CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN
FINANCIAL STATEMENTS AND SUPPLEMENTARY INFORMATION
For the Years Ended June 30, 2023 and 2022

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

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INDEPENDENT AUDITOR'S REPORT

To the Board of Administration
City of Los Angeles
Water and Power Employees' Retirement Plan
Los Angeles, California

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Retirement Fund, Disability Fund, Death Benefit Fund, and Retiree Health Benefits Fund (individually referred to as the Funds), administered by the City of Los Angeles Water and Power Employees' Retirement Plan (WPERP), which comprise the statements of fiduciary net position as of June 30, 2023 and 2022, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the basic financial statements for each fund as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the Funds, as of June 30, 2023 and 2022, and the respective changes in financial position for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Funds and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

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

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

Auditors' Responsibilities for the Audit of the Financial Statements

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

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the WPERP's internal control. Accordingly, no such opinion is expressed.

- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the WPERP's ability to continue as a going concern for a reasonable period of time.

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

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 4 through 17; the Schedule of Changes in Net Pension Liabilityand Related Ratios on pages 56 and 57; the Schedule of Changes in Net Other Postemployment Benefit Liability and Related Ratios on pages 61, 62, and 66; the Schedule of Employer Contributions and related notes on pages 58, 59, 63, 64, 67, and 68; and the Schedule of Investment Returns on pages 60, 65, and 69 be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Funds' basic financial statements. The supplementary information identified in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of thebasic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Simpson & Simpson

Los Angeles, California
November 16, 2023

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN
MANAGEMENT'S DISCUSSION AND ANALYSIS
(Unaudited)

We are pleased to provide this overview and analysis of the financial activities of the City of Los Angeles Department of Water and Power (Department) Employees' Retirement Plan (WPERP) for the years ended June 30, 2023 and 2022.

FINANCIAL HIGHLIGHTS

- At June 30, 2023, the fiduciary net position was $16.4 billion, $41.3 million, $46.5 million, and $3.0 billion for the Retirement, Disability, Death Benefit, and Retiree Health Benefits Funds, respectively. All of the fiduciary net positions were available to meet the obligations to participants and their beneficiaries.

- Total fiduciary net position increased by $910.9 million or 5.87% for the Retirement Fund, decreased by $3.6 million or 8.01% for the Disability Fund, increased by $6.0 million or 14.83% for the Death Benefit Fund, and inceased by $210.0 million or 7.61% for the Retiree Health Benefits Fund.

- Additions to the Retirement Fund's fiduciary net position increased by $2.1 billion in the current year, while additions to the Retiree Health Benefits Fund's fiduciary net position increased by $368.6 million. The increases were due mainly to the rebound of higher investment returns.

- Deductions from the Retirement Fund's fiduciary net position increased $33.8 million from $721.6 million to $755.5 million over the prior year, or approximately 4.69%, due primarily to the cost of living adjustment granted.

- At June 30, 2023, the fiduciary net position as a percentage of total pension liability of the Retirement Fund was 96.58%.

- At June 30, 2023, the Department's net pension liability under the Retirement Fund was $582.1 million.

- At June 30, 2023, the fiduciary net position as a percentage of total other postemployment benefits liability of the Retiree Health Benefits Fund and Death Benefit Fund was 113.17% and 29.98%, respectively.

- At June 30, 2023, the Department's net other postemployment benefits surplus under the Retiree Health Benefits Fund was $345.8 million. The Department's net other postemployment benefits liability under the Death Benefit Fund was $108.7 million.

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN
MANAGEMENT'S DISCUSSION AND ANALYSIS
(Unaudited)

OVERVIEW OF THE FINANCIAL STATEMENTS

The following discussion and analysis is intended to serve as an introduction to the financial statements of the WPERP, which are:

1. Statements of Fiduciary Net Position
2. Statements of Changes in Fiduciary Net Position
3. Notes to the Financial Statements

The Statements of Fiduciary Net Position is a snapshot of account balances at year end. It indicates the amount of assets available for payment to retirees, beneficiaries, and any current liabilities owed at this time.

The Statements of Changes in Fiduciary Net Position reports additions to and deductions from the fiduciary net position during the year.

The above statements are on a full accrual basis of accounting. Investment gains and losses are shown at trade date, and account balances are based on market values recognizing both realized and unrealized gains and losses on investments.

Notes to the Financial Statements provide additional information essential to a full understanding of the data provided in the financial statements. These notes are presented in pages 21 to 55 of this report.

Required Supplementary Information: This report presents certain required supplementary information concerning the Retirement Fund, the Retiree Health Benefits Fund, and the Death Benefit Fund's progress in funding to provide pension, health benefits, and insured life benefits to members. The report also provides summary information on employer contributions. The required supplementary information is on pages 56 to 69 of this report.

Supplementary Information: The supplementary information is also available in this report for a better understanding of the WPERP's financial activities. The supplementary information is on pages 70 to 72 of this report.

FINANCIAL ANALYSIS

Retirement Fund

Fiduciary Net Position

A summary of the Retirement Fund's fiduciary net position is presented below**:**

Condensed Statements of Fiduciary Net Position
(In Thousands)

	2023	2022	2021	2022-23 % Change	2021-22 % Change
Cash	$ 69,916	$ 77,212	$ 77,081	-9.45%	0.17%
Prepaid expense	53	21	27	152.38%	-22.22%
Receivables	381,672	266,371	276,728	43.29%	-3.74%
Investments	17,000,694	16,281,581	17,410,499	4.42%	-6.48%
Total assets	17,452,335	16,625,185	17,764,335	4.98%	-6.41%
Liabilities	1,027,534	1,111,261	1,096,871	-7.53%	1.31%
Fiduciary net position	$ 16,424,801	$ 15,513,924	$ 16,667,464	5.87%	-6.92%

Fiscal year ended June 30, 2023

Fiduciary net position increased by $910.9 million or 5.87% to $16.4 billion from the prior fiscal year. Investments accounted for almost all of the increase, rising $719.1 million or 4.42%, due to the recovery of the capital market. Total receivables increased by $115.3 million or 43.29% due mainly to higher pending investment sales.

Fiscal year ended June 30, 2022

Fiduciary net position decreased by $1.2 billion or 6.92% to $15.5 billion from the prior fiscal year. Investments accounted for almost all of the decrease; investments were down $1.1 billion or 6.48% due to the challenging capital market environment.

Retirement Fund (Continued)

Changes in Fiduciary Net Position

Condensed Statements of Changes in Fiduciary Net Position
(In Thousands)

	2023	2022	2021	2022-23 % Change	2021-22 % Change
Additions					
Members' contributions	$ 144,715	$ 131,105	$ 122,316	10.38%	7.19%
Employer contributions	368,479	325,326	385,072	13.26%	-15.52%
Net investment income (loss)	1,153,143	(888,349)	3,489,200	229.81%	-125.46%
Total additions	1,666,337	(431,918)	3,996,588	485.80%	-110.81%
Deductions					
Benefit payments	740,641	706,885	671,278	4.78%	5.30%
Refund	8,819	9,123	6,439	-3.33%	41.68%
Administrative expenses	6,000	5,614	5,115	6.88%	9.76%
Total deductions	755,460	721,622	682,832	4.69%	5.68%
Net increase (decrease) in fiduciary net position	910,877	(1,153,540)	3,313,756	178.96%	-134.81%
Fiduciary net position beginning	15,513,924	16,667,464	13,353,708	-6.92%	24.82%
Fiduciary net position ending	$ 16,424,801	$ 15,513,924	$ 16,667,464	5.87%	-6.92%

Additions to Fiduciary Net Position

Additions needed to fund benefit payments are accumulated through contributions from the employees and the employer, and from income generated from the Retirement Fund's investing activities.

Fiscal year ended June 30, 2023

Employer contributions increased by 13.26% over the prior fiscal year due to the higher required contribution rate versus the previous year. Net investment income totaled $1.2 billion, an increase of 229.81%. The growth was attributed to the rebound of the fair value of investments relative to the prior year.

Retirement Fund (Continued)

Fiscal year ended June 30, 2022

Employer contributions decreased by 15.52% over the prior fiscal year, due to the lower required contribution rate versus the prior year. Net investment loss totaled $888.3 million in fiscal year 2022, a decrease of 125.46%. The decrease was attributed to steep decline in the fair value of investments relative to prior year.

Deductions from Fiduciary Net Position

Costs associated with the Retirement Fund include benefit payments as designated by the Plan document, refund of contributions due to terminations and member deaths, and administrative expenses.

Fiscal year ended June 30, 2023

Deductions for the fiscal year ended June 30, 2023, totaled $755.5 million, up $33.8 million or 4.69% over the prior fiscal year. Benefit payments increased by 4.78% over the previous fiscal year. The increase was due largely to the cost of living adjustment granted.

Fiscal year ended June 30, 2022

Deductions for the fiscal year ended June 30, 2022 totaled $721.6 million, up $38.8 million or 5.68% over the prior fiscal year. Benefit payments increased by 5.30% over the prior fiscal year. The increase was due to the rise in the total number of retirees and the cost of living adjustment granted.

Disability Fund

Fiduciary Net Position

The Disability Fund's fiduciary net position is summarized below:

Condensed Statements of Fiduciary Net Position
(In Thousands)

	2023	2022	2021	2022-23 % Change	2021-22 % Change
Cash	$ 1,671	$ 519	$ 2,363	221.97%	-78.04%
Receivables	8,552	8,629	8,839	-0.89%	-2.38%
Investments	31,807	36,412	40,546	-12.65%	-10.20%
Total assets	42,030	45,560	51,748	-7.75%	-11.96%
Liabilities	774	710	534	9.01%	32.96%
Fiduciary net position	$ 41,256	$ 44,850	$ 51,214	-8.01%	-12.43%

Fiscal year ended June 30, 2023

The Disability Fund's fiduciary net position decreased by $3.6 million, or 8.01%, in fiscal year 2023. Cash increased by $1.2 million or 221.97% due to the pending cash transfer at last fiscal year end. Investments decreased by $4.6 million or 12.65% due to drawdown of investments for benefit payments.

Fiscal year ended June 30, 2022

The Disability Fund's fiduciary net position decreased by $6.4 million, or 12.43% in fiscal year 2022. Cash declined by $1.8 million or 78.04% due to pending cash transfer at fiscal year end. Investments decreased by $4.1 million or 10.20% due to significant decline in fair value.

Disability Fund (Continued)

Changes in Fiduciary Net Position

	Condensed Statements of Changes in Fiduciary Net Position (In Thousands)				
	2023	2022	2021	2022-23 % Change	2021-22 % Change
Additions					
Members' contributions	$ 539	$ 529	$ 529	1.89%	0.00%
Employer contributions	15,629	16,358	16,794	-4.46%	-2.60%
Net investment income (loss)	(141)	(4,179)	349	96.63%	-1297.42%
Total additions	16,027	12,708	17,672	26.12%	-28.09%
Deductions					
Benefit payments	18,342	17,847	15,167	2.77%	17.67%
Administrative expenses	1,279	1,225	1,219	4.41%	0.49%
Total deductions	19,621	19,072	16,386	2.88%	16.39%
Net increase (decrease) in fiduciary net position	(3,594)	(6,364)	1,286	43.53%	-594.87%
Fiduciary net position beginning	44,850	51,214	49,928	-12.43%	2.58%
Fiduciary net position ending	$ 41,256	$ 44,850	$ 51,214	-8.01%	-12.43%

Additions to Fiduciary Net Position

Additions needed to fund benefits are accumulated through employer and employee contributions and investment income generated from the Fund's investing activities.

Fiscal year ended June 30, 2023

Net investment loss totaled $0.1 million compared to last fiscal year loss of $4.2 million. The lower decline was attributed to the relatively improved performance of fixed income investments during fiscal year 2023.

Fiscal year ended June 30, 2022

Net investment loss totaled $4.2 million compared to last fiscal year income of $0.3 million. The decrease is attributed to the decline in fair value of fixed income investments during fiscal year 2022.

Deductions from Fiduciary Net Position

The costs associated with the Disability Fund include disability benefit payments and administrative expenses.

Fiscal year ended June 30, 2023

Fiscal year 2023 benefit payments were consistent with the prior year's, with a slight increase of $0.5 million.

Fiscal year ended June 30, 2022

Fiscal year 2022 benefit payments increased by $2.7 million or 17.67% from a year ago. The increase was primarily due to increases in the temporary disability benefits paid.

Death Benefit Fund

The Death Benefit Fund's fiduciary net position is summarized below:

	Condensed Statements of Fiduciary Net Position (In Thousands)				
	2023	2022	2021	2022-23 % Change	2021-22 % Change
Cash	$ 4,048	$ 6,258	$ 1,839	-35.31%	240.29%
Receivables	3,076	2,674	3,273	15.03%	-18.30%
Investments	46,607	37,838	42,172	23.18%	-10.28%
Total assets	53,731	46,770	47,284	14.88%	-1.09%
Liabilities	7,197	6,245	6,546	15.24%	-4.60%
Fiduciary net position	$ 46,534	$ 40,525	$ 40,738	14.83%	-0.52%

Fiscal year ended June 30, 2023

The Fund's fiduciary net position increased by $6.0 million, or 14.83%, compared to the previous year. Cash decreased by $2.2 million or 35.31% due to funds directed toward investments. Investments were up $8.8 million, or 23.18%, as a result of sustained increase in employer contributions.

Fiscal year ended June 30, 2022

The Fund's fiduciary net position decreased by $0.2 million, or 0.52%, when compared to prior year's fiduciary net position. Cash increased to $6.3 million or 240.29% due to pending cash transfer at fiscal year end. Investments were down $4.3 million, or 10.28%, due to significant decline in fair value.

Death Benefit Fund (Continued)

Changes in Fiduciary Net Position

	Condensed Statements of Changes in Fiduciary Net Position (In Thousands)				
	2023	2022	2021	2022-23 % Change	2021-22 % Change
Additions					
Members' contributions	$ 378	$ 372	$ 374	1.61%	-0.53%
Employer contributions	16,497	14,992	14,523	10.04%	3.23%
Net investment income (loss)	(279)	(4,381)	343	93.63%	-1377.26%
Total additions	16,596	10,983	15,240	51.11%	-27.93%
Deductions					
Benefit payments	8,724	9,340	10,245	-6.60%	-8.83%
Administrative expenses	1,863	1,856	1,622	0.38%	14.43%
Total deductions	10,587	11,196	11,867	-5.44%	-5.65%
Net increase (decrease) in fiduciary net position	6,009	(213)	3,373	2921.13%	-106.31%
Fiduciary net position beginning	40,525	40,738	37,365	-0.52%	9.03%
Fiduciary net position ending	$ 46,534	$ 40,525	$ 40,738	14.83%	-0.52%

Additions to Fiduciary Net Position

Additions to fund the benefits are accumulated through contributions and investment income from invested funds.

Fiscal year ended June 30, 2023

Net investment loss totaled $0.3 million compared to last fiscal year's loss of $4.4 million. The lower decline was due to the relatively improved performance of fixed income investments during fiscal year 2023.

Fiscal year ended June 30, 2022

Net investment loss totaled $4.4 million compared to last fiscal year income of $0.3 million. The decrease is attributed to the decline in fair value of fixed income investments during fiscal year 2022.

Deductions from Fiduciary Net Position

The costs associated with the Death Benefit Fund include the benefits payments and administrative expenses.

Fiscal year ended June 30, 2023

Fiscal year 2023 benefit payments decreased by $0.6 million, down 6.6% from last year. The decrease was due to the decline in insured lives death benefit claims for active members.

Fiscal year ended June 30, 2022

Fiscal year 2022 benefit payments decreased by $0.9 million, down 8.83% from prior year. The decrease was due to the decline in the number of death benefits claimed.

Retiree Health Benefits Fund

The DWP Board of Water and Power commissioners (DWP Board) approved the creation of the Retiree Health Benefits Fund in September 2006 to defray current and future retiree health benefit liabilities and related costs. The Retirement Board has the fiduciary responsibility for investing the assets of the RHBF and administering payments from it, while the DWP Board continues to have the responsibility to set the funding policy and the funding levels of the RHBF. The RHBF assets amounting to $642.0 million were transferred to the WPERP to establish the fund during fiscal year 2007.

As of June 30, 2023 the fiduciary net position of the fund totaled approximately $3.0 billion. A condensed statements of the fund's fiduciary net position and a condensed statements of changes in fiduciary net position are as follow:

Fiduciary Net Position

	Condensed Statements of Fiduciary Net Position (In Thousands)				
	2023	2022	2021	2022-23 % Change	2021-22 % Change
Cash	$ 578	$ 1,507	$ 697	-61.65%	116.21%
Receivables	48,716	35,965	35,745	35.45%	0.62%
Investments	3,145,553	2,972,440	3,079,112	5.82%	-3.46%
Total assets	3,194,847	3,009,912	3,115,554	6.14%	-3.39%
Liabilities	223,792	248,871	197,433	-10.08%	26.05%
Fiduciary net position	$ 2,971,055	$ 2,761,041	$ 2,918,121	7.61%	-5.38%

Fiscal year ended June 30, 2023

Fiduciary net position increased $210.0 million or 7.61% during the fiscal year. Investments increased by $173.1 million or 5.82% due to the rebound in capital market. Cash decreased by $0.9 million or 61.65% based on projected liquidity needs. Total receivables increased by $12.8 million or 35.45% due to pending investment sales.

Retiree Health Benefits Fund (continued)

Fiscal year ended June 30, 2022

Fiduciary net position decreased $157.1 million or 5.38% in the current fiscal year. Investments decreased by $106.7 million or 3.46% due to the challenging capital market environment. Cash increased by $0.8 million or 116.21% based on projected liquidity needs. Total liabilities increased by $51.4 million or 26.05% due mainly to higher securities lending collateral held at fiscal year end.

Changes in Fiduciary Net Position

	Condensed Statements of Changes in Fiduciary Net Position (In Thousands)				
	2023	2022	2021	2022-23 % Change	2021-22 % Change
Additions					
Employer contributions	$ 114,618	$ 113,094	$ 110,261	1.35%	2.57%
Net investment income (loss)	209,846	(157,243)	614,234	233.45%	-125.60%
Total additions	324,464	(44,149)	724,495	834.93%	-106.09%
Deductions					
Benefit payments	113,571	112,081	109,282	1.33%	2.56%
Administrative expenses	879	850	821	3.41%	3.53%
Total deductions	114,450	112,931	110,103	1.35%	2.57%
Net increase (decrease) in fiduciary net position	210,014	(157,080)	614,392	233.70%	-125.57%
Fiduciary net position beginning	2,761,041	2,918,121	2,303,729	-5.38%	26.67%
Fiduciary net position ending	$ 2,971,055	$ 2,761,041	$ 2,918,121	7.61%	-5.38%

Additions to Fiduciary Net Position

Additions to fund the benefits are accumulated through contributions from the Department and investment income derived from invested funds.

Fiscal year ended June 30, 2023

Net investment income totaled $209.8 million compared to last fiscal year loss of $157.2 million. The increase of 233.45% was mainly due to the appreciation in the fair value of investments.

Fiscal year ended June 30, 2022

Net investment loss totaled $157.2 million compared to last fiscal year income of $614.2 million. The decrease of 125.60% was due to sizable depreciation in the fair value of investments.

Deductions from Fiduciary Net Position

Deductions represent medical and dental insurance premiums paid for the benefit of retirees and operating costs.

Fiscal year ended June 30, 2023

Insurance premium payments in fiscal year 2023 were consistent to the prior fiscal year with a net increase of 1.33%.

Fiscal year ended June 30, 2022

Insurance premium payments in fiscal year 2022 were consistent to the prior fiscal year with a net increase of 2.56%.

Request for Information

This financial report is designed to provide the Retirement Board, members, investment managers and creditors with a general overview of the WPERP's finances. Questions concerning any of the information provided in this report or requests for additional information should be addressed to:

Linda P. Le, Retirement Plan Manager
Water and Power Employees' Retirement Plan
111 N. Hope Street, Room 357
Los Angeles, CA 90012

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN
STATEMENTS OF FIDUCIARY NET POSITION
AS OF JUNE 30, 2023 AND 2022

	Pension Plan		Other Benefits Plan		Other Postemployment Benefits Plans			
	Retirement Fund		Disability Fund		Death Benefit Fund		Retiree Health Benefits Fund	
	2023	2022	2023	2022	2023	2022	2023	2022
ASSETS								
Cash (Notes 2 and 3)	$ 69,915,745	$ 77,212,166	$ 1,670,624	$ 519,064	$ 4,047,757	$ 6,258,013	$ 578,448	$ 1,507,202
Prepaid expense	53,102	21,203	-	-	-	-	-	-
Receivables								
Accrued investment income	47,576,533	41,478,588	110,302	81,663	161,133	85,281	8,246,805	7,012,158
Department of Water and Power	68,082,589	52,090,229	3,208,392	3,192,821	2,894,539	2,568,781	-	-
Pending investment sales	257,224,987	168,224,587	-	-	-	-	40,468,581	28,952,963
Other	8,788,403	4,577,103	1,923,517	2,044,669	20,044	20,044	-	-
Contingent disability benefit advance	-	-	3,310,339	3,310,339	-	-	-	-
Total receivables	381,672,512	266,370,507	8,552,550	8,629,492	3,075,716	2,674,106	48,715,386	35,965,121
Investments, at fair value (Notes 2, 3, and 4)								
Fixed income	3,885,575,620	3,855,448,612	31,225,723	35,851,241	46,336,527	37,578,020	700,124,011	691,635,812
Equity	6,684,302,538	6,153,372,081	-	-	-	-	1,221,805,904	1,084,839,020
Short-term investments	414,183,546	503,199,371	580,841	560,308	270,352	260,093	88,959,954	102,216,846
Alternative investments	3,841,183,349	3,678,522,223	-	-	-	-	692,009,638	659,761,635
Real estate	1,464,570,607	1,373,139,071	-	-	-	-	272,067,453	243,976,184
Securities lending - short-term collateral investment pool	710,878,396	717,899,733	-	-	-	-	170,586,471	190,010,379
Total investments	17,000,694,056	16,281,581,091	31,806,564	36,411,549	46,606,879	37,838,113	3,145,553,431	2,972,439,876
Total assets	17,452,335,415	16,625,184,967	42,029,738	45,560,105	53,730,352	46,770,232	3,194,847,265	3,009,912,199
LIABILITIES								
Payables								
Pending investment purchases	236,940,963	310,460,472	107,802	81,124	159,970	85,031	43,105,897	52,700,880
Department of Water and Power	-	-	-	-	-	-	135,523	115,645
Other	15,165,924	20,949,094	325,750	271,888	775,390	677,703	9,591,523	5,715,496
Outstanding Checks	64,549,021	61,951,274	340,047	356,868	447,229	460,059	372,763	328,883
Securities lending - collateral payable (Note 4)	710,878,396	717,899,733	-	-	-	-	170,586,471	190,010,379
Death claims in process - insured lives	-	-	-	-	5,814,125	5,022,300	-	-
Total liabilities	1,027,534,304	1,111,260,573	773,599	709,880	7,196,714	6,245,093	223,792,177	248,871,283
Fiduciary net position restricted for pension, other postemployment, and disability benefits	$ 16,424,801,111	$ 15,513,924,394	$ 41,256,139	$ 44,850,225	$ 46,533,638	$ 40,525,139	$ 2,971,055,088	$ 2,761,040,916

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

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEARS ENDED JUNE 30, 2023 AND 2022

	Pension Plan		Other Benefits Plan		Other Postemployment Benefits Plans			
	Retirement Fund		Disability Fund		Death Benefit Fund		Retiree Health Benefits Fund	
	2023	2022	2023	2022	2023	2022	2023	2022
ADDITIONS								
Members' contributions								
Retirement benefit	$ 144,715,315	$ 131,105,102	$ -	$ -	$ -	$ -	$ -	$ -
Temporary disability benefit	-	-	269,474	264,261	-	-	-	-
Permanent total disability	-	-	269,475	264,261	-	-	-	-
Insured lives death benefit	-	-	-	-	269,483	264,261	-	-
Supplemental family death benefit	-	-	-	-	108,539	107,997	-	-
Total members' contributions	144,715,315	131,105,102	538,949	528,522	378,022	372,258	-	-
Department of Water and Power contributions towards:								
Retirement benefit (net of reversions)	361,585,859	318,873,759	-	-	-	-	-	-
Insurance premiums	-	-	-	-	-	-	113,571,109	112,081,130
Temporary disability benefits	-	-	13,343,147	13,644,286	-	-	-	-
Supplemental disability benefits	-	-	1,005,096	1,486,607	-	-	-	-
Death Benefits	-	-	-	-	14,631,549	13,133,730	-	-
Administrative expenses	6,893,095	6,451,962	1,280,345	1,226,855	1,865,675	1,858,203	1,047,017	1,012,947
Total Department of Water and Power contributions	368,478,954	325,325,721	15,628,588	16,357,748	16,497,224	14,991,933	114,618,126	113,094,077
Total contributions	513,194,269	456,430,823	16,167,537	16,886,270	16,875,246	15,364,191	114,618,126	113,094,077
Investment income								
Net appreciation (depreciation) in fair value of investments	872,376,208	(1,103,563,240)	(1,262,956)	(4,902,210)	(1,746,806)	(5,138,325)	160,321,413	(194,009,355)
Interest	171,735,786	109,644,112	1,159,933	768,076	1,516,486	804,118	30,433,102	17,920,162
Dividends	111,832,976	107,086,576	-	-	-	-	21,562,948	19,208,884
Income from real estate investments	42,254,591	47,293,021	-	-	-	-	7,373,393	7,966,942
Income from alternative investments	22,085,056	16,567,985	-	-	-	-	2,480,613	3,276,909
Securities lending (Note 4)	31,622,277	4,489,471	-	-	-	-	7,600,511	1,054,755
Total investment income	1,251,906,894	(818,482,075)	(103,023)	(4,134,134)	(230,320)	(4,334,207)	229,771,980	(144,581,703)
Less: Securities lending expenses (Note 4)	(28,603,412)	(1,900,005)	-	-	-	-	(6,957,424)	(478,657)
Less: Investment expenses	(70,402,377)	(68,076,515)	(37,687)	(44,775)	(49,541)	(46,914)	(12,994,051)	(12,215,748)
Net investment income	1,152,901,105	(888,458,595)	(140,710)	(4,178,909)	(279,861)	(4,381,121)	209,820,505	(157,276,108)
Other income	241,691	109,867	-	-	-	-	25,539	32,968
Total additions	1,666,337,065	(431,917,905)	16,026,827	12,707,361	16,595,385	10,983,070	324,464,170	(44,149,063)

(Continued)

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

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEARS ENDED JUNE 30, 2023 AND 2022

	Pension Plan		Other Benefits Plan		Other Postemployment Benefits Plan			
	Retirement Fund		Disability Fund		Death Benefit Fund		Retiree Health Benefits Fund	
	2023	2022	2023	2022	2023	2022	2023	2022
DEDUCTIONS								
Benefits paid								
Retirement	740,641,591	706,884,767	-	-	-	-	-	-
Temporary disability	-	-	14,896,259	13,839,136	-	-	-	-
Extended temporary disability	-	-	511,407	454,775	-	-	-	-
Permanent total disability	-	-	1,929,599	2,066,050	-	-	-	-
Supplemental	-	-	1,005,096	1,486,607	-	-	-	-
Death benefits (active/retired members)	-	-	-	-	8,142,167	8,704,737	-	-
Family allowances	-	-	-	-	581,671	635,479	-	-
Retiree health benefits paid (insurance premiums)	-	-	-	-	-	-	113,571,109	112,081,130
Total benefits paid	740,641,591	706,884,767	18,342,361	17,846,568	8,723,838	9,340,216	113,571,109	112,081,130
Refund of members' contributions	8,819,054	9,123,134	-	-	-	-	-	-
Administrative expenses	5,999,703	5,613,756	1,278,552	1,224,994	1,863,048	1,855,962	878,889	850,111
Total deductions	755,460,348	721,621,657	19,620,913	19,071,562	10,586,886	11,196,178	114,449,998	112,931,241
Net increase (decrease) in fiduciary net position	910,876,717	(1,153,539,562)	(3,594,086)	(6,364,201)	6,008,499	(213,108)	210,014,172	(157,080,304)
Fiduciary net position restricted for pension, other postemployment, and disability benefits								
Beginning of year	15,513,924,394	16,667,463,956	44,850,225	51,214,426	40,525,139	40,738,247	2,761,040,916	2,918,121,220
End of year	$ 16,424,801,111	$ 15,513,924,394	$ 41,256,139	$ 44,850,225	$ 46,533,638	$ 40,525,139	$ 2,971,055,088	$ 2,761,040,916

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

NOTE 1 – PLAN DESCRIPTIONS

The Water and Power Employees' Retirement Plan of the City of Los Angeles (WPERP) was established by the Los Angeles Department of Water and Power (Department) in 1938. The WPERP is a single employer public employee retirement system whose primary function is to provide pension, death, and disability benefits to eligible employees of the Department.

Under the provisions of the Charter of the City of Los Angeles (City Charter), the Retirement Board of Administration (Retirement Board) has the responsibility and authority to administer the WPERP and invest its assets. The Retirement Board members serve as trustees and must act in the exclusive interest of the WPERP's members and beneficiaries. The Retirement Board has seven members: a member of the Board of Water and Power Commissioners (DWP Board), the Department's General Manager, the Department's Chief Accounting Employee, three employee members who are elected for a three-year term by active members of the WPERP, and a retiree who DWP Board appoints for a three-year term.

In 1986, the DWP Board adopted the Department Health Plans Board Resolution. This resolution established provisions for the health, dental and other medical plans of the Department and its subsidies. This resolution and subsequent amendments have created the Department's Postretirement Health Care Benefit Plan (Retiree Health Benefits Plan), a single-employer postemployment healthcare benefit plan. The DWP Board establishes the benefit terms and funding policy of the Retiree Health Benefits Plan. The DWP Board has five members. The members are appointed by the Mayor of the City of Los Angeles, subject to the approval of the City Council. On September 6, 2006, the Retirement Board approved the creation and establishment of the Retiree Health Benefits Fund (RHBF) as an independent trust fund to discharge the benefits provided under the Retiree Health Benefits Plan. The Retirement Board has investment oversight of the RHBF.

The WPERP has four separate funds – Retirement Fund, Disability Fund, Death Benefit Fund, and RHBF. Each fund is considered a separate plan and an independent trust fund of the Department. The Retirement Fund is a single employer defined benefit pension plan. The Death Benefit Fund and Retiree Health Benefit Fund are single employer defined benefit other postemployment benefits (OPEB) plans. The Disability Fund is for the payment of temporary disability and permanent total disability of the Department's employees and is considered neither a pension plan nor an OPEB plan.

NOTE 1 – PLAN DESCRIPTIONS (Continued)

Retirement Fund, Disability Fund, and Death Benefit Fund

Membership

The Retirement Fund's and Death Benefit Fund's membership consisted of the following at June 30, 2023 and 2022:

	2023		2022	
	Retirement	Death Benefit	Retirement	Death Benefit
Retirees, beneficiaries	9,756	7,904	9,716	7,853
Terminated vested	1,765	575	1,735	595
Active	11,039	11,039	10,799	10,799
Total	22,560	19,518	22,250	19,247

Benefit Provisions

Retirement Fund

The Retirement Fund consists of both defined contribution and defined benefit elements. Under Tier 1, members vest in the defined contribution element (annuity) after one year of service. Members vest in the defined benefit element (pension) only after qualifying for retirement and meeting the criteria for the formula pension. Generally, new and returning employees of the Department become eligible for Plan membership on the first day of the payroll period following entry into Department service. New eligible employees must complete 26 weeks of continuous service before becoming entitled to disability and/or death benefits. During the fiscal year 2014, the City of Los Angeles (City) and the Department agreed to a new tier of retirement benefits for new hires to the Department. On December 11, 2013, the Retirement Board adopted a Plan amendment to create a new tier, Tier 2, for the Department's new hires on or after January 1, 2014. Major benefit provisions for each tier are described below.

Tier 1 members are eligible for normal retirement at age 60. Early retirement at age 55 is generally available if the member has at least 10 years of qualifying service out of the last 12 years before retirement. Members with 30 or more years of qualifying service also may retire at any age and receive a reduced benefit. The early retirement benefit reduction is not applicable if the member is between the ages of 55 and 60 and has at least 30 years of service credits. Upon qualifying for retirement, Tier 1 members will also qualify for a formula pension if they have been employed by the Department or City for at least five years before retirement and have been a contributing member of the Plan for at least four of five years immediately preceding retirement or while eligibe

NOTE 1 – PLAN DESCRIPTIONS (Continued)

to retire (or during any of those four years if they were receiving either disability benefits under the Disability Benefit Plan or payments under any Workers' Compensation Law).

Eligible Tier 1 members are entitled to an annual retirement benefit, payable monthly for life, currently equal to a retirement factor of 2.1% of their highest average salary for each year of credited service. Members who have at least 30 years of service credit and are at least 55 years of age are entitled to a retirement factor of 2.3% in the calculation of their retirement allowance. "Highest average salary" is defined as the employee's average base salary over the highest 26 consecutive contributing payroll periods. Retirees who are receiving a formula pension are entitled to an annual cost of living adjustment (COLA). Adjustments are applied each July 1 based on the Consumer Price Index (Los Angeles-Long Beach-Anaheim, CA – All Items) published by the Bureau of Labor Statistics of the United States Department of Labor (CPI) for the two immediately preceding calendar years. The maximum adjustment, positive or negative, is 3% in any one year.

Tier 2 members are eligible for normal retirement at age 60 with at least 5 years of continuous Department service (5 years must be as a contributing member and/or receiving either disability benefits under the Disability Benefit Plan or payments under any Workers' Compensation Law). A reduced benefit for early retirement at any age is generally available if the member has at least 30 years of service. Members with 30 or more years of credited service may retire at age 55 and receive unreduced benefits.

Eligible Tier 2 members are entitled to an annual retirement benefit, payable monthly for life currently in an amount equal to a retirement factor, multiplying each year of credited service and then multiplying their final average salary. The specific retirement factor is based on the combination of the member's age and credited service as follows:

- 1.5% at age 60 with 5 years of continuous Department service or 10 years of qualifying service
- 2.0% at any age with 30 years
- 2.0% at age 63 with 5 years of continuous Department service or 10 years of qualifying service
- 2.1% at age 63 with 30 years

"Final average salary" is defined as the employee's average base salary over the highest 78 consecutive payroll periods. A member's monthly pension amount is capped at 80% of one's final average salary. Retirees who are receiving a formula pension are entitled to annual COLA. Adjustments are applied each July 1 based on the CPI for the two immediately preceding

NOTE 1 – PLAN DESCRIPTIONS (Continued)

calendar years. The maximum adjustment, positive or negative, is 2% in any one year. Members may purchase additional post-retirement COLA coverage, not to exceed an additional 1% per year, at full actuarial cost to the Plan. Members eligible for a deferred retirement (vesting) are also eligible for a formula pension but are not entitled to an annual COLA.

Death Benefit Fund

The Death Benefit Fund consists of the insured lives death benefit (IDB), family death benefit (FDB), and supplemental family death benefit (SFDB).

- Insured Lives Death Benefit

  For contributing active members, death benefit coverage begins after the completion of 26 weeks of continuous Department service. If the death occurs while an active member of the Plan, the benefit includes a single lump sum distribution equal to fourteen times the member's monthly salary and the Retirement Fund contributions plus accrued interest, payable to the beneficiary.

  For retired members, the benefits include a single lump sum distribution equal to fourteen times the member's full retirement allowance, not to exceed $20,000, plus any unpaid retirement allowances due and the unused portion of the Retirement Fund contributions upon death (if elected at retirement) payable to the beneficiary.

- Family Death Benefit

  Coverage begins after completion of 26 weeks of continuous Department service. The Plan provides a monthly FDB allowance of $416 to each qualified surviving child plus $416 to the spouse, if the spouse has the care of one or more of the member's eligible children. The maximum monthly FDB allowance cannot exceed $1,170.

- Supplemental Family Death Benefit

  The SFDB program supplements the FDB. Coverage begins after enrollment and payment of premiums for 39 consecutive biweekly payroll deductions. The Plan provides for an additional monthly SFDB allowance of $520 to each qualified surviving child plus $520 to the spouse, if the spouse has the care of one or more of the member's eligible children. The maximum SFDB allowance cannot exceed $1,066.

NOTE 1 – PLAN DESCRIPTIONS (Continued)

Contributions

Retirement Fund

Retirement contributions are determined by a member's Tier designation. Covered Tier 1 employees continue contributing 6% of their annual covered payroll upon becoming a Plan member on or after June 1, 1984. Employees entering the Plan before June 1, 1984, contribute an amount based upon an entry-age percentage rate. Employee contribution plus credited interest is refundable if an employee leaves or dies while employed. After one year of membership, the employee may leave his or her contribution on account with the Plan along with the Department's matching contributions and receive a money purchase allowance at retirement age. A surviving spouse of an employee who dies while eligible to retire or with at least 25 years of service may elect to receive a monthly allowance from the Retirement Fund for life rather than a refund of the employee's contributions and interest.

Covered Tier 2 employees are required to contribute 10% of their annual covered payroll upon becoming a Plan member. A Tier 2 member has the same benefits as a Tier 1 member upon termination or death while employed, with a single exception. A Tier 2 member will not receive a money purchase allowance with vesting after one year. Instead, a Tier 2 member will only receive a formula pension if one is at age 60 and has at least 5 years of continuous Department service.

The Department contributes $1.10 for each $1.00 contributed by Tier 1 members, plus an actuarially determined percentage of covered payroll. The Department solely contributes an actuarially determined percentage of covered payroll for Tier 2 members. Contribution provisions are established and amended by the Retirement Board upon the advice of the Plan actuary. The average employer contribution rates for fiscal years 2023 and 2022 (based on the July 1, 2022 and 2021 valuations) were 29.84% and 26.04% of compensation, respectively.

Disability Fund

Each bi-weekly payroll period, both eligible Tiers 1 and 2 members contribute $1.00 each for temporary disability and permanent total disability. The Department contribution rate for fiscal years 2023 and 2022 for temporary disability (based on the July 1, 2022 and 2021 valuations) were $1.05 and $1.07 per $100 of covered payroll, respectively. Department contribution for permanent total disability continues to be suspended, as current reserve significantly exceeds the target reserve amount.

NOTE 1 – PLAN DESCRIPTIONS (Continued)

Death Benefit Fund

Prior to fiscal year 2019, Death Benefit was funded by the employer on a modified "pay-as-you-go" basis. The funding policy was changed for valuation period beginning July 1, 2019 and thereafter. Employer contributions shall be determined on the basis of Entry Age Actuarial Cost Method and amortizing the resulting unfunded liability or surplus. The Department contribution rate for fiscal year 2023 and 2022 (based on the July 1, 2022 and 2021 valuations) was 1.21% and 1.11% of covered payroll, respectively.

Contributing active Tiers 1 and 2 members continue to contribute $1.00 per bi-weekly payroll period toward their benefit. For those who have enrolled in the Supplemental Family Death Benefit, active members continue to contribute $2.25 per bi-weekly payroll period, and retired members contribute $4.90 per month.

Retiree Health Benefits Fund

Membership

The Retiree Health Benefits Plan's membership consisted of the following at June 30, 2023 and 2022:

	2023	2022
Current retirees and beneficiaries	8,552	8,557
Current active members	11,039	10,799
Total	19,591	19,356

Benefit Provisions

Retired members of the Plan are eligible to receive a medical and dental subsidy based on their age and years of service at retirement. The retirees pay any health and dental plan premiums in excess of Department subsidy limits that they are eligible for.

Contributions

The DWP Board establishes the funding policy and funding levels of the RHBF. The Department retains the responsibility and obligation to fund the RHBF to the extent necessary and appropriate as recommended by the Department's actuary, based on funding parameters set by the Department on advice of the actuary. During fiscal years 2023 and 2022, the Department contributed $114.6 million and $113.1 million, respectively, to fund current and future retiree health benefits liabilities and related costs.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting and Presentation

The financial statements are prepared using the accrual basis of accounting and reflect the overall financial operations of each fund of the WPERP. Member and Department contributions are recognized as revenues in the period in which the employee services are performed, and when due, and benefits and refunds are recognized when due and payable in accordance with the terms of each benefit fund.

Other expenses are recognized when incurred. The net appreciation (depreciation) in the fair value of investments is recorded as an increase (decrease) in investment income based on the valuation of investments.

Investments

Investments are reported at fair value. Investments that do not have a readily determinable fair value may be valued at Net Asset Value (NAV), such as member units or ownership interest in partners' capital to which a proportionate share of net assets is attributed. Short-term investments are reported at cost, which approximates fair value.

The fair value of securities is determined by the published market prices and quotations from major investment dealers. Securities traded on a national or international exchange are valued at the last reported sales price at current currency exchange rates in effect. Mortgages are valued based on future principal and interest payments and are discounted at prevailing interest rates for similar investments. Hedge funds are initially recorded at cost and subsequently valued at fair value, and these are reported as "Alternative Investments" on the statements of fiduciary net position.

The WPERP has investments in commingled real estate funds in which real property is its primary underlying investment. These are reported as "Real Estate" at fair value on the statements of fiduciary net position. Fair values of real estate investments are estimated by fund managers based on property appraisal reports both internally and externally.

Purchases and sales of securities are recorded on a trade date basis. Unsettled investment trades as of year-end are reported in the financial statements as receivable for pending sales or payable for pending purchases.

Cash

Cash consists primarily of cash on deposits in the City Treasury under the City's investment pool program.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Derivatives

To the extent permitted by policy and individual agreements, investment managers are authorized to use derivatives for risk management purposes. Accordingly, derivatives are not held for trading purposes. Derivative securities are instruments whose value is derived from an underlying security or index. They include options, futures, swaps, forwards, structured notes, and stripped securities. These instruments offer unique characteristics and risks that assist the investment managers with meeting their investment strategies.

Use of Estimates

Preparing financial statements conforming with generally accepted accounting principles requires management to make estimates and assumptions affecting certain financial statement amounts and disclosures. Actual results could differ from those estimates.

NOTE 3 – CASH AND INVESTMENTS

Investment Policy

Investment authority is granted to the WPERP by the City Charter and is exercised in accordance with the Retirement Board's investment policy. The City Charter authorizes the form and type of investment vehicles that may be purchased. The Retirement Board may invest in common and preferred stocks (including both domestic and international equities), convertible debt, fixed income, alternative investments, and real estate, and it may utilize stock-covered call options and securities lending.

NOTE 3 – CASH AND INVESTMENTS (continued)

The following is the asset allocation policy as of June 2023 and June 2022:

Asset Class	Target Allocation
Large cap U.S. equity	21.10%
Small cap U.S. equity	2.10%
Developed international large cap equity	12.20%
Developed international small cap equity	1.80%
Global equity	2.70%
Emerging market equity	5.10%
TIPS	3.50%
Real estate	7.00%
Cash and equivalents	1.00%
Commodities	1.50%
Private equity	10.00%
Private credit	2.40%
Hedge funds	5.00%
Non-core real estate	3.00%
Custom fixed income	21.60%
Total	100.00%

Cash

As of June 30, 2023 and 2022, the cash balances consist primarily of cash deposits in the City Treasury. The WPERP's participation in the program is less than 1% at June 30, 2023 and 2022. Interest earned on the City's investment pool is allocated by the City Treasury to the WPERP based on its average daily cash balance during the allocation period.

NOTE 3 – CASH AND INVESTMENTS (Continued)

Investments

As of June 30, 2023, and 2022, the WPERP had the following investments:

Investment Type	June 30, 2023 Fair Value	June 30, 2022 Fair Value
Domestic equities	$ 3,980,593,750	$ 3,760,788,881
International equities	3,909,402,525	3,443,785,021
U.S. Treasuries	1,044,814,829	1,247,438,647
U.S. agencies	1,204,523,658	1,150,418,229
Preferred securities/convertible bonds/other	16,112,167	33,637,199
Mortgage and asset backed securities	280,121,911	294,607,118
Corporate debt - domestic	1,032,236,374	1,035,191,108
Corporate debt - international	507,443,297	450,579,200
Government debt - international	273,219,022	223,047,843
Private credit	237,203,365	139,372,653
Municipal/provincial bonds	6,137,177	6,429,625
Mutual funds	581,556,941	679,665,879
Private equity & hedge funds	4,533,192,987	4,338,283,858
Real estate	1,736,638,060	1,617,115,256
Securities lending short-term collateral investment pool	881,464,867	907,910,112
Total investments	$ 20,224,660,930	$ 19,328,270,629

Fair Value of Investments

The WPERP categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of an asset or liability as follows:

- Level 1 — Inputs utilized are unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 — Inputs include quoted prices for similar assets or liabilities, and inputs other than quoted prices that are observable for the asset or liability, including quoted prices in markets that are not active.
- Level 3 — Inputs are unobservable for an asset or liability.

NOTE 3 – CASH AND INVESTMENTS (Continued)

Fair Value of Investments (Continued)

Investments that do not have a readily determinable fair value may be valued at the net asset value (NAV), such as member units or ownership interest in partners' capital, to which a proportionate share of net assets is attributed. Investments whose fair value is measured at the NAV are excluded from the fair value hierarchy.

The WPERP has the following recurring fair value measurement as of June 30, 2023:

	Fair Value Measurement at June 30, 2023*			
	Level 1	Level 2	Level 3	Total
Equity securities:				
Domestic equities	$ 3,980,593,750	$ -	$ -	$ 3,980,593,750
International equities	3,909,402,525	-	-	3,909,402,525
Preferred securities	16,112,167	-	-	16,112,167
Fixed income securities:				
U.S. Treasuries	-	1,044,814,829	-	1,044,814,829
U.S. agencies	-	1,204,523,658	-	1,204,523,658
Mortgage and asset backed securities	-	280,121,911	-	280,121,911
Corporate debt - domestic	-	1,032,236,374	-	1,032,236,374
Corporate debt - international	-	507,443,297	-	507,443,297
Government debt -international	-	273,219,022	-	273,219,022
Municipal/provincial bonds	-	6,137,177	-	6,137,177
Total investments by fair value	$ 7,906,108,442	$ 4,348,496,268	$ -	$ 12,254,604,710

* Mutual funds of $581.6 million and security lending short-term investments of $881.5 million are not included in fair value hierarchy. Investments measured at the NAV are also not included within the fair value hierarchy. See description of investments measured at the NAV on page 32.

Equity and preferred securities classified in level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities and real estate funds. Debt securities classified in level 2 of the fair value hierarchy are valued based on evaluated quotes provided by independent pricing services and matrix pricing techniques. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Mortgage and asset-backed securities classified in level 2 are valued on the basis of discounted future principal and interest payments.

NOTE 3 – CASH AND INVESTMENTS (Continued)

Fair Value of Investments Measured at the NAV — Below is a summary of the WPERP's investments at June 30, 2023 for which fair value is measured based on the NAV.

Investments Measured at the NAV	Fair Value	Unfunded Commitment	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Private Equity				
Direct partnerships	$ 1,972,586,867	$ 723,696,516	Not Eligible	Not Eligible
Fund of funds	534,628,417	337,645,295	Not Eligible	Not Eligible
Private Credit				
Open ended	179,225,138	66,972,319	Annually*	90 days
Close ended	57,978,227	68,296,666	Not Eligible	Not Eligible
Real Estate				
Open ended	957,082,169	112,500,000	Quarterly	45-90 days
Close ended	779,555,891	721,095,040	Not Eligible	Not Eligible
Real Return				
Commodities	262,038,886	-	Daily	2 days
Timberland	39,438,514	-	Not Eligible	Not Eligible
Short duration TIPS	652,858,522	-	Daily	3 days
Hedge Fund				
Fund of funds	1,071,641,781	-	Daily	60 Days
Total investments measured at the NAV	$ 6,507,034,412	$ 2,030,205,836		

* Certain investment has a 5.5-year lock before eligible for redemption.

WPERP's private equity portfolio consists of ventured capital, leveraged buyouts, distressed debt, and other special equity funds. WPERP's participation is either through direct partnership or fund of funds. Both structures are not eligible for redemption. Instead, distributions are received as underlying investments within the partnerships and funds are liquidated, which on average can occur over the span of 10 to 15 years.

NOTE 3 – CASH AND INVESTMENTS (Continued)

WPERP's private credit portfolio includes asset-backed, opportunistic, stressed, special situations and direct lending investments. These investments are in both open ended and closed ended funds/partnerships. Open ended funds/partnerships can be redeemed subject to their redemption schedule. Closed ended funds/partnerships are not eligible for redemption. Instead, distributions are received as underlying investments within the funds/partnerships are liquidated, which on average can occur over the span of 5 to 8 years.

The real estate portfolio consists of investments in domestic and international commercial and industrial real property. WPERP is invested in both open ended and close ended funds/partnerships. Open ended funds/partnerships can be redeemed subject to the redemption schedule as listed above. Close ended funds/partnerships are not eligible for redemption. Instead, distributions are received as underlying investments within the funds/partnerships are liquidated, which on average can occur over the span of 10 to 15 years.

Real return investments include a commingled commodities fund, a commingled short duration treasury inflation protected securities fund, and two timberland direct partnerships. The timberland partnerships are not eligible for redemption. The estimated duration of these partnerships ranges from 10 to 15 years.

One hedge fund investment is executed through fund of funds. The underlying third party hedge fund managers' strategies could include, but is not limited to convertible arbitrage, distressed securities, fixed income arbitrage, merger arbitrage, long/short credit, long/short equity, etc.

Rate of Return

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for changing amounts actually invested. For the years ended June 30, 2023 and 2022, the annual money-weighted rate of return on the Retirement Fund investments, net of investment expense, was 7.52% and -5.39%, respectively.

For the years ended June 30, 2023 and 2022, the annual money-weighted rate of return on the Retiree Health Benefits Fund investments, net of investment expense, was 7.60% and -5.39%, respectively; the annual money-weighted rate of return on the Death Benefit Fund investments, net of investment expense, was -0.60% and -9.53%, respectively.

NOTE 3 – CASH AND INVESTMENTS (Continued)

Credit Risk

The WPERP's investment policy is to apply the "prudent person" standards. Investments are made with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. The WPERP's investment policy has been designed to produce the most favorable long-term total portfolio return consistent with reasonable levels of risk. Prudent risk-taking is warranted within the context of overall portfolio diversification.

According to the WPERP's investment policy for fixed-income securities, the WPERP can invest in both investment-grade and high-yield fixed-income securities. Investment-grade fixed-income securities that are rated by Moody's, Standard & Poor's, and Fitch, should have a minimum rating of BBB- or Baa3 by two or more rating agencies. Investment managers for investment-grade fixed-income securities will notify the WPERP's management of subsequent rating declines and develop an investment strategy for investments rated below Baa3 or BBB-.

Active high-yield fixed-income investment is composed primarily of non-investment grade securities as rated by Moody's, Standard & Poor's or Fitch. If a bond is rated by all three rating agencies, then it must be graded BB+ or Ba1 or below by two or more rating agencies. If a bond is rated by two rating agencies, it must be rated below investment grade by at least one rating agency.

NOTE 3 – CASH AND INVESTMENTS (Continued)

The credit ratings of the WPERP's investments at June 30, 2023 are as follows:

Investment Type	Credit Rating	Fair Value		% of Portfolio
U.S. Treasuries	AAA	$ 1,044,814,829		20.16%
U.S. Agency notes	AAA	1,179,244,960		22.75%
	A or better	7,566,179		0.15%
	B or better	16,035,986		0.31%
	Not Rated	1,676,533		0.03%
Preferred securities/convertible bonds/other	Not rated	16,112,167		0.31%
Mortgage and asset backed securities	AAA	175,800,934		3.39%
	A or better	10,243,797		0.20%
	B or better	53,019,759		1.02%
	Not rated	41,057,421		0.79%
Corporate debt - domestic	AAA	1,636,100		0.03%
	A or better	93,091,114		1.80%
	B or better	713,527,181		13.77%
	C or better	142,110,087		2.74%
	D/Not rated	81,871,892		1.58%
Corporate debt - international	AAA	22,015,298		0.42%
	A or better	50,915,877		0.98%
	B or better	397,016,850		7.66%
	C or better	21,069,487		0.41%
	Not Rated	16,425,785		0.32%
Goverment debt - international	AAA	1,239,492		0.02%
	A or better	25,634,207		0.49%
	B or better	155,550,485		3.00%
	C or better	41,179,086		0.79%
	D/Not Rated	49,615,752		0.96%
Private Credit	Not rated	237,203,365		4.58%
Municipal/provincial bonds	AAA	6,137,177		0.12%
Mutual funds	Not rated	581,556,941	*	11.22%
Total		$ 5,183,368,741		100.00%

* Consist of money market fund or short-term investment fund investing in the fixed income securities.

NOTE 3 – CASH AND INVESTMENTS (Continued)

The credit ratings of the WPERP's investments at June 30, 2022 are as follows:

Investment Type	Credit Rating	Fair Value		% of Portfolio
U.S. Treasuries	AAA	$ 1,247,438,647		23.71%
U.S. Agency notes	AAA	1,145,946,014		21.78%
	Not Rated	4,472,215		0.09%
Preferred securities/convertible bonds/other	Not rated	33,637,199		0.64%
Mortgage and asset backed securities	AAA	183,665,366		3.49%
	A or better	20,854,876		0.40%
	B or better	66,784,674		1.27%
	C or better	90,721		0.00%
	Not rated	23,211,481		0.44%
Corporate debt - domestic	AAA	6,006,609		0.11%
	A or better	90,667,534		1.72%
	B or better	753,456,266		14.32%
	C or better	135,990,554		2.59%
	D/Not rated	49,070,145		0.93%
Corporate debt - international	A or better	47,242,388		0.90%
	B or better	363,436,574		6.91%
	C or better	19,103,521		0.36%
	Not Rated	20,796,717		0.40%
Goverment debt - international	AAA	613,200		0.01%
	A or better	22,915,260		0.44%
	B or better	130,013,733		2.47%
	C or better	34,801,558		0.66%
	D/Not Rated	34,704,092		0.66%
Private Credit	Not rated	139,372,653		2.65%
Municipal/provincial bonds	AAA	6,429,625		0.12%
Mutual funds	Not rated	679,665,879	*	12.92%
Total		$ 5,260,387,501		100.00%

* Consist of money market fund or short-term investment fund investing in the fixed income securities.

NOTE 3 – CASH AND INVESTMENTS (Continued)

Custodial Credit Risks

For deposits, custodial credit risk is the risk that in the event of a bank failure, the WPERP's deposits may not be returned. As of June 30, 2023 and 2022, the WPERP's cash balances consist primarily of cash deposits in the City Treasury.

Collateral received in securities lending transactions are cash collateral and marketable securities. See Note 4 for further disclosure on securities lending transactions.

Concentration of Credit Risk

According to the WPERP's investment policy, no more than 5% of investments shall be invested in any one issue, except for investment in the fixed income asset class where no more than 10% of investment shall be invested in any one issue. United States Treasury or United States Agency issues are exempted from this limitation. As of June 30, 2023, and 2022, there were no investments holdings of more than 5% in any one issue of each fund's net position or in the WPERP's aggregate net position, except investments issued or guaranteed by the U.S. Government and investments in commingled funds.

Interest Rate Risk

As of June 30, 2023, the WPERP's exposure to interest rate risk is as follows:

Investment Type	Fair Value	Weighted Average Maturity (Years)
U.S. Treasuries	$ 1,044,814,829	5.08
U.S. Agency Notes	1,204,523,658	22.13
Preferred Securities	16,112,167	0.00
Mortgage and Asset Backed Securities	280,121,911	15.34
Corporate Debt - Domestic	1,032,236,374	8.02
Corporate Debt - International	507,443,297	7.89
Government Debt - International	273,219,022	12.01
Municipal/Provincial Bonds	6,137,177	16.10
Mutual Funds	581,556,941	0.00
Total	$ 4,946,165,376 *	10.50

*Not included are private credit investments of $237.2 million with average redemption periods ranging 5 to 8 years.

NOTE 3 – CASH AND INVESTMENTS (Continued)

As of June 30, 2022, the WPERP's exposure to interest rate risk is as follows:

Investment Type	Fair Value	Weighted Average Maturity (Years)
U.S. Treasuries	$ 1,247,438,647	4.95
U.S. Agency Notes	1,150,418,229	22.97
Preferred Securities	33,637,199	0.00
Mortgage and Asset Backed Securities	294,607,118	17.02
Corporate Debt - Domestic	1,035,191,108	8.93
Corporate Debt - International	450,579,200	8.73
Government Debt - International	223,047,843	11.05
Municipal/Provincial Bonds	6,429,625	17.10
Mutual funds	679,665,879	0.00
Total	$ 5,121,014,848 *	10.15

*Not included are private credit investments of $139.4 million with average redemption periods ranging 5 to 8 years.

NOTE 3 – CASH AND INVESTMENTS (Continued)

Foreign Currency Risk

As of June 30, 2023 and 2022, the WPERP's exposure to foreign currency risk is as follows:

Currency	Investment Type	2023	2022
Australian dollar	Cash & cash equivalents	$ 34,394	$ (305,187)
	Equities	60,583,727	67,142,529
Brazilian real	Cash & cash equivalents	145,604	260,236
	Fixed Income	20,417,700	16,459,001
	Equities	32,968,764	24,685,982
Brithish pound sterling	Cash & cash equivalents	978,407	9,311,726
	Fixed Income	33,194,233	35,098,409
	Equities	295,939,373	254,791,266
Canadian dollar	Cash & cash equivalents	1,432,908	228,015
	Fixed Income	742,256	-
	Equities	174,475,664	157,219,252
Chinese yuan renminbi	Cash & cash equivalents	-	65,667
	Fixed Income	4,516,644	6,857,599
HK offshore Chinese yuan renminbi	Cash & cash equivalents	32,818	35,611
	Fixed Income	151,007	1,444,823
	Equities	23,602,003	19,526,783
Chilean peso	Fixed Income	1,131,792	3,109,903
	Equities	578,412	1,376,726
Colombian peso	Fixed Income	8,149,398	11,366,713
Czech koruna	Cash & cash equivalents	5,033	4,601
	Fixed Income	2,850,416	-
Danish krone	Cash & cash equivalents	32,320	10,940
	Equities	37,260,504	31,000,851
Dominican peso	Fixed Income	1,345,170	-
European euro	Cash & cash equivalents	39,685,850	19,974,324
	Fixed Income	224,065,256	180,605,075
	Equities	875,207,124	659,344,105
Hong Kong dollar	Cash & cash equivalents	239,641	207,167
	Equities	119,211,446	150,702,087
Hungarian forint	Fixed Income	2,752,178	-
	Equities	-	267,233
Indonesian rupiah	Fixed Income	11,582,157	8,396,084
	Equities	10,474,306	8,795,973
Indian rupee	Fixed Income	1,366,023	880,639
Japanese yen	Cash & cash equivalents	2,260,019	3,294,720
	Equities	432,459,177	379,653,664
Kazakhstani tenge	Fixed Income	1,109,559	221,960
	Equities	-	69,160,324
Malaysian ringgit	Fixed Income	5,533,244	8,652,919
	Equities	2,842,029	6,717,093
Mexican new peso	Cash & cash equivalents	16,862	812,797
	Fixed Income	14,586,124	10,610,654
	Equities	24,981,696	12,081,794
New Taiwan dollar	Cash & cash equivalents	569,040	1,196,681
	Equities	103,298,536	78,308,754
	Subtotal	2,572,808,814	2,239,575,493

NOTE 3 – CASH AND INVESTMENTS (Continued)

Currency	Investment Type	2023	2022
New Zealand dollar	Cash & cash equivalents	90,216	38,823
	Equities	3,618,716	4,828,940
Norwegian krone	Cash & cash equivalents	33,795	2,100
	Equities	3,435,677	6,443,982
Peruvian nuevo sol	Fixed Income	2,323,008	2,529,780
Philippine peso	Cash & cash equivalents	67,078	34,972
	Equities	5,264,072	4,146,956
Polish zloty	Cash & cash equivalents	(1,704)	38,983
	Fixed Income	1,523,948	1,314,310
	Equities	2,435,090	4,036,454
Russian ruble	Equities	4,773,961	-
Singapore dollar	Cash & cash equivalents	98,324	(1)
	Equities	25,566,169	15,442,073
South African rand	Cash & cash equivalents	51,926	327
	Fixed Income	9,277,638	11,608,657
	Equities	15,782,548	19,045,358
South Korean won	Cash & cash equivalents	68,957	46,109
	Fixed Income	3,852,026	-
	Equities	75,500,792	-
Swedish krona	Cash & cash equivalents	41,285	28,951
	Equities	54,334,167	53,842,395
Swiss franc	Cash & cash equivalents	821,085	594,716
	Equities	167,380,142	179,440,575
Thai baht	Cash & cash equivalents	32,398	-
	Fixed Income	1,799,064	-
	Equities	20,602,885	18,228,825
Turkish lira	Cash & cash equivalents	2	2
	Equities	4,366,652	3,734,888
Ukrainian hryvnia	Cash & cash equivalents	14,136	65,873
	Fixed Income	263,472	375,088
United Arab Emirates dirham	Cash & cash equivalents	(136)	90,117
	Equities	13,649,447	12,845,552
	Subtotal	417,066,836	338,804,804
Total		$ 2,989,875,650	$ 2,578,380,297

The WPERP's investment policy permits it to invest up to 21.80% of total investments of the WPERP in non-U.S. investments. The WPERP's position is 14.78% and 13.34% as of June 30, 2023 and 2022, respectively.

NOTE 3 – CASH AND INVESTMENTS (Continued)

Derivative Instruments

The fair value balances and notional amounts of derivative instruments outstanding at June 30, 2023 and 2022, classified by type, and the changes in fair values of such derivative instruments for the years then ended as reported in the 2023 and 2022 financial statements are as follows:

	2023				
	Changes in Fair Value		Fair Value		
Type	Classification	Amount	Classification	Amount	Notional Amount
Forward Contracts	Investment Income / (Loss)	$ (6,670,963)	Investment	$ (22,348)	$ 1,187,014,183

	2022				
	Changes in Fair Value		Fair Value		
Type	Classification	Amount	Classification	Amount	Notional Amount
Forward Contracts	Investment Income / (Loss)	$ 4,302,284	Investment	$ 6,648,615	$ 609,633,032

At June 30, 2023 and 2022, the WPERP had direct commitments to purchase and/or sell foreign currency in the forms of forward contracts as part of the strategy of hedging its currency risk. The fair values of forward contracts were based on the market price.

NOTE 4 – SECURITIES LENDING PROGRAM

The WPERP is authorized by the City Charter and the Retirement Board's investment policy to lend its investment securities to various brokers without limit. The lending is managed by the WPERP's custodial bank. The WPERP or the borrowers can terminate the contract with advance notice. Prior to August 2013, the lending arrangements were collateralized by cash and marketable securities (guaranteed by the full faith and credit of the U.S. Government) at (i) 102% with respect to U.S. Securities; (ii) 105% with respect to foreign securities; or (iii) a percentage mutually agreed of the underlying securities' market value. In August 2013, the Retirement Board adopted an amendment to the securities lending program to expand the acceptance of equities as non-cash

NOTE 4 – SECURITIES LENDING PROGRAM (Continued)

collateral. Equities received are required to be collateralized at 110% with respect to loaned securities' value. The custodial bank will assume the equity risk and indemnify the WPERP 100% for any shortfall if a loan position is not returned and proceeds from the sale of equity collateral are insufficient to replace the loan position.

These arrangements provide for the return of the investments and a share of the interest earned on the collateral. The securities on loan to brokers remain the property of the WPERP and continue to be included in their respective accounts on the statements of fiduciary net position. The WPERP does not have the ability to pledge or sell collateral assets unless the borrower is in default of its obligation. As of June 30, 2023, and 2022, the WPERP has no credit risk exposure because the value of the collateral received exceeded the value of the securities on loan.

The WPERP's custodian is the authorized agent to handle the WPERP's securities lending activity. The WPERP's custodian may invest the cash collateral received in connection with securities on loan in investments permitted by the WPERP. The WPERP bears the sole risk of all losses of the invested collateral, including losses incurred in the event of liquidation of the permitted investments. The custodian bank is responsible for the return of loaned securities from borrowers. In lending domestic securities, cash collateral is invested in the lending agent's short-term investment pool, which has an average maturity of 73 days and 99 days as of June 30, 2023 and 2022, respectively.

The fair values of the underlying securities on loan, collateralized by cash and securities as of June 30, 2023 and 2022 are:

Securities on loan	2023	2022
Global agencies	$ 1,048,357	$ 2,858,553
Global equities	190,964,990	282,335,382
Global corporate fixed	31,347,596	48,205,825
Global government fixed	139,730,556	314,646,596
U.S. Agency notes	7,819,389	4,211,043
U.S. corporate fixed	239,946,112	241,506,847
U.S. equities	344,861,940	268,155,251
U.S. government fixed	494,431,497	435,291,052
Total	$ 1,450,150,437	$ 1,597,210,549

NOTE 5 – NET PENSION LIABILITY OF THE DEPARTMENT

Retirement Fund

The components of the net pension liability (NPL) of the Retirement Fund as of June 30, 2023 and 2022 are as follows:

	Total Pension Liability	Retirement Fund Fiduciary Net Position	Net Pension Liability	Fiduciary Net Position as % of Total Pension Liability
As of June 30, 2023	$17,006,877,134	$16,424,801,111	$582,076,023	96.58%
As of June 30, 2022	$16,130,117,067	$15,513,924,394	$616,192,673	96.18%

The WPERP engages an independent actuarial firm to conduct annual actuarial valuation to determine the total pension liability of the Department as of June 30, 2023 and 2022. The TPL as of June 30, 2023 and 2022 was determined by actuarial valuation as of July 1, 2023 and July 1, 2022, respectively. The actuarial assumptions used in the June 30, 2023 and June 30, 2022 measurements were based on the results of the most recent actuarial experience study for the period from July 1, 2018 through June 30, 2021. In particular, the following assumptions were applied in the measurements:

Inflation rate	2.50%
Projected salary increases	4.25% to 10.00%, includes inflation at 2.50%, "across the board" increases of 0.50% plus merit and promotional increases
Cost-of-living adjustments (COLA)	Retiree COLA increases of 2.75% per year for Tier 1 and 2.00% per year for Tier 2 members
Investment rate of return	6.50% net of investment expense, including inflation
Mortality	Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021

NOTE 5 – NET PENSION LIABILITY OF THE DEPARTMENT (Continued)

Investment rate of return: The long-term expected rate of return on the Retirement Fund's investments was determined in 2022 using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns 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, adding expected inflation, and subtracting expected investment expenses and a risk margin.

The Retirement Fund's target asset allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumptions as of June 30, 2023 and 2022 are summarized in the following table.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Large Cap US equity	21.10%	5.13%
Small Cap US equity	2.10%	5.86%
Developed International Large Cap equity	12.20%	6.01%
Developed International Small Cap equity	1.80%	5.72%
Global equity	2.70%	5.94%
Emerging market equity	5.10%	8.16%
TIPS	3.50%	-0.23%
Real estate	7.00%	4.60%
Cash and cash equivalents	1.00%	-0.77%
Commodities	1.50%	2.77%
Private equity	10.00%	10.46%
Private credit	2.40%	5.94%
Hedge funds	5.00%	1.85%
Non-Core real estate	3.00%	7.14%
Custom fixed income	21.60%	0.68%
Total	100.00%	

NOTE 5 – NET PENSION LIABILITY OF THE DEPARTMENT (Continued)

Discount rate: The discount rate used to measure the total pension liability was 6.50% as of June 30, 2023 and June 30, 2022. The projection of cash flows used to determine the discount rate assumed member contributions will be made at the current contribution rates and that employer contributions will be made at rates equal to the required contribution rates. For this purpose, only employee and employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan Fiduciary Net Position was projected to be available to make all projected future benefit payments for 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 as of June 30, 2023 and June 30, 2022.

Sensitivity of the net pension liability to changes in the discount rate: The following presents the Retirement Fund's NPL as of June 30, 2023 and 2022, calculated using its respective discount rate, as well as what the NPL would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the utilized rate:

	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (7.50%)
NPL as of June 30, 2023	$2,902,051,623	$582,076,023	$(1,326,580,326)
NPL as of June 30, 2022	$2,814,145,546	$616,192,673	$(1,193,115,217)

NOTE 6 – NET OTHER POSTEMPLOYMENT BENEFITS LIABILITY OF THE DEPARTMENT

The WPERP benefits and funds included within the definition of Other Postemployment Benefits (OPEB) are the RHBF and the Death Benefit Fund.

Retiree Health Benefits Fund

The components of the net OPEB liability (NOL) of the RHBF as of June 30, 2023 and 2022 are as follows:

NOTE 6 – NET OTHER POSTEMPLOYMENT BENEFITS LIABILITY OF THE DEPARTMENT (Continued)

	Total OPEB Liability	RHBF Fiduciary Net Position	Net OPEB Liability	Fiduciary Net Position as % of Total OPEB Liability
As of June 30, 2023	$2,625,289,929	$2,971,055,088	$(345,765,159)	113.17%
As of June 30, 2022	$2,630,841,628	$2,761,040,916	$(130,199,288)	104.95%

An independent actuarial firm conducts an annual actuarial valuation to determine the total OPEB liability of the Department. The NOL as of June 30, 2023 and 2022 were determined by the actuarial valuation as of June 30, 2023 and 2022, respectively. The actuarial assumptions used in the June 30, 2023 and 2022 measurements were based on the results of the most recent actuarial experience study for the period from July 1, 2018 through June 30, 2021 and the OPEB assumption letter dated October 6, 2023. In particular, the following assumptions were applied in the measurements:

June 30, 2023 measurements

Inflation rate	2.50%
Projected salary increases	4.25% to 10.00%, includes inflation at 2.50%, "across the board" increases of 0.50% plus merit and promotional increases
Investment rate of return	6.50% net of investment expense, including inflation
Mortality	Headcount-weighted Above Median Pub-2010 General Healthy Retiree Mortality Table (separate tables for males and females) times 105% for males and 100% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

NOTE 6 – NET OTHER POSTEMPLOYMENT BENEFITS LIABILITY OF THE DEPARTMENT (Continued)

Healthcare cost assumptions are separately developed by the actuary annually. They are based on annual cost trend surveys of the healthcare industry and plan-specific information. Specifically, the following assumptions were applied in the June 30, 2023 and 2022 measurements:

	June 30, 2023	June 30, 2022
Non-Medicare medical plan	7.00%, graded down to an ultimate of 4.50% over 10 years	7.25%, graded down to an ultimate of 4.50% over 11 years
Medicare medical plans	6.25%, graded down to an ultimate of 4.50% over 7 years	6.50%, graded down to an ultimate of 4.50% over 8 years
Dental	3.00%	3.00%
Medicare Part B	4.50%	4.50%

Investment rate of return: The long-term expected rate of return on RHBF's investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns 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, adding expected inflation, and subtracting expected investment expenses and a risk margin.

The RHBF's target asset allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumptions as of June 30, 2023 and 2022 are summarized in the following table.

NOTE 6 – NET OTHER POSTEMPLOYMENT BENEFITS LIABILITY OF THE DEPARTMENT (Continued)

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Large Cap US equity	21.10%	5.13%
Small Cap US equity	2.10%	5.86%
Developed international Large Cap equity	12.20%	6.01%
Developed international Small Cap equity	1.80%	5.72%
Global equity	2.70%	5.94%
Emerging market equity	5.10%	8.16%
TIPS	3.50%	-0.23%
Real estate	7.00%	4.60%
Cash and cash equivalents	1.00%	-0.77%
Commodities	1.50%	2.77%
Private equity	10.00%	10.46%
Private credit	2.40%	5.94%
Hedge funds	5.00%	1.85%
Non-Core real estate	3.00%	7.14%
Custom fixed income	21.60%	0.68%
Total	100.00%	

Discount rate: The discount rate used to measure the total OPEB liability was 6.50% as of June 30, 2023 and June 30, 2022, respectively. The projection of cash flows used to determine the discount rate assumed contributions will be equal to the actuarially determined contributions. For this purpose, only contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected Department contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the RHBF's fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on RHBF's investments was applied to all periods of projected benefit payments to determine the total OPEB liability as of June 30, 2023 and 2022.

NOTE 6 – NET OTHER POSTEMPLOYMENT BENEFITS LIABILITY OF THE DEPARTMENT (Continued)

Sensitivity of the net OPEB liability to changes in the discount rate: The following presents the RHBF's NOL as of June 30, 2023 and 2022, calculated using its respective discount rate, as well as what the NOL would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the utilized rate:

	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (7.50%)
NOL as of June 30, 2023	$44,503,307	$(345,765,159)	$(664,616,576)
NOL as of June 30, 2022	$257,570,322	$(130,199,288)	$(447,329,328)

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rate: The following presents the RHBF's NOL as of June 30, 2023 and 2022, calculated using the healthcare cost trend rates assumed in the June 30, 2023 and 2022 actuarial valuations, as well as what the NOL would be if it were calculated using trend rates that are 1-percentage-point lower or 1-percentage-point higher than the assumed rates:

	1% Decrease	Assumed Trend Rates	1% Increase
NOL as of June 30, 2023	$(700,657,607)	$(345,765,159)	$102,064,580
NOL as of June 30, 2022	$(481,795,630)	$(130,199,288)	$312,243,163

Death Benefit Fund

The components of the NOL of the Death Benefit Fund as of June 30, 2023 and 2022 are as follows:

	Total OPEB Liability	Death Benefit Fund Fiduciary Net Position	Net OPEB Liability	Fiduciary Net Position as % of Total OPEB Liability
As of June 30, 2023	$155,233,537	$46,533,638	$108,699,899	29.98%
As of June 30, 2022	$153,187,434	$40,525,139	$112,662,295	26.45%

NOTE 6 – NET OTHER POSTEMPLOYMENT BENEFITS LIABILITY OF THE DEPARTMENT (Continued)

The WPERP engages an independent actuarial firm to conduct annual actuarial valuation to determine the total OPEB liability of the Department. The TOL as of June 30, 2023 and 2022 were determined by the actuarial valuations as of June 30, 2023 and 2022. The actuarial assumptions used in the June 30, 2023 and June 30, 2022 measurements were based on the results of the most recent actuarial experience study for the period from July 1, 2018 through June 30, 2021, with the exception of a 2.75% investment return assumption and additional assumptions regarding family composition for the Family Death Benefit and Supplemental Family Death Benefit. In particular, the following assumptions were applied in the measurements:

Inflation rate	2.50%
Projected salary increases	4.25% to 10.00%, includes inflation at 2.50%, "across the board" increases of 0.50% plus merit and promotional increases
Investment rate of return	2.75% net of investment expense, including inflation

Investment rate of return: The long-term expected rate of return on the Death Benefit Fund's investments was determined in 2022 using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. This information is 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, adding expected inflation, and subtracting expected investment expenses and a risk margin.

The Death Benefit Fund's target asset allocation and projected arithmetic real rates of return for each major asset class, calculated after deducting inflation but before deducting investment expenses, remain consistent in the derivation of the long-term expected investment rate of return assumptions as of June 30, 2023 and 2022. These are summarized in the following table.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Fixed income	100.00%	0.36%
Total	100.00%	

NOTE 6 – NET OTHER POSTEMPLOYMENT BENEFITS LIABILITY OF THE DEPARTMENT (Continued)

Discount rate: The discount rate used to measure the total OPEB liability (TOL) was 2.75% as of June 30, 2023 and June 30, 2022. A "crossover test" was not explicitly performed as of June 30, 2023 since the municipal bond rate as of June 30, 2023 was 3.65%, which was higher than the 2.75% long-term expected rate of return on the Death Benefit Fund's investments. Therefore, the long-term expected rate of return on the Death Benefit Fund's investments was applied to all periods of projected benefit payments to determine the TOL as of June 30, 2023.

Also, a "crossover test" was not explicitly performed as of June 30, 2022 since the municipal bond rate as of June 30, 2022 was 3.54%, which was higher than the 2.75% long-term expected rate of return on the Death Benefit Fund's investments. Therefore, the long-term expected rate of return on the Death Benefit Fund's investments was applied to all periods of projected benefit payments to determine the TOL as of June 30, 2022.

Sensitivity of the net OPEB liability to changes in the discount rate: The following presents the Death Benefit's NOL as of June 30, 2023 and 2022, calculated using its respective discount rate, as well as what the NOL would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the utilized rate:

	1% Decrease (1.75%)	Current Discount Rate (2.75%)	1% Increase (3.75%)
NOL as of June 30, 2023	$134,853,839	$108,699,899	$87,975,711
NOL as of June 30, 2022	$138,630,944	$112,662,295	$92,097,795

Sensitivity of the net OPEB liability to changes in the cost trend rate: Since there is no trend rate assumption used in valuing these benefits, the net OPEB liability is unaffected by any changes in trend rates.

NOTE 7 – ACTUARIAL VALUATION – DISABILITY FUND

Actuarial studies are performed annually on the Disability Fund to determine and recommend the appropriate contribution rates and the benefit reserves levels needed to fund the current and future benefit liabilities. The results of the most recent annual actuarial reviews (as of July 1, 2022 and July 1, 2021) for the Disability Fund found that the Fund's accumulated reserves had met the recommended reserve level. The actuarial recommendations for the contribution rates and reserve levels were approved by the Retirement Board.

For permanent total disability, the Department's contribution rate remains at $0 per $100 of covered payroll. As for temporary disability, the Department's contribution rate was $1.05 and $1.07 per $100 of covered payroll for fiscal years 2023 and 2022, respectively. The rates were approved by the Retirement Board in January of each year and were implemented the same month.

NOTE 8 – RESERVES AND DESIGNATED BALANCES

Reserve accounts are established to cover all deferred liabilities as they accrue. Reserves are established from members and Department contributions and the accumulation of investment income after satisfying investment and administrative expenses. There are four major classes of reserves and designated accounts.

Member contribution accounts represent the balance of member contributions. Additions include member contributions and interest. Deductions include refunds of member contributions and transfers to the reserve for retirement allowances and the reserve for death benefit.

Department contribution accounts represent the balance of Department contributions for future retirement payments to current active members. Additions include contributions from the Department and related earnings. Deductions include transfers to the reserve for retirement allowances and a reserve for death benefits.

Estimated benefit liabilities reserves represent the balance of transfers from member contribution and/or Department contribution accounts and related earnings less payments to retired members, members on disability, and beneficiaries.

General reserves represent reserves accumulated for future earnings deficiencies, investment losses, and other contingencies. Additions include investment income and other revenue. Deductions include investment expense, interest allocated to member and Department contribution accounts, and interest allocated to the estimated benefits liabilities reserves accounts.

NOTE 8 – RESERVES AND DESIGNATED BALANCES (Continued)

The WPERP's reserves and designated balances at June 30, 2023 and 2022 are as follows:

	2023	2022
Retirement Fund - Reserves and Designated Balances		
Reserve for retirement allowances	$ 9,848,789,321	$ 9,452,278,935
Contributions:		
Members' contributions	2,093,095,974	1,960,534,962
Department contributions	(2,113,792,593)	(1,990,108,896)
Total contributions	(20,696,619)	(29,573,934)
General reserve	3,923,273,590	3,959,044,330
Total reserves and designated balances	13,751,366,292	13,381,749,331
Unrealized appreciation in the fair value of investments	2,673,434,819	2,132,175,063
Total reserves and designated balances at fair value	$ 16,424,801,111	$ 15,513,924,394
Disability Fund - Reserves and Designated Balances		
Estimated liability for temporary and permanent disability cases	$ 15,771,117	$ 15,954,027
General reserve	25,206,387	27,214,700
Total reserves and designated balances	40,977,504	43,168,727
Unrealized appreciation in the fair value of investments	278,635	1,681,498
Total reserves and designated balances at fair value	$ 41,256,139	$ 44,850,225
Death Benefit Fund - Reserves and Designated Balances		
Estimated liability for family allowances	$ 3,933,528	$ 4,061,084
Contribution account - family allowances	7,421,906	7,225,866
General reserve	37,160,361	29,473,540
Total reserves and designated balances	48,515,795	40,760,490
Unrealized appreciation in the fair value of investments	(1,982,157)	(235,351)
Total reserves and designated balances at fair value	$ 46,533,638	$ 40,525,139
Retiree Health Benefits Fund - Reserves and Designated Balances		
Department contributions (net of insurance premiums payment)	$ 1,037,604,927	$ 1,037,604,927
General reserve	1,453,569,543	1,362,824,678
Total reserves and designated balances	2,491,174,470	2,400,429,605
Unrealized appreciation in the fair value of investments	479,880,618	360,611,311
Total reserves and designated balances at fair value	$ 2,971,055,088	$ 2,761,040,916

NOTE 9 – PLAN AMENDMENTS

The Plan is periodically amended to meet changes in economic conditions and sound business practices. The following is a summary of the more significant Plan amendments taken effect during the fiscal years ended June 30, 2023 and 2022:

Fiscal year ended June 30, 2023

The Regular Interest Rate, as defined in the Plan, is used to credit members' retirement contributions on deposit with the Plan. That rate and the mortality rate assumptions are also used in the calculation of retirement allowances and conversion to optional benefit amounts. Prior to the following amendment, the Regular Interest Rate shall align with the investment return assumption rate as adopted by Retirement Board effective the 1st of the month following the adoption of the assumption, so long as the investment return assumption rate is at least 7.00%.

On November 9, 2022, the Plan was amended such that the Regular Interest Rate shall align with the investment return assumption rate, and the mortality factors with the mortality assumptions, as adopted by Retirement Board effective the 1st of the month one year after the adoption of the assumptions; provided, however, that the Regular Interest Rate shall not change prior to July 1, 2024. Thus, the Regular Interest Rate shall decrease from 7.00% to 6.50% effective July 1, 2024.

Fiscal year ended June 30, 2022

There were no significant Plan amendments for the fiscal year ended June 30, 2022.

NOTE 10 – RISKS AND UNCERTAINTIES

The WPERP invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statements of fiduciary net position.

Additionally, the Department contributions and actuarial valuations are reported based on certain assumptions pertaining to interest rates and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

NOTE 11 – SUBSEQUENT EVENTS

The WPERP has evaluated subsequent events through November 16, 2023, the date the financial statements were available to be issued and concluded no other events have occurred that require disclosure or adjustments to the financial statements.

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
RETIREMENT FUND
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
(Unaudited)

	2023	2022	2021	2020	2019
Total pension liability					
Service cost	$ 322,734,117	$ 277,243,581	$ 275,365,595	$ 263,472,814	$ 243,262,953
Interest	1,045,077,316	1,044,964,004	1,008,129,964	963,032,210	952,071,733
Change of benefit terms	(82,833,165)	-	-	-	-
Differences between expected and actual experience	341,242,444	(35,733,830)	(62,310,517)	62,540,626	17,806,843
Change of assumptions	-	550,825,337	-	-	8,835,790
Benefit payments, including refund of member contributions	(749,460,645)	(716,007,901)	(677,717,014)	(635,652,595)	(597,563,566)
Net change in total pension liability	876,760,067	1,121,291,191	543,468,028	653,393,055	624,413,753
Total pension liability - beginning	16,130,117,067	15,008,825,876	14,465,357,848	13,811,964,793	13,187,551,040
Total pension liability - ending	$ 17,006,877,134	$ 16,130,117,067	$ 15,008,825,876	$ 14,465,357,848	$ 13,811,964,793
Fiduciary net position					
Contributions - employer, including administrative expenses	$ 368,478,954	$ 325,325,721	$ 385,071,467	$ 427,655,268	$ 416,180,197
Contributions - employees	144,715,315	131,105,102	122,316,256	120,299,327	104,741,925
Net investment income	1,153,142,796	(888,348,728)	3,489,200,333	459,024,099	791,832,113
Benefit payments, incluidng refund of member contribution	(749,460,645)	(716,007,901)	(677,717,014)	(635,652,595)	(597,563,566)
Administrative expense	(5,999,703)	(5,613,756)	(5,115,182)	(4,705,004)	(5,188,931)
Net change in fiduciary net position	910,876,717	(1,153,539,562)	3,313,755,860	366,621,095	710,001,738
Fiduciary net position - beginning	15,513,924,394	16,667,463,956	13,353,708,096	12,987,087,001	12,277,085,263
Fiduciary net position - ending	$ 16,424,801,111	$ 15,513,924,394	$ 16,667,463,956	$ 13,353,708,096	$ 12,987,087,001
Net pension liability	$ 582,076,023	$ 616,192,673	$ (1,658,638,080)	$ 1,111,649,752	$ 824,877,792
Fiduciary net position as % of total pension liabilitiy	96.58%	96.18%	111.05%	92.32%	94.03%
Covered employee payroll	$ 1,259,245,870	$ 1,178,016,102	$ 1,121,883,556	$ 1,130,066,414	$ 1,028,212,002
Net pension liability as % of covered employee payroll	46.22%	52.31%	-147.84%	98.37%	80.22%

See accompanying independent auditor's report.

EXHIBIT I

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
RETIREMENT FUND
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
(Unaudited)

	2018	2017	2016	2015	2014
Total pension liability					
Service cost	$ 228,621,066	$ 217,276,778	$ 209,832,859	$ 214,735,027	$ 193,661,118
Interest	913,798,415	887,133,571	837,977,383	821,047,664	779,396,615
Change of benefit terms	(59,019,242)	-	-	(144,007,904)	-
Differences between expected and actual experience	10,253,750	(196,176,749)	(189,461,173)	(162,912,927)	(154,221,968)
Change of assumptions	-	-	722,927,661	-	525,443,921
Benefit payments, including refund of member contributions	(563,212,525)	(540,361,335)	(510,484,986)	(485,966,910)	(463,596,940)
Net change in total pension liability	530,441,464	367,872,265	1,070,791,744	242,894,950	880,682,746
Total pension liability - beginning	12,657,109,576	12,289,237,311	11,218,445,567	10,975,550,617	10,094,867,871
Total pension liability - ending	$ 13,187,551,040	$ 12,657,109,576	$ 12,289,237,311	$ 11,218,445,567	$ 10,975,550,617
Fiduciary net position					
Contributions - employer, including administrative expenses	$ 439,298,444	$ 397,747,778	$ 368,259,056	$ 382,231,868	$ 389,138,324
Contributions - employees	93,659,240	83,239,105	75,068,523	68,552,375	72,299,526
Net investment income	998,777,227	1,280,806,288	95,807,981	410,778,109	1,405,686,199
Benefit payments, incluidng refund of member contribution	(563,212,525)	(540,361,335)	(510,484,986)	(485,966,910)	(463,596,941)
Administrative expense	(5,336,458)	(5,375,229)	(5,108,115)	(4,612,476)	(4,221,234)
Net change in fiduciary net position	963,185,928	1,216,056,607	23,542,459	370,982,966	1,399,305,874
Fiduciary net position - beginning	11,313,899,335	10,097,842,728	10,074,300,269	9,703,317,303	8,304,011,429
Fiduciary net position - ending	$ 12,277,085,263	$ 11,313,899,335	$ 10,097,842,728	$ 10,074,300,269	$ 9,703,317,303
Net pension liability	$ 910,465,777	$ 1,343,210,241	$ 2,191,394,583	$ 1,144,145,298	$ 1,272,233,314
Fiduciary net position as % of total pension liabilitiy	93.10%	89.39%	82.17%	89.80%	88.41%
Covered employee payroll	$ 953,635,670	$ 892,332,196	$ 861,818,854	$ 839,213,254	$ 819,923,866
Net pension liability as % of covered employee payroll	95.47%	150.53%	254.28%	136.34%	155.16%

See accompanying independent auditor's report.

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
RETIREMENT FUND
NOTES TO SCHEDULE OF EMPLOYER CONTRIBUTIONS
(Unaudited)

Plan Year Ended June 30	Actuarially Determined Contributions	Actual Contributions	Contribution Deficiency/ (Excess)	Covered Employee Payroll	Contribution as Percentage of Covered Payroll
2023	$ 372,208,800	$ 361,585,859	$ 10,622,941	$ 1,259,245,870	28.71%
2022	302,800,123	318,873,759	(16,073,636)	1,178,016,102	27.07%
2021	373,374,390	378,990,511	(5,616,121)	1,121,883,556	33.78%
2020	424,375,428	422,017,394	2,358,034	1,130,066,141	37.34%
2019	408,750,192	410,165,124	(1,414,932)	1,028,212,002	39.89%
2018	425,512,236	433,412,569	(7,900,333)	953,635,670	45.45%
2017	403,780,319	391,717,359	12,062,960	892,332,196	43.90%
2016	368,599,924	362,359,894	6,240,030	861,818,854	42.05%
2015	387,464,759	376,902,022	10,562,737	839,213,254	44.91%
2014	387,823,989	384,265,892	3,558,097	819,923,866	46.87%

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
RETIREMENT FUND
NOTES TO SCHEDULE OF EMPLOYER CONTRIBUTIONS
(Unaudited)

Valuation date	Actuarially determined contribution rates are calculated as of June 30, one year prior to the end of the fiscal year in which contributions are reported.
Actuarial cost method	Entry age actuarial cost method
Amortization method	Level dollar amortization
Remaining amortization period	The July 1, 2004 Unfunded Actuarial Accrued Liability is amortized over a 15-year period commencing July 1, 2004. Any subsequent changes in Unfunded Actuarial Accrued Liability are amortized over separate 15-year periods effective with that valuation. The funding policy was revised and adopted by the Retirement Board on November 9, 2022. In particular, if the Plan is in a surplus position and the surplus is 20% or greater (i.e., the funded ratio is 120% or greater), the surplus in excess of 20% will be amortized over a 30-year period in equal dollar amounts. In a year where the Plan is in a surplus position following a previous unfunded liability position, or an unfunded liability position following a previous surplus position, the previous amortization layers will be considered fully amortized (i.e., set to zero) and a new series of amortization layers will start.
Asset valuation method	The 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 a market value basis, and is recognized over a five-year period.
Other information	All members hired on or after January 1, 2014 enter Tier 2.
Actuarial assumptions:	
Investment rate of return	6.50%
Inflation rate	2.50%
Projected salary increases	4.25% to 10.00%
Cost of living adjustments	2.75% (actual increases are contingent upon CPI increases with a 3.00% maximum for Tier 1, 2.00% maximum for Tier 2)
Mortality	Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021.
Other assumptions	Same as those used in the July 1, 2023 funding actuarial valuation

EXHIBIT III

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
RETIREMENT FUND
SCHEDULE OF INVESTMENT RETURNS
(Unaudited)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	7.52%	-5.39%	26.40%	3.56%	6.50%	8.89%	12.79%	0.96%	4.27%	17.05%

Note to schedule:

This schedule is presented for the year for which information is available.

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
RETIREE HEALTH BENEFITS FUND
SCHEDULE OF CHANGES IN NET OTHER POSTEMPLOYMENT BENEFIT LIABILITY
AND RELATED RATIOS
(Unaudited)

	2023	2022	2021	2020
Total OPEB liability				
Service cost	$ 63,208,118	$ 49,615,448	$ 48,226,344	$ 52,963,965
Interest	171,480,279	179,466,316	173,866,595	187,719,658
Change of benefit terms	35,212,136	-	-	-
Differences between expected and actual experience	35,298,809	(62,373,754)	(27,834,317)	(288,180,293)
Change of assumptions	(197,179,932)	6,932,933	(5,917,751)	(36,324,788)
Benefit payments	(113,571,109)	(112,081,130)	(109,282,435)	(109,401,181)
Net change in total OPEB liability	(5,551,699)	61,559,813	79,058,436	(193,222,639)
Total OPEB liability - beginning	2,630,841,628	2,569,281,815	2,490,223,379	2,683,446,018
Total OPEB liability - ending	$ 2,625,289,929	$ 2,630,841,628	$ 2,569,281,815	$ 2,490,223,379
Fiduciary net position				
Contributions - employer, including administrative expenses	$ 114,618,126	$ 113,094,077	$ 110,261,019	$ 110,444,724
Net investment income	209,846,044	(157,243,140)	614,234,046	83,021,344
Benefit payments	(113,571,109)	(112,081,130)	(109,282,435)	(109,401,181)
Administrative expense	(878,889)	(850,111)	(820,432)	(887,299)
Net change in fiduciary net position	210,014,172	(157,080,304)	614,392,198	83,177,588
Fiduciary net position - beginning	2,761,040,916	2,918,121,220	2,303,729,022	2,220,551,434
Fiduciary net position - ending	$ 2,971,055,088	$ 2,761,040,916	$ 2,918,121,220	$ 2,303,729,022
Net OPEB liability	$ (345,765,159)	$ (130,199,288)	$ (348,839,405)	$ 186,494,357
Fiduciary net position as % of total OPEB liabilitiy	113.17%	104.95%	113.58%	92.51%
Covered employee payroll	$ 1,259,245,870	$ 1,178,016,102	$ 1,121,883,556	$ 1,130,066,141
Net OPEB liability as % of covered employee payroll	-27.46%	-11.05%	-31.09%	16.50%

Note to Schedule:

This schedule is presented for those years for which information is available.

See accompanying independent auditor's report.

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
RETIREE HEALTH BENEFITS FUND
SCHEDULE OF CHANGES IN NET OTHER POSTEMPLOYMENT BENEFIT LIABILITY AND RELATED RATIOS
(Unaudited)

	2019	2018	2017	2016
Total OPEB liability				
Service cost	$ 46,187,613	$ 49,190,698	$ 49,295,168	$ 38,342,912
Interest	178,690,352	170,306,670	169,518,251	146,596,915
Change of benefit terms	-	(285,566)	-	-
Differences between expected and actual experience	(40,431,700)	(6,956,314)	(44,553,945)	87,184,567
Change of assumptions	131,290,346	4,798,880	(70,508,237)	185,583,627
Benefit payments	(101,594,970)	(95,233,622)	(90,310,419)	(79,895,671)
Net change in total OPEB liability	214,141,641	121,820,746	13,440,818	377,812,350
Total OPEB liability - beginning	2,469,304,377	2,347,483,631	2,334,042,813	1,956,230,463
Total OPEB liability - ending	$ 2,683,446,018	$ 2,469,304,377	$ 2,347,483,631	$ 2,334,042,813
Fiduciary net position				
Contributions - employer, including administrative expenses	$ 102,631,460	$ 95,918,712	$ 91,023,926	$ 80,606,726
Net investment income	134,706,591	173,674,359	218,835,834	14,462,876
Benefit payments	(101,594,970)	(95,233,622)	(90,310,419)	(79,895,671)
Administrative expense	(882,725)	(548,907)	(585,352)	(578,174)
Net change in fiduciary net position	134,860,356	173,810,542	218,963,989	14,595,757
Fiduciary net position - beginning	2,085,691,078	1,911,880,536	1,692,916,547	1,678,320,790
Fiduciary net position - ending	$ 2,220,551,434	$ 2,085,691,078	$ 1,911,880,536	$ 1,692,916,547
Net OPEB liability	$ 462,894,584	$ 383,613,299	$ 435,603,095	$ 641,126,266
Fiduciary net position as % of total OPEB liabilitiy	82.75%	84.46%	81.44%	72.53%
Covered employee payroll	$ 1,028,212,002	$ 953,635,670	$ 892,332,196	$ 861,818,854
Net OPEB liability as % of covered employee payroll	45.02%	40.23%	48.82%	74.39%

Note to Schedule:

This schedule is presented for those years for which information is available.

See accompanying independent auditor's report.

EXHIBIT V

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
RETIREE HEALTH BENEFITS FUND
SCHEDULE OF EMPLOYER CONTRIBUTIONS
(Unaudited)

Plan Year Ended June 30	Actuarially Determined Contributions	Actual Contributions	Contribution Deficiency/ (Excess)	Covered Employee Payroll	Contribution as Percentage of Covered Payroll
2023	$ 55,584,893	$ 113,571,109	$ (57,986,216)	$ 1,259,245,870	9.02%
2022	49,687,613	112,081,130	(62,393,517)	1,178,016,102	9.51%
2021	63,164,899	109,282,435	(46,117,536)	1,121,883,556	9.74%
2020	95,375,489	109,401,181	(14,025,692)	1,130,066,141	9.68%
2019	80,850,687	101,594,970	(20,744,283)	1,028,212,002	9.88%
2018	85,339,091	95,233,622	(9,894,531)	953,635,670	9.99%
2017	93,920,143	90,310,419	3,609,724	892,332,196	10.12%
2016	61,971,138	79,895,671	(17,924,533)	861,818,854	9.27%
2015	70,748,429	78,496,618	(7,748,189)	839,213,254	9.35%
2014	58,453,215	74,105,548	(15,652,333)	819,923,866	9.04%

See accompanying independent auditor's report.

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
RETIREE HEALTH BENEFITS FUND
NOTES TO SCHEDULE OF EMPLOYER CONTRIBUTIONS
(Unaudited)

Valuation date	Actuarially determined contribution rates are calculated as of June 30, one year prior to the end of the fiscal year in which contributions are reported.
Actuarial cost method	Entry age, Level Percent of Pay
Amortization method	When the Plan has an UAAL: Single closed amortization period, level percent of pay; 12 years remaining as of June 30, 2023 and 13 years remaining as of June 30, 2022. When the Plan has a Surplus: Single open amortization period, level percent of pay; 30 years remaining as of June 30, 2023 and 30 years remaining as of June 30, 2022.
Asset valuation method	The 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 returns and the expected returns on a market value basis, and is recognized over a five-year period.
Actuarial assumptions:	
Investment rate of return	6.50%, net of investment expense
Inflation rate	2.50%
Projected salary increases	4.25% to 10.00%
Healthcare cost trend rates:	
Non-Medicare medical plan	7.00%, graded down to an ultimate of 4.50% over 10 years
Medicare medical plans	6.25%, graded down to an ultimate of 4.50% over 7 years
Dental	3.00%
Medicare Part B	4.50%

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
RETIREE HEALTH BENEFITS FUND
SCHEDULE OF INVESTMENT RETURNS
(Unaudited)

	2023	2022	2021	2020	2019	2018	2017
Annual money-weighted rate of return, net of investment expense	7.60%	-5.39%	26.65%	3.74%	6.46%	9.08%	12.92%

Note to schedule:
This schedule is presented for the year for which information is available.

EXHIBIT VII

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
DEATH BENEFIT FUND
SCHEDULE OF CHANGES IN NET OTHER POST EMPLOYMENT BENEFIT LIABILITY AND RELATED RATIOS
(Unaudited)

	2023	2022	2021	2020	2019	2018	2017
Total OPEB liability							
Service cost	$ 5,957,755	$ 5,052,420	$ 5,040,195	$ 4,716,844	$ 4,779,848	$ 3,875,903	$ 3,656,610
Interest	4,256,540	4,704,713	4,677,912	4,725,458	5,058,685	5,140,912	5,095,026
Change of benefit terms	-	-	-	-	-	90,905	-
Differences between expected and actual experience	555,646	1,508,032	828,147	(2,040,143)	485,084	(4,443,689)	125,381
Change of assumptions	-	17,224,419	-	-	(11,703,994)	-	-
Benefit payments	(8,723,838)	(9,340,216)	(10,245,251)	(7,922,692)	(8,232,053)	(7,602,577)	(7,968,010)
Net change in total OPEB liability	2,046,103	19,149,368	301,003	(520,533)	(9,612,430)	(2,938,546)	909,007
Total OPEB liability - beginning	153,187,434	134,038,066	133,737,063	134,257,596	143,870,026	146,808,572	145,899,565
Total OPEB liability - ending	$ 155,233,537	$ 153,187,434	$ 134,038,066	$ 133,737,063	$ 134,257,596	$ 143,870,026	$ 146,808,572
Fiduciary net position							
Contributions - employer, including administrative expenses	$ 16,497,224	$ 14,991,933	$ 14,522,798	$ 14,908,884	$ 8,777,581	$ 8,101,199	$ 8,206,607
Contributions - employees	378,022	372,258	373,989	384,893	358,073	346,931	336,630
Net investment income	(279,861)	(4,381,121)	343,631	2,793,526	2,292,799	(119,894)	(56,662)
Benefit payments	(8,723,838)	(9,340,216)	(10,245,251)	(7,922,692)	(8,232,053)	(7,602,577)	(7,968,010)
Administrative expense	(1,863,048)	(1,855,962)	(1,621,742)	(1,606,529)	(1,599,880)	(1,099,573)	(1,119,190)
Net change in fiduciary net position	6,008,499	(213,108)	3,373,425	8,558,082	1,596,520	(373,914)	(600,625)
Fiduciary net position - beginning	40,525,139	40,738,247	37,364,822	28,806,740	27,210,220	27,584,134	28,184,759
Fiduciary net position - ending	$ 46,533,638	$ 40,525,139	$ 40,738,247	$ 37,364,822	$ 28,806,740	$ 27,210,220	$ 27,584,134
Net OPEB liability	$ 108,699,899	$ 112,662,295	$ 93,299,819	$ 96,372,241	$ 105,450,856	$ 116,659,806	$ 119,224,438
Fiduciary net position as % of total OPEB liabilitiy	29.98%	26.45%	30.39%	27.94%	21.46%	18.91%	18.79%
Covered employee payroll	$1,259,245,870	$1,178,016,102	$1,121,883,556	$1,130,066,141	$1,028,212,002	$ 953,635,670	$ 892,332,196
Net OPEB liability as % of covered employee payroll	8.63%	9.56%	8.32%	8.53%	10.26%	12.23%	13.36%

Note to Schedule:

This schedule is presented for those years for which information is available.

See accompanying independent auditor's report.

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
DEATH BENEFIT FUND
SCHEDULE OF EMPLOYER CONTRIBUTIONS
(Unaudited)

Plan Year Ended June 30	Actuarially Determined Contributions	Actual Contributions	Contribution Deficiency/ (Excess)	Covered Employee Payroll	Contribution as Percentage of Covered Payroll
2023	$ 15,236,875	$ 14,631,549	$ 605,326	$ 1,259,245,870	1.16%
2022	13,075,979	13,133,730	(57,751)	1,178,016,102	1.11%
2021	12,565,096	12,898,727	(333,631)	1,121,883,556	1.15%
2020	13,334,780	13,299,775	35,005	1,130,066,141	1.18%
2019	7,259,955	7,259,955	-	1,028,212,002	0.71%
2018	7,137,211	7,137,211	-	953,635,670	0.75%
2017	7,137,953	7,137,953	-	892,332,196	0.80%
2016	7,206,780	7,206,780	-	861,818,854	0.84%

Note to schedule:
This schedule is presented for the years for which information is available.

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
DEATH BENEFIT FUND
NOTES TO SCHEDULE OF EMPLOYER CONTRIBUTIONS
(Unaudited)

Valuation date	Actuarially determined contribution rates are calculated as of June 30, one year prior to the end of the fiscal year in which contributions are reported.
Actuarial cost method	Entry Age Actuarial Cost Method
Asset valuation method	The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and expected returns on a market value basis and is recognized over a five-year period.
Amortization method	Level dollar amortization
Remaining amortization period	The July 1, 2019 Unfunded Actuarial Accrued Liability is amortized over a fifteen-year period commencing July 1, 2019 (fully amortized as of July 1, 2034). Any subsequent changes in Unfunded Actuarial Accrued Liability are amortized over separate fifteen-year periods effective with that valuation. The funding policy was revised and adopted by the Retirement Board on November 9, 2022. In particular, if the Plan is in a surplus position and the surplus is 20% or greater (i.e., the funded ratio is 120% or greater), the surplus in excess of 20% will be amortized over a 30-year period in equal dollar amounts. In a year where the Plan is in a surplus position following a previous unfunded liability position, or an unfunded liability position following a previous surplus position, the previous amortization layers will be considered fully amortized (i.e., set to zero) and a new series of amortization layers will start.
Actuarial assumptions:	
Investment rate of return	2.75%, net of investment expense
Inflation rate	2.50%
Projected salary increase	4.25% to 10.00%

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN

REQUIRED SUPPLEMENTARY INFORMATION
DEATH BENEFIT FUND
SCHEDULE OF INVESTMENT RETURNS
(Unaudited)

	2023	2022	2021	2020	2019	2018	2017
Annual money-weighted rate of return, net of investment expense	-0.60%	-9.53%	0.82%	8.33%	7.56%	-0.39%	-0.18%

Note to schedule:
This schedule is presented for the year for which information is available.

EXHIBIT X

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN
SUPPLEMENTARY INFORMATION

RETIREMENT FUND
SCHEDULE OF CONTRIBUTION ACCOUNTS AND ESTIMATED LIABILITY FOR RETIREMENT ALLOWANCES
For the Years Ended June 30, 2023 and 2022
(Unaudited)

	Current Service	Minimum Pension	Cost of Living Adjustments	Continuance to Eligible Spouse	Department of Water and Power Total	Members' Total	Combined Total	Estimated Liabilities for Retirement Allowances
Balance at June 30, 2021	$ 1,537,268,354	$ 668,461,240	$ (3,726,716,930)	$ (262,015,777)	$ (1,783,003,113)	$ 1,867,587,228	$ 84,584,115	$ 8,980,604,243
Contributions received	47,946,662	274,404,778	-	-	322,351,440	131,105,102	453,456,542	-
Contributions refunded	(3,477,681)	-	-	-	(3,477,681)	(9,123,135)	(12,600,816)	-
Net Contributions	44,468,981	274,404,778	-	-	318,873,759	121,981,967	440,855,726	-
Transfers from contribution accounts for retiring members	(153,847,115)	(90,520,367)	(135,786,523)	(18,779,517)	$ (398,933,522)	(157,412,861)	(556,346,383)	556,346,383
Retirement allowances paid	-	-	-	-	-	-	-	(706,884,767)
Interest at 7.00% per annum	103,354,237	53,303,797	(264,800,956)	(18,903,098)	(127,046,020)	128,378,628	1,332,608	622,213,075
Balance at June 30, 2022	1,531,244,457	905,649,448	(4,127,304,409)	(299,698,392)	(1,990,108,896)	1,960,534,962	(29,573,934)	9,452,278,934
Contributions received	47,217,225	318,785,589	-	-	366,002,814	144,715,315	510,718,129	-
Contributions refunded	(4,416,954)	-	-	-	(4,416,954)	(8,819,054)	(13,236,008)	-
Net Contributions	42,800,271	318,785,589	-	-	361,585,860	135,896,261	497,482,121	-
Transfers from contribution accounts for retiring members	(134,582,476)	(77,663,603)	(116,184,698)	(17,226,628)	$ (345,657,405)	(139,106,885)	(484,764,290)	484,764,290
Retirement allowances paid	-	-	-	-	-	-	-	(740,641,591)
Interest at 7.00% per annum	103,402,867	70,774,266	(292,338,864)	(21,450,421)	(139,612,152)	135,771,636	(3,840,516)	652,387,688
Balance at June 30, 2023	$ 1,542,865,119	$ 1,217,545,700	$ (4,535,827,971)	$ (338,375,441)	$ (2,113,792,593)	$ 2,093,095,974	$ (20,696,619)	$ 9,848,789,321

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN
SUPPLEMENTARY INFORMATION

DEATH BENEFIT FUND
SCHEDULE OF CONTRIBUTION ACCOUNTS AND ESTIMATED LIABILITY FOR FAMILY ALLOWANCES
For the Years Ended June 30, 2023 and 2022

	Members'	Department of Water and Power	Combined Total	Estimated Liability for Family Allowances
Balances at June 30, 2021	$ 7,061,142	$ -	$ 7,061,142	$ 3,978,785
Contributions received	107,997	-	107,997	-
Transfers to estimated liability for family allowances from contribution accounts for member deceased during the year	(192,725)	-	(192,725)	192,725
Transfer to/from general reserve	-	-	-	383,458
Family allowances paid	-	-	-	(635,479)
Interest transferred from general reserve at 3.5% per annum	249,452	-	249,452	141,595
Balances at June 30, 2022	$ 7,225,866	$ -	$ 7,225,866	$ 4,061,084
Contributions received	108,539	-	108,539	-
Transfers to estimated liability for family allowances from contribution accounts for members deceased during the year	(112,676)		(112,676)	112,676
Transfer to/from general reserve	-	-	-	229,485
Family allowances paid	-	-	-	(581,671)
Interest transferred from general reserve at 2.75% per annum	200,177	-	200,177	111,954
Balances at June 30, 2023	$ 7,421,906	$ -	$ 7,421,906	$ 3,933,528

CITY OF LOS ANGELES
WATER AND POWER EMPLOYEES' RETIREMENT PLAN
SUPPLEMENTARY INFORMATION

RETIREMENT FUND
SCHEDULE OF REVENUES BY SOURCE AND EXPENSES BY TYPES
June 30, 2023

Revenues by Source

Fiscal Year	Members' Contributions	Department Contributions*	Investment Income**	Total
2023	$ 144,715,315	$ 372,895,909	$ 350,927,274	$ 868,538,498
2022	$ 131,105,102	$ 328,803,402	$ 283,181,160	$ 743,089,664
2021	$ 122,316,256	$ 388,313,848	$ 244,732,292	$ 755,362,396
2020	$ 120,299,327	$ 432,140,635	$ 243,186,601	$ 795,626,563
2019	$ 104,741,925	$ 419,702,724	$ 257,334,361	$ 781,779,010
2018	$ 93,659,240	$ 442,535,901	$ 223,611,026	$ 759,806,167
2017	$ 83,239,105	$ 401,127,290	$ 208,617,806	$ 692,984,201
2016	$ 75,068,523	$ 371,845,053	$ 184,829,756	$ 631,743,332
2015	$ 68,552,375	$ 386,286,580	$ 175,987,770	$ 630,826,725
2014	$ 72,299,526	$ 394,811,381	$ 191,737,068	$ 658,847,975

Expenses by Type

Fiscal Year	Benefits	Administrative Expenses***	Refunds****	Total
2023	$ 740,641,591	$ 76,402,080	$ 13,236,008	$ 830,279,679
2022	$ 706,884,767	$ 73,690,271	$ 12,600,816	$ 793,175,854
2021	$ 671,277,654	$ 69,934,969	$ 9,681,741	$ 750,894,364
2020	$ 628,852,137	$ 59,985,183	$ 11,285,824	$ 700,123,144
2019	$ 591,461,776	$ 54,438,930	$ 9,624,317	$ 655,525,023
2018	$ 558,900,946	$ 48,293,515	$ 7,549,036	$ 614,743,497
2017	$ 535,914,984	$ 40,643,556	$ 7,825,863	$ 584,384,403
2016	$ 505,591,726	$ 33,807,268	$ 8,479,257	$ 547,878,251
2015	$ 480,465,024	$ 35,470,631	$ 9,556,598	$ 525,492,253
2014	$ 457,558,214	$ 32,227,775	$ 11,711,783	$ 501,497,772

* Represents Department contributions before Current Service reversions and includes contributions towards administrative expenses.

** Represents "booked" investment income and excludes "net appreciation (depreciation) in fair value of investment."

*** Represents investment and administrative expenses.

**** Represents both refunds on members' contributions and reversions on Department Current Service contributions.