

**MEMPHIS LIGHT, GAS AND WATER DIVISION
RETIREMENT AND PENSION SYSTEM**

Financial Statements

For the Years Ended December 31, 2019 and 2018

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MEMPHIS LIGHT, GAS AND WATER DIVISION
RETIREMENT AND PENSION SYSTEM
Memphis, Tennessee

For the Years Ended December 31, 2019 and 2018

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Letter of Transmittal

MEMPHIS LIGHT, GAS AND WATER DIVISION RETIREMENT AND PENSION SYSTEM

To The MLGW Pension Board and Board of Commissioners:

We are pleased to submit the Annual Report of Memphis Light, Gas and Water Division (MLGW) Retirement and Pension System (the “Plan”) for the fiscal year ended December 31, 2019. This report has been prepared in conformity with accounting Principles Generally Accepted in the United States of America (GAAP).

Management is responsible for the preparation and fair presentation of the information. Notes have been included to assist the reader in understanding the financial statements.

The MLGW Plan’s financial statements have been audited by Banks, Finley, White & CO., licensed certified public accountants. The goal of the independent audit was to obtain reasonable assurance that the financial statements of the “Plan” for fiscal year December 31, 2019 were free from material misstatements. The independent audit involved performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements as well as evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management.

The independent auditors concluded, based upon the audit, that there was a reasonable basis for rendering an unmodified opinion that the Plan’s financial statements for the fiscal year ended December 31, 2019, are fairly presented in conformity with GAAP. The independent auditor’s report is presented as the first component of the report.

GASB Statement No. 34, Basic Financial Statements-and Management Discussion and Analysis-for State and Local Governments (GASB 34) requires that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of a Management’s Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The Plan’s MD&A can be found immediately following the report of the independent auditors.

Profile of the Plan – The Memphis Light, Gas and Water Division (the “Division”), a division of the City of Memphis, under a resolution by the Board of Commissioners, established the Memphis Light, Gas and Water Division Retirement and Pension System (the “Plan”) to recognize and reward employee contributions to the operations of the Division. The MLGW Pension Plan, which was amended and restated effective January 1, 2015, is part of the Division’s overall plan to provide for the future security of its employees and their family members. The MLGW Pension Plan is a single employer defined benefit plan.

The MLGW Pension Plan is funded by contributions made by the employees and by the Division. Benefits under the MLGW Pension Plan normally are paid upon retirement (service, disability, or deferred), death (to survivors), or separation of service (to those who leave the Division prior to retirement). The MLGW Pension Plan is administered by the MLGW Pension Board under the direction of the Board of Commissioners.

The MLGW Pension Board establishes the policies of the MLGW Pension Plan. The Board is comprised of one member of the Board of Commissioners of the Division (who serves as Chairman of the Pension Board), the President of the Division (who serves as Vice-Chairman), the Sr. Vice President, CFO, CAO, and Secretary-Treasurer of Division, two active Participants who have vested rights under the MLGW Pension Plan and who are elected by Participants, one retired Participant who is elected by retired Participants, and one citizen of Shelby County who is appointed by the Board of Commissioners of the Division. The members of the Pension Board serve without compensation.

The MLGW Pension Board shall fulfill the duties of the fiduciary responsible for MLGW Pension Plan administration and shall have overall control of the administration of the Plan, with all powers and discretion necessary to enable it to properly carry out its duties; provided the responsibility and authority to administer to the Plan on a day-to-day basis shall be delegated to the Pension Department.

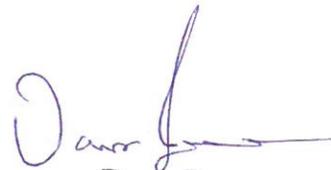
Funded Status – As of January 1, 2020, the actuarial accrued liability was \$1,571.0 million and the actuarial value of assets was \$1,490.1 million; resulting in an unfunded actuarial accrued liability of \$80.9 million which is a funded ratio of 94.9%. The covered payroll was \$174.3 million.

Acknowledgements – The preparation of this report was made possible by the overall dedication of the MLGW's Pension Department. We would like to express our appreciation of the Pension Department who contributed to the preparation of this report. Special thanks must also be given to Banks, Finley, White & Co., CPAs for their efficient and timely completion of this year's audit.

Respectfully submitted,



Jarl "J.T." Young
President & CEO



Dana Jeanes
SVP, CFO & CAO (Secretary-Treasurer)

**MEMPHIS LIGHT, GAS AND WATER DIVISION
RETIREMENT AND PENSION SYSTEM**
Memphis, Tennessee

Pension Board Members



Carlee McCullough
Chairwoman



Jarl "J.T." Young
Vice Chairman



Dana Jeanes
Secretary-Treasurer



Nicholas Newman
Employee Member
Term Expires: 12/31/2021



Nedra Bailey
Employee Member
Term Expires: 12/31/2022



Patricia Howard
Retired Member
Term Expires: 12/31/2020



Pamela Z. Clary
Citizen Member
Term Expires: 6/30/2020

The Memphis Light, Gas and Water Pension Plan provides that the Pension Board shall fulfill duties of the fiduciary responsible for Plan administration and shall have overall control of the administration of the Plan, with all powers and discretion necessary to enable it to properly carry out its duties set forth in the Plan. The responsibility and authority to administer the Plan on a day-to-day basis is delegated to the Pension Department.

PROFESSIONAL CONSULTANTS

The MLGW Pension Plan contracts with several independent consultants to provide services that are vital to the professional and successful operation of the Plan.

INVESTMENT CONSULTANT

CBIZ Investment Advisory Services, LLC

Robert A. Longfield, Jr., CFA
Executive Vice President & Senior Consultant

Curtis Williams
Senior Investment Consultant

CUSTODIAN

Northern Trust Corporation

Anabel Argüello
2nd Vice President | Relationship Manager

Kristi Kamykowski
Vice President | Specialist
Client Business Solutions Consulting

DEATH AUDIT CONSULTANT

The Berwyn Group

Jane Potts
Sales Representative

CONSULTING ACTUARY

Segal Consulting

Leon F. (Rocky) Joyner, Jr., FCA, ASA, EA, MAAA
Senior Vice President and National Public Sector
Retirement Practice Leader

Deborah K. Brigham, FCA, ASA, EA, MAAA
Senior Vice President and Consulting Actuary

LEGAL CONSULTANT

Evans & Petree, PC

Frank N. Stockdale Carney
Shareholder

Elizabeth Friary
Associate

FISCAL YEAR UPDATES

In January 2019, the Pension Board approved the issuance of a new contract for Investment Consulting Services to the current consultant, Gavion, LLC (who later merged with CBIZ Investment Advisory Services, LLC). The Board of Commissioners subsequently approved the contract on February 6, 2019.

CBIZ Investment Advisory Services, LLC presented an Asset Allocation Review to the Pension Board in June 2019. The Board approved the following recommendations in June 2019:

- 1) Reduce the total investments in Domestic Equities from 39% to 35%.
- 2) Reduce the total investments in International Equities from 12% to 9%.
- 3) Reduce the total investments in Global Fixed Income from 26% to 24%.
- 4) Increase the total investments in Special Strategies from 8% to 15%.
- 5) Increase the total investments in Real Estate (Cash) from 13% to 15%.
- 6) Allow the total investments in Short Term Investments to remain at 2%.

Frank Carney, MLGW's legal consultant from Evans & Petree, PC, presented an amendment to the Retirement and Pension System Plan in August 2019. The normal form of benefit for a married participant hired on or after January 1, 2014 is a joint and survivor annuity with a "pop-up" feature. This amendment specifies the actuarial basis for calculating the joint and survivor annuity benefit. The Pension Board approved the amendment in September 2019.

The amendment states as follows:

Section 1.3. shall be amended to add a subsection (c) as follows to provide for the definition of "Actuarial Equivalence" in converting the Normal Form of Retirement Benefit to joint and survivor annuity with a pop-up feature for participants employed on or after January 1, 2014:

1.3 Actuarial Equivalent shall mean (except as otherwise specifically set forth in the Plan) a benefit of equivalent value based on the following:

- (c) For purposes of converting the Normal Form of Retirement Benefit to the joint and survivor annuity with a pop-up feature, as described in Section 6.1 of the Plan for Participants hired on or after January 1, 2014, an interest rate equal to (i) three percent (3.0%) more than the average of the annual rate of interest on 30-year Treasury securities for the five (5) years before the date of distribution, and (ii) the applicable mortality table under Code §417 (e)(3)(A).

See next page

FISCAL YEAR UPDATES (continued)

In December 2019, Segal Consulting, the actuary for the MLGW Retirement and Pension System presented their findings from a Five-Year Experience Study based on the period January 1, 2014 through December 31, 2018. The proposed assumptions in the study were adopted by the Pension Board in December 2019.

Assumption	Previous Assumption	Approved Assumption
Healthy Retiree Mortality	Sex-distinct RP-2014 Healthy Annuitant Mortality Table, with rates loaded 38%	Sex-distinct PRI-2012 Healthy Annuitant Amount-Weighted Mortality Table, with rates loaded 20%
Beneficiary Mortality	Sex-distinct RP-2014 Healthy Annuitant Mortality Table, with rates loaded 38%	Sex-distinct PRI-2012 Contingent Amount-Weighted Annuitant Mortality Table, loaded 20%
Disabled Participant Mortality	Sex-distinct RP-2014 Disabled Retiree Mortality Table, with rates loaded 38%	Sex-distinct PRI-2012 Disabled Retiree Amount-Weighted Mortality Table, with rates loaded 20%
Active Participant and Inactive Vested Mortality	Sex-distinct RP-2014 Employee Mortality Table, (no loads)	Sex-distinct PRI-2012 Employee Amount-Weighted Mortality Table, (no loads)
Future Mortality Improvement	Projected generationally from 2014 a modified RPEC2014 projection table using a 15-year convergence period for cohort effects and a 10-year convergence for age/period effects	Projected generationally from 2012 with the SSA-2019 Projection Scale
Line-of-Duty Death	5% of active deaths	No change
Retirement	Separate age-based tables of rates for those with less than 25 years of service and those with 25 or more years. Tables differ for employees hired on or after January 1, 2014	Modify the existing age-based rates for those hired before 2014, to more accurately reflect observed retirement patterns. No change to post-January 2014 rates.

See next page

FISCAL YEAR UPDATES (continued)

Assumption	Previous Assumption	Approved Assumption
Percent Married	Age-based rates starting at 75% and grading down at older ages	No change
Spousal Age Difference	Females four years younger than males	No change
Sick Leave	3 months	No change
Disability	0.30% per year, regardless of age	0.20% per year, regardless of age
Line-of-Duty Disability	5% of disabilities	0% of disabilities
Turnover	Age-based rates, cutting off at first eligibility for early retirement	Maintain age-based rates, but increase the rates for all ages prior to 45
Salary Scale	Select-and-ultimate table (age-based with higher rates for the first five years of service)	Revised select-and-ultimate rates, rates, reflecting observed experience
Inflation	2.75%	2.50%
COLA	.0825% for ages 56-58 1.650% for ages 59-61 2.063% for ages 62 and above, and all disabled participants	.0750% for ages 56-58 1.500% for ages 59-61 1.875% for ages 62 and above, and all disabled participants
Investment Return	7.50%	7.25%
Payroll Growth	0.50% in 2019, 0% thereafter	0% beginning in 2020 (Level Dollar Amortization)
Administrative Expenses	Updated annually based on actual expenses (currently \$800,000)	No change, continue annual adjustment based on actual expenses

FINANCIAL SECTION

Independent Auditor's Report
Banks, Finley, White & Co. CPA



INDEPENDENT AUDITOR'S REPORT

Board of Commissioners and Management
Memphis Light, Gas and Water Division
Retirement and Pension System
Memphis, Tennessee

Report on the Financial Statements

We have audited the accompanying statements of plan's fiduciary net position of the Memphis Light, Gas and Water Division Retirement and Pension System (the "Plan"), a fiduciary fund of the City of Memphis, Tennessee, as of December 31, 2019 and 2018, and the related statements of changes in plan's fiduciary net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility 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; this includes 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. 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, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.



We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Plan as of December 31, 2019 and 2018, and the changes in its fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Emphasis of Matter

As discussed in Note 1, the accompanying statements are those of Memphis Light, Gas and Water Division Retirement and Pension System. The statements do not purport to present the financial position of the Light, Gas and Water Division of the City of Memphis or the City of Memphis as of December 31, 2019 and 2018, and the respective changes in their financial position or, where applicable, its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis; schedule of changes in retirement and pension system's net pension liability, schedule of Division's contributions to the retirement and pension system, and schedule of investment return on pages 4 through 13 and pages 41 through 43 be presented to supplement the basic financial statements. Such information, 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.

Other Information

The introductory section has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on it.



Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated June 3, 2020, on our consideration of the Plan'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 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 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 Memphis Light, Gas and Water Division Retirement and Pension System's internal control over financial reporting and compliance.

Banks, Lindsey, White & Co.

Memphis, Tennessee

June 3, 2020



**RETIREMENT AND PENSION SYSTEM
MANAGEMENT'S DISCUSSION AND ANALYSIS
Years Ended December 31, 2019 and 2018**

This discussion and analysis of the Memphis Light, Gas and Water Division (“MLGW”) Retirement and Pension System (the “Pension Plan”) financial performance provides a narrative overview and analysis of the MLGW Pension Plan’s financial activities and funding conditions for the fiscal years ended December 31, 2019 and December 31, 2018. Please read it in conjunction with the MLGW Pension Plan’s financial statements, notes, and required supplementary information, which follow this section. Information for fiscal years 2018 and 2017 is presented for comparative purposes.

FINANCIAL HIGHLIGHTS

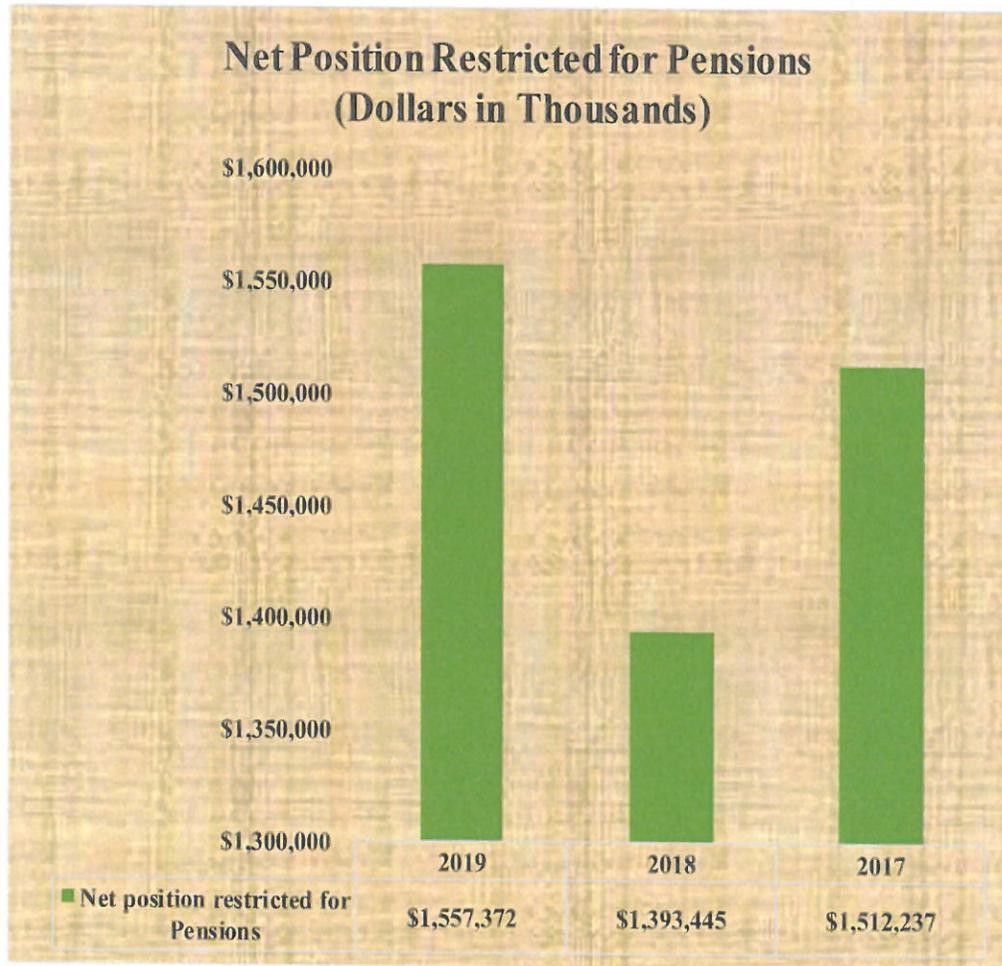
- Total fiduciary net position restricted for pension (total assets and deferred outflows of resources less total liabilities and deferred inflows of resources) at December 31, 2019 was \$1,557.4 million, an increase of \$163.9 million, or 11.8% compared to the total net position at December 31, 2018 of \$1,393.4 million. 2018 reflected a decrease of \$118.8 million, or 7.9% from \$1,512.2 million total net position at December 31, 2017. *See Graph 1 on next page.*
- Cash and cash equivalents increased \$59.0 million, or 301.9% to \$78.5 million at December 31, 2019 from \$19.5 million at December 31, 2018. 2018 reflected a decrease of \$14.3 million or 42.2% from \$33.8 million reported in 2017.
- Investments were \$1,476.3 million at December 31, 2019, an increase of \$102.5 million, or 7.5% from \$1,373.8 million at December 31, 2018. 2018 reflected a decrease of \$103.8 million, or 7.0% from \$1,477.6 million reported in 2017.
- Net investment activities increased by \$277.5 million, or 681.5% to \$236.8 million at December 31, 2019. This was primarily due to a \$275.6 million increase in net appreciation of investments. For 2019, net appreciation of investments totaled \$207.5 million compared with net depreciation of investments of \$68.1 million for 2018.
- Total pension benefit payments decreased by \$3.7 million, or 3.4% at December 31, 2019 to \$104.3 million from \$108.0 million at December 31, 2018. 2018 reflected an increase of \$5.8 million, or 5.7% from \$102.2 million reported in 2017.

See next page



Financial Highlights

Graph 1:



See next page



OVERVIEW OF THE FINANCIAL STATEMENTS

This report contains the following information:

1. **Basic Financial Statements** including:
 - a. Statements of Fiduciary Net Position
 - b. Statements of Changes in Fiduciary Net Position
 - c. Notes to the Financial Statements
2. **Required Supplementary Information** including:
 - a. Schedule of Changes in Retirement and Pension System's Net Pension Liability
 - b. Schedule of Division's Contributions to the Retirement and Pension System
 - c. Schedule of Investment Return

The basic financial statements are described as follows:

- The Statements of Fiduciary Net Position show the account balances at year-end and include the net position available for future benefit payments. The liabilities for future benefit payments are not included in the Statements; however, they are shown in the Schedule of Changes in Retirement and Pension System's Net Position Liability that is included in the Required Supplementary Information.
- The Statements of Changes in Fiduciary Net Position show the sources and use of funds during the year and illustrates the change in net position from the previous year.
- The Notes to the Financial Statements are an integral part of the financial statements and include additional detailed information and schedules to provide a better understanding of the financial statements.

The required supplementary information is based upon the MLGW Pension Plan's adoption of GASB Statement 67 and provides historical trends that help to reflect the ongoing plan perspective and the long-term nature of the defined benefit plan.

- The Schedule of Changes in Net Pension Liability contains actuarial information about the status of the plan.
- The Schedule of Division's Contributions contains historical trend information regarding the value of the total annual contributions the employer must pay and the actual contributions paid by the employer to meet this requirement. In addition, significant methods and assumptions used in calculating the actuarially determined contributions are included in the schedule.
- The Schedule of Investment Return contains the actuarial value and market value investment returns realized on the total portfolio for the last ten years.



RETIREMENT AND PENSION SYSTEM
MANAGEMENT'S DISCUSSION AND ANALYSIS
Years Ended December 31, 2019 and 2018

ANALYSIS OF FIDUCIARY NET POSITION

Condensed financial information comparing the Fiduciary Net Position for the past three fiscal years is presented below:

Table 1					
Condensed Statements of Fiduciary Net Position					
Years Ended December 31, 2019, 2018, and 2017					
<i>(Dollars in Thousands)</i>					
	<u>2019</u>	<u>2018</u>	<u>FY19 - FY18</u> <u>Percentage</u> <u>Change</u>	<u>2017</u>	<u>FY18 - FY17</u> <u>Percentage</u> <u>Change</u>
Assets					
Cash and cash equivalents	\$ 78,498	\$ 19,532	301.9%	\$ 33,803	-42.2%
Receivables	24,810	13,178	88.3%	3,881	239.6%
Investments *	1,476,269	1,373,793	7.5%	1,477,595	-7.0%
Collateral held for securities on loan	82,967	64,052	29.5%	123,741	-48.2%
Total assets	<u>1,662,544</u>	<u>1,470,555</u>	<u>13.1%</u>	<u>1,639,020</u>	<u>-10.3%</u>
Liabilities					
Liability for securities purchased and accrued liabilities	22,205	13,058	70.0%	3,042	329.2%
Collateral subject to return to borrowers	82,967	64,052	29.5%	123,741	-48.2%
Total liabilities	<u>105,172</u>	<u>77,110</u>	<u>36.4%</u>	<u>126,783</u>	<u>-39.2%</u>
Net position restricted for Pensions	<u>\$ 1,557,372</u>	<u>\$ 1,393,445</u>	<u>11.8%</u>	<u>\$ 1,512,237</u>	<u>-7.9%</u>

* Investments include a private equity firm, GPB Holdings II, LP, valued at \$20.0 million for year ended 2019, the fair market value as of June 30, 2019. For years ended December 31, 2018 and 2017, the investment was valued at \$25.0 million, the initial capital contribution invested in 2017. As of the date of this report, the Pension Plan has not received the fair market value statements from GPB Holdings II, LP for the years ended December 31, 2019, 2018, or 2017.

Assets

2019 Compared to 2018:

At December 31, 2019, total assets were \$1,662.5 million, which represented an addition of \$192.0 million, or 13.1%, from 2018. The increase in total assets was primarily due to an increase in cash and cash equivalents, and the appreciation in the market value of the Plan's domestic equity and fixed income investments.



**RETIREMENT AND PENSION SYSTEM
MANAGEMENT'S DISCUSSION AND ANALYSIS
Years Ended December 31, 2019 and 2018**

The MLGW Pension Plan's significantly higher balance in cash and cash equivalents can mainly be attributed to the liquidation of two equity funds, J.O. Hambro International Select Fund and LMCG Emerging Markets Collective Fund.

The MLGW Pension Plan's investments are comprised of domestic and international equities, domestic and international fixed income, domestic and international special strategies, real estate, and short term investments. For 2019, investments were \$1,476.3 million, which reflected an increase of \$102.5 million, or 7.5% from 2018. The increase in total investments was chiefly due to the improved market value of investments in domestic equity funds as well as domestic and international corporate and government bonds.

2018 Compared to 2017:

At December 31, 2018, total assets were \$1,470.6 million, a decrease of \$168.5 million, or 10.3% from 2017. The decrease in total assets was primarily due to the decline in cash and cash equivalents, receivables, and investments.

The MLGW Pension Plan decline in cash and cash equivalents was due to increased investment in existing funds as well as funding of new money managers at year end.

The total receivables in 2018 significantly dropped primarily due to the collateral held for securities on loan under the MLGW Pension Plan's securities lending program. This resulted from a decrease in borrower demand compared to cash collateral in the fourth quarter of 2018.

The MLGW Pension Plan's investments are comprised of domestic and international equities, domestic and international fixed income, domestic and international special strategies, real estate, and short-term investments. For 2018, investments totaled \$1,373.8 million, a decrease of \$103.8 million, or 7.0% from 2017. The decrease in total investments was primarily due to the declining market value of investments in equity funds, domestic corporate and government bonds, and the liquidation of the Plan's emerging market bonds ETF.

Liabilities

2019 Compared to 2018:

At December 31, 2019, total liabilities were \$105.2 million, an increase of \$28.1 million, or 36.4% from \$77.1 million at 2018. The increase was primarily due to the rise in collateral subject to return to borrowers. Both cash and non-cash collateral increased which resulted in a significant increase in lendable securities over last year. The increase was partially offset by a decrease in accrued liabilities.



**RETIREMENT AND PENSION SYSTEM
MANAGEMENT'S DISCUSSION AND ANALYSIS
Years Ended December 31, 2019 and 2018**

2018 Compared to 2017:

At December 31, 2018, total liabilities were \$77.1 million, a decrease of \$49.7 million, or 39.2% from \$126.8 million at 2017. The decrease was primarily derived from a decrease in the collateral subject to return to borrowers under the MLGW Pension Plan's securities lending program. The decline was partially offset by an increase in the liability for securities purchased.

Net position

2019 Compared to 2018:

At December 31, 2019, the MLGW Pension Plan's fiduciary net position (total assets and deferred outflows of resources less total liabilities and deferred inflows of resources) was \$1,557.4 million, an increase of \$163.9 million, or 11.8% from the net position at December 31, 2018. The increase in the MLGW Pension Plan fiduciary net position was largely due to the appreciation in market value of certain investments held during 2019 as well as the increase in cash and cash equivalents.

2018 Compared to 2017:

At December 31, 2018, the MLGW Pension Plan's fiduciary net position (total assets and deferred outflows of resources less total liabilities and deferred inflows of resources) was \$1,393.4 million, a decrease of \$118.8 million, or 7.9% from December 31, 2017 net position. The decrease in net position restricted for pension was largely due to the declining market value of investments held in the fourth quarter of 2018, as well as the reduction in total receivables and cash and cash equivalents. The decrease in total assets was partially offset by a decrease in total liabilities.

See next page



RETIREMENT AND PENSION SYSTEM
MANAGEMENT'S DISCUSSION AND ANALYSIS
Years Ended December 31, 2019 and 2018

ANALYSIS OF CHANGES IN FIDUCIARY NET POSITION

Condensed financial information comparing the Changes in Fiduciary Net Position for the past three fiscal years is presented below:

Table 2 Condensed Statements of Changes in Fiduciary Net Position Years Ended December 31, 2019, 2018, and 2017 (Dollars in Thousands)					
	<u>2019</u>	<u>2018</u>	FY19 - FY18 Percentage <u>Change</u>	<u>2017</u>	FY18 - FY17 Percentage <u>Change</u>
Additions					
Contributions	\$ 35,276	\$ 35,391	-0.3%	\$ 35,348	0.1%
Net investment activities income (loss)	236,798	(40,722)	681.5%	215,659	-118.9%
Securities lending activities income	515	727	-29.2%	839	-13.1%
Total additions (loss)	<u>272,589</u>	<u>(4,604)</u>	<u>6021.0%</u>	<u>251,846</u>	<u>-101.8%</u>
Deductions					
Benefits payments	104,291	107,965	-3.4%	102,179	5.7%
Refunds	3,440	5,351	-35.7%	2,740	95.3%
Administrative expense	931	872	6.8%	860	1.4%
Total deductions	<u>108,662</u>	<u>114,188</u>	<u>-4.8%</u>	<u>105,779</u>	<u>7.9%</u>
Net increase (decrease)	163,927	(118,792)	238.0%	146,067	-181.3%
Net position restricted for Pensions					
Beginning of year	<u>1,393,445</u>	<u>1,512,237</u>	<u>-7.9%</u>	<u>1,366,170</u>	<u>10.7%</u>
End of year	<u>\$ 1,557,372</u>	<u>\$ 1,393,445</u>	<u>11.8%</u>	<u>\$ 1,512,237</u>	<u>-7.9%</u>

Change in Net Position

2019 Compared to 2018:

The change in net position at December 31, 2019 was \$163.9 million, up \$282.7 million, or 238.0% from a loss of \$118.8 million at December 31, 2018 due to the improvement in total investment activities income. Total investment activities rose by \$277.3 million, or 693.4% due to the net appreciation in the fair value of investments. The appreciation was largely due to the results from investments in equity funds as well as fixed income funds.



**RETIREMENT AND PENSION SYSTEM
MANAGEMENT'S DISCUSSION AND ANALYSIS
Years Ended December 31, 2019 and 2018**

2018 Compared to 2017:

The change in net position at December 31, 2018 reflected a loss of \$118.8 million, down \$264.9 million, or 181.3% from a gain of \$146.1 million at December 31, 2017 as a result of a loss in total investment activities. Total investment activities decreased by \$256.5 million, or 118.5%, due to net depreciation of investments across the MLGW Pension plan's portfolio asset classes. The depreciation was largely from the investments in equity funds as well as domestic corporate and government bonds.

Additions

2019 Compared to 2018:

Total additions to net position increased by \$277.2 million, or 6,021.0% to \$272.6 million at December 31, 2019, compared to the total loss of \$4.6 million at December 31, 2018, primarily as a result of the increase in net investment activities.

Net investment activities income was \$236.8 million, an increase of \$277.5 million, or 681.5% from a loss of \$40.7 million in 2018. The component of net investment activities income that had the greatest impact was net appreciation of investments.

2018 Compared to 2017:

Total additions to net position reflected a loss of \$4.6 million, or 101.8% at December 31, 2018, compared to total additions of \$251.8 at December 31, 2017, primarily as a result of the decrease in net investment activities.

Net investment activities reflected a loss of \$40.7 million, a decrease of \$256.4 million, or 118.9% from \$215.7 million in 2017. The component of net investment activities that had the largest impact was net depreciation of investments.

Deductions

2019 Compared to 2018:

Total deductions from net position in 2019 amounted to \$108.7 million, a decrease of \$5.5 million or 4.8%, down from \$114.2 million in 2018. The decrease was primarily derived from the benefit payments to retired participants for 2019 which totaled \$86.9 million, down \$4.2 million, or 4.7% compared to 2018. Additionally, refunds to terminated members were \$3.4 million, down \$1.9 million, or 35.7% compared to 2018. Benefit payments to retired participants in 2019 declined due, in part, to a 23% reduction in the number of new retirees added to the MLGW Pension Plan. Furthermore, in 2019 the refund recipients served fewer years with MLGW Division, resulting in a lower multiple of accumulated participant contributions. Only 12% of the refunds issued in 2019 were at least \$100 thousand compared to 27% in 2018.



**RETIREMENT AND PENSION SYSTEM
MANAGEMENT'S DISCUSSION AND ANALYSIS
Years Ended December 31, 2019 and 2018**

2018 Compared to 2017:

Total deductions from net position in 2018 amounted to \$114.2 million, an increase of \$8.4 million or 8.0%, up from \$105.8 million in 2017. The increase was primarily derived from the benefit payments to retired participants for 2018 which totaled \$91.1 million, up \$5.6 million, or 6.6% compared to 2017. Additionally, refunds to terminated members were \$5.4 million, up \$2.6 million, or 95.3% compared to 2017. The rise in benefit payments was due to an increase in the number of new retirees processed and refunds issued to terminated members in 2018.

FUNDING STATUS

Retirement benefits are financed by employer and participant contributions and income earned on the MLGW Pension Plan's investments. Over the long term, the investment portfolio returns have been a major component of additions to the MLGW Pension Plan's net position. In 2019, the MLGW Pension Plan's investments appreciated in value, with equity funds and fixed income funds rebounding significantly from 2018. *See graphs 3 (a) and (b) on next page.*

The funding policy adopted in 2015 and made effective on January 1, 2016 requires the Division to contribute 100% of the actuarially determined contribution. Employees are still required to contribute 8.0% of pensionable earnings to the MLGW Pension Plan. The Division's contribution is determined by an actuarial valuation study, but shall be no less than 8.0% of pensionable earnings for all active participants. This, in addition to the contributions from plan participants, reinforces its current and continued financial stability. For the year ended December 31, 2019, the Division's actual annual contribution was \$21.8 million as recommended and determined by an independent actuarial valuation study.

REQUESTS FOR INFORMATION

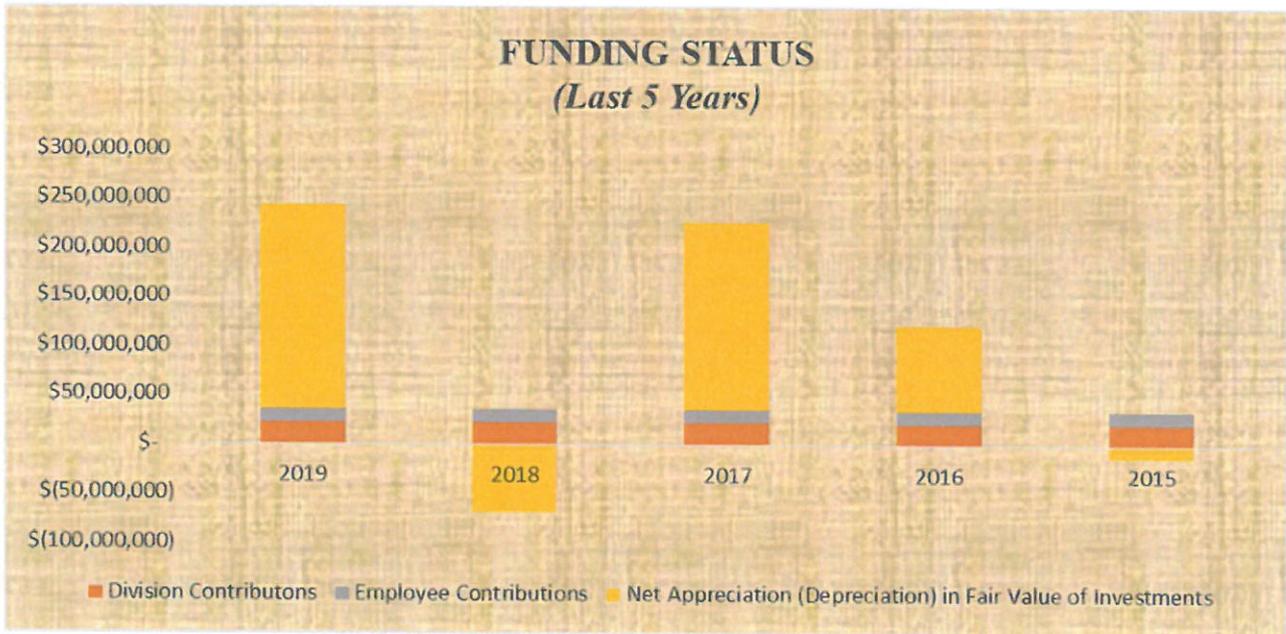
Questions concerning any of the information provided in this report or requests for additional information should be addressed to:

Memphis Light, Gas and Water Division
Manager of Insurance & Pension
P.O. Box 430
Memphis, TN 38101

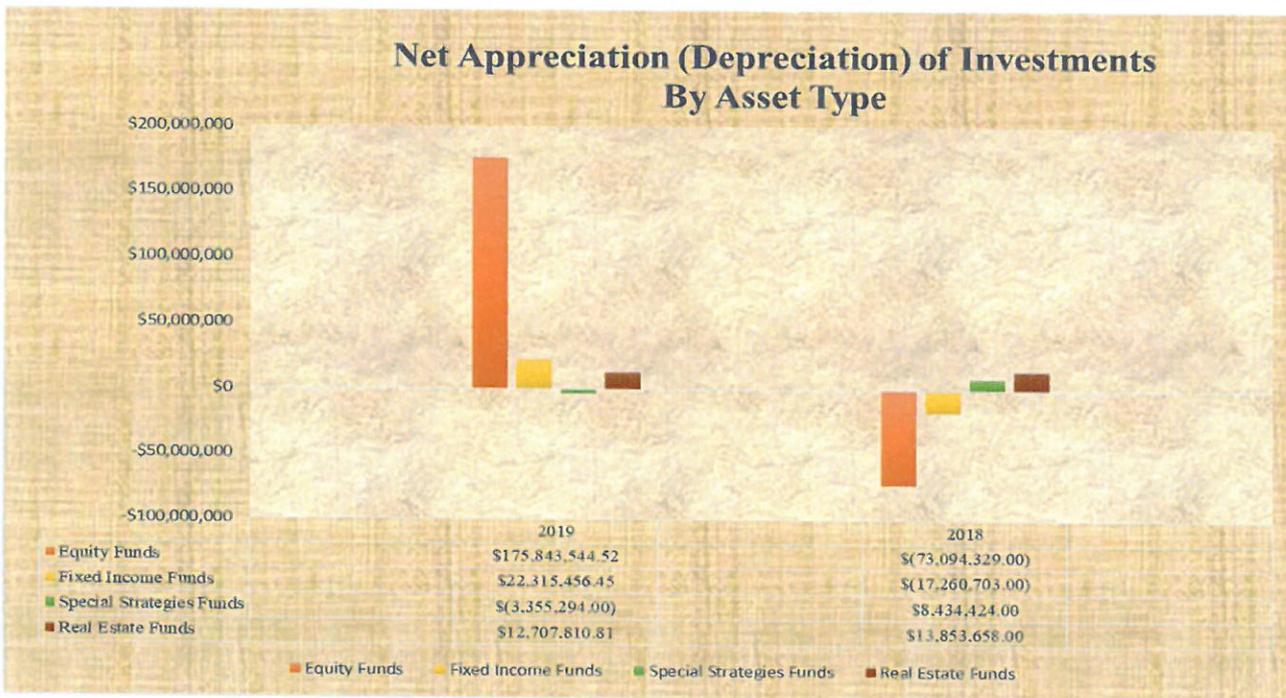


**RETIREMENT AND PENSION SYSTEM
MANAGEMENT'S DISCUSSION AND ANALYSIS
Years Ended December 31, 2019 and 2018**

Graph 3 (a)



Graph 3 (b)





RETIREMENT AND PENSION SYSTEM
STATEMENTS OF FIDUCIARY NET POSITION
Years Ended December 31, 2019 and 2018

	December 31	
	2019	2018
Assets		
Cash and cash equivalents	\$ 78,497,776	\$ 19,531,955
Receivables:		
Interest, dividends and real estate receivable	4,013,056	4,020,327
Receivable for securities sold	20,283,615	8,551,296
Miscellaneous receivable	1,030	86,198
Employer and employee contributions receivable	512,568	519,665
Collateral held in trust for securities on loan	82,967,023	64,052,059
Total receivables	107,777,292	77,229,545
Investments:		
Equity Funds:		
Common stock - domestic	321,328,015	254,708,475
Common stock - international	48,477,728	79,220,960
Common stock index - domestic	238,564,465	196,160,560
Preferred stock - international	2,032,763	3,481,572
Equity ETF - domestic	142,021,236	126,824,877
Fixed Income Funds:		
Corporate bonds - domestic	48,991,344	44,463,128
Corporate bonds - international	46,898,145	41,597,453
Corporate convertible bond - international	392,625	125,775
Government bonds - domestic	4,212,676	1,494,582
Government bonds - international	49,020,929	43,925,885
Global bond - international	76,030,455	69,591,109
Emerging market bonds ETF		-
U.S. government agencies	8,600,159	8,838,804
Global government agencies	7,602,903	7,711,648
Asset backed securities - domestic	11,158,583	12,283,501
Asset backed securities - international	4,018,354	1,471,312
Mortgage backed securities - domestic	19,245,046	19,163,361
Securitized asset fund	16,723,441	2,523,372
Special Strategies Funds:		
Private equity - domestic *	61,485,277	63,957,809
Private equity - international	3,028,365	1,012,374
Distressed debt - domestic	35,762,134	52,695,663
Distressed debt - international	40,504,773	39,979,040
Multi-asset - domestic	13,860,156	12,587,841
Life settlement funds - domestic	67,512,713	64,882,987
Real Estate Funds:		
Real estate	206,164,385	208,346,632
Short-Term Investment	2,632,518	16,744,657
Total investments	1,476,269,188	1,373,793,377
Total assets	1,662,544,256	1,470,554,877
Liabilities		
Collateral subject to return to borrowers	82,967,023	64,052,059
Liability for securities purchased	20,512,230	11,283,557
Accrued liabilities	1,692,909	1,774,548
Total liabilities	105,172,162	77,110,164
Net position restricted for Pensions	\$ 1,557,372,094	\$ 1,393,444,713

*Private equity-domestic includes a private equity firm, GPB Holdings II, LP, valued at \$20.0 million for year ended 2019, the fair market value as of June 30, 2019. For the year ended December 31, 2018, the investment was valued at \$25.0 million, the initial capital contribution invested in 2017. As of the date of this report, the Pension Plan has not received the fair market value statements from GPB Holdings II, LP for the years ended December 31, 2019 and 2018.

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



RETIREMENT AND PENSION SYSTEM
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
Years Ended December 31, 2019 and 2018

	Years Ended December 31	
	2019	2018
Additions		
Contributions		
Employer	\$ 21,813,428	\$ 22,174,419
Member	13,462,380	13,216,689
Total contributions	<u>35,275,808</u>	<u>35,391,108</u>
Investment Activities Income		
Net appreciation (depreciation) of investments	207,511,518	(68,066,950)
Interest income	18,490,441	12,816,336
Dividend income	9,703,644	12,544,756
Real estate income	5,651,845	6,270,273
Other income	10,102	15,860
Recovery of losses - class action suit	4,108	84,705
Total investment activities income (loss)	<u>241,371,658</u>	<u>(36,335,020)</u>
Less investment activities expenses	<u>4,573,254</u>	<u>4,387,466</u>
Net investment activities income (loss)	236,798,404	(40,722,486)
Securities Lending Activities:		
Securities lending income	2,549,979	2,883,446
Securities lending expenses:		
Borrower rebates	(1,906,104)	(1,975,262)
Management fees	(128,701)	(181,572)
Total securities lending expenses	<u>(2,034,805)</u>	<u>(2,156,834)</u>
Net securities lending activities income	<u>515,174</u>	<u>726,612</u>
Total investment activities income (loss)	237,313,578	(39,995,874)
Total additions (loss)	<u>272,589,386</u>	<u>(4,604,766)</u>
Deductions		
Benefit payments:		
Retired members	86,872,323	91,110,167
Survivors (spouse, minors, and dependents)	16,535,038	16,121,632
Disabled members	450,321	490,474
Deferred vested members	250,386	210,907
Alternate payees	182,994	31,381
Total benefit payments	<u>104,291,062</u>	<u>107,964,561</u>
Contributions refund	3,439,540	5,351,288
Administrative expenses	931,403	871,948
Total deductions	<u>108,662,005</u>	<u>114,187,797</u>
Change in net position	<u>163,927,381</u>	<u>(118,792,563)</u>
Net position restricted for Pensions		
Beginning of year	1,393,444,713	1,512,237,276
End of year	<u>\$ 1,557,372,094</u>	<u>\$ 1,393,444,713</u>

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



1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization

The Memphis Light, Gas and Water Division (the “Division”), a division of the City of Memphis, under a resolution by the Board of Commissioners, established the Memphis Light, Gas and Water Division Retirement and Pension System (the “MLGW Pension Plan”) to recognize and reward employee contributions to the operations of the Division. The MLGW Pension Plan, which was amended and restated effective January 1, 2015, is part of the Division’s overall plan to provide for the future security of its employees and their family members. The MLGW Pension Plan is a single employer defined benefit plan.

The MLGW Pension Plan is funded by contributions made by the employees and by the Division. Benefits under the MLGW Pension Plan normally are paid upon retirement, death, disability, or separation of service. The MLGW Pension Plan is administered by the MLGW Pension Board under the direction of the Board of Commissioners.

The MLGW Pension Board establishes the policies of the MLGW Pension Plan. The Board is comprised of one member of the Board of Commissioners of the Division (who serves as Chairman of the Pension Board), the President of the Division (who serves as Vice-Chairman), the SVP, CFO & CAO (Secretary-Treasurer) of the Division, two active Participants who have vested rights under the MLGW Pension Plan and who are elected by Participants, one retired Participant who is elected by retired Participants, and one citizen of Shelby County who is appointed by the Board of Commissioners of the Division. The members of the Pension Board serve without compensation.

The MLGW Pension Board shall fulfill the duties of the fiduciary responsible for the MLGW Pension Plan administration and shall have overall control of the administration of the Plan, with all powers and discretion necessary to enable it to properly carry out its duties; provided the responsibility and authority to administer the Plan on a day-to-day basis shall be delegated to the Pension Department.

Basis of Presentation

The financial statements present only the Memphis Light, Gas and Water Division Retirement and Pension System (the “MLGW Pension Plan”) in conformity with accounting principles generally accepted in the United States of America that are applicable to a fiduciary fund of a governmental trust unit. The accompanying financial statements present the separate financial position, results of operation, and cash flows for the MLGW Pension Plan, but do not present the financial position, results of operations, or cash flows of MLGW, a division of the City of Memphis (the “City”). Accordingly, the accompanying disclosures related separately to the MLGW Pension Plan, as applicable, and not collectively to MLGW. These statements are not intended to present the financial position of the City, the results of the City’s operations, or the cash flows of the City’s funds.



Basis of Accounting

The MLGW Pension Plan's financial statements are prepared using the accrual basis of accounting in accordance with the Governmental Accounting Standards Board ("GASB"). MLGW and member contributions are recognized in the period in which member services are performed. Investment income is recognized when earned. Gains and losses on sales and exchanges of investments are recognized on the transaction date. Benefits and refunds are recognized when paid in accordance with the MLGW Pension Plan's provisions.

Recent Accounting Standards

GASB Statement No. 84, *Fiduciary Activities*, was issued in January of 2017. The Statement establishes criteria for identifying fiduciary activities of all state and local governments. The basis of the criteria centers on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. The Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3), private-purpose trust funds, (4) custodial funds. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. Due to the COVID-19 pandemic, GASB Statement No.95, Postponement of the Effective Dates of Certain Authoritative Guidance, which includes GASB Statement No. 84, was issued in May of 2020. To offer short-term relief to governments and other stakeholders, effective immediately, the requirements of this statement will postpone the effective dates of certain provisions in Statements and Implementation Guides that became effective for periods beginning after June 15, 2018 and later. The adoption of this Statement will not affect the MLGW Pension Plan's financial statements.

Administrative Expenses

Expenses for the administration of the MLGW Pension Plan are paid from net investment earnings.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect the reported amounts in the financial statements and accompanying notes. Actual results could differ from those estimates and assumptions.

Cash and Cash Equivalents

The MLGW Pension Plan considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.



Investments

The MLGW Pension Plan's securities are stated at fair value based on quoted market prices. Securities traded on a national securities exchange are valued at the last reported sales price on the last business day of the fiscal year. Investments traded in the over-the-counter market and listed securities for which no sale was reported on that date are valued at the average of the last reported bid and ask prices.

The equity funds are comprised of both domestic and international securities. The MLGW Pension Plan's investments in the equity funds are measured at fair value, as determined by MLGW's Trustee and Custodian (Northern Trust).

For certain investments consisting of corporate bonds and notes that do not have an established fair value, MLGW's Trustee and Northern Trust, determine the value using basic assumptive information received from Bloomberg or Reuter's Analytics after the prices for the majority of corporate deals are obtained.

The TCW Residential Capital Structure is classified as a securitized asset fund. The fair value of investment in TCW Residential Capital Structure Fund is determined by the Investment Manager who uses independent pricing providers, if available. As an alternative, the Investment Manager may utilize independent pricing sources such as broker quotes and apply a price in line with the market or use valuation models to determine an appropriate price. Due to this valuation technique, this fund is categorized in the net asset value section of the fair value hierarchy table per GASB 72.

The MLGW Pension Plan investments in the private equity limited partnerships are reported at fair value. The fair value of investments is based on information obtained from the partnerships' Quarterly Statements. The private equity limited partnerships are Brookfield Infrastructure Fund II-B, SSM Partners Growth I, LP, SSM Partners Growth II, LP, SSM Partners Growth Equity III, LP, Glouston Capital Partners, LLC, Headlands Capital Secondary Fund, LP, and GPB Holdings II, LP, and Schroder Adveq Asia V S.C.S.

The fair value of investment in Brookfield Infrastructure Fund II-B is measured based on the type of investment/asset being valued and its characteristics. Commonly used methodologies may include, but are not limited to, comparable market transactions, performance multiples/direct capitalization, discounted cash flows, net asset valuations, or industry specific benchmarks. The General Partner may use, as required, the services of an independent valuation firm to determine the fair value of investments or engage third-party expertise to confirm the reasonableness of internally prepared valuations.

The fair value of investments in SSM Partners Growth Equity I, LP, SSM Partners Growth II, LP, and SSM Partners Growth III, LP is defined in accordance with Accounting Standards Codification (ASC) 820 (formerly FAS No. 157). It provides a consistent definition of fair value which focuses on exit price and prioritizes, within a measurement of fair value, the use of market-based inputs over entity-specific inputs.



RETIREMENT AND PENSION SYSTEM
NOTES TO THE FINANCIAL STATEMENTS
Years Ended December 31, 2019 and 2018

The fair value of investment in Glouston Capital Partners, LLC is measured based on a variety of inputs which a buyer would consider including: original transaction price, recent transactions in the same or similar instruments, completed or pending third-party transactions in the underlying investment or comparable issuers, subsequent rounds of financing, recapitalizations and other transactions across the capital structure, offerings in the equity or debt capital market, changes in financial ratios or cash flows, and illiquidity and or non-transferability.

The fair value of investment in Headlands Capital Secondary Fund, LP is measured based on the close of trading on the date as of which the value is being determined by taking the last reported sale price of such Marketable Securities on such date on the exchange where it is primarily traded. All other assets of the Partnership shall be valued at fair value by the General Partner based upon all relevant factors.

The fair value of investments in GPB Holdings II, LP is determined by the General Partner, who makes a good faith effort to value the assets at their current market value.

The fair value of investments in Schroder Adveq Asia V S. C.S. is determined, in good faith, by the General Partner in conformity with International Private Equity and Venture Capital Valuation (IPEV) guidelines. The General Partner uses the latest available audited or unaudited reports and performs additional Net Asset Value (NAV) adjustments as deemed necessary. At its sole discretion, the General Partner may elect another valuation method if another method would better characterize the value of the assets in the Partnership. A quarterly calculation is performed in conjunction with the Investment Management (IM) Department and approval by Schroder Adveq's Valuation Working Group.

The MLGW Pension Plan investments in the distressed debt limited partnerships are reported at fair value. The fair value of investments is based on information obtained from the partnerships' Quarterly Investor Shareholder Statements. The distressed debt limited partnerships are Courage Credit Opportunities Offshore Fund III, LP, GoldenTree Distressed Debt 2014 (Cayman), Medley Opportunity Fund III, LP, Courage Credit Opportunities Fund IV, L.P., and GoldenTree Distressed Fund III, LP.

The fair value of investment in Courage Credit Opportunities Offshore Fund III, LP is determined by the General Partner or such Persons designated by the General Partner, in its sole discretion, in a reasonable manner.

The fair value of investment in GoldenTree Distressed Debt 2014 (Cayman) shall be valued (i) by using securities exchange quotations/listed market prices, or (ii) by using pricing services, or (iii) by obtaining broker-dealer quotations, or (iv) at a good-faith estimate of fair value, as determined by a pricing method approved by the Pricing Committee.

The fair value of investment in Medley Opportunity Fund III, LP is measured based on the Accounting Standard Codification (ASC) Topic 820. Fair value is the price that would be received in the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.



RETIREMENT AND PENSION SYSTEM
NOTES TO THE FINANCIAL STATEMENTS
Years Ended December 31, 2019 and 2018

The fair value of investment in Courage Credit Opportunities Fund IV, LP is determined by the General Partner or a person designated (including the Investment Manager) in a reasonable manner. Valuations determined in accordance with the preceding sentence are final and binding on the Partners.

The fair value of investment in GoldenTree Distressed Debt Fund III, LP is determined by the Investment Manager in accordance with its written valuation policy and shall be binding on all of the Partners.

The MLGW Pension Plan investments in the life settlement funds are reported at fair value. The fair value of investments is based on information obtained from the partnerships' Monthly Investor Shareholder Statements. The life settlement funds are CCA Black, LP, Vida Longevity Fund, LP and CCA Longevity Fund VI, LP.

The fair value of investment in CCA Black, LP is determined on a discounted cash flow basis, incorporating current life expectancy and other key assumptions. The Partnership defines fair value as the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date.

The fair value of investment in Vida Longevity Fund, LP is measured by calculating the value for a portfolio of life settlement policies. This calculation includes: (i) analysis of the prior mortality experience of the portfolio; (ii) development of future mortality assumptions for risks included in the portfolio; (iii) projection of future maturities and premiums to determine monthly cash flows, and (iv) calculation of the present value of cash flows.

The fair value of investment in CCA Longevity Fund VI, LP is determined by an independent actuarial firm on a quarterly basis. Recent medical and life expectancy information concerning the insured (to the extent available) and current market conditions will be considered in the valuation.

The MLGW Pension Plan investment in the multi-asset fund is reported at fair value. The fair value of investments is based on information obtained from the partnerships' Monthly Investor Shareholder Statements. The multi-asset fund is Preserver, LP. The fair market value of assets in this fund is valued using one of the following: (i) the last traded price, (ii) an independent pricing service, (iii) capital balances prepared by the underlying managers and their Administrators, (iv) current market quotations, and (v) cost or market depending on the type of investment.

The MLGW Pension Plan investments in the real estate funds are reported at fair value. The fair value of investments is based on information obtained from the partnerships' Quarterly Investor Shareholder Statements. The real estate funds are Sentinel Real Estate Fund, LP, Heitman Value Partners III, LP, American Strategic Value Realty Fund, LP, U.S. Real Estate Investment Fund, LLC, TerraCap Partners IV (Institutional), LP.



RETIREMENT AND PENSION SYSTEM
NOTES TO THE FINANCIAL STATEMENTS
Years Ended December 31, 2019 and 2018

The fair value of investment in Sentinel Real Estate Fund, LP as determined by the General Partner, involves numerous estimates and subjective judgments that are subject to change. The General Partner engaged independent firms to appraise 100% percent of the real estate.

The fair value of investment in Heitman Value Partners III, LP is prepared by Asset Managers using the following: (i) the income approach to value using cash flow projections prepared by the Investor Accounting group, (ii) supporting valuation assumptions, and (iii) independent property market and capital market assessments made by the Research Group.

The fair value of investment in American Strategic Value Realty Fund, LP is based on an external valuation and appraisal process. Properties are appraised by an independent appraiser at least quarterly. Each investment in the Value Fund is marked to market quarterly and written up, written down, or held constant as appropriate reflecting the determined value of the asset.

The fair value of investment in U.S. Real Estate Investment Fund, LLC is measured based on Accounting Standard Codification (ASC) Topic 820. The real estate investments of the Fund are stated at estimated fair value and are reviewed and adjusted quarterly. In the quarters in which an investment is not independently appraised, the fair value is updated as appropriate by management for changes in prior cash flow estimates and market assumptions.

The fair value of investment in TerraCap Partners IV (Institutional), LP is determined by the General Partner who may rely on valuations submitted by a third party. For assets that are not readily marketable, the General Partner may unilaterally determine the value of the assets or hire a third party to appraise the assets. The General Partner has the authority to use other methods that are deemed to be fair and reasonable.

Short-term investments are reported at cost, which approximates fair value. All other investments are valued based on quoted market values except for certain limited partnership investments.

Collective Investment Trusts (CITs) were incorporated into the Plan in 2015 and are designed to enhance investment management by combining assets from different accounts into a single fund with a specific investment strategy. They provide for pooling of assets of employee benefits trusts, that meet all of the conditions as permitted under Revenue Rulings 81-100 and 2011-1, or subsequent guidance, and that are operated or maintained exclusively for the commingling and collective investment of funds from other trusts.

2. RETIREMENT AND PENSION SYSTEM

Plan Description

The Memphis Light, Gas and Water Division Pension Board is the administrator of a single-employer retirement system established by the Division to provide retirement benefits for its employees. Prior to



RETIREMENT AND PENSION SYSTEM
NOTES TO THE FINANCIAL STATEMENTS
Years Ended December 31, 2019 and 2018

1988, the retirement system included two contributory defined benefit plans (the “1948 Plan” and the “1978 Plan”). The 1948 Plan and the 1978 Plan were amended and superseded as of July 1, 1988. All employees who were members of the 1948 Plan and the 1978 Plan automatically became members of the amended, restated, and consolidated Memphis Light, Gas and Water Division Retirement and Pension System (the MLGW Pension Plan), a division of the City of Memphis, Tennessee. The MLGW Pension Plan was amended and restated effective January 1, 2015. Participants in the 1948 Plan (which includes those employees hired before July 1, 1978) are entitled to the greater of their retirement benefit determined under the 1948 Plan or their retirement benefit under the MLGW Pension Plan.

The MLGW Pension Plan covers permanent full-time employees and appointed commissioners who opt to participate.

Membership at December 31, 2019 and 2018 consisted of:

	2019	2018
Retired members or beneficiaries currently receiving benefits	2,680	2,677
Vested terminated members entitled to but not yet receiving benefits *	37	38
Active members	2,543	2,621
Total	5,260	5,336

* Includes participants on long-term disability

The MLGW Pension Plan provides death and disability benefits as well as retirement benefits. MLGW Pension Plan members hired prior to January 1, 2014 who attain the age of fifty-five (55) and retire on or after ten (10) years of creditable service, or attain the age of seventy (70) and retire on or after five (5) years of creditable service, or attain twenty-five (25) years of creditable service regardless of age are entitled to an annual retirement allowance. The allowance is computed by multiplying the applicable percentage for the age of retirement times the number of years of creditable service, which equals the benefit percentage times the final average compensation.

MLGW Pension Plan members hired on or after January 1, 2014 who attain the age of sixty (60) and retire on or after ten (10) years of creditable service, or attain the age of seventy (70) and retire on or after five (5) years of creditable service, or attain the age of fifty-five (55) with twenty-five (25) years of creditable service are entitled to an annual retirement allowance. The allowance is computed by multiplying the applicable percentage for the age of retirement times the number of years of creditable service, which equals the benefit percentage times the final average compensation.



RETIREMENT AND PENSION SYSTEM
NOTES TO THE FINANCIAL STATEMENTS
Years Ended December 31, 2019 and 2018

Members hired on or after January 1, 2014 can elect a single annuity or joint and survivor annuity. For members who elect the single annuity, spousal consent is required. The single annuity is automatically applied for members hired prior to January 1, 2014. If the joint and survivor annuity is elected, actuarial factors will be applied against the member's monthly retirement allowance to cover the cost of a pension paid to a qualifying surviving spouse.

Effective January 1, 2001, the following table is the applicable benefit percentage for each year of creditable service at the applicable retirement age under the MLGW Pension Plan:

Retirement Age	Benefit Percentage for Each Year of Creditable Service
59 1/2 and less	2.25%
60	2.30%
61	2.40%
62 and above	2.50%

The annual retirement allowance of a 1948 Plan or the 1978 Plan member who was a member at the time of the adoption of the MLGW Pension Plan shall not be less than the annual retirement allowance the member would have had under the 1948 Plan or the 1978 Plan in effect on June 30, 1988. A member of the 1948 Plan at the time of adoption of the MLGW Pension Plan may retire at less than age fifty-five with twenty-five or more years of creditable service with benefits computed only under the 1948 Plan. For the purpose of determining whether the benefit under the 1948 Plan or the 1978 Plan is more or less than the benefit under the MLGW Pension Plan, the benefit shall be measured by the retirement allowance for the retiring member.

Final average compensation is the member's basic earnings (which includes member contributions pursuant to Section 414(h) and Section 457 of the Internal Revenue Code (the "Code") for the three (3) consecutive years of creditable service if less than thirty (30) years, two (2) consecutive years if more than thirty (30) years and one (1) year if 35 or more years of creditable service during which the compensation was the highest) plus work out of classification pay, shift differential pay, and automobile allowance for such employees designated by Resolution of the Board of Commissioners.

The annual retirement allowance shall not exceed 85.0% of the member's final average compensation. The 2019 minimum monthly retirement benefit for all members is the greater of \$50 per year of service or \$500 per month.



RETIREMENT AND PENSION SYSTEM
NOTES TO THE FINANCIAL STATEMENTS
Years Ended December 31, 2019 and 2018

Additionally, as of July 1 of each plan year, each retired participant who (1) has attained age fifty-six (56) on such date and (2) has been terminated from the employment of the Division for at least twelve (12) months, shall be entitled to an increase in the amount of his/her monthly benefit under The MLGW Pension Plan equal to the cost of living adjustment.

A surviving spouse or a handicapped child receiving death benefits shall be entitled to a cost of living adjustment if the surviving spouse or handicapped child has attained age fifty-six (56) and the deceased participant has separated from service at least twelve (12) months prior to the beginning of the plan year.

The cost of living adjustment shall be equal to the monthly benefit payable to the participant, surviving spouse, or handicapped child under the MLGW Pension Plan multiplied by the product of the (i) percent change in the Consumer Price Index for the immediately preceding calendar year and (ii) the applicable percentage of CPI increase. The applicable percentage of CPI increase shall be determined based on the age of the participant, surviving spouse, or handicapped child as of the first day of July of the plan year.

The cost of living adjustment is made as follows:

Age	Percentage of CPI Increase
56-58	30%
59-61	60%
62 and older	75%

The cost of living adjustment for any retired participant, surviving spouse, or handicapped child in any plan year shall not exceed five percent (5%) of the retired participant's, surviving spouse's, or handicapped child's benefit under the MLGW Pension Plan for the immediately preceding plan year. Under no circumstances shall the cost of living adjustment result in a decrease in the benefit of a retired participant, surviving spouse, or handicapped child.

Contributions

Members covered under the MLGW Pension Plan are required to contribute eight percent (8.0%) of pensionable earnings each payroll period to the MLGW Pension Plan. Members with thirty-five (35) or more years of creditable service or an annual retirement allowance of 85.0% shall contribute the applicable percentage only on that portion of their compensation which is in excess of their annual compensation at the time they attained their thirty-five (35) years of creditable service or an annual retirement allowance of 85.0%. Benefit and contribution provisions may be amended only by the Pension Board, MLGW Board of Commissioners, and the Memphis City Council.



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The Actuarially Determined Contribution (ADC) for the current year was determined based on the actuarial valuation using the entry age normal cost method. The 2019 contribution represented 100% of the ADC. An explanation of the contributions can be found on the footnote of the Schedule of Division's Contributions to the Retirement and Pension System.

As of January 1, 2020, the actuarial accrued liability was \$1,571.0 million and the actuarial value of assets was \$1,490.1 million; resulting in an unfunded actuarial accrued liability of \$80.9 million which is a funded ratio of 94.9%. The covered payroll projected was \$174.3 million.

3. NET PENSION LIABILITY

The components of the net pension liability of the Pension System at December 31, 2019 were as follows:

Total pension liability	\$	1,530,874,929
Plan fiduciary net position		1,557,372,094
Net pension liability	\$	<u>(26,497,165)</u>
Plan fiduciary net position as a percentage of the total pension liability		101.73%

Actuarial Assumptions:

The total pension liability was determined by an actuarial valuation as of December 31, 2019, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	Inflation plus merit increases that vary by age and service, ranging from 0.00% to 8.50%
Investment rate of return	7.25%, including inflation, net of pension plan investment expense
Cost-of-living adjustments	0.750% for ages 56-58 1.500% for ages 59-61 1.875% for ages 62 and above, and all disabled participants

Pre-retirement mortality rates are based on the PRI-2012 Employee Mortality Table with sex-distinct rates. Healthy annuitant mortality rates are based on the PRI-2012 Healthy Annuitant Mortality Table with sex-distinct rates, plus a 20% load. Disabled annuitant mortality rates are based on the PRI-2012 Disabled Retiree Mortality Table with sex-distinct rates, plus a 20% load. Beneficiary mortality rates are based on the PRI-2012 Contingent Survivor Mortality Table with sex-distinct rates, plus a 20% load. All the aforementioned mortality tables above are projected generationally with Scale SSA-2019.



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The actuarial assumptions used in the valuation as of December 31, 2019 are based on the results of an experience study for the period January 1, 2014 to December 31, 2018.

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. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2019 are summarized in the following table*:

Asset Class	Target Allocation	Long-Term Expected Real Rate to Return ¹
Domestic Equity	39%	6.40%
International Equity	12%	7.54%
Fixed Income	29%	1.62%
Alternatives	8%	3.32%
Real Estate	10%	4.50%
Short Term Investments	2%	0.65%
Total	100%	

¹ The expected real rate of return is net of inflation.

*The information provided in this table does not reflect the Target Allocation percentages approved by the Pension Board in June 2019.

Discount Rate

The discount rate used to measure the total pension liability was 7.25%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the pension plan'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.



Sensitivity of the net pension liability to changes in the discount rate

The following presents the net pension liability, calculated using the discount rate of 7.25%, as well as what the net pension liability would be if it were calculated using a discount rate that is one percentage-point lower (6.25%) or one percentage-point higher (8.25%) than the current rate:

	<u>1% Decrease (6.25%)</u>	<u>Current Discount (7.25%)</u>	<u>1% Increase (8.25%)</u>
Net Pension Liability	\$ 140,145,846	\$ (26,497,165)	\$ (166,270,197)

4. DEPOSITS AND INVESTMENTS

Deposits

As of December 31, 2019, MLGW Pension Plan’s deposits were fully insured or collateralized in accordance with state law.

Investments

The overall investment objective is to provide for the funding needs of the MLGW Pension Plan. The Pension Board (“Investment Committee”) has formulated specific performance standards for the overall fund as well as its components. Underlying these standards is the belief that management of the fund should be directed toward achieving long-term growth of the assets by focusing on achieving an above average rate of return without the assumption of undue risk. In addition, the fund must keep pace with inflation and meet actuarial assumptions. The Investment Committee is charged with the responsibility to manage the assets of the MLGW Pension Plan.

The Investment Committee is authorized and permitted to engage the services of registered investment managers who possess the necessary specialized research facilities and skilled professionals to meet the investment objectives and guidelines of The MLGW Pension Plan. The Investment Committee requires the investment managers to adhere to the “prudent person rule” under such federal and state laws that now apply, or that may in the future apply in regard to investing of the MLGW Pension Plan’s assets. The Investment Committee is responsible for selecting investment managers and reviewing and evaluating investment results in the context of predetermined performance standards.

The Investment Committee engages with an Investment Consultant, an independent investment consulting firm. The Investment consultant is charged with keeping the Investment Committee, SVP, CFO & CAO (Secretary-Treasurer), and Manager of Treasury Management and/or their respective designees, informed of the investment results being achieved by the Fund. The consultant will also provide data pertaining to the MLGW Pension Plan’s asset allocation structure and the risk (volatility) associated with the Plan’s investment allocation.



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The Investment Committee has the responsibility of determining the asset allocation that offers the highest probability of achieving the investment goals and objectives. The target asset allocation of the MLGW Pension Plan is designed to give balance to the overall structure of the plan's investment program over a long period of time. Therefore, the Investment Committee must update and revise the asset mix as the financial needs of the MLGW Pension Plan are analyzed and reviewed, as capital markets change, and as they receive the advice and guidance of the Investment Consultant regarding both the financial needs of the Plan and the changes in the capital markets. The Investment Committee establishes the maximum exposures on some of the asset classes being employed by the Plan.

In compliance with the MLGW Retirement and Pension Fund investment policy, the MLGW Pension Plan may invest in the following major asset classes: domestic and international equities, global fixed income, special strategies, real estate, and short-term investments.

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As of December 31, 2019, the MLGW Pension Plan's investments consisted of the following:

Investment Type	Investments	Actual Exposure	Maximum Exposure	Minimum Exposure
Domestic Equity Funds:				
Common stock - domestic	\$ 321,328,015	21.77%		
Common stock index - domestic	238,564,465	16.16%		
Equity ETF - domestic	142,021,236	9.62%		
Subtotal Domestic Equity Funds:	701,913,716	47.56%	65%	20%
International Equity Funds:				
Common stock - international	48,477,728	3.28%		
Preferred stock - international	2,032,763	0.14%		
Subtotal international Equity Funds:	50,510,491	3.42%	25%	0%
Global Fixed Income Funds:				
Corporate bond - domestic	48,991,344	3.32%		
Corporate bond - international	46,898,145	3.18%		
Convertible corporate bond - international	392,625	0.03%		
Government bonds - domestic	4,212,676	0.28%		
Government bonds - international	49,020,929	3.32%		
Global bond - international	76,030,455	5.15%		
U.S. government agencies - domestic	8,600,159	0.58%		
Global government agencies	7,602,903	0.52%		
Asset backed securities-domestic	11,158,583	0.76%		
Asset backed securities-international	4,018,354	0.27%		
Mortgage backed securities	19,245,046	1.30%		
Securitized asset fund	16,723,441	1.13%		
Subtotal Global Fixed Income Funds:	292,894,660	19.84%	65%	15%
Special Strategies Funds:				
Private equity - domestic*	61,485,277	4.16%		
Private equity - international	3,028,365	0.21%		
Distressed debt - domestic	35,762,134	2.42%		
Distressed debt - international	40,504,773	2.74%		
Multi-asset - domestic	13,860,156	0.94%		
Life settlement funds - domestic	67,512,713	4.57%		
Subtotal Special Strategies Funds:	222,153,418	15.05%	25%	0%
Real Estate Funds				
Real estate	206,164,385	13.97%		
Subtotal Real Estate Funds:	206,164,385	13.97%	20%	0%
Short-Term Investments				
	2,632,518	0.18%	40%	0%
Total Investments	\$ 1,476,269,188	100.00%		

* Private equity-domestic includes a private equity firm, GPB Holdings II, LP, valued at \$20.0 million, the fair market value as of June 30, 2019. As of the date of this report, the Pension Plan has not received the fair market value statement from GPB Holdings II, LP for the year ended December 31, 2019.



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The MLGW Pension Plan's investments (including items bought, sold, as well as, held during the year) appreciated and depreciated in value, as follows during the years ended December 31:

	Net Appreciation (Depreciation) of Investments	
	2019	2018
Investments:		
Equity Funds:		
Common and preferred stock - domestic	\$ 63,861,929	\$ (34,511,814)
Common and preferred stock - international	11,624,448	(19,748,996)
Common stock index - domestic	63,470,222	(5,839,986)
Equity ETF - domestic	36,886,946	(12,993,533)
Subtotal Equity Funds:	175,843,545	(73,094,329)
Fixed Income Funds:		
Corp. Bonds; Gov't Bonds; Global Bond; Gov't Agencies; Asset backed Securities; Mortgage Backed Securities; Short-Term Investments - domestic	6,737,003	(6,690,230)
Corp. Bonds; Convertible Corp. Bond; Gov't Bonds; Global Bond; Gov't Agencies; Asset backed Securities; Mortgage Backed Securities; Short-Term Investments - international	14,834,079	(4,791,087)
Emerging market bonds ETF - domestic	-	(5,829,523)
Securitized asset fund - domestic	744,374	50,137.00
Subtotal Fixed Income Funds:	22,315,456	(17,260,703)
Special Strategies Funds:		
Private equity funds - domestic *	(4,039,320)	1,486,607
Private equity fund - international	(76,509)	(276,019)
Distressed debt funds - domestic	(6,617,578)	(1,480,790)
Distressed debt fund - international	2,169,657	5,100,871
Hedge funds - domestic	-	-
Multi-asset fund - domestic	1,272,315	67,082
Life settlement funds - domestic	3,936,141	3,536,673
Subtotal Special Strategies Funds:	(3,355,294)	8,434,424
Real Estate Funds	12,707,811	13,853,658
Total Net Appreciation (Depreciation) of Investments	\$ 207,511,518	\$ (68,066,950)

* Private equity-domestic includes GPB Holdings II, LP, which is valued at \$20.0 million, the fair market value as of June 30, 2019. For year ended December 31, 2018, the investment was valued at \$25.0 million, the initial capital contribution invested in 2017. As of the date of this report, the Pension Plan has not received the fair market value statements from GPB Holdings II, LP for the years ended December 31, 2019 and 2018.



Credit Risk

Credit risk for investments is the risk that an issuer or other counterparty to an investment will default and not meet its obligations. This risk is measured by the credit quality ratings issued by nationally recognized statistical rating organizations. Investments in obligations explicitly guaranteed by the U.S. Government are not considered to have credit risk.

The MLGW Pension Plan's investment managers are co-fiduciaries of the fund. All Investment Managers are expected to invest the assets entrusted to them according to the goals and objectives of the Fund and within the constraints placed on them by the Investment Committee. While each manager will have his/her own individual set of guidelines, there are certain responsibilities specific to all managers.

The global fixed income manager's goal is to exceed the return (net of fees) above appropriate bond indices, have a minimum quality rating of investment grade "BBB-, Baa3, etc." for all fixed income and have no holdings of any one security of more than five (5.0%) in the Investment Manager's portfolio. The average duration of the portfolio should not exceed the appropriate index by more than twenty percent (20%). No more than ten percent (10%) of an Investment Manager portfolio may be invested with a single corporate issuer.

An Investment Manager may invest no more than twenty-five percent (25%) of the portfolio in the securities of a single non-US government guaranteed agency or supranational authority. Additionally, an Investment Manager may invest no more than twenty-five percent (25%) of the portfolio in emerging markets debt securities.

Approximately 29.0% of the MLGW Pension Plan's investment portfolio is held in partnerships. Partnerships establish their own market value and set their own pricing. Partnerships include special strategies and real estate funds.

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The following tables represent the MLGW Pension Plan's investment exposure to credit risk based on Standard & Poor's and Moody's Investor Service ratings:

As of December 31, 2019 the Plan's investments were rated as follows by Standard & Poor's:

Investment Type	AAA	AA	A	BBB	BB	B	CCC	CC	D	Not Rated/ Categorized or Quality Rating not Available	US Government Guaranteed	Total
Collateralized Bonds										343,517		343,517
Commercial Mortgage-Backed				484,525						6,487,163		6,971,688
Corporate Bonds	587,871	5,563,651	19,824,138	33,318,553	9,042,761	7,110,893				20,125,564		95,573,431
Corporate Convertible Bonds										392,625		392,625
Funds - Government Agencies											76,030,455	76,030,455
Funds - Short Term Investment										68,216,148		68,216,148
Government Agencies	535,621	8,600,159		3,433,562					94,937	3,346,693	192,090	16,203,062
Government Bonds		1,999,857	7,616,150	5,893,721	7,023,609	8,506,806	363,935	2,251,408	238,625	14,707,217	2,599,209	51,200,537
Government Mortgage Backed Securities											2,582,280	2,582,280
Government Issued Commercial Mortgage-Backed											7,856,688	7,856,688
Life Settlement Funds										16,760,841		16,760,841
Index Linked Government Bonds										352,369		352,369
Municipal/Provincial Bonds				401,052			456,500			124,242		981,794
Non-Government Backed CMOs										2,150,447		2,150,447
Short Term Bills and Notes											2,402,518	2,402,518
Sukuk				698,906								698,906
Total Market Value by Rating	\$ 1,123,492	\$ 16,163,667	\$ 27,440,288	\$ 49,691,412	\$ 16,482,742	\$ 15,617,699	\$ 820,435	\$ 2,251,408	\$ 333,562	\$ 141,794,269	\$ 91,831,752	\$ 363,550,726

As of December 31, 2019 the Plan's investments were rated as follows by Moody's Investor Services:

Investment Type	Aaa	Aa	A	Baa	Ba	B	Caa	Ca	C	Not Rated/ Categorized or Quality Rating not Available	US Government Guaranteed	Total
Collateralized Bonds				343,517								343,517
Commercial Mortgage-Backed				316,057						6,655,631		6,971,688
Corporate Bonds	2,198,683	5,982,550	17,030,778	29,838,736	6,804,447	5,632,969	3,912,512			24,172,756		95,573,431
Corporate Convertible Bonds				392,625								392,625
Funds - Government Agencies											76,030,455	76,030,455
Funds - Short Term Investment	68,216,148											68,216,148
Government Agencies	9,516,277	835,305		4,886,602		192,090				772,788		16,203,062
Government Bonds	2,421,770	1,768,825	9,996,894	8,997,657	4,640,695	6,604,594	3,548,958		238,625	12,982,519		51,200,537
Government Mortgage Backed Securities											2,582,280	2,582,280
Government Issued Commercial Mortgage-Backed											7,856,688	7,856,688
Life Settlement Funds										16,760,841		16,760,841
Index Linked Government Bonds										352,369		352,369
Municipal/Provincial Bonds				525,294			456,500					981,794
Non-Government Backed CMOs										2,150,447		2,150,447
Short Term Bills and Notes											2,402,518	2,402,518
Sukuk				698,906								698,906
Total Market Value by Rating	\$ 82,352,878	\$ 8,586,680	\$ 28,001,620	\$ 51,325,470	\$ 11,445,142	\$ 12,429,653	\$ 7,917,970	\$ -	\$ 238,625	\$ 72,212,235	\$ 89,040,453	\$ 363,550,726



Custodial Credit Risk

Custodial credit risk for investments is the risk that, in the event of failure of the counterparty to a transaction, the Fund will not be able to recover the value of its investment or collateral securities that are in the possession of another party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the government, and are held by either the counterparty, or the counterparty's trust department or agent but not in the name of Fund. Investments in external investment pools and in open-end mutual funds are not exposed to custodial credit risks because their existence is not evidenced by securities that exist in physical or book entry form. To further limit Custodial Credit Risk exposure all cash and securities in physical or book entry form shall be held in safekeeping by a designated third-party custodian, its sub-custodians or depositories in the name of the designated fund. As part of its function under the Investment Policy Statement, the Investment Committee, or its designee, receives and periodically reviews lists identifying assets held in designated custodial name or depositories. As of December 31, 2019, there were no investments exposed to custodial credit risk.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss in relation to the amount of an investment in a single issuer. Governments should provide information about the concentration of risk associated with their investments by disclosing any one issuer that represents 5.0% or more of the total investments.

The MLGW Pension Plan's charter states that the Pension Board shall be able to make such investments as authorized by state law and as it deems proper. No Investment Manager should have more than 15% of the total portfolio of the Fund, excluding passively managed strategies such as index mutual funds, indexed ETFs, and other indexed commingled funds. The MLGW Pension Plan's fund will not have holdings in any one issuer of more than 5.0 to 10.0%, excluding US government and agency issues, investments in mutual funds and investments diversified to limit the exposure to any one issuer.

Of the investments subject to concentration of credit risk, there were no investments in any one issuer that represented 5.0% or more of the fund.

Interest Rate Risk

Interest rate risk is borne by changes in interest rates that unfavorably affect the fair value of an investment in debt securities. The MLGW Pension Plan's investment policy does not limit investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.



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At December 31, 2019, the MLGW Pension Plan had the following investments with effective duration:

<u>Investment Type</u>	<u>Market Value</u>	<u>Effective Duration (in years)</u>
Asset Backed Securities	\$ 14,353,456	1.4
Collateralized Bonds	343,517	0.5
Commercial Mortgage-Backed	6,971,688	5.5
Corporate Bonds	91,644,914	7.8
Corporate Convertible Bonds	392,625	7.3
Government Agencies	16,203,062	4.9
Government Bonds	51,107,962	8.0
Government Mortgage Backed Securities	2,582,280	7.0
Gov't-issued Commercial Mortgage-Backed	7,856,688	3.8
Index Linked Government Bonds	352,369	0.4
Municipal/Provincial Bonds	981,794	0.8
Non-Government Backed C.M.O.s	1,425,100	22.2
Short Term Bills and Notes	2,402,518	0.2
Sukuk	698,906	6.8
Subtotal:	<u>\$ 197,316,879</u>	
Asset Backed Securities	\$ 479,964	Unavailable
Corporate Bonds	3,928,517	Unavailable
Funds-Government Agencies	76,030,455	Unavailable
Funds- Short term Investments	68,216,148	Unavailable
Government Bonds	92,575	Unavailable
Life Settlement Fund-Corry Capital	16,760,841	Unavailable
Non-Government Backed C.M.O.s	725,347	Unavailable
Subtotal:	<u>\$ 166,233,847</u>	
Total Investments with Effective Duration	<u><u>\$ 363,550,726</u></u>	



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Foreign Currency Risk

Foreign currency risk is the risk that an investor will have to close out a position in a foreign currency at a loss due to an adverse movement in exchange rates.

The MLGW Pension Plan's exposure to foreign currency risk at December 31, 2019, is as follows:

<u>Investments</u>	<u>Currency</u>	<u>Fair Value</u>
Common stock	British pound - United Kingdom	\$ 11,959,363
Preferred stock	British pound - United Kingdom	6,594
Common stock	Canadian dollar - Canada	1,697,816
Common stock	Euro - France	3,474,654
Common stock	Euro - Germany	5,744,037
Common stock	Euro - Italy	1,583,764
Preferred stock	Euro - Germany	2,026,169
Common stock	Euro - Netherlands	1,266,942
Common stock	Euro - Spain	450,504
Common stock	Euro - United Kingdom	1,149,038
Common stock	Hong Kong dollar - China	1,786,789
Common stock	Japanese yen - Japan	5,552,045
Common stock	Korean won - Republic of Korea	2,240,351
Common stock	Swiss franc - Switzerland	6,039,081
Government Bonds	ARS Argentina	579,150
Government Bonds	Euro - Argentina	111,268
Government Bonds	Euro - Cote d'Ivoire	1,581,197
Government Bonds	Brazil	3,791,786
Government Bonds	Chile	444,647
Government Bonds	Columbia	1,744,832
Government Bonds	Indonesia	1,907,507
Government Agencies	Korea-Indonesian rupiah	364,358
Government Agencies	Multi-National Agencies Region-Indonesia (IDR)	380,497
Government Agencies	Multi-National Agencies Region-India (INR)	535,621
Government Agencies	Korea-Indian rupee	470,947
Government Agencies	South Africa	677,850
Government Bonds	Mexico	5,568,838
Government Bonds	Malaysia	2,033,039
Government Bonds	Peru	1,436,818
Government Bonds	Poland	1,229,235
Government Bonds	Russian Federation	4,042,452
Government Bonds	South Africa	857,000
Index Linked Government Bonds	Argentina	352,369
Total foreign currency exposure		\$ 73,086,558



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Securities Lending Transactions

The MLGW Pension Plan has authorized The Northern Trust Company (“Agent”) to enter into, on behalf of the plan, securities lending transactions – loans of securities to broker-dealers and other entities in exchange for collateral with a simultaneous agreement to return the collateral for the same securities in the future. MLGW authorizes the Agent to accept in exchange for borrowed securities, cash collateral having an initial market value of at least 102% of the market value of borrowed securities, or 105.0% of the market value of borrowed securities and collateral if they are denominated in different currencies. The borrower is required to deliver additional collateral when necessary so that the total collateral held by the Agent for all loans to the borrower of all participating lenders will at least equal the market value of all the borrowed securities of all participating lenders loaned to the borrower. The MLGW Pension Plan does not have the ability to pledge or sell collateral securities without a borrower default. The maturities of the investments made with cash collateral do not necessarily match the maturities of securities on loan.

The Agent may terminate a loan at any time and the borrower must deliver equivalent securities to the Agent. The Agent is required to indemnify the plan if the Agent is unable to recover borrowed securities and distributions made due to the Agent’s: 1) failure to make a reasonable determination of the borrower’s creditworthiness, 2) failure to demand adequate collateral on a timely basis or 3) failure to perform its duties in accordance with the lending agreement held with the MLGW Pension Plan.

Collateral held in trust for securities on loan included in the 2019 and 2018 statements of plan net position consisted of cash and noncash collateral. At December 31, 2019 and 2018, the MLGW Pension Plan had no credit risk exposure to borrowers because the amounts the MLGW Pension Plan owed to the borrowers exceeded the amounts the borrowers owed the MLGW Pension Plan. Investments held by broker-dealers under securities loans consist of the following:

Securities Type	As of December 31, 2019					
	Market Value of Securities on Loan			Collateral Received from Borrowers		
	Cash Collateral	Non-Cash Collateral	Total	Cash Collateral	Non-Cash Collateral ¹	Total
Global Equities	\$ 20,349	\$ -	\$ 20,349	\$ 21,854	\$ -	\$ 21,854
Global Government Fixed	585,439	-	585,439	604,225	-	604,225
U.S. Agencies	1,388,855	-	1,388,855	1,422,450	-	1,422,450
U.S. Corporate Fixed	9,222,031	5,747,625	14,969,656	9,435,544	5,869,352	15,304,896
U.S. Equities	67,225,018	55,161,910	122,386,928	68,659,819	56,326,889	124,986,708
U.S. Government Fixed	2,757,612	1,679,067	4,436,679	2,823,131	1,715,383	4,538,514
Total	\$ 81,199,304	\$ 62,588,602	\$ 143,787,906	\$ 82,967,023	\$ 63,911,624	\$ 146,878,647

Securities Type	As of December 31, 2018					
	Market Value of Securities on Loan			Collateral Received from Borrowers		
	Cash Collateral	Non-Cash Collateral	Total	Cash Collateral	Non-Cash Collateral ¹	Total
Global Equities	\$ 453,690	\$ 10,941,151	\$ 11,394,841	\$ 473,584	\$ 11,586,436	\$ 12,060,020
U.S. Agencies	134,128	134,128	268,256	136,500	140,643	277,143
U.S. Corporate Fixed	5,722,186	1,055,859	6,778,045	5,831,453	1,102,602	6,934,055
U.S. Equities	56,784,647	11,690,156	68,474,803	57,610,522	12,000,729	69,611,251
U.S. Government Fixed	-	1,488,670	1,488,670	-	1,516,788	1,516,789
Total	\$ 63,094,651	\$ 25,309,964	\$ 88,404,615	\$ 64,052,059	\$ 26,347,198	\$ 90,399,257

¹ Collateral values are estimates based on program wide collateralization levels.



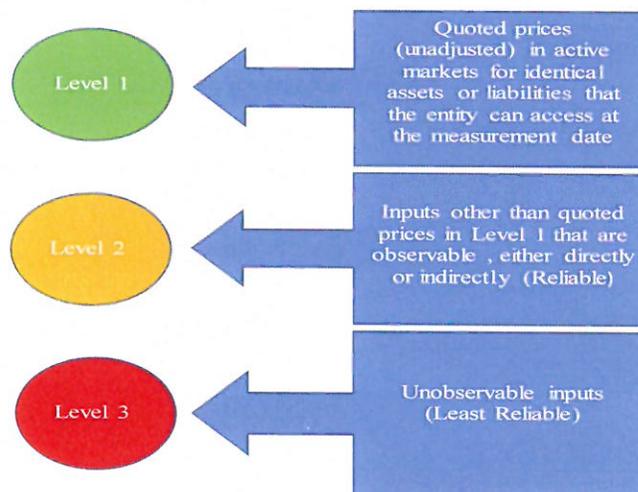
5. FAIR VALUE MEASUREMENTS

The definition of fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. GASB 72 requires a government to use valuation techniques that are appropriate under the circumstances and for which sufficient data are available to measure fair value. This Statement establishes a hierarchy that prioritizes and ranks the inputs to valuation techniques used to measure fair value based on observability. The accounting standards break down the fair value hierarchy into three levels, based on how observable the inputs are that make up the valuation. The most observable inputs are classified as Level 1, inputs other than quoted prices included within level 1 that are observable for an asset or liability, either directly or indirectly are classified as Level 2, and the unobservable inputs are classified as Level 3.

Level 1: Fair value is determined using unadjusted quoted prices for identical assets or liabilities in active markets that are accessible on the measurement date. The MLGW Pension Plan includes short-term securities, debt securities, and equity securities in this level.

Level 2: Fair value is determined using quoted market prices for similar asset or liability in active markets; quoted prices for identical or similar asset or liability in inactive market; inputs other than quoted prices that are observable for the asset or liability; market-corroborated inputs. The MLGW Pension Plan's debt and equity securities in this level are based on the matrix pricing approach with access to observable information such as trades and quotes.

Level 3: Fair value is determined using unobservable inputs for an asset or liability. As a general rule, Level 3 inputs are those that are difficult to obtain on a regular basis and require verification from an outside party to validate the valuation. The MLGW Pension Plan's debt securities in this level are based on an independent pricing evaluator that did not have direct observable information.





RETIREMENT AND PENSION SYSTEM
NOTES TO THE FINANCIAL STATEMENTS
Years Ended December 31, 2019 and 2018

The following table displays information regarding investments measured using the fair value hierarchy:

	December 31 2019	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
Short-term securities	\$ 2,632,518	\$ 2,402,518	\$ 230,000	\$ -
Debt Securities				
Asset backed securities	14,664,908	-	10,428,533	4,236,375
Corporate bonds	95,966,057	-	93,827,857	2,138,200
Debt other	76,373,972	-	76,030,455	343,517
Government bonds	5,886,293	-	5,533,924	352,369
Government mortgage-backed securities	10,438,968	-	10,438,968	-
Municipal bonds	981,794	-	981,794	-
Non U.S. government agencies	7,602,903	-	7,602,903	-
Non-government bonds	43,244,843	-	43,006,595	238,248
Non-government mortgage-backed securities	9,122,135	-	2,907,770	6,214,365
U.S. government agencies	8,768,671	-	8,768,671	-
U.S. treasury securities	2,421,770	2,421,770	-	-
Total debt securities	275,472,314	2,421,770	259,527,470	13,523,074
Equity Securities				
Communication services	16,738,420	16,738,420	-	-
Consumer discretionary	24,016,141	24,016,141	-	-
Consumer staples	10,598,677	10,598,677	-	-
Energy	26,820,350	26,820,350	-	-
Equity other	486,052,781	486,052,781	-	-
Financials	51,522,366	51,522,366	-	-
Health care	33,002,709	33,002,709	-	-
Industrials	41,359,971	41,353,377	-	6,594
Information technologies	44,259,194	44,259,194	-	-
Materials	10,240,943	10,240,943	-	-
Telecommunication services	-	-	-	-
Utilities	2,137,226	2,137,226	-	-
Real estate	5,675,428	5,675,428	-	-
Total equity securities	752,424,206	752,417,612	-	6,594
Sukuk	698,906	-	698,906	-
Total investments by fair value level	\$ 1,031,227,944	\$ 757,241,900	\$ 260,456,376	\$ 13,529,668
Investments measured at the net asset value (NAV) *				
Distressed debt funds	\$ 76,266,907			
Life settlement funds	67,512,713			
Fixed income	16,723,441			
Multi-asset fund	13,860,156			
Private equity funds **	64,513,642			
Real estate funds	206,164,385			
Total investments measured at NAV	\$ 445,041,244			
Total Investments	\$ 1,476,269,188			

* In accordance with GASB 72, certain investments that were measured at NAV per share (or its equivalent) have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the line items presented in the Statements of Fiduciary Net Position.

* * Private equity funds includes the MLGW Pension Plan's investment in GPB Holdings II, LP. It is valued at \$20.0 million, the fair market value as of June 30, 2019. As of the date of this report, the Plan has not received the fair market value statement at December 31, 2019.



RETIREMENT AND PENSION SYSTEM
NOTES TO THE FINANCIAL STATEMENTS
Years Ended December 31, 2019 and 2018

Investments in Certain Entities that Calculate Net Asset Value (NAV) Per Share

MLGW Pension Plan measures certain investments that do not have a readily determinable fair value using NAV as a practical expedient. These investments are generally structured as limited partnerships, hedge funds, private equity funds, and real estate funds. The investments measured at NAV as a practical expedient are excluded from the fair value hierarchy because the valuation is not based on actual market inputs, but rather is quantified using the fund's reported NAV.

The following table displays information regarding investments that use NAV per share (or equivalent) as their fair value measurement:

Investments Measured at the Net Asset Value (NAV)				
	Fair Value December 31, 2019	Unfunded Commitments	Redemption Notice Period	Redemption Frequency (if Currently Eligible)
Distressed debt funds ⁽¹⁾	\$ 76,266,907	\$ 71,078,244		
Life settlement funds ⁽²⁾	67,512,713	-	120 - 180 days	Quarterly
Fixed income funds ⁽³⁾	16,723,441	34,044,305		
Multi-asset fund ⁽⁴⁾	13,860,156	-		Quarterly with no gate
Private equity funds ⁽⁵⁾	64,513,642	39,402,030		
Real estate funds ⁽⁶⁾	206,164,385	2,390,209	30 - 91 days	Quarterly or 2 years
Total investments measured at NAV	\$ 445,041,244	\$ 146,914,788		

- ⁽¹⁾ This category includes five distressed debt funds that invest in senior secured debt as well as distressed and stressed assets that are restructuring or believed to be misunderstood in the marketplace. The MLGW Pension Plan investment in each fund is generally not subject to redemption and is normally returned through distributions as a result of the liquidation. It is expected that the underlying assets of the funds will be liquidated over the next 3 to 8 years.
- ⁽²⁾ This category includes three life settlement funds that invest in longevity contingent assets, including life settlements and a portfolio of individual, non-variable, life insurance policies. The MLGW Pension Plan investments in this category representing 24.8% can be redeemed quarterly with 120 days notice; 48.4% can be redeemed quarterly with 180 days notice. The remaining 26.8% is not subject to redemption and it is expected that the underlying assets of this fund will be liquidated over the next 8 years.
- ⁽³⁾ This category is composed of a fixed income fund that is managed by the securitized product specialists. The fund is an opportunistic, enhanced total return fixed income strategy that seeks to take advantage of the investment opportunity created by dislocated and mispriced assets in the residential mortgage backed sector. The MLGW Pension Plan investment in this category is generally not subject to redemption and it is expected that the underlying assets of this fund will be liquidated over the next 5 years.
- ⁽⁴⁾ This category is composed of a multi-asset fund that employs alternative strategies under a flexible investment mandate including both fund and direct investments. The MLGW Pension Plan investment in this category can be redeemed quarterly.
- ⁽⁵⁾ This category includes eight private equity funds that invest in health care and technology, utilities, transportation, and energy assets, high quality cash flowing companies and secondary investments across various sectors. 68.9% of MLGW Pension Plan investments in this category are not subject to redemption and are normally returned through distributions as a result of the liquidation. It is expected that the underlying assets of these funds will be liquidated over the next 4 to 15 years. The remaining 31.1% can be redeemed monthly on the 15th after the 3rd month.
- ⁽⁶⁾ This category includes five real estate funds that invest in office, retail, industrial, and multi-family properties. The MLGW Pension Plan investments in this category representing 17.8% can be redeemed quarterly with 30 days notice; 21% can be redeemed 2 years after notice; 36.6% can be redeemed quarterly with 91 days notice. The remaining 24.6% are not subject to redemption and it is expected that the underlying assets of these funds will be liquidated over the next 6 to 8 years.



6. INCOME TAX STATUS

The MLGW Pension Plan is qualified under Section 401(a) of the Internal Revenue Code (the “Code”); therefore, the related trust is exempt from taxation.

7. SUBSEQUENT EVENT

Subsequent to December 31, 2019, the report date of the MLGW Retirement and Pension System financial statements, the World Health Organization declared the outbreak of what is now known as the Coronavirus (COVID-19) a pandemic in March of 2020. As the world struggled to understand the nature of the disease, its impact was being felt across various sectors of the economy, resulting in significant volatility in the financial markets. The downward turn in the market towards the end of March 2020 negatively impacted the MLGW Plan investments, resulting in a 13.8% decline in the fund balance as of the end of the first quarter. Because the Plan remained fully invested, it also experienced the recovery, a preliminary gain of 6.4% that occurred in April. Much uncertainty remains concerning the long-term financial impacts of COVID-19 on the Plan.

See next page

REQUIRED SUPPLEMENTARY INFORMATION



**RETIREMENT AND PENSION SYSTEM
REQUIRED SUPPLEMENTARY INFORMATION
Years Ended December 31, 2019 and 2018**

Schedule of Changes in Retirement and Pension System's Net Pension Liability

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Total Pension Liability							
Service cost	\$ 31,635,554	\$ 31,185,071	\$ 31,977,390	\$ 32,590,805	\$ 30,139,353	\$ 31,786,185	\$ 33,122,294
Interest	110,927,046	108,431,791	103,730,509	102,247,950	99,939,763	100,436,012	98,818,230
Change in benefit terms	-	-	-	-	-	-	-
Differences between expected and actual experience	(5,039,880)	3,725,938	4,908,452	(11,297,656)	2,274,807	(16,338,083)	(14,280,030)
Changes of assumptions	(174,213)	-	-	-	-	(22,111,951)	-
Benefit payments, including refunds of employee contributions	(107,730,602)	(113,315,849)	(104,919,467)	(102,627,833)	(100,528,352)	(100,249,274)	(91,930,874)
Net change in total pension liability	<u>29,617,905</u>	<u>30,026,951</u>	<u>35,696,884</u>	<u>20,913,266</u>	<u>31,825,571</u>	<u>(6,477,111)</u>	<u>25,729,620</u>
Total pension liability - beginning	<u>1,501,257,024</u>	<u>1,471,230,073</u>	<u>1,435,533,189</u>	<u>1,414,619,923</u>	<u>1,382,794,352</u>	<u>1,389,271,463</u>	<u>1,363,541,843</u>
Total pension liability - ending (a)	<u>\$ 1,530,874,929</u>	<u>\$ 1,501,257,024</u>	<u>\$ 1,471,230,073</u>	<u>\$ 1,435,533,189</u>	<u>\$ 1,414,619,923</u>	<u>\$ 1,382,794,352</u>	<u>\$ 1,389,271,463</u>
Plan fiduciary net position							
Contributions - employer	21,813,428	22,174,419	22,389,805	21,390,060	21,390,060	26,804,170	30,706,286
Contributions - employee	13,462,380	13,216,689	12,958,804	12,513,273	12,309,664	11,729,085	12,000,254
Net investment income	237,313,578	(39,995,874)	216,498,126	108,008,264	15,231,323	98,931,237	185,706,622
Benefit payments, including refunds of employee contributions	(107,730,602)	(113,315,849)	(104,919,467)	(102,627,833)	(100,528,352)	(100,249,274)	(91,930,874)
Administrative expense	(931,403)	(871,948)	(859,736)	(729,599)	(758,946)	(714,266)	(657,209)
Other	-	-	-	-	-	-	-
Net change in plan fiduciary net position	<u>163,927,381</u>	<u>(118,792,563)</u>	<u>146,067,532</u>	<u>38,554,165</u>	<u>(52,356,251)</u>	<u>36,500,952</u>	<u>135,825,079</u>
Other adjustments	-	-	-	-	787,877 *	-	-
Plan fiduciary net position - beginning	<u>1,393,444,713</u>	<u>1,512,237,276</u>	<u>1,366,169,744</u>	<u>1,327,615,579</u>	<u>1,379,183,953</u>	<u>1,342,683,001</u>	<u>1,206,857,922</u>
Plan fiduciary net position - ending (b)	<u>\$ 1,557,372,094</u>	<u>\$ 1,393,444,713</u>	<u>\$ 1,512,237,276</u>	<u>\$ 1,366,169,744</u>	<u>\$ 1,327,615,579</u>	<u>\$ 1,379,183,953</u>	<u>\$ 1,342,683,001</u>
Net pension liability - ending (a) - (b)	<u>\$ (26,497,165)</u>	<u>\$ 107,812,311</u>	<u>\$ (41,007,203)</u>	<u>\$ 69,363,445</u>	<u>\$ 87,004,344</u>	<u>\$ 3,610,399</u>	<u>\$ 46,588,462</u>
Plan fiduciary net position as a percentage of the total pension liability	101.73%	92.82%	102.79%	95.17%	93.85%	99.74%	96.65%
Covered - employee payroll	\$ 170,945,709	\$ 169,605,389	\$ 167,220,851	\$ 161,925,757	\$ 160,640,772	\$ 152,367,924	\$ 154,759,208
Net pension liability as percentage of covered employee payroll	-15.50%	63.57%	-24.52%	42.84%	54.16%	2.37%	30.10%

Notes to Schedule:

Benefit changes : There have been no changes in benefit provisions since GASB 67 implementation.

Changes of assumptions : The assumptions were updated for the December 31, 2019 pension liability based on the five-year experience study for the period ending December 31, 2018.

* The Actuary used preliminary data on net investment income (in 2014) and administrative expense (in 2013); however, the Pension Plan's annual report reflected late-reporting received from money managers. Therefore, the ending balance as of 12/31/2014 was understated by \$787,877. "Other Adjustments" represents the correction of the beginning balance at 12/31/2015.



RETIREMENT AND PENSION SYSTEM
REQUIRED SUPPLEMENTARY INFORMATION
Years Ended December 31, 2019 and 2018

Schedule of Division's Contributions to the Retirement and Pension System
Last Ten Fiscal Years

Year Ended December 31	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered- Employee Payroll	Contributions as a Percentage of Covered Employee Payroll
2019	\$ 21,813,428	\$ 21,813,428	\$ -	\$ 170,945,709	12.76%
2018	22,174,419	22,174,419	-	169,605,389	13.07%
2017	22,389,805	22,389,805	-	167,220,851	13.39%
2016	21,390,060	21,390,060	-	161,925,757	13.21%
2015	21,390,060	21,258,344	131,716 *	160,640,772	13.32%
2014	26,812,140	26,804,170	7,970	152,367,924	17.59%
2013	30,705,469	30,706,286	(817)	154,759,208	19.84%
2012	30,067,184	30,062,947	4,237	154,346,706	19.48%
2011	26,208,301	26,212,629	(4,328)	154,036,290	17.02%
2010	27,381,023	27,384,615	(3,592)	153,509,072	17.84%

Notes to Schedule:

Valuation date: The actuarially determined contribution (ADC) is calculated using January 1 valuation date as of the beginning of the fiscal year prior to the year in which contributions are reported. Therefore, the ADC for the year ended December 31, 2019 is based on the January 1, 2018 actuarial valuation.

Actuarial methods and assumptions used to determine contribution rates for the year ended December 31, 2019:

Actuarial cost method	Entry age
Amortization method	Level percent of payroll, using 1.00% annual increases
Remaining amortization period	23 years remaining as of January 1, 2018
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five-year period, further adjusted, if necessary, to be within 30% of the market value.
Investment rate of return	7.50%, including inflation, net of pension plan investment expense
Inflation rate	2.75%
Cost-of-living adjustments	0.83% for ages 56-58 1.65% for ages 59-61 2.06% for ages 62 and older, and all disabled participants

Other information

* The MLGW Pension Plan adopted GASB Statement No. 82 in 2016. To present the comparative statements for 2016 and 2015, the Division contributions for 2015 were restated to reflect the Executive contributions as a part of Member contributions.



RETIREMENT AND PENSION SYSTEM
REQUIRED SUPPLEMENTARY INFORMATION
Years Ended December 31, 2019 and 2018

Schedule of Investment Return

Year Ended December 31	Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent
2019	\$ 107,355,676	7.56	\$ 237,313,578	17.49
2018	89,065,015	6.33	(39,995,874)	(2.72)
2017	127,928,003	9.45	216,498,126	16.27
2016	116,897,173	8.95	109,044,572	8.44
2015	112,201,227	8.89	14,970,639	1.11
2014	138,270,129	11.63	98,931,237	7.54
2013	144,028,841	13.08	185,706,622	15.71
2012	33,852,220	3.04	156,645,120	14.60
2011	14,803,483	1.29	48,903,443	4.57
2010	24,728,193	2.12	131,093,537	13.29
2009	55,475,605	4.80	144,287,472	16.31
Total	\$ 964,605,565		\$ 1,303,398,472	
	Five-year average return	8.20%		7.91%
	Ten-year average return	7.29%		9.33%

Note: Each year's yield is weighted by the average asset value in that year.

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart above shows the rate of return on an actuarial basis compared to the actual market value investment return for the last ten years, including five-year and ten-year averages.



**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**

Board of Commissioners and Management
Memphis Light, Gas and Water Division
Retirement and Pension System
Memphis, Tennessee

We have audited, 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*, issued by the Comptroller General of the United States, the financial statements of the Memphis Light, Gas and Water Division Retirement and Pension System (the "Plan"), as of and for the year ended December 31, 2019, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements, and have issued our report thereon dated June 3, 2020.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered the Plan's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we do not express an opinion on the effectiveness of the Plan'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 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 reporting that might be significant deficiencies, or material weakness. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weakness. However, material weakness may exist that have not been identified.



Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Plan's financial statements are free of 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 determination of financial statement amounts. 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 controls 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.

Memphis, Tennessee
June 3, 2020

**MEMPHIS LIGHT, GAS AND WATER DIVISION
RETIREMENT AND PENSION SYSTEM**

Schedule of Prior Year Findings and Responses
For the Year Ended December 31, 2019

There were no prior findings reported.