652	-	13,652	23,097
Board of trustees expenses	8,659	4,929	13,588	12,392
Training	9,998	3,333	13,331	6,243
Medical exams	2,217	-	2,217	6,421
Bad debt	615	-	615	8,449
	<u>\$ 2,994,556</u>	<u>\$ 2,142,711</u>	<u>\$ 5,137,267</u>	<u>\$ 5,666,004</u>

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Supplementary Schedule of Personnel Costs

September 30, 2022 and 2021

	<u>2022</u>	<u>2021</u>
Salaries and wages	\$ 1,759,141	\$ 1,707,122
Pension (benefit) expense	(98,676)	468,288
Medicare contribution	<u>25,415</u>	<u>24,675</u>
	<u>\$ 1,685,880</u>	<u>\$ 2,200,085</u>
Average number of employees	42	39
Average cost per employee	\$ 40,140	\$ 56,412

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Supplementary Schedule of Personnel Count - Public Law 28-150: Section 45

September 30, 2022 and 2021

	Full Time Employees		Total
	During	As of	Salaries & Wages
	FY 2022	September 30,	Expended
		2022	
Director's Office	2	2	\$ 159,778
Administrative Services	5	5	159,931
Accounting / Investments	19	22	930,870
Members and Benefits Services	13	13	508,562
	<u>39</u>	<u>42</u>	<u>\$ 1,759,141</u>

	Full Time Employees		Total
	During	As of	Salaries & Wages
	FY 2021	September 30,	Expended
		2021	
Director's Office	2	2	\$ 159,245
Administrative Services	3	5	111,643
Accounting / Investments	20	19	926,667
Members and Benefits Services	13	13	509,567
	<u>38</u>	<u>39</u>	<u>\$ 1,707,122</u>

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Supplementary Schedule of Other Receivables - Defined Benefit Plan

September 30, 2022 and 2021

	<u>2022</u>	<u>2021</u>
Benefit overpayments	\$ 549,946	\$ 649,520
Member rate differential	<u>79,819</u>	<u>91,534</u>
	<u>\$ 629,765</u>	<u>\$ 741,054</u>

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Supplementary Schedule of Receivables by Agency - Defined Benefit Plan

September 30, 2022

Agency	Employer Contributions	Employer Contributions (Unfunded Liability)	Member Contributions	Interest & Penalties	Retiree Supplemental Benefits & Insurance	TOTAL
Department of Administration (General Fund)	891,367	\$870,116	\$304,820	\$31,892	\$1,963,804	\$4,061,999
Guam Department of Education	783,886	870,160	264,580	63,464	-	1,982,090
Guam Memorial Hospital Authority	157,667	342,816	53,953	-	-	554,436
University of Guam	163,583	176,882	55,526	-	-	395,991
Supreme Court of Guam	92,305	105,695	32,093	-	-	230,093
Guam Community College	70,737	49,209	23,729	-	-	143,675
Guam Power Authority	-	562	-	-	32,293	32,855
Guam Economic Development Authority	7,087	16,594	2,377	-	-	26,058
Port Authority of Guam	-	81	-	-	-	81
Total	<u>\$2,166,632</u>	<u>\$2,432,115</u>	<u>\$737,078</u>	<u>\$95,356</u>	<u>\$1,996,097</u>	<u>\$7,427,278</u>

See independent auditors' report.

GOVERNMENT OF GUAM RETIREMENT FUND

Supplementary Schedule of Receivables by Agency - Defined Benefit Plan

September 30, 2021

Agency	Employer Contributions	Employer Contributions (Unfunded Liability)	Member Contributions	Interest & Penalties	Retiree Supplemental Benefits & Insurance	TOTAL
Department of Administration (General Fund)	\$843,334	\$726,441	\$305,650	\$263,933	\$1,963,804	\$4,103,162
Guam Department of Education	676,241	691,374	240,303	63,464	-	1,671,382
Guam Memorial Hospital Authority	175,332	307,250	63,282	-	-	545,864
University of Guam	171,766	153,243	61,189	13,867	-	400,065
Port Authority of Guam	120,440	79,896	42,688	-	-	243,024
Supreme Court of Guam	94,900	92,130	34,553	-	-	221,583
Guam Waterworks Authority	74,911	90,214	26,709	-	-	191,834
Guam Airport Authority	90,869	39,388	33,349	-	-	163,606
Guam Community College	73,034	43,240	25,803	-	-	142,077
Guam Housing & Urban Renewal Authority	34,772	17,870	12,339	-	-	64,981
Guam Power Authority	2,151	562	-	-	32,293	35,006
Public Defender	-	19,506	-	-	-	19,506
Guam Economic Development Authority	6,364	9,683	2,242	-	-	18,289
Total	<u>\$2,364,114</u>	<u>\$2,270,797</u>	<u>\$848,107</u>	<u>\$341,264</u>	<u>\$1,996,097</u>	<u>\$7,820,379</u>

See independent auditors' report.

BURGER & COMER, P.C.
CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Board of Trustees
Government of Guam Retirement Fund

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, the financial statements of the Government of Guam Retirement Fund, as of and for the year ended September 30, 2022, which comprise the statement of fiduciary net position and statement of changes in fiduciary net position, and the related notes to the financial statements, which collectively comprise Government of Guam Retirement Fund's basic financial statements, and have issued our report thereon dated August 24, 2023.

Report on Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Government of Guam Retirement Fund's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Government of Guam Retirement Fund's internal control. Accordingly, we do not express an opinion on the effectiveness of the Government of Guam Retirement Fund's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements, on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Government of Guam Retirement Fund's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Buyp # Comm, P.C.

Tamuning, Guam
August 24, 2023