

(A Fiduciary Fund of The City of New York)

Combining Financial Statements and Supplementary Information (Together with Report of Independent Certified Public Accountants)

For the Years Ended June 30, 2022 and 2021

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#### REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

To the Board of Trustees of New York City Fire Pension Funds

#### Opinion

We have audited the combining financial statements of New York City Fire Pension Fund, New York City Firefighters' Variable Supplements Fund, and New York City Fire Officers' Variable Supplements Fund, which collectively comprise the New York City Fire Pension Funds (the "Funds"), which comprise the combining statements of fiduciary net position as of June 30, 2022 and 2021 and the related combining statements of changes in fiduciary net position for the years then ended, and the related notes to combining financial statements, which collectively comprise the Funds' basic combining financial statements.

In our opinion, the accompanying combining financial statements present fairly, in all material respects, the combining fiduciary net position of the Funds as of June 30, 2022 and 2021, and the changes in the combining fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### Basis for opinion

We conducted our audits of the financial statements in accordance with auditing standards generally accepted in the United States of America (US 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 audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Responsibilities of management for the financial statements

Management is responsible for the preparation and fair presentation of the combining 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 Plan's ability to continue as a going concern for one year after the date the financial statements are available to be issued.



#### Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the combining financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US 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 combining financial statements.

In performing an audit in accordance with US GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the combining 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 Funds' 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 combining financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Funds' 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, schedule 1 - schedules of changes in the employer's net pension liability and related ratios for each of the nine years in the period ended June 30, 2022, schedule 2 - schedules of employer contributions for each of the ten years in the period ended June 30, 2022, and schedule 3 - schedule of investment returns for each of the nine years in the period ended June 30, 2022, be presented to supplement the basic combining financial statements. Such information is the responsibility of management and, although not a required part of the basic combining 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 combining financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with US GAAS. These limited



procedures 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 combining financial statements, and other knowledge we obtained during our audit of the basic combining 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.

New York, New York October 26, 2022

Scant Thornton LLP

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

June 30, 2022 and 2021

This narrative discussion and analysis of the New York City Fire Pension Funds' ("FIRE", "Funds" or the "Plan") financial performance provides an overview of the Funds' combining financial activities for the Fiscal Years ended June 30, 2022 and 2021. It is meant to assist the reader in understanding the Funds' combining financial statements by providing an overall review of the combining financial activities during the years and the effects of significant changes, as well as a comparison with the prior years' activity and results. This discussion and analysis is intended to be read in conjunction with the Funds' combining financial statements.

FIRE administers the New York City Fire Pension Fund, which is generally referred to as the New York Fire Department Pension Fund - Qualified Pension Plan ("QPP") - as set forth in the Administrative Code of the City of New York ("ACNY") Section 13-313.1. FIRE also administers the New York City Firefighters' Variable Supplements Fund ("FFVSF") and the New York City Fire Officers' Variable Supplements Fund ("FOVSF").

#### **Overview of Combining Financial Statements**

The following discussion and analysis is intended to serve as an introduction to the Funds' combining financial statements. The combining financial statements, which include the financial statements of each of the above stated Funds are prepared in accordance with Governmental Accounting Standards Board ("GASB") pronouncements, are as follows:

- The Combining Statements of Fiduciary Net Position presents the financial position of the Funds at fiscal year-end. It provides information about the nature and amounts of resources with present service capacity that the Funds presently control (assets), consumption of net assets by the Funds that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the Funds have little or no discretion to avoid (liabilities), and acquisition of net assets by the Funds that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/deferred inflow of resources being reported as net position. Investments are shown at fair value. All other assets and liabilities are determined on an accrual basis.
- The Combining Statements of Changes in Fiduciary Net Position presents the results of activities during the fiscal year. All changes affecting the assets/deferred outflow and liabilities/deferred inflow of the Funds are reflected on an accrual basis when the activity occurred, regardless of the timing of the related cash flows. In that regard, changes in the fair values of investments are included in the year's activity as net appreciation (depreciation) in fair value of investments.
- The Notes to Combining Financial Statements provide additional information that is essential to a full understanding of the data provided in the combining financial statements. The notes present information about the Funds' accounting policies, significant account balances and activities, material risks, obligations, contingencies and subsequent events, if any.
- Required Supplementary Information (Unaudited) includes the management discussion and analysis (this section), and the notes to combining financial statements as required by the GASB.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED

June 30, 2022 and 2021

#### Financial Highlights

For Fiscal Year ended June 30, 2022, the Funds' fiduciary net position restricted for benefits was approximately \$18.2 billion. This amount reflects a decrease of \$1.7 billion (8.2%) over the Funds' fiduciary net position restricted for benefits in the prior Fiscal Year. The decrease for Fiscal Year 2022 can be attributed to the decrease in the fair value of invested assets in the combined investment portfolio of the funds. However, there was an excess of total contribution, other receipts over pension benefits and administrative expenses paid. In addition, the net decrease in fair value of the Funds' investment portfolio resulted in the decrease to the amount of net investment income reported for the period.

For Fiscal Year ended June 30, 2021, the Funds' fiduciary net position restricted for benefits was approximately \$19.9 billion. This amount reflects an increase of \$4.0 billion (24.9%) over the Funds' fiduciary net position restricted for benefits in the prior Fiscal Year. The growth for Fiscal Year 2021 can be attributed to the excess of total contributions, net investment income and other receipts over pension benefits and administrative expenses paid. In addition, a net appreciation in fair value of the Funds' investment portfolio resulted in the significant increase to the amount of net investment income reported for the period.

## Changes in Fiduciary Net Position Years ended June 30, 2022, 2021 and 2020 (In thousands)

	2022	2021	2020
Additions:			
Member contributions	\$ 134,46	9 \$ 112,566	\$ 106,821
Employer contributions	1,446,99	1,436,977	1,419,270
Net investment income	(1,582,85	57) 3,963,257	718,739
Other	95	758	2,842
Total additions	(44	5,513,558	2,247,672
Deductions: Benefit payments, withdrawals and			
administrative expenses	1,633,11	6 1,550,256	1,526,276
Net increase in net position	(1,633,55	3,963,302	721,396
Net position restricted for benefits			
Beginning of year	19,864,00	15,900,707	15,179,311
End of year	\$ 18,230,45	\$ 19,864,009	\$ 15,900,707

Fiscal Year 2022 member contributions of approximately \$134.5 million was 19.5% higher compared to member contributions for Fiscal Year 2021. For Fiscal Year 2021, member contributions of approximately \$112.6 million was 5.4% higher compared to member contributions for Fiscal Year 2020. Generally, increases or decreases in member contributions are primarily due to changes in the number of active fund members making voluntary contributions in addition to their required contributions and changes in the average annual pay of Funds' members.

Employer contributions are made on a statutory basis determined by the actuarial valuations performed as of June 30, 2020 and 2019, under the One-Year Lag Methodology ("OYLM"). Employer contributions for Fiscal Year 2022 totaled \$1.45 billion, which increased \$10.0 million when compared to employer contributions for Fiscal Year 2021. Employer contributions for Fiscal Year 2021 totaled \$1.44 billion, an increase of \$17.7 million (1.2%) compared to employer contributions for Fiscal Year 2020.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED

June 30, 2022 and 2021

For Fiscal Year 2022, the Funds had a net investment loss of \$1.6 billion, which was 139.9% lower compared to the net investment gain of \$4.0 billion reported for Fiscal Year 2021. The net investment loss for Fiscal Year 2022 can be attributed to the significant overall net decline in fair values of invested assets in the combined investment portfolio of the Funds.

For Fiscal Year 2021, the Funds had a net investment gain of \$4.0 billion, which was 451.4% higher compared to the net investment gain of \$718.7 million reported for Fiscal Year 2020. The net investment gain for Fiscal Year 2021 can be attributed to the significant overall net appreciation in fair values of invested assets in the combined investment portfolio of the Funds.

Benefit payments, withdrawals and administrative expenses totaled \$1.6 billion for the Fiscal Year 2022; which equals to the benefit payments, withdrawals and administrative expenses paid in the previous Fiscal Year. During Fiscal Year 2021, the Funds recorded benefit payments, withdrawals and administrative expenses of \$1.6 billion, this was an increase of 1.6% compared to Fiscal Year 2020. Increases in benefit payments and withdrawals are primarily due to changes in the number of new retirees and the amount of payments made to beneficiaries. Members are also able to withdraw excess or voluntary contributions made to the pension fund. In addition, legislatively enacted cost of living increases for certain retirees and beneficiaries also serve to increase benefit payments each year.

### Fiduciary Net Position

For Fiscal Year 2022, the Funds' combined net position restricted for benefits decreased by 8.2% to \$18.2 billion, compared to the net position restricted for benefits of \$19.9 billion in Fiscal Year 2021. The overall decline for the current fiscal year can be attributed to the overall net investment decline in the net investment income over pension benefits and withdrawals and administrative expenses.

For Fiscal Year 2021, the Funds' combined net position restricted for benefits increased by 24.9% to \$19.9 billion, compared to the net position restricted for benefits of \$15.9 billion in Fiscal Year 2020. The overall growth for the current fiscal year can be attributed to the excess of total contributions and net investment income over pension benefits and withdrawals and administrative expenses. In addition, a net appreciation in fair value of the Funds' investment portfolio resulted in the significant increase to the amount of net investment income reported for the period.

Outstanding member loans for Fiscal Year 2022 totaled \$11.7 million; this amount is 23.2% lower than member loans reported in the prior fiscal year. Outstanding member loans for Fiscal Year 2021 totaled \$15.2 million; this amount is 26.2% lower than member loans reported in the prior fiscal year. Changes in member loans can be attributed to changes in the number and amounts of new loans disbursed and the amount of repayments received. Members are permitted to borrow up to 75% (for certain members up to 90%) of their required contributions, including accumulated interest.

## MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED

June 30, 2022 and 2021

Fiduciary Net Position
June 30, 2022, 2021 and 2020
(In thousands)

	2022	2021	2020
Cash	\$ 13,168	\$ 25,162	\$ 5,952
Receivables	375,332	488,580	431,483
Investments - at fair value	18,397,688	20,292,439	16,150,586
Collateral from securities lending	2,004,521	2,141,504	941,705
Other assets	14,644	3,431	2,970
Total assets	20,805,353	22,951,116	17,532,696
Accounts payable	90,881	100,913	65,993
Payables for investments purchased	424,802	796,171	580,490
Accrued benefits payable	54,699	48,519	43,801
Payables for securities lending transactions	2,004,521	2,141,504	941,705
Total liabilities	2,574,903	3,087,107	1,631,989
Net position restricted for benefits	\$ 18,230,450	\$ 19,864,009	\$ 15,900,707

The Funds' receivables and payables are primarily generated through the timing differences between the trade and settlement dates for investment securities purchased or sold.

# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED June 30, 2022 and 2021

## Investment Summary June 30, 2022 (In thousands)

Investments - at fair value:	QPP	FFVSF	FOVSF	Combined
Short-term investments: U.S. Treasury Bills and Agencies Commercial paper Short-term investment fund	\$ 179,990 150,480 178,943	\$ - 2,209 17	\$ - 3,949 69	\$ 179,990 156,638 179,029
Debt (fixed income) securities: U.S. government and agency Corporate and other Mortgage debt securities Bank loans Treasury inflation-protected securities	2,899,182 1,546,553 796,717 46,620	- - - -	- - - -	2,899,182 1,546,553 796,717 46,620
Equity securities: Domestic equity International equity	4,973,935 1,805,750	162,047 -	122,535	5,258,517 1,805,750
Collective trust funds: Bank loans Corporate and other International equity Domestic equity Mortgage debt securities Opportunistic-fixed income U.S. government and agency	172 - 393,822 11,101 48,946 53,999	39,467 113,642 12,528 42,762 - 78,113	27,316 83,575 10,917 29,596 - 54,063	172 66,783 591,039 34,546 121,304 53,999 132,176
Alternative investments: Infrastructure Opportunistic-fixed income Private equity Private real estate Hedge funds  Collateral from securities lending	275,604 616,087 1,657,719 1,117,567 861,696 1,905,756 \$ 19,520,639	57,655 \$ 508,440	41,110 \$ 373,130	275,604 616,087 1,657,719 1,117,567 861,696 2,004,521 \$ 20,402,209

# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED June 30, 2022 and 2021

## Investment Summary June 30, 2021 (In thousands)

Investments - at fair value:	QPP	FFVSF	FOVSF	Combined
Short-term investments: U.S. Treasury Bills and Agencies Commercial paper Short-term investment fund	\$ 185,564 227,013 205,068	\$ - 4,000 118	\$ - 3,600 81	\$ 185,564 234,613 205,267
Debt (fixed income) securities: U.S. government and agency Corporate and other Mortgage debt securities Bank loans Treasury inflation-protected securities	2,347,865 1,757,335 865,263 65,367 813,528	- - - -	- - - -	2,347,865 1,757,335 865,263 65,367 813,528
Equity securities: Domestic equity International equity	6,121,847 2,351,785	208,941	146,688	6,477,476 2,351,785
Collective trust funds: Bank loans Corporate and other International equity Domestic equity Mortgage debt securities Opportunistic-fixed income U.S. government and agency	436 - 491,133 23,202 54,320 58,843	54,393 154,167 18,521 52,317 - 74,859	38,665 117,956 15,584 37,190 - 53,214	436 93,058 763,256 57,307 143,827 58,843 128,073
Alternative investments: Infrastructure Opportunistic-fixed income Private equity Private real estate Hedge funds	193,915 535,545 1,288,105 794,417 931,594	- - - - -	- - - - -	193,915 535,545 1,288,105 794,417 931,594
Collateral from securities lending	2,067,990 \$ 21,380,135	42,486 \$ 609,802	31,028 \$ 444,006	2,141,504 \$ 22,433,943

The tables above summarize the Funds' investment portfolio including collateralized securities lending. To meet the Funds' long-term benefit obligations, assets are invested in a diversified portfolio of capital market securities. Investments in these assets are expected to produce higher returns but are also subject to greater volatility. For example, the Russell 3000 index, a broad measure of the United States stock market posted losses of 13.9% in Fiscal Year 2022, compared to gains posted of 44.2% in Fiscal Year 2021. The QPP's investment portfolio posted losses of 7.6% for Fiscal Year 2022 compared to the gain of 24.9% for Fiscal Year 2021. For the three-year period ended June 30, 2022, the overall rate of return on the QPP's investment portfolio was 6.52%.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED

June 30, 2022 and 2021

The FFVSF's investment portfolio posted losses of 13.3% for Fiscal Year 2022 compared to the gain of 25.1% for Fiscal Year 2021. For the three-year period ended June 30, 2022, the overall rate of return on the Funds' investment portfolio was 3.9%.

Similarly, the FOVSF's investment portfolio posted gains of 13.8% for Fiscal Year 2022 compared to the gain of 25.3% for Fiscal Year 2021. For the three-year period ended June 30, 2022, the overall rate of return on the Funds' investment portfolio was 3.9%.

#### Other Matters

Chapter 298 of the laws of 2016 provides corpus funding of administrative expense for the Funds commencing September 8, 2016. This means that the administrative expenses are paid for out of the assets of the Funds instead of being paid for by the City of New York. Chapter 298 also allows for the appointment of an executive director of the Funds.

#### **Contact Information**

This financial report is designed to provide a general overview of the New York City Fire Pension Funds' finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Chief Accountant, New York City Fire Pension Funds, One Battery Park Plaza, 9th Floor, New York, New York 10004.

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## **COMBINING STATEMENT OF FIDUCIARY NET POSITION**

## June 30, 2022 (In thousands)

	QPP	FFVSF	FOVSF	Eliminations	Combined Funds
ASSETS					
Cash	\$ 10,873	\$ 1,219	\$ 1,076	\$ -	\$ 13,168
Receivables:	000 000				
Investments securities sold	303,803	-	-	-	303,803
Member loans (Note 7)	11,656	-	-	-	11,656
Accrued interest and dividends	59,230	139	339	-	59,708
Accounts receivable		138	27		165_
Total receivables	374,689	277_	366_		375,332
Investments - at fair value (Notes 2 and 3):					
Short-term investments:					
Commercial paper	150,480	2,209	3,949	_	156,638
Short-term investment fund	178,943	17	69	_	179,029
U.S. treasury bills and agencies	179,990		-	_	179,990
Debt (fixed income) securities:	170,000				170,000
U.S. government and agencies	2,899,182	_	_	_	2,899,182
Mortgage debt security	796,717	_	_	_	796,717
Corporate and other	1,546,553	_	_	_	1,546,553
Bank loans	46,620	_	_	_	46,620
Equity securities:	40,020				40,020
Domestic equity	4,973,935	162,047	122,535	_	5,258,517
International equity	1,805,750	102,047	122,000		1,805,750
Collective trust funds:	1,000,700	<u>-</u>	_	_	1,000,700
Bank loans	172				172
	172	39,467	27,316	-	66,783
Corporate and other	393,822	12,528	83,575	-	489,925
International equity				-	
Domestic equity	11,101	113,642 42,762	10,917 29,596	-	135,660
Mortgage debt security	48,946	42,762	29,596	-	121,304
Opportunistic-fixed income	53,999	70.440	-	-	53,999
U.S. government and agency	-	78,113	54,063	-	132,176
Alternative investments:	075 004				075 004
Infrastructure	275,604	-	-	-	275,604
Opportunistic-fixed income	616,087	-	-	-	616,087
Private equity	1,657,719	-	-	-	1,657,719
Private real estate	1,117,567	-	-	-	1,117,567
Hedge funds	861,696		-	-	861,696
Collateral from securities lending (Note 2)	1,905,756	57,655	41,110		2,004,521
Total investments	19,520,639	508,440	373,130		20,402,209
Other assets	14,644	-	-	-	14,644
Total assets	19,920,845	509,936	374,572		20,805,353
LIABILITIES					
Accounts payable	90,612	154	115	-	90,881
Payable for investment securities purchased	424,802	-	-	-	424,802
Accrued benefits payable (Note 2)	27,511	18,395	8,793	-	54,699
Securities lending (Note 2)	1,905,756	57,655	41,110		2,004,521
Total liabilities	2,448,681	76,204	50,018		2,574,903
Net position restricted for benefits:					
Benefits to be provided by QPP	17,472,164				17,472,164
Benefits to be provided by VSF	11,412,104	433,732	324,554	-	758,286
20.1011to to be provided by Voi	<del></del>	400,702	024,004		100,200
Total net position restricted for benefits	\$ 17,472,164	\$ 433,732	\$ 324,554	\$ -	\$ 18,230,450

## **COMBINING STATEMENT OF FIDUCIARY NET POSITION**

## June 30, 2021 (In thousands)

	QPP	FFVSF	FOVSF	Eliminations	Combined Funds
ASSETS					
Cash	\$ 22,894	\$ 1,240	\$ 1,028	\$ -	\$ 25,162
Receivables:					
Investments securities sold	406,775	52	37	-	406,864
Member loans (Note 7)	15,173	-	-	-	15,173
Accrued interest and dividends	65,923	130	326	-	66,379
Accounts receivable		137	27		164
Total receivables	487,871	319	390_		488,580
Investments - at fair value (Notes 2 and 3):					
Short-term investments:					
Commercial paper	227,013	4,000	3,600	_	234,613
Short-term investment fund	205,068	118	81	_	205,267
U.S. treasury bills and agencies	185,564		-	_	185,564
Debt (fixed income) securities:	,				
U.S. government and agencies	2,347,865	_	_	_	2,347,865
Mortgage debt security	865,263	_	_	_	865,263
Corporate and other	1,757,335	_	_	_	1,757,335
Treasury inflation-protected securities	813,528	_	_	_	813,528
Bank loans	65,367	_	_	_	65,367
Equity securities:	00,007				00,007
Domestic equity	6,121,847	208,941	146,688	_	6,477,476
International equity	2,351,785	200,541	140,000		2,351,785
Collective trust funds:	2,331,703	_	-	_	2,001,700
	436				436
Bank loans	430	54,393	38,665	-	93,058
Corporate and other	404 422	54,393 154,167	,	-	,
International equity	491,133 23,202	,	117,956 15,584	-	763,256
Domestic equity	,	18,521	,	-	57,307
Mortgage debt security	54,320	52,317	37,190	-	143,827
Opportunistic-fixed income	58,843	74.050	-	-	58,843
U.S. government and agency	-	74,859	53,214	-	128,073
Alternative investments:					
Infrastructure	193,915	-	-	-	193,915
Opportunistic-fixed income	535,545	-	-	-	535,545
Private equity	1,288,105	-	-	-	1,288,105
Private real estate	794,417	-	-	-	794,417
Hedge funds	931,594	-	-	-	931,594
Collateral from securities lending (Note 2)	2,067,990	42,486	31,028		2,141,504
Total investments	21,380,135	609,802	444,006		22,433,943
Other assets	3,431	_	-	_	3,431
Total assets	21,894,331	611,361	445,424		22,951,116
LARU TER					
LIABILITIES	400.070	405	00		100.010
Accounts payable	100,679	135	99	-	100,913
Payable for investment securities purchased	796,171		-	-	796,171
Accrued benefits payable (Note 2)	20,930	18,924	8,665	-	48,519
Securities lending (Note 2)	2,067,990	42,486	31,028		2,141,504
Total liabilities	2,985,770	61,545	39,792		3,087,107
Net position restricted for benefits:					
Benefits to be provided by QPP	18,908,561	-	-	-	18,908,561
Benefits to be provided by VSF	· · · · ·	549,816	405,632	-	955,448
Total net position restricted for benefits	\$ 18,908,561	\$ 549,816	\$ 405,632	\$ -	\$ 19,864,009

## **COMBINING STATEMENT OF CHANGES IN FIDUCIARY NET POSITION**

## Year ended June 30, 2022 (in thousands)

	QPP	FFVSF			FOVSF	Eliminations	Total
Additions							
Contributions:							
Member contributions	\$ 134,469	\$	-	\$	-	\$ -	\$ 134,469
Employer contributions	 1,446,992						 1,446,992
Total contributions	 1,581,461			_			 1,581,461
Investment (loss) income (Note 3):							
Interest income	253,563		7,233		5,442	-	266,238
Dividend income	209,174		7,666		5,728	-	222,568
Net (depreciation) appreciation in fair value of investmen	 (1,781,277)		(87,273)		(66,479)		 (1,935,029)
Total investment (loss) income	(1,318,540)		(72,374)		(55,309)	-	(1,446,223)
Less: investment expenses	 (140,427)		(292)		(210)		 (140,929)
Net investment (loss) income before							
securities lending transactions	 (1,458,967)		(72,666)	_	(55,519)		 (1,587,152)
Securities lending transactions:							
Securities lending income	4,494		154		115	-	4,763
Securities lending fees	(445)		(13)		(10)	-	(468)
Net securities lending income	4,049		141		105		4,295
Net investment (loss) income	(1,454,918)		(72,525)		(55,414)		 (1,582,857)
Net receipts from other retirement systems							_
Litigation income	953		-		-	-	953
Total additions	 127,496		(72,525)		(55,414)		(443)
Deductions							
Benefit payments and withdrawals (Note 1)	1,551,182		43,559		25,664	_	1,620,405
Administrative expenses	12,711		-		-	_	12,711
Total deductions	1,563,893		43,559		25,664		1,633,116
Net (decrease) increase in net position	(1,436,397)		(116,084)		(81,078)	-	(1,633,559)
Net position restricted for benefits Beginning of year	18,908,561		549,816		405,632		19,864,009
End of year	\$ 17,472,164	\$	433,732	\$	324,554	\$ -	\$ 18,230,450

## **COMBINING STATEMENT OF CHANGES IN FIDUCIARY NET POSITION**

## Year ended June 30, 2021 (in thousands)

		QPP	FFVSF		FOVSF		Eliminations		Total
Additions									
Contributions:									
Member contributions	\$	112,566	\$	-	\$	-	\$ -	\$	112,566
Employer contributions		1,436,977							1,436,977
Total contributions		1,549,543							1,549,543
Investment income (Note 3):									
Interest income		197,929		4,559		3,242	-		205,730
Dividend income		173,022		7,003		5,156	-		185,181
Net appreciation in fair value of investments		3,487,916		107,739		77,940			3,673,595
Total investment income		3,858,867		119,301		86,338	-		4,064,506
Less: investment expenses		103,577		257		187			104,021
Net investment income before									
securities lending transactions		3,755,290		119,044		86,151			3,960,485
Securities lending transactions:									
Securities lending income		2,843		124		92	-		3,059
Securities lending fees		(268)		(11)		(8)			(287)
Net securities lending income		2,575		113		84			2,772
Net investment income		3,757,865		119,157		86,235			3,963,257
Net receipts from other retirement systems		51		-		-	-		51
Litigation income		707							707
Total additions		5,308,166		119,157		86,235			5,513,558
Deductions									
Benefit payments and withdrawals (Note 1)		1,475,835		43,617		20,459	-		1,539,911
Administrative expenses		10,345		-		-	-		10,345
Total deductions		1,486,180		43,617		20,459			1,550,256
Net increase in net position		3,821,986		75,540		65,776	-		3,963,302
Net position restricted for benefits Beginning of year		15,086,575		474,276		339,856	-		15,900,707
End of year	•	18,908,561	\$	549,816	\$	405,632	\$ -	\$	19,864,009
Life of year	Ψ	10,300,301	Ψ	343,010	Ψ	400,002	<u>Ψ</u> -	Ψ	10,004,009

#### NOTES TO COMBINING FINANCIAL STATEMENTS

June 30, 2022 and 2021

#### **NOTE 1 – PLAN DESCRIPTION**

The City of New York ("City" or "The City") maintains a number of pension systems providing benefits for employees of its various agencies (as defined within New York State ("State") statutes and City laws). The City's five major actuarially-funded pension systems are the New York City Fire Pension Funds ("FIRE", "Funds" or the "Plan"), the New York City Employees' Retirement System ("NYCERS"), the Teachers' Retirement System of the City of New York ("TRS"), the New York City Board of Education Retirement System ("BERS"), and the New York City Police Pension Funds ("POLICE"). Each pension system is a separate Public Employee Retirement System ("PERS") with a separate oversight body and is financially independent of the others.

FIRE administers the New York City Fire Subchapter Two Pension Fund, which is generally referred to as the New York City Fire Pension Fund ("QPP") as set forth in the Administrative Code of The City of New York ("ACNY") Section 13-313.1. FIRE also administers the New York City Firefighters' Variable Supplements Fund ("FFVSF") and the New York City Fire Officers' Variable Supplements Fund ("FOVSF").

The QPP is a single-employer pension plan. The QPP provides pension benefits for full-time uniformed employees of the New York City Fire Pension Fund (the "Employer"). All full-time uniformed employees of the New York City Fire Department become members of the QPP upon appointment. The QPP functions in accordance with existing State statutes and City laws, which are the basis by which benefit terms and Employer and member contribution requirements are established and amended. The QPP combines features of a defined benefit pension plan with those of a defined contribution pension plan but is considered a defined benefit pension plan for financial reporting purposes.

The FFVSF and the FOVSF (collectively, the "VSFs") operate pursuant to the provisions of Title 13, Chapter 3 of the ACNY and provide supplemental benefits to retired Firefighters and Wipers, and Fire Officers, respectively. To be eligible to receive benefits from the VSFs, Firefighters and Wipers, and Fire Officers must retire, on or after October 1, 1968, with 20 or more years of uniformed service and be receiving a service retirement benefit from the QPP. Under current law, the VSFs are not to be construed as constituting a pension or retirement system. Instead, they provide defined supplemental payments, other than pension or retirement system allowances, in accordance with applicable statutory provisions. While The City guarantees these payments, the New York State Legislature has reserved to itself and the State the right and power to amend, modify, or repeal the VSFs and the payments they provide. For financial reporting purposes, however, the VSFs are considered single employer defined benefit pension plans.

FIRE is a fiduciary fund of The City and is included in the Pension and Other Employee Benefit Trust Funds section of The City's Annual Comprehensive Financial Report ("ACFR"). GASB Statement No. 98, The Annual Comprehensive Financial Report, establishes the term annual comprehensive financial report and its acronym ACFR. The new term replaces comprehensive annual financial report and its acronym in generally accepted accounting principles for state and local governments. FIRE has decided to early implement this pronouncement and has applied the change as of the issuance of this report.

#### **Boards of Trustees**

The QPP's Board of Trustees consists of 12 members. The Trustees and their voting rights are as follows: The City Fire Commissioner, The City Mayor, The City Comptroller (the "Comptroller"), and Commissioner of Finance (three votes each); the President, the Vice President, Treasurer, and Chairperson of the Board of Trustees of the Uniformed Firefighters Association of Greater New York ("UFA") (two votes each); the President of the Uniformed Fire Officers' Association of Greater New York ("UFOA") and three elected members of the Executive Board of the UFOA, one of whom shall be an officer with rank above that of captain (one vote), one of whom shall be a captain (one vote) and one of whom shall be a lieutenant (one and one-half votes); and a representative of the Uniformed Pilots' and Marine Engineers' Association of Greater New York (one-half vote).

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

The FFVSF's Board of Trustees consists of five members. The Trustees are as follows: The City Mayor, Comptroller, Commissioner of Finance, and two representatives of the UFA who are members of the QPP Board of Trustees with one vote each.

The FOVSF's Board of Trustees consists of five members. The Trustees are as follows: The Mayor, Comptroller, Commissioner of Finance, and two of the representatives of the UFOA who members of the QPP Board of Trustees with one vote each.

#### Membership Data

At June 30, 2022, June 30, 2021 and June 30, 2020, the QPP's membership consisted of:

	20221	2021	2020
Retirees and beneficiaries receiving benefits	17,351	16,578	16,624
Terminated vested members not yet receiving benefits	60	62	64
Terminated non-vested members <sup>2</sup>	2	2	-
Active members receiving salary	10,574	10,793	11,079
Total	27,987	27,435	27,767

<sup>&</sup>lt;sup>1</sup> Estimated figures.

At June 30, 2022, June 30, 2021 and June 30, 2020, the FFVSF and FOVSF membership consisted of:

		FFVSF			FOVSF			
	2022 <sup>3</sup>	022 <sup>3</sup> 2021 2020		2022 <sup>3</sup> 2021		2020		
Retirees currently receiving								
payments	3,075	3,130	3,215	1,468	1,467	1,490		
Active members <sup>4</sup>	7,944	8,203	8,389	2,630	2,590	2,690		
Total	11,019	11,333	11,604	4,098	4,057	4,180		

<sup>&</sup>lt;sup>3</sup> Estimated figures.

### Summary of Benefits

### **QPP**

The New York State Constitution provides that the pension rights of public employees are contractual and shall not be diminished or impaired. In 1973, amendments were made to the New York State Retirement and Social Security Law ("RSSL") to modify certain benefits for employees joining the QPP on or after the effective date of such amendments. These amendments, which affect employees who joined the QPP on and after July 1, 1973, established certain benefit limitations relating to eligibility for retirement, the salary base for benefits and maximum benefits. Recent laws, including but not limited to Chapter 372 of the Laws of 2000 which provides a revised definition of salary base to be used in the computation of certain benefits

<sup>&</sup>lt;sup>2</sup> As of June 30, 2020, members that are on leave with insufficient service for vesting and assumed to not return to active service are classified as terminated non-vested members.

<sup>&</sup>lt;sup>4</sup> Represents the number of actively employed Firefighters and Fire Officers, respectively, as of the June 30 valuation dates.

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

for Tier 2 members of the QPP and Chapter 589 of the Laws of 2001 which eliminated the Tier 2 maximum 30 years of service limitation, have lessened these limitations.

The QPP currently administers the following pension tiers: Tier 1, Tier 2, Tier 3, Tier 3 Modified, and Tier 3 Enhanced.

The QPP provides four main types of retirement benefits for all tiers: Vested Retirement benefits, Service Retirements, Ordinary Disability Retirements (non-job-related disabilities), and Accident Disability Retirements (job-related disabilities). Additionally, the QPP provides death benefits for all tiers.

Tier 1 is applicable to members appointed to the FDNY prior to July 1, 1973. Tier 2 is applicable to members appointed between July 1, 1973 and June 30, 2009. Benefits are generally the same for Tier 1 and Tier 2.

For Tier 1 and Tier 2 members, the QPP generally provides the following:

- A Vested Retirement benefit is payable to Tier 1 and 2 members with at least five years of uniformed service. Tier 1 and 2 members who commenced their membership with the QPP prior to February 4, 2000 must have 15 years of uniformed service to be eligible for a Vested Retirement benefit. This benefit is generally comprised of a pension equal to 1/40 of their final average salary for every year of uniformed service and is reduced or increased based on the actuarial value of an account shortage or excess. The benefit can also be increased for any purchased non-uniformed service.
- A Service Retirement benefit, in both tiers, provides an allowance of one-half of "final salary" after 20 years or 25 years of uniformed service (as elected), with additional benefits equal to a specified percentage per year of service (currently approximately 1.67%) of "average salary" times the number of years of credited service in excess of the 20-year or 25-year minimum. Under the new program, these additional benefits are increased, where applicable, by an annuity attributable to employee contributions accumulated with interest with respect to service over the 20-year or 25-year minimum and an annuity attributable to the Increased-Take-Home-Pay ("ITHP") contributions accumulated after required member qualifying service. ITHP represents amounts contributed by The City in lieu of members' own contributions. These amounts reduce the contributions that the members would have to make to the QPP during their service and thereby increase their take-home pay. Members have the choice of waiving their ITHP reduction, which would reduce their take-home pay and increase pension contributions made to the QPP.
- An Ordinary Disability Retirement ("ODR") benefit generally provides a pension equal to 1/40 of
  "final salary" times the number of years of service but not less than one-half of "final salary" if 10 or
  more years of service were completed, or one-third of "final salary" if less than 10 years of service
  were completed. Members of the Improved Benefits Plan with years of service in excess of 20 years
  receive the actuarial equivalent of their Annuity Savings Fund balance.
- An Accident Disability Retirement ("ADR") benefit provides a pension of three-fourths of "final salary" plus an increment, as described above based on years of credited service in excess of the 20-years or 25-years minimum plus: (i) under the Original Plan, accumulated employee contributions without interest as a lump sum or an actuarially equivalent annuity; and (ii) under the Improved Benefits Plan, an annuity based on the member's contributions and ITHP contributions both of which are accumulated with interest.
- Tier 1 and Tier 2 members have the right to make voluntary member contributions ("Voluntary Contributions") in excess of their required member contributions ("Required Contributions"). Both the Voluntary Contributions and the Required Contributions are credited with interest at a statutory rate (currently 8.25% Annual Percentage Rate). At the time of retirement or refund of contributions, a member's aggregate balance of actual Required Contributions and Voluntary Contributions,

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

including statutory interest ("Actual Balance"), less the outstanding balance of any member loans ("Net Actual Contributions"), may exceed ("Excess of Contributions") or fall short of ("Deficiency of Contributions") the member's Required Amount. The Required Amount is the sum of the Required Contributions which a member should have made during his or her first 20 years of credited service, plus statutory interest earnings thereon. The amount of the member's retirement annuity or the refund of contributions that he or she is entitled to is increased by the actuarial value of any Excess of Contributions or reduced by any Deficiency of Contributions. The collective value of required amount, actual balance, and outstanding member loans, as of June 30, 2022, is as follows:

(In Thousands)	Tier 1	Tier 1			Total		
Required amount	\$	-	\$	,	\$	532,284	
Actual balance		-		2,107,106		2,107,106	
Outstanding loans		-		11,656		11,656	

Annuities attributable to member contributions are reduced on an actuarial basis for any loans with unpaid balances outstanding at the date of retirement.

Cost of living adjustments ("COLA") are automatically payable to members who are either: (1) at least age 62 and have been retired for at least five years; or (2) at least age 55 and have been retired for at least 10 years. Additionally, COLA are payable to members who retired for disability after being retired for five or more years and to beneficiaries receiving accidental death benefits who have been receiving them for at least 5 years. Beginning September 2001, COLA benefits equal 50% of the increase in the Consumer Price Index for All Urban Consumers ("CPI-U") based on the year ending March 31, rounded to the next higher 0.1% not less than 1% nor greater than 3% of the first \$18,000 of the sum of maximum pension allowance and prior COLA.

In June of 2009, the Governor vetoed legislation that would have extended Tier 2 to members hired after June 30, 2009. As a result of the Governor's veto, QPP members hired on and after July 1, 2009 are covered under Tier 3, as governed by Article 14 of the RSSL. As a result of Chapter 18 of the Laws of 2012, there are certain limitations on Tier 3 benefits available to participants hired on and after April 1, 2012. These changes are generally referred to as Tier 3 Modified.

For Tier 3/Tier 3 Modified members, the QPP generally provides the following:

- A Normal Service Retirement benefit is payable after completion of 22 years of uniformed service.
- An Early Service Retirement is payable upon completion of 20 years or age 62 for Tier 3 or upon completion of 20 years for Tier 3 Modified and is payable as a pension equal to 2.1% of Final Average Salary plus 1/3% of Final Average Salary for each month in excess of 20 years of uniformed service, such benefit not to exceed 50% of Final Average Salary.
- A Vested benefit is payable to members with at least five years of uniformed service. The benefit is
  equal to 2.1% of final average salary for every year of uniformed service payable upon attainment of
  eligibility for early age, or 55.
- An ODR retirement allowance is payable to a member who has at least five years of service and is
  in receipt of Social Security Disability Benefits (non-Enhanced members only). An ODR benefit is 1/3
  of Final Average Salary or 2% of Final Average Salary for each year of credited service, whichever
  is greater and does not exceed 50% of Final Average Salary. The ODR retirement allowance for
  Enhanced Members is described on page 42.

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

An ADR retirement allowance is payable to a member who was disabled as the result of a line-of-duty
accident not attributable to his own willful negligence. An ADR pension is 50% of a member's Final
Average Salary. The ADR retirement allowance for Enhanced Members is described on page 42.

The Normal Service, Early Service, Vested, and non-Enhanced disability retirement allowances are reduced by one-half of the member's Social Security Benefit attributable to New York State public earnings, at age 62, regardless of eligibility for Social Security.

Tier 3/Tier 3 Modified members are also eligible for annual escalation on the retirement allowance: (1) in full, if they have retired for Service after completing 25 or more years of uniformed service (or elected to defer commencement of their benefit to that 25-year date) or on a reduced basis, by 1/36 for each month that their retirement precedes 25 years; or (2) in full, if they have retired for disability and are Non-Enhanced Members; or (3) in full, to their beneficiary for accidental death benefits. Escalation is determined from the change in the CPI-U based on the prior year ending December 31, not greater than 3% nor less than - 3% in the event of a decrease. Tier 3/Tier 3 Modified members, when eligible, receive the greater of the applicable increase from COLA or escalation.

#### **VSFs**

The FFVSF provides a guaranteed schedule of supplemental benefits for Firefighters who retire (or have retired) as Firefighters on Service retirement with at least 20 years of credited service as follows:

• For those Firefighters who retired from service as Firefighters before July 1, 1988, the annual supplemental benefit was \$2,500 in Calendar Year 1988. For those who retired during Calendar Year 1988, the annual \$2,500 benefit payment was prorated. The annual benefit increases \$500 each year thereafter to a maximum of \$12,000 in Calendar Year 2007. The 1988 benefits included any payments made under the prior program.

For those Firefighters hired before July 1, 1988 and who retire after Calendar Year 1988, the annual benefit payment is the scheduled amount as described above, prorated in the year of retirement and the full amount thereafter.

• For those who become members of QPP on or after July 1, 1988, the annual supplemental benefit is \$2,500 for the first 12 months of retirement, which increases by \$500 each year until a maximum of \$12,000 is payable in the 20th and later years of retirement. This was later modified by Chapter 500 of the Laws of 1995 ("Chapter 500/95") such that these members will receive the maximum \$12,000 benefit beginning Calendar Year 2008 and thereafter.

The FOVSF provides a guaranteed schedule of supplemental benefits for Fire Officers who retire (or have retired) as Fire Officers on Service retirement with at least 20 years of credited uniformed service as follows:

• A Fire Officer hired before July 1, 1988, who retired from service as a Fire Officer on or after October 1, 1988, and prior to Calendar Year 1993 receives a defined schedule of benefits starting at \$5,000 payable in January 1994 for the Calendar Year 1993 payment. For those who retired during Calendar Year 1993, the annual \$5,000 benefit payment was prorated. The annual benefit increases \$500 each year thereafter to a maximum of \$12,000 for Calendar Year 2007 (payable by January 31, 2008) and thereafter.

For those who were members of QPP prior to July 1, 1988, and who retire after Calendar Year 1993, the annual benefit payment is the scheduled amount as described above, prorated in the year of retirement and the full amount thereafter.

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

• For those who become members of the QPP on or after July 1, 1988, the annual supplemental benefit is \$2,500 for the first 12 months of retirement, which increases by \$500 each year until a maximum of \$12,000 is payable in the 20th and later years of retirement. This was later modified by Chapter 500 of the Laws of 1998 ("Chapter 500/98") such that these members will receive the maximum \$12,000 benefit beginning Calendar Year 2008 and thereafter.

Chapter 500/95 permitted certain active employees with prior service credit before entering the QPP to utilize their original dates of hire for determining eligibility for benefits from the FFVSF and the FOVSF. In addition, this law permitted certain active employees with prior service credit before entering the QPP to utilize their original dates of hire for determining eligibility for benefits from the FFVSF and the FOVSF.

Additionally, Chapter 216 of the Laws of 2002 ("Chapter 216/02") provides that participants of the VSFs who retire from the QPP on and after January 1, 2002 with more than 20 years of credited service are entitled to an additional one-time special lump-sum payment, the Deferred Retirement Option Plan ("DROP"). The DROP also known as "Banked Variable" represents the amount the member would have received had he/she retired for Service upon reaching eligibility. The DROP payment is an eligible distribution that may be rolled over pursuant to Internal Revenue Service ("IRS") regulations. Members who retired for a disability or die in active service are not eligible for the VSF DROP. Accumulated VSF DROP balances for Fiscal Year 2022 were \$62.1 million for FFVSF and \$314.6 million for FOVSF. Similarly, for Fiscal Year 2021, the balances were \$71.7 million for FFVSF and \$128.1 million for FOVSF.

Any increase in the amount of ad hoc cost-of-living increases ("Supplementation") or automatic COLA payable from the QPP to a retiree of the FFVSF under legislation enacted on or after July 1, 1988 or to a retiree of the FOVSF under legislation enacted on or after January 1, 1993, will reduce benefits payable from the FFVSF or FOVSF to such retiree by an amount equal to such increase until the following date:

- For a retiree with a date of membership before July 1, 1988, the later of: (a) the first day of the month following the month such retiree attains age 62; and (b) January 1, 2007.
- For a retiree with a date of membership on or after July 1, 1988, the later of: (a) the first day of the month following the month such retiree attains age 62; and (b) the earlier of: (1) the first day of the month following the 19th anniversary of such retiree's date of retirement; and (2) January 1, 2008.

#### NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - The Funds use the accrual basis of accounting where the measurement focus is on the flow of economic resources. Revenues are recognized in the accounting period in which they are earned, and expenses are recognized in the period incurred. Contributions from members are recognized by the QPP when the Employer makes payroll deductions from QPP members. Employer contributions are recognized when due and the Employer has a legal obligation to provide the contributions. Benefit payments and withdrawals are recognized when due and payable in accordance with the terms of the Funds.

**Use of Estimates** - The preparation of combining financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the combining financial statements and revenues and expenses during the reporting period. Actual results could differ from those estimates.

**Cash and Cash Equivalents** - Cash equivalents consist of financial instruments with original maturity dates of three months or less.

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**Investment Valuation** - Investments are reported at fair value. Fair value is defined as the quoted market price at the end of the last trading day for the specified period, except for alternative investments which are considered long term and illiquid in nature. Alternative investments consist of limited partnership structures invested in privately held investments for which exchange quotations are not readily available and are valued at estimated fair value. Fair value at fiscal year-end is based on the fair value of net assets reported in the most recently available partnership's capital account statements from the general partner, adjusted for any subsequent contributions, distributions, management fees and changes in values of foreign currency. They include investments held within Hedge funds, Private Equity, Real Estate, Opportunistic-Fixed Income, and Infrastructure.

Purchases and sales of securities are reflected on the trade date. Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned on an accrual basis.

**Income Taxes** - Income earned by the Funds is not subject to federal income tax.

**Accounts Payable** - Accounts payable is principally comprised of amounts owed to the Funds' banks for overdrawn bank balances. The Funds' practice is to fully invest cash balances in most bank accounts daily. Overdrawn balances result primarily from outstanding benefit checks that are presented to the banks for payment on a daily basis, and these balances are routinely settled each day.

**Accrued Benefits Payable** - Accrued benefits payable represent either: (1) benefits due and unpaid by the Funds as of year end; or (2) related to the VSFs, benefits deemed incurred and unpaid (an accrual for a portion of the current calendar year benefit) for the Fiscal Year ended on June 30.

**Inter-Plan Eliminations** - Included on the Combining Statements of Fiduciary Net Position and the Combining Statements of Changes in Fiduciary Net Position is an elimination column, the purpose of which is to remove from the statement any transactions involving dealings between reported entities.

**Securities Lending Transactions** - State statutes and Board policies permit the Funds to lend its investments to broker-dealers and other entities for collateral, for the same securities in the future with a simultaneous agreement to return the collateral in the form of cash, U.S. Treasury and U.S. Government securities. The Funds' agent lends the following types of securities: short-term securities, common stocks, long-term corporate bonds, U.S. Government and U.S. Government agency bonds, asset-backed securities, and international equities and bonds held in collective investment funds.

In return, the Funds receive collateral in the form of cash, U.S. Treasury and U.S. Government agency securities at 100% to 105% of the principal plus accrued interest for reinvestment. At June 30, 2022 and 2021, management believes that the Funds had no credit risk exposure because the fair value of collateral held by the Funds equaled or exceeded the fair value of securities lent to the borrowers. The contracts with the Funds' Securities Lending Agent (the "Agent") require the Agent to indemnify the Funds.

In the situation when a borrower goes into default, the Agent will liquidate the collateral to purchase replacement securities. Any shortfall before the replacement securities cost and the collateral value is covered by the Agent. All securities loans can be terminated on demand within a period specified in each agreement by either the Funds or the borrowers. Cash collateral is invested by the securities lending agent using approved Lender's Investment guidelines. The weighted-average maturity is 31.64 days for collateral investments. The securities lending program in which the Funds participate only allows pledging or selling securities in the case of borrower default.

GASB Statement No. 28, Accounting and Financial Reporting for Securities Lending Transactions, requires that securities loaned as assets and related liabilities be reported in the statements of fiduciary net position. Cash received as collateral on securities lending transactions and investments made with that cash are reported as assets. Securities received as collateral are also reported as assets if the government entity

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

has the ability to pledge or sell them without a borrower default. Accordingly, the Funds recorded the investments purchased with the cash collateral as collateral from securities lending with a corresponding liability for securities lending.

Securities on loan at fair value as of June 30, 2022 and 2021, was \$1.9 billion and \$2.1 billion, respectively, for the QPP, \$5.2 million and \$42.9 million, respectively, for the FFVSF, and \$3.8 million and \$31.4 million, respectively, for the FOVSF. Cash collateral received related to securities lending as of June 30, 2022 and 2021 was \$2.0 billion and \$2.1 billion, respectively, for the QPP, \$57.7 million and \$42.5 million, respectively, for the FFVSF, and \$41.1 million and \$31.0 million, respectively, for the FOVSF. As of the date of the combining statements of fiduciary net position, the maturities of the investments made with cash collateral on average exceed the maturities of the securities loans by approximately 25.2 days.

GASB Statement No. 72, Fair Value Measurement and Application ("GASB 72") requires the Funds to use valuation techniques which are appropriate under the circumstances and are either a market approach, a cost approach or income approach. GASB 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs, and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability. GASB 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that was used for the fair value measurements.

GASB Statement No. 87, Accounting for Leases, requires that accounting for leases meets the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. Management has evaluated all leases of the Funds and determined there was no material impact as a result of adoption of GASB Statement No. 87.

#### **NOTE 3 – INVESTMENTS AND DEPOSITS**

The Comptroller acts as an investment advisor to the Funds. In addition, the Funds employ an independent investment consultant as an investment advisor. The Funds utilize several investment managers to manage the long-term debt and equity portfolios. The managers are regularly reviewed, regarding both their investment performance and their adherence to investment guidelines.

The Boards of Trustees of the respective Funds set investment objectives to assure adequate accumulation of reserves and to protect the long-term value of the assets. The Boards' investment policy is implemented using a strategic allocation of assets that meet the objectives of the Funds, while working within the confines of the legislative guidelines. The guidelines dictate that fixed income, equity and other investments may be made permitted by the RSSL and State Banking Law, the ACNY, and the Legal Investments for New York Savings Banks list as published by The New York State Banking Department. The Funds' asset allocation policy is constructed to meet both short-term funding requirements and long-term pension obligations. Investments up to 25% of assets of the Funds may be made in instruments not expressly permitted by the State RSSL.

#### **NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

June 30, 2022 and 2021

The Funds do not possess an investment risk policy statement, nor do they actively manage assets to specific risk targets. Rather, investment risk management is an inherent function of the Funds' asset allocation process. Assets are diversified over a broad range of asset classes and encompass multiple investment strategies aimed at limiting concentration risk. The asset allocation targeted for the Funds in Fiscal Year 2022 and 2021 includes securities in the following categories:

	2022	2021
U.S. equity Core U.S. fixed	27.0% 19.0	27.0% 19.0
EAFE markets	9.0	9.0
Private equities	8.0	8.0
Emerging markets	6.0	6.0
Enhanced yield bonds	6.0	6.0
Real estate	7.0	7.0
Infrastructure Hedge funds	3.0 5.0	3.0 5.0
TIPS	4.0	4.0
Opportunistic fixed	4.0	4.0
ETI	2.0	2.0
Total	100.0%	100.0%

State Street Bank is the primary custodian for substantially all the securities of the Funds.

**Concentrations** - In accordance with RSSL § 177, no investment in any individual company may represent more than either 2% of the Funds' total net assets or 5% or more of their fiduciary net position.

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

Credit Risk - the possibility of a loss or default resulting from a borrower's inability to repay a loan or fulfill its contractual debt obligations. Portfolios other than U.S. Government and related portfolios, have credit rating limitations. Investment Grade portfolios are limited to mostly ratings, of BBB/Baa2 and above, except that they are also permitted a 10% maximum exposure to BB & B/Ba2 & B2 rated securities. While high yield non-investment grade managers primarily invest in BB & B/Ba2 & B2 rated securities, they can also invest up to 10% of their portfolio in securities rated CCC/Caa2. The quality ratings of the Funds' investments, by percentage of the rated portfolio, as described by nationally recognized statistical rating organizations, at June 30, 2022 and 2021, are as follows:

									Moo	dy's Quality	Ratings								
Investment Type June 30, 2022 (In percent)	Aaa	_Aa1_	Aa2	_Aa3_	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	ВаЗ	<u>B1</u>	B2	B3	Caa & Below Caa1	Not Rated	Total
U.S. government Corporate bonds Short term:	59.60% 1.01%	0.01% 0.02%	0.01% 0.10%	0.01% 0.14%	0.02% 0.88%	-% 1.52%	-% 1.38%	-% 1.86%	0.03% 2.32%	0.01% 2.39%	-% 1.68%	-% 2.20%	-% 2.63%	-% 2.45%	-% 2.25%	-% 1.98%	-% 1.91%	5.70% 3.49%	65.39% 30.21%
Commercial paper STIF																		1.35% 3.05%	1.35% 3.05%
Percent of rated portfolio	60.61%	0.03%	0.11%	0.15%	0.90%	1.52%	1.38%	1.86%	2.35%	2.40%	1.68%	2.20%	2.63%	2.45%	2.25%	1.98%	1.91%	13.59%	100.00%
									Moo	dy's Quality	Ratings								
Investment Type June 30, 2021 (In percent)	Aaa	_Aa1_	Aa2		A1	A2	A3	Baa1	Moo Baa2	dy's Quality Baa3	Ratings Ba1	Ba2	Ba3	B1	B2	B3	Caa & Below Caa1	Not Rated	Total
June 30, 2021 (In percent)  U.S. government Corporate bonds	Aaa 59.05% 0.88%	Aa1 0.02% 0.13%	Aa2 0.01% 0.19%	Aa3 0.01% 0.15%	A1 0.02% 0.67%	_% 1.74%		Baa1 0.03% 1.94%			<u> </u>	Ba2 -% 2.19%	Ba3 -% 2.62%		B2 -% 2.20%		Below		
June 30, 2021 (In percent) U.S. government	59.05%	0.02%	0.01%	0.01%	0.02%	-%	-%	0.03%	Baa2 0.07%	Baa3 0.01%	Ba1	-%	-%	-%	-%	-%	Below Caa1	3.67%	62.89%

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**Custodial Credit Risk** - Deposits are exposed to custodial credit risk if they are uninsured and uncollateralized. In the event of a failure of the counterparty or depository financial institution, the Funds will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are not registered in the name of the Funds and are held by either the counterparty or the counterparty's trust department or agent but not in the name of the Funds.

Consistent with the Funds' investment policy, the investments are held by the Funds' custodian and registered in the name of the Funds.

All the Funds' deposits are insured by the Federal Deposit Insurance Corporation ("FDIC") and collateralized by securities held by a financial institution separate from the Funds' depository financial institution. However, the Funds' cash balances can exceed FDIC insured limits. Non-invested cash is swept into a State Street Short-Term investment intraday account, which is not FDIC insured.

**Interest Rate Risk** - The risk that the value of debt securities will be affected by fluctuations in market interest rates. Although there is no formal interest rate risk management policy, the duration of the portfolio, relative to the duration of the portfolio's benchmark, is monitored by the Comptroller's Bureau of Asset Management. The lengths of investment maturities (in years) of the Funds' investments, as shown by the percent of the rated portfolio, at June 30, 2022 and 2021, are as follows:

		Inve	estment Maturit	ies	
Years to Maturity		Less Than	One to Five	Six to Ten	More Than
June 30, 2022	Fair Value	One Year	Years	Years	Ten Years
U.S. government	65.39%	3.94%	27.41%	10.98%	23.05%
Corporate bonds	30.21	0.29	9.61	13.47	6.85
Short term:					
Commercial paper	1.35	1.35	-	-	-
STIF	3.05	3.05			
Percent of rated	100.000/	0.620/	27.020/	24.450/	20.000/
portfolio	100.00%	8.63%	37.02%	24.45%	29.90%
		Inve	estment Maturit	ies	
Years to Maturity		Less Than	One to Five	Six to Ten	More Than
June 30, 2021	Fair Value	One Year	Years	Years	Ten Years
				·	
U.S. government	62.89%	3.27%	21.43%	5.74%	32.45%
Corporate bonds	30.81	0.25	8.94	14.25	7.37
Short term:					
Commercial paper	3.25	3.25	-	-	-
STIF	3.05	3.05			
Percent of rated portfolio	100.00%	9.82%	30.37%	19.99%	39.82%

**Foreign Currency Risk** - Foreign currency risk is the risk that changes in the exchange rates will adversely impact the fair value of an investment. Currency risk is present in underlying portfolios that invest in foreign stocks and/or bonds.

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

#### June 30, 2022 and 2021

The currency markets are effective diversifiers in a total portfolio context; therefore, the Funds have numerous managers that invest globally. In general, currency exposure is viewed as a benefit for its diversification reasons and not as an inherent risk within the portfolio. The Funds' combined foreign currency holdings as of June 30, 2022 and 2021, are as follows (in thousands, in U.S. Dollars):

Trade Currency		6/30/2022 larket Value		/30/2021 irket Value
EURO CURRENCY	\$	772,016	\$	926,512
HONG KONG DOLLAR	Ψ	339,554	Ψ	416,406
JAPANESE YEN		253,429		338,526
POUND STERLING		233,837		277,782
INDIAN RUPEE		147,105		176,712
SWISS FRANC		133,893		184,313
SOUTH KOREAN WON		130,993		213,908
NEW TAIWAN DOLLAR		128,545		171,029
CANADIAN DOLLAR		98,594		101,769
AUSTRALIAN DOLLAR		64,772		83,502
DANISH KRONE		61,618		79,236
BRAZILIAN REAL		51,665		69,978
SINGAPORE DOLLAR		33,450		31,693
SWEDISH KRONA		31,537		46,559
CHINESE YUAN RENMINBI		27,198		41,936
INDONESIAN RUPIAH		26,093		18,133
SOUTH AFRICAN RAND		25,690		34,405
CHINESE YUAN (OFFSHORE)		21,266		17,426
THAILAND BAHT		21,011		18,340
MEXICAN PESO (NEW)		12,449		14,310
NORWEGIAN KRÔNE '		10,672		19,850
UAE DIRHAM		10,540		8,667
POLISH ZLOTY		7,206		15,984
QATARI RIAL		7,016		2,260
NEW ISRAELI SHEQEL		6,906		5,161
CZECH KORUNA		6,673		6,201
HUNGARIAN FORINT		6,637		13,010
TURKISH LIRA		5,682		7,113
MALAYSIAN RINGGIT		5,109		6,644
KUWAITI DINAR		3,231		1,818
ROMANIAN LEU		2,111		2,672
NEW ZEALAND DOLLAR		1,966		2,365
PHILIPPINE PESO		1,828		2,023
CHILEAN PESO		1,355		3,238
COLUMBIAN PESO		533		537
NIGERIAN NAIRA		239		255
EGYPTIAN POUND		193		273
RUSSIAN RUBLE		97		1,291
TUNISIAN DINAR		4		6
PAKISTAN RUPEE		1		123
Total	\$	2,692,714	\$	3,361,966

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

### Securities Lending Transactions

Credit Risk – The quality ratings of investments held as collateral for securities lending by the Funds at June 30, 2022 and 2021, are as follows:

Investment Type and Fair Value of Securities						Moody's Qu	uality Ratings					
Lending Transactions June 30, 2022 (in thousands)	Aaa & Below	Aa & Below	A1	A2	A3	Baa2 & Below	Ba & Below	B & Below	Caa & Below	Ca & Below	Not Rated	Total
Short term: Reverse repurchase agreements Money market Cash or cash	\$ - 195,825	\$ -	\$ - -	\$ 58,355 -	\$ 599,248 -	\$ 13,441 -	\$ - -	\$ -	\$ - -	\$ -	\$ 695,667 241,806	\$1,366,711 437,631
Equivalent Uninvested			200,482								(305)	200,482 (305)
Total	\$ 195,825	\$ -	\$ 200,482	\$ 58,355	\$ 599,248	\$ 13,441	<u> </u>	<u>\$ -</u>	<u> </u>	<u> </u>	\$ 937,168	\$2,004,519
Percent of securities lending portfolio	9.77%	0.00%	10.00%	2.91%	29.89%	0.67%	0.00%	0.00%	0.00%	0.00%	46.75%	100%
Investment Type and Fair Value of Securities						Moody's Qu	uality Ratings					
Lending Transactions June 30, 2021 (in thousands)	Aaa & Below	Aa & Below	A1	A2	A3	Baa2 & Below	Ba & Below	B & Below	Caa & Below	Ca & Below	Not Rated	Total
Short term: Reverse repurchase agreements Money market Cash or cash	\$ - 316,304	\$ -	\$ -	\$ 143,552 -	\$ 515,316 -	\$ 12,890 -	\$ -	\$ -	\$ - -	\$ -	\$ 657,630 279,626	\$1,329,388 595,930
equivalent Uninvested			214,003								2,183	214,003 2,183
Total	\$ 316,304	\$ -	\$ 214,003	\$ 143,552	\$ 515,316	\$ 12,890	<u> </u>	<u> </u>	<u> </u>	<u> </u>	\$ 939,439	\$2,141,504

#### **NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

June 30, 2022 and 2021

*Interest Rate Risk* – The lengths of investment maturities of the collateral for securities lending held by the Funds, are as follows:

Years to Maturity		Investn	nent Maturities (iı	n years)	
Investment Type June 30, 2022 (In thousands)	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
Short term: Reverse repurchase agreement Money market Cash or cash equivalents Uninvested	\$ 1,366,711 437,631 200,482 (305)	\$ 1,366,711 437,631 200,482 (305)	\$ - - - -	\$ - - - -	\$ - - - -
Total	\$ 2,004,521	\$ 2,004,521	<u> </u>	\$ -	\$ -
Percent of securities lending portfolio	100.00%	100.00%	0.00%	0.00%	0.00%
Years to Maturity		Investn	nent Maturities (ii	n years)	
Investment Type June 30, 2021 (In thousands)	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
Short term: Reverse repurchase agreement Money market Cash or cash equivalents Uninvested	\$ 1,329,388 595,930 214,003 2,183	\$ 1,329,388 595,930 214,003 2,183	\$ - - - -	\$ - - - -	\$ - - - -
Total	\$ 2,141,504	\$ 2,141,504	\$ -	\$ -	\$ -
Percent of securities lending portfolio	100.00%	100.00%	0.00%	0.00%	0.00%

**Rate of return** – For the years ended June 30, 2022 and 2021, the annual money-weighted rate of return on investments, net of investment expense, for the Funds was, as follows:

	2022	2021
QPP FFVSF FOVSF	(7.64)% (13.34)% (13.76)%	24.86% 25.39% 25.43%
	(10110)75	_0

The money-weighted rate of return expresses investment performance, net of investment expense adjusted for the changing amounts invested.

In Fiscal Year 2015, the Funds adopted GASB 72. GASB 72 was issued to address accounting and financial reporting issues related to fair value measurements.

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

#### June 30, 2022 and 2021

**GASB 72 – Level Inputs** – The Funds categorize their 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 the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. The Funds have the following recurring fair value measurements as of June 30, 2022 and June 30, 2021:

GASB 72 – Disclosure Investments – at fair value (In thousands)		20	022	
,	Level 1	Level 2	Level 3	Total
Short-term investments: Commercial paper Short-term investment fund U.S. treasury bills and agencies	\$ - -	\$ 156,638 179,029 179,990	\$ - -	\$ 156,638 179,029 179,990
Debt (fixed income) securities: Bank loans Corporate and other Mortgage debt security Treasury inflation-protected securities U.S. government and agency	- - - - -	46,620 1,540,992 796,717 - 2,899,182	- 5,561 - - -	46,620 1,546,553 796,717 - 2,899,182
Equity securities: Domestic equity International equity	5,256,101 1,794,866	168	2,248 10,884	5,258,517 1,805,750
Collective trust funds: Bank loans Corporate and other Domestic equity International equity Mortgage debt security Opportunistic-fixed income U.S. government and agency	34,545 590,782 - 105	66,783 - 99,520 52,400 132,176	172 - 257 21,784 1,494	172 66,783 34,546 591,039 121,304 53,999 132,176
Alternative investments: Infrastructure Opportunistic-fixed income Private equity Private real estate	- - - -		275,604 616,087 1,657,719 1,117,567	275,604 616,087 1,657,719 1,117,567
Total investments	\$ 7,676,399	\$ 6,150,215	\$ 3,709,377	17,535,992
Alternative investments (Hedge Funds*) valued at NAV				861,696
Total				\$ 18,397,688

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

#### June 30, 2022 and 2021

GASB 72 – Disclosure Investments – at fair value (In thousands)

(In thousands)		2	2021	
,	Level 1	Level 2	Level 3	Total
Short-term investments: Commercial paper Short-term investment fund U.S. treasury bills and agencies	\$ - -	\$ 234,613 205,267 185,564	-	\$ 234,613 205,267 185,564
Debt (fixed income) securities: Bank loans Corporate and other Mortgage debt security Treasury inflation-protected securities U.S. government and agency	- - - - -	64,449 1,753,859 865,263 813,528 2,347,865	3,476	65,367 1,757,335 865,263 813,528 2,347,865
Equity securities: Domestic equity International equity	6,470,987 2,332,827	2,999 -	3,490 18,958	6,477,476 2,351,785
Collective trust funds: Bank loans Corporate and other Domestic equity International equity Mortgage debt security Opportunistic-fixed income U.S. government and agency	57,131 762,774 - 2,685	433 93,058 - - 118,717 54,429 128,073	- 176 482 25,110	436 93,058 57,307 763,256 143,827 58,843 128,073
Alternative investments: Infrastructure Opportunistic-fixed income Private equity Private real estate	- - 1,098 -	- - -	193,915 535,545 1,287,007 794,417	193,915 535,545 1,288,105 794,417
Total investments	\$ 9,627,502	\$ 6,868,117	\$ 2,865,226	19,360,845
Alternative investments (Hedge Funds*) valued at NAV				931,594
Total				\$ 20,292,439

<sup>\*</sup> Hedge Funds that do not have a readily determinable fair value and are measured at fair value using the net asset value ("NAV") per share (or its equivalent) as a practical expedient ("NAV Practical Expedient"), have not been classified in the fair value hierarchy.

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

## Equity and Debt (Fixed Income) Securities

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors for these securities. Debt and equity securities classified in Level 2 of the fair value hierarchy are valued using prices determined using matrix pricing techniques maintained by the various pricing vendors for these securities. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Debt and equity securities classified in Level 3 of the fair value are securities whose stated market price is unobservable by the marketplace; many of these securities are priced by the issuers or industry groups for these securities. Fair Value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by the Funds' custodian bank. Debt and equity securities held in collective trust funds are held in those funds on behalf of the pension system and there is no restriction on the use and or liquidation of those assets for the exclusive benefit of the Funds' participants.

#### Collective Trust Funds

Collective trust funds are separately managed accounts which are owned 100% by The City's pension systems. The investments underlying the collective trust funds are presented as Level 1, Level 2 or Level 3 based on their respective fair value hierarchy classifications.

#### Alternative Investments

Alternative investments include Private Equity, Real Estate, Opportunistic-Fixed Income and Infrastructure Investments. These are investments for which exchange quotations are not readily available and are valued at NAV calculated by the GP's valuation policy. Alternative investments are mainly illiquid and typically not sold or redeemed.

Investments in non-public equity securities should be valued by the GP or the fund administrator using one or more valuation methodologies outlined in GASB 72, depending upon the availability of data required by each methodology. In some cases, the GP may use multiple approaches to estimate a valuation range.

Because of the subjective nature of estimated fair value of the private investments, such value may differ significantly from the values that would have been used had a ready market existed for these investments. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will generally be liquidated within 10 years but in some cases can take longer.

Alternative investments that are measured at fair value using the net asset value ("NAV") per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value quantities presented in the table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the entity's financial statements.

Alternative investments are not fully funded upon subscribing to the investment. The GP can draw down or call for capital as the fund goes into more investments or when the need arises such as expenses associated with the partnership. The residual balance of uncalled capital is also known as unfunded commitments which are restricted to the maximum amount of the limited partners total committed amount. The total unfunded commitments for the alternative investments as of June 30, 2022 and 2021 amounted to \$2.2 billion and \$2 billion, respectively.

#### **NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

#### June 30, 2022 and 2021

The fair value quantities presented in these tables are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the entity's combining financial statements. The following tables below display details of the fair value, redemption terms, redemption notice periods, gates and redemption holdback amounts.

e 30, 2022 air Value	Redemption Terms	Redemption Notice Period	Gate	Redemption Holdback
\$ 78,093	Monthly redeeming on Last Business Day (Shares can be redeemed and any time other than the last Business day of the month but are subject to 1.5% fee)	3 Calendar days notice	No Yes	5%
20,731	Bi-quarterly redeeming on Las Business Day of Month	60 Calendar days notice	This fund imposes a 50% investor level gate with slower liquidation schedule. Yes	10%
28,264	Quarterly redeeming on Last Business Day Of Month Quarterly redeeming on Last Business Day of the month, but are	90 Calendar days	This fund imposes a 25% investor level gate with slower liquidation schedule.	10%
19,124	subject to 1.25% mgmt. fees and 20% performance fees	45 Calendar days notice	No Yes	3%
116,791	Quarterly Calendar redeeming on Last Business Day of the month but, subject to 3% mgmt. fees and 30% performance fees Quarterly redeeming on Last Business Day of March, June, September or December, but subject to 1% mgmt. fees and 20%	75 Calendar days notice	This fund may impose a 8.3% fund level gate with slower liquidation schedule.	10%
43,467	performance fees  Monthly redeeming on First Business Day, subject to 1% mgmt.	44 Calendar days notice	No	10%
60,503	fees and 15% performance fees	30 Calendar days notice	No Yes	5%
47,658	Quarterly redeeming on Last Business Day	90 Calendar days notice	This fund imposes 20% Master Fund level gate. Yes	5%
61,671	Quarterly Calendar redeeming on Last Business Day of Month lockup with 3% penalty	65 Calendar days notice	This fund imposes 25% investor level gate with slower liquidation schedule.  Yes	5%
53,040	Monthly redeeming First Day of the month; subject to 1.5% mgmt. fees and 17.5% performance fees	180 Calendar days notice	This fund imposes 16.7% investor level gate with slower liquidation schedule.	5%
43,800	Quarterly Calendar redeeming on Last Business Day of Month	90 Calendar days notice	No	5%
51,665 40,994	Quarterly Calendar redeeming on Last Business Day Of Month Quarterly Calendar redeeming on Last Business Day Of Month	90 Calendar days notice 30 Calendar days notice	No No Yes	5% 5%
62,973	Quarterly Calendar redeeming on Last Business Day Of Month	60 Calendar days notice	This fund imposes a 33.3% investor level gate with slower liquidation schedule.	5%
17,276	Quarterly Calendar redeeming on Last Business Day Of Month	90 Calendar days notice	Yes This fund imposes a 25% investor level gate with slower liquidation schedule. Yes	5%
61,512	Quarterly Calendar redeeming on Last Business Day Of Month	45 Calendar days notice	This fund imposes a 12.5% investor level gate with slower liquidation schedule.	5%
11,943 42,191	Monthly redeeming on First Business Day of Month Monthly redeeming on First Business Day Of Month	30 Calendar days notice 30 Calendar days notice	No No	1% 1%
\$ 861,696	Total Hedge Funds (dollars in thousands)			

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

## June 30, 2022 and 2021

	e 30, 2021 air Value	Redemption Terms	Redemption Notice Period	Gate	Redemption Holdback
\$	62,500	Monthly redeeming on Last Business Day (Shares can be redeemed and any time other than the last Business day of the month but are subject to 1.5% fee)	3 Calendar days notice	No	5%
	36,792	Semester Calendar redeeming on Last Business Day Of Month	60 Calendar days notice	No Yes	10%
	79,430	Quarterly redeeming on Last Business Day Of Month	90 Calendar days	This fund imposes a 25% investor level gate with slower liquidation schedule.	10%
	107,740	Quarterly Calendar redeeming on Last Business Day Of Month	75 Calendar days notice	This fund may impose a 8.3% fund level gate with slower liquidation schedule	10%
	46,718	Last Business Day Of March, June, September or December	44 Calendar days notice	Fund level Gate 25% at manager's discretion	10%
	36	Illiquid – periodic distributions and Other	Illiquid – periodic distributions	No	0-10%
	43,000	Monthly redeeming on First Business Day	30 Calendar days notice	Up to 10% of the NAV of their BMS Units Shares	5%
	36,294	Monthly redeeming on Last Business Day	30 Calendar days notice	20% firm level gate	5%
	61,789	Daily redeeming	2 Calendar days notice	No	N/A
	53,565	Quarterly Calendar redeeming on Last Business Day Of Month	65 Calendar days notice	25% investor level	5%
	27,310	Monthly redeeming on Last Business Day Of Month	90 Calendar days notice	No	10%
	82,967 63,368 44,400	Quarterly Calendar redeeming on Last Business Day Of Month Quarterly Calendar redeeming on Last Business Day Of Month Quarterly Calendar redeeming on Last Business Day Of Month	90 Calendar days notice 90 Calendar days notice 30 Calendar days notice	No 25% fund level gate No	5% 5% 5%
	55,540	Quarterly Calendar redeeming on Last Business Day Of Month	60 Calendar days notice	Yes This fund imposes a 33.3% investor level gate with slower liquidation schedule. Yes	5%
	20,302	Quarterly Calendar redeeming on Last Business Day Of Month	90 Calendar days notice	This fund imposes a 25% investor level gate with slower liquidation schedule.  This fund imposes a 25% fund level gate with slower liquidation schedule. This fund may impose a 25%	5%
	63,595 10,075	Quarterly Calendar redeeming on Last Business Day Of Month Monthly redeeming on First Business Day Of Month	45 Calendar days notice 30 Calendar days notice	fund level gate with slower liquidation schedule. No	5% 1%
-	36,173	Monthly redeeming on First Business Day Of Month	30 Calendar days notice	No	1%
\$	931,594	Total Hedge Funds (dollars in thousands)			

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

#### NOTE 4 - TRANSFER TO VARIABLE SUPPLEMENTS FUNDS

The ACNY provides that the QPP transfer to the VSFs an amount equal to certain excess earnings on equity investments, limited to the unfunded actuarial present value ("APV") of accumulated plan benefits for each VSF. Excess earnings are defined as the amount by which earnings on equity investments of the QPP exceed what those earnings would have been had such funds been invested at a yield comparable to that available from fixed-income securities ("Hypothetical Fixed Income Security Earnings") less any cumulative deficiencies. The VSFs also receive credit for investment earnings on VSF assets.

The calculation of the Hypothetical Fixed Income Security Earnings requires the determination of the Hypothetical Interest Rate ("HIR"), which is computed by the Comptroller.

For Fiscal Year 2022, the preliminary excess earnings of the QPP are reported on the combined financial statements for the year ended June 30, 2022 to be equal to \$0, where \$0 was reported as a liability from the QPP to the FFVSF and \$0 was reported as a liability from the QPP to the FOVSF.

For Fiscal Year 2021, the preliminary excess earnings of the QPP are reported on the combined financial statements for the year ended June 30, 2021 to be equal to \$0 (after limiting to the unfunded APV of accumulated plan benefits), where \$0 was reported as a liability from the QPP to the FFVSF and \$0 was reported as a liability from the QPP to the FOVSF.

In addition, Chapter 583 of the Laws of 1989 states that if the assets of the FFVSF or FOVSF are less than the amount required to pay the retirees' guaranteed supplemental benefit payments, then an amount sufficient to pay such benefits shall be appropriated from the Contingent Reserve Fund of the QPP.

The amounts shown for the APV of accumulated plan benefits, are the measure of the present value of scheduled supplemental benefits estimated to be payable in the future as a result of employee service-to-date. It is calculated as the actuarial present value of credited projected benefits, prorated on service and is intended to help users assess the funded status of the VSFs on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due and make comparisons among VSFs.

Actuarial valuations of the VSFs are performed annually as of June 30.

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

A comparison of the APV of accumulated plan benefits as calculated by the Funds' Chief Actuary (the "Actuary") with the net position restricted for benefits for the FFVSF and the FOVSF as of June 30, 2021 and June 30, 2020, is as follows:

	FFVSF				FOVSF			
		2021 <sup>2</sup>	2020		2021 <sup>2</sup>			2020
				(ln mi	llions	s)		
APV of accumulated plan benefits for:								
Retirees currently receiving benefits	\$	299.8	\$	330.9	\$	138.4	\$	153.0
Active members		119.0		112.7		117.3		119.0
Total APV of accumulated plan benefits		418.8		443.6		255.7		272.0
Net position held in trust for benefits <sup>1</sup>		568.7		493.7		414.3		348.8
(Overfunded)Unfunded APV of accumulated plan benefits	\$	(149.9)	\$	(50.1)	\$	(158.6)	\$	(76.8)

See Note 2 for valuation of investments in the calculation of net position restricted for benefits. Reflects net position not inclusive of the SKIM amounts payable for the respective year and includes an adjustment made for accrued benefits payable for the respective year.

For purposes of the June 30, 2021 and the June 30, 2020 actuarial valuations of the VSFs, Chapter 125/00 has been taken into account in the determination of the unfunded APV of accumulated plan benefits relative to the Supplementation benefit increases that began Fiscal Year 2001 and to the automatic COLA that began Fiscal Year 2002 (see Note 1).

Sections 13-384 and 13-394 of the ACNY provide that the Boards of Trustees of the VSFs shall adopt, upon the recommendation of the Actuary, actuarial assumptions as to interest rate, mortality of retirees and estimated number of active members of the QPP in service as of each June 30 who will retire for service with 20 or more years of service as Firefighters and Fire Officers, for use in making annual valuations of liabilities.

<sup>&</sup>lt;sup>2</sup> Preliminary.

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

The following actuarial assumptions represent the recommendations of the Actuary and were used in the actuarial calculations to determine the preceding APV of accumulated plan benefits as of June 30, 2021 and June 30, 2020:

	June 30, 2021 <sup>1</sup>	June 30, 2020
Investment rate of return	7.0% per annum.²	7.0% per annum.²
Post-retirement mortality	Tables adopted by the Board of Trustees during Fiscal Year 2019.	Tables adopted by the Board of Trustees during Fiscal Year 2019.
Active service: withdrawal, death, and disability	Tables adopted by the Board of Trustees during Fiscal Year 2019.	Tables adopted by the Board of Trustees during Fiscal Year 2019.
Service retirement	Tables adopted by the Board of Trustees during Fiscal Year 2019.	Tables adopted by the Board of Trustees during Fiscal Year 2019.
Percentage of all active FIRE members estimated to retire for service with 20 or more years of service as Firefighters	70%	70%
Percentage of all active FIRE Officers estimated to retire for service with 20 or more years of service as FIRE Officers	100%	100%
Cost-of-living adjustments <sup>2</sup>	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.

<sup>&</sup>lt;sup>1</sup> Preliminary.

### **NOTE 5 – QPP CONTRIBUTIONS**

The financial objective of the QPP is to fund members' retirement benefits during their active service and to establish Employer contribution rates which, expressed as a percentage of annualized covered payroll, will remain approximately level from year to year. The Employer contributes amounts that, together with member contributions and investment income, are intended to ultimately be enough to accumulate assets to pay benefits when due.

**Member Contributions** – Tier 1 and Tier 2 members contribute by salary deductions on the basis of a normal rate of contribution which is assigned by the QPP at membership. A member's normal rate is dependent upon age and actuarial tables in effect at the time of membership. These member contributions are reduced by 5.0% under the ITHP program.

<sup>&</sup>lt;sup>2</sup> Developed assuming a long-term Consumer Price Inflation assumption of 2.5% per year.

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

Members may voluntarily increase their rates of contribution by 50% for the purpose of purchasing an additional annuity. Members are permitted to borrow up to 90% of their own contributions including accumulated interest.

Tier 3 and Tier 3 Modified members contribute 3.0% of salary until they have 25 years of credited service.

**Employer Contributions** – Statutory Contributions to the QPP, determined by the Actuary in accordance with State statutes and City laws, are generally funded by the Employer within the appropriate fiscal year. The Statutory Contribution for the year ended June 30, 2022, based on an actuarial valuation as of June 30, 2020 was \$1.4 billion and the Statutory Contribution for the year ended June 30, 2021, based on an actuarial valuation as of June 30, 2019 was \$1.4 billion. The Statutory Contributions for Fiscal Years 2022 and 2021 were equal to the Actuarial Contributions. Refer to the Schedule of Employer Contributions in the accompanying required supplementary information for more information on the actuarial methods and assumptions applied by the Actuary to determine the Statutory Contributions.

### **NOTE 6 - NET PENSION LIABILITY**

The components of the net pension liability of the Employer at June 30, 2022 and 2021 for the Funds were as follows:

		(In tho	usands)	
June 30, 2022	QPP	FFVSF	FOVSF	TOTAL
Total pension liability* Fiduciary net position**	\$ 24,968,435 17,472,164	\$ 466,163 452,127	\$ 292,696 333,347	\$ 25,727,294 18,257,638
Employers' net pension liability	\$ 7,496,271	\$ 14,036	\$ (40,651)	\$ 7,469,656
Fiduciary net position as a percentage of the total pension liability	69.98%	96.99% (In the	113.89% usands)	70.97%
June 30, 2021	QPP	FFVSF	FOVSF	TOTAL
Total pension liability* Fiduciary net position**	\$ 24,102,174 18,908,561	\$ 471,448 568,740	\$ 296,809 414,297	\$ 24,870,431 19,891,598
Employers' net pension liability	\$ 5,193,613	\$ (97,292)	\$ (117,488)	\$ 4,978,833
Fiduciary net position as a percentage of the total pension liability	78.45%	120.64%	139.58%	79.98%

<sup>\*</sup> Includes Liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

<sup>\*\*</sup> Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

### **Actuarial Methods and Assumptions**

The total pension liability as of June 30, 2022 and 2021 was calculated from the actuarial valuations as of June 30, 2021 (Preliminary) and June 30, 2020 (Updated Preliminary), respectively, that were rolled forward to develop the total pension liability to the respective fiscal year end. The following actuarial assumptions were applied to all periods included in the measurement:

Projected Salary Increases In general, merit and promotion increase plus assumed General

Wage Increases of 3.0% per annum.

Investment Rate of Return 7.0% per annum, net of Investment Expenses.

COLAs 1.5% per annum for AutoCOLA.

2.5% per annum for Escalation.

The above assumptions were developed assuming a long-term Consumer Price Inflation assumption of 2.5% per annum.

The fiscal year 2021 results reflect changes in the actuarial assumptions and methods from the prior year. These changes reflect refinements and improvements to the actuarial assumptions and methods under the judgment of the Chief Actuary.

Pursuant to Section 96 of the New York City Charter, studies of the actuarial assumptions used to value liabilities of the five actuarially-funded NYCRS are conducted every two years. The most recent of these studies was performed by Bolton, Inc. and included experience through June 30, 2017. Milliman is performing the current experience study that covers the period through June 30, 2021.

On January 23, 2019, the Actuary issued a Report titled "Proposed Changes in Actuarial Assumptions and Methods for Determining Employer Contributions for Fiscal Years Beginning on and After July 1, 2018 for the New York City Fire Pension Fund." The actuarial assumptions and methods described in that report are referred to as the "2019 A&M."

On July 19, 2021, the Actuary issued a memorandum titled "Proposed Changes to Actuarial Assumptions and Methods." The actuarial assumptions and methods described in that memorandum amend certain assumptions and methods from the 2019 A&M. This revised set of actuarial assumptions and methods are referred to as the "Revised 2021 A&M."

The June 30, 2021 total pension liability was calculated from the Updated Preliminary June 30, 2020 actuarial valuation, which was based on the Revised 2021 A&M.

The June 30, 2022 total pension liability was calculated from the Preliminary June 30, 2021 actuarial valuation, which was based on the Revised 2021 A&M.

The Entry Age Normal ("EAN") cost method of funding is utilized by the Funds' Actuary to calculate the contribution required of the Employer.

Under this method, the Present Value ("PV") of Future Benefits ("PVFB") of each individual included in the actuarial valuation is allocated on a level basis over the earnings (or service) of the individual between entry age and assumed exit age(s). The employer portion of this PVFB allocated to a valuation year is the Normal Cost. The portion of this PVFB not provided for at a valuation date by the PV of Future Normal Costs or future member contributions is the Accrued Liability ("AL").

The excess, if any, of the AL over the Actuarial Value of Asset ("AVA") is the Unfunded Accrued Liability ("UAL").

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

Under this method, actuarial gains and losses, as they occur, reduce and increase the UAL and are explicitly identified and amortized.

Increases or decreases in obligations due to benefit changes, actuarial assumption changes, and actuarial method changes are also explicitly identified and amortized.

The obligations of FIRE to the FFVSF and the FOVSF are recognized through a methodology where the PV of future VSF transfers from FIRE to the FFVSF and FOVSF is included directly as an actuarial liability of FIRE. This amount is computed as the excess, if any, of the PV of benefits of the FFVSF and FOVSF over the AVA of the FFVSF and FOVSF, respectively. Under EAN, a portion of the PV of future VSF transfers is reflected in the PV of future normal costs and a portion is reflected in the UAL.

### **Expected Rate of Return on Investments**

The long-term expected rate of return on the Funds' investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (i.e., expected returns, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table as of June 30, 2022 and 2021:

	As of June	e 30, 2022	As of June 30, 2021			
		Long-Term Expected		Long-Term Expected		
Asset Class	Target Asset Allocation	Real Rate of Return	Target Asset Allocation	Real Rate of Return		
Public Markets						
U.S. public market equities	27.0%	5.1%	27.0%	4.8%		
Developed public market equities	9.0	5.5%	9.0	5.2%		
Emerging public market equities	6.0	9.3%	6.0	9.0%		
Fixed income	31.0	1.4%	31.0	1.1%		
Private Markets (Alternative						
Investments)						
Private equity	8.0	9.8%	8.0	9.7%		
Private real estate	7.0	4.8%	7.0	5.3%		
Infrastructure	3.0	4.5%	3.0	4.6%		
Hedge Funds	5.0	3.5%	5.0	3.2%		
Opportunistic-fixed income	4.0	6.2%	4.0	5.8%		
Total	100.0%		100.0%			

#### Discount Rate

The discount rate used to measure the total pension liability was 7.0%. The projection of cash flows used to determine the discount rate assumes that employee contributions will be made at the rates applicable to the current Tier for each member and that Employer contributions will be made at rates as determined by the Actuary. Based on those assumptions, the Funds' fiduciary net position was projected to be available to make all projected future benefit payments of current active and non-active members. Therefore, the

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

long-term expected rate of return on the Funds' investments was applied to all periods of projected benefit payments to determine the total pension liability.

The following presents the net pension liability of the Employer for the Funds as of June 30, 2022, calculated using the discount rate of 7.0%, as well as what the Employer's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.0%) or 1-percentage-point higher (8.0%) than the current rate:

Net Pension Liability – June 30, 2022 (In thousands)	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)		
QPP FFVSF FOVSF	\$ 10,340,774 56,474 (16,442)	\$ 7,496,271 14,036 (40,651)	\$ 5,106,913 (22,545) (61,649)		
Total	\$ 10,380,806	\$ 7,469,656	\$ 5,022,719		
Net Pension Liability – June 30, 2021 (In thousands)	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)		

### **NOTE 7 – MEMBER LOANS**

Tier 1 and Tier 2 members are permitted to borrow up to 90% of their own contributions including accumulated interest. The balance of QPP member loans receivable at June 30, 2022 and 2021 was \$11.7 million and \$15.2 million, respectively. Members repay their loans at the statutory rate of 4% per annum. Upon termination of employment before retirement, certain members are entitled to refunds of their own contributions including, for new program members, accumulated interest less any loans outstanding. Certain prior year loans to retirees were removed from member loans receivables. Such balances should be reduced at the effective date of retirement as a result of payoff or future benefit reductions.

### **NOTE 8 - RELATED PARTIES**

Pursuant to statute and resolutions, the Comptroller has been appointed as custodian for the assets of the Funds. Securities are held by certain banks under custodial agreements with the Comptroller. The Comptroller, the Financial Information Services Agency ("FISA"), and the Office of Payroll Administration ("OPA") also provide cash receipt and cash disbursement services to the Funds. Actuarial services are provided to the Funds by the New York City Office of the Actuary. The City's Corporation Counsel provides legal services to the Funds. Other administrative services are also provided by The City. The aforementioned services may be provided by employees or officers of The City who may also be participants in the Funds. The cost of providing such services amounted to \$3.6 million and \$3.6 million in Fiscal Years 2022 and 2021, respectively.

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

#### **NOTE 9 – ADMINISTRATIVE AND INVESTMENT EXPENSES**

In Fiscal Year 2022, there were \$12.7 million in administrative expenses paid out of the corpus of the fund. During Fiscal Year 2021, in accordance with Chapter 298 of the New York State Laws of 2016, the QPP Plan provided corpus funding for administrative expenses in the amount of \$10.3 million. Additionally, services, as set out in Note 8 on "Related Parties" are provided by various City Agencies. The City defrayed the cost associated with these services. Investment expenses charged to the investment earnings of the QPP, exclusive of expenses relating to securities-lending transactions amounted to approximately \$140.4 million and \$103.6 million in 2022 and 2021, respectively.

In March 2018, the Funds entered into a lease agreement for office space. The agreement is for a term of 15 years and 4 months. Future minimum rental payments for the next four years and thereafter is approximately:

Fiscal Year Ending June 30th,	Beginning Balance	Annual Year-End Interest Accrual	Total Annual Payment	Ending Balance
2023	\$ 12,087,673	\$ 250,917	\$ 1,089,094	\$ 11,249,496
2024	11,249,496	232,053	1,151,131	10,330,418
2025	10,330,418	211,477	1,178,703	9,363,192
2026	9,363,192	190,377	1,178,703	8,374,866
2027	8,374,866	168,817	1,178,703	7,364,980
Thereafter	7,364,980	513,719	7,878,699	-

Rent expense for the years ended June 30, 2022 and 2021 was \$1,053,381 and \$1,053,022, respectively.

### **NOTE 10 - CONTINGENT LIABILITIES AND OTHER MATTERS**

Contingent Liabilities – The Funds have claims pending against them and have been named as defendant in lawsuits and also have certain other contingent liabilities. Management of FIRE, on the advice of legal counsel, believes that such proceedings and contingencies will not have a material effect on the Funds' net position or changes in the Funds' net position. Under the existing State statutes and City laws that govern the functioning of the Funds, increases in the obligations of the Funds to members and beneficiaries ordinarily result in increases in the obligations of The City to the Funds.

Other Matters – During Fiscal Years 2022 and 2021, certain events described below took place which, in the opinion of FIRE management, could have the effect of increasing benefits to members and/or their beneficiaries and therefore would increase the obligations of the Funds. The effect of such events has not been fully quantified. However, it is the opinion of FIRE management that such developments would not have a material effect on the Funds' combined net position restricted for benefits or cause changes in the Funds' net position restricted for benefits.

**Actuarial Audit** – Pursuant to Section 96 of the New York City Charter, studies of the actuarial assumptions used to value liabilities of the five actuarially-funded New York City Retirement Systems ("NYCRS") are conducted every two years. Refer to Note 6 for the results of the most recent actuarial studies for FIRE.

**Revised Actuarial Assumptions and Methods** – In accordance with the ACNY and with appropriate practice, the Boards of Trustees of the five actuarially-funded NYCRS are to periodically review and adopt actuarial assumptions as proposed by the Actuary for use in the determination of Employer Contributions.

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

The most recently completed study was published by Bolton, Inc. dated June 2019. Bolton analyzed experience for the four- and 10-year periods ended June 30, 2017 and made recommendations with respect to the actuarial assumptions and methods based on their analysis. Based, in part, on these, recommendations, the Actuary proposed new assumptions and methods for use in determining Employer Contributions for Fiscal Years beginning on and after July 1, 2018. These assumptions and methods have been adopted by the Board of Trustees during Fiscal Year 2019.

Previously, Gabriel, Roeder, Smith & Company ("GRS") published their study in October 2015. Milliman is performing the current experience study that covers the period through June 30, 2021.

### New York State Legislation (only significant laws since Fiscal Year 2012 included)

Chapter 18 of the Laws of 2012 placed certain limitations on the Tier 3 and Tier 4 benefits available to participants hired on and after April 1, 2012 in most New York State PERS, including FIRE.

Chapter 3 of the Laws of 2013 ("Chapter 3/13") implemented changes in the actuarial procedures for determining Employer Contributions beginning Fiscal Year 2012. Chapter 3/13 continued the One-Year Lag Methodology ("OYLM"), employed the Entry Age Actuarial Cost Method ("EAACM"), an Actuarial Interest Rate ("AIR") assumption of 7.0% per annum, net of investment expenses and defined the amortization of Unfunded Actuarial Accrued Liabilities ("UAAL").

Chapter 489 of the Laws of 2013 ("Chapter 489/13") extended the Notice of Participation filing deadline to September 11, 2014 for vested members to file a sworn statement indicating participation in the World Trade Center Rescue, Recovery, and Clean-up Operations.

Chapter 427 of the Laws of 2014 ("Chapter 427/14") provides non-contributory retirement service credit for members called to active military duty on or after September 11, 2001 and prior to January 1, 2006 who did not receive their full salary from the New York City Fire Department and are otherwise eligible to receive retirement service credit for such service. Such member would not be required to make member contributions to receive such credit.

Chapter 41 of the Laws of 2016 ("Chapter 427/14") removes the specified periods of time, medal requirements, and theaters of operation in which military service would had to have been rendered for a service purchase pursuant to RSSL § 1000. Accordingly, for a member to be eligible to purchase service credit pursuant to RSSL § 1000 for pre-membership military service, the member need only have been honorably discharged from the military; all other requirements of RSSL § 1000 remain the same. This law is not retroactive and does not permit retired members to purchase service credit.

Chapter 326 of the Laws of 2016 ("Chapter 326/16") extended the deadline to file a Notice of Participation in the World Trade Center Rescue, Recovery, and Clean-up Operations to September 11, 2018.

Chapter 298 of the Laws of 2016 ("Chapter 298/16") amended the Accidental Disability Retirement and Ordinary Disability Retirement benefits for Tier 3 and Tier 3 Modified members with dates of membership prior to June 15, 2016 who elect to participate in the Enhanced Disability Benefits. Tier 3 Modified members with dates of membership June 15, 2016 and later are mandated into the Enhanced Disability Benefits. Members electing or mandated into this benefit will pay an extra 2% of wages.

Chapter 89 of the Laws of 2020 ("Chapter 89/20") provides death benefits to statutory beneficiaries of members whose death was a result of or was contributed to by coronavirus disease ("COVID-19"). This law provides an Accidental Death Benefit to the eligible beneficiaries of a member or a retiree who retired after March 1, 2020, where such member reported for work outside their home and contracted COVID-19 within 45 days after reporting for work, and whose death was caused by COVID-19 or where COVID-19

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

contributed to such member's death. Amounts payable are reduced by payments of any ordinary death benefits or option benefit paid to another statutory beneficiary.

#### COVID-19

The outbreak of COVID-19, has been declared a pandemic by the World Health Organization. The Governor declared a state of emergency in the State on March 7, 2020 and the Mayor declared a state of emergency in The City on March 12, 2020, each of which is still in effect. The ultimate impact of the COVID-19 pandemic on the Funds cannot be determined at this time.

Chapter 78 of the Laws of 2021 establishes a coronavirus disease 2019 (COVID-19) public employee death benefit for individuals who reported to their usual place of employment or an alternate worksite at the direction of their employer on or after March 1, 2020 and such individual contracted COVID-19 within 45 days of reporting to such workplace as confirmed by a laboratory test or by a licensed physician and such individual died on or before December 31, 2022.

Title II, Subtitle B, Section 2202(a) of the CARES Act of March 2020 made loans and distributions with improved terms, including waived penalties and deferred repayment options, available for members adversely affected by COVID-19 through December 31, 2020.

The following outlines the changes to Tier 3 and Tier 3 Modified provisions with the Enhanced Disability legislation:

### 1. Member Contributions

- Tier 3 Enhanced Members contribute 3% of pensionable earnings plus an additional contribution rate to help fund the enhanced disability benefit. Currently, the additional contribution rate is 2% that can be raised to 3% based on a financial analysis by the Office of the Actuary every three years. At no time can the total contribution rate exceed 6%.
- Taxability
  - Base Member Contributions
    - Pre-tax
  - Increased Member Contributions for Enhanced Disability Provisions
    - Pre-tax for members appointed June 15, 2016 and later (i.e., the date new members are mandated into the Plan).
    - Post-tax for those who were eligible to elect the Enhanced Disability Plan provisions and elected such provisions.

### 2. Accidental Disability Retirement ("ADR")

- The ADR benefit for Tier 3 Enhanced Members is 75% of their Five-Year Final Average Salary ("FAS5").
- Tier 3 Enhanced Members have statutory presumptions (i.e., Heart/HHAT/Lung).

### 3. Ordinary Disability Retirement ("ODR")

- The ODR benefit for Tier3 Enhanced Members is the greater of:
  - ° 33 1/3% of FAS5 or
  - ° FAS5 multiplied by years of credited service (not greater than 22 years)

#### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

### 4. Escalation

• Tier 3 Enhanced Members who retire for ODR or ADR are not subject to escalation. Tier 3 Enhanced Members are subject to COLA, the same as Tier 1 and 2 members.

### 5. Social Security Offset

- Tier 3 Enhanced Members who retire for ODR or ADR are not subject to the Social Security
  offset.
- Tier 3 Enhanced Members who retire for a Service or Vested Retirement are subject to the Social Security offset.

### 6. Final Average Salary

- Tier 3 Enhanced Members have a FAS5 calculation.
- The Tier 3 Original members who opt into the Tier 3 Enhanced benefit have their FAS5
  applied for ODR or ADR, but their Three-Year Final Average Salary ("FAS3") applied for
  Service or Vested Retirements.

Additionally, Chapter 298/16 allows the Board of Trustees of FIRE to establish a budget for the administration of FIRE and authorized payment from the assets of FIRE to cover such Administrative Expenses. The Administrative Expenses will be charged against FIRE in the first instance and then reimbursed with interest by The City of New York as an Employer Contribution in the following fiscal year. This structure is commonly referred to as a "corpus-funded entity." Accordingly, starting in Fiscal Year 2019, Administrative Expenses will be reflected in the Employer Contribution and the UAAL Payments.

Chapter 61 of the Laws of 2017 permits FIRE members subject to RSSL Article 14 ("Eligible Members"), who would be ineligible for disability retirement benefits solely on account of being eligible for a normal service retirement benefit, to be eligible for disability benefits. It also relaxed the safeguards provisions regarding restrictions on post-retirement employment for Eligible Members who are awarded ADR and modified the process for reducing or eliminating an ADR benefit based on post-retirement earnings.

The following changes apply to all Tier 3 members (Original, Revised and Enhanced):

### 1. Eligibility for ADR

 Members no longer cease to be eligible for ADR at 22 years and can apply at any time as long as they are active.

### 2. Safeguards

- RSSL § 507(d) no longer applies to Tier 3 ADR retirees; the Tier 2 safeguard provisions contained in New York City Administrative Code § 13-254 apply. Therefore, all Tier 3 ADR retirees will be treated identically to Tier 2 ADR retirees for Safeguards purposes. This includes earnings limitations and re-employment.
- Safeguards remain unchanged for ODR retirees. Thus, they must continue to be in receipt of Social Security Disability benefits to maintain their receipt of pension benefits.

\* \* \* \* \* \*

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

### June 30, 2022 (In thousands)

	QPP*	FFVSF	FOVSF	TOTAL	
Total pension liability:	<b>A</b> 570.400		<b>.</b>	<b>*</b> 500.040	
Service cost	\$ 572,460	\$ 8,824	\$ 5,035	\$ 586,319	
Interest	1,673,848	32,102	20,250	1,726,200	
Differences between expected and actual experience	171,135	(2,124)	(3,862)	165,149	
Changes of assumptions Benefit payments and withdrawals	- (1,551,182)	- (44,087)	(25,536)	(1,620,805)	
Benefit payments and withdrawais	(1,551,162)	(44,067)	(25,530)	(1,020,003)	
Net change in total pension liability	866,261	(5,285)	(4,113)	856,863	
Total pension liability - beginning	24,102,174	471,448	296,809	24,870,431	
Total pension liability - ending (a)	24,968,435	466,163	292,696	25,727,294	
Plan fiduciary net position:					
Employer contributions	1,446,992	-	-	1,446,992	
Member contributions	134,469	-	-	134,469	
Net investment income	(1,454,918)	(72,525)	(55,414)	(1,582,857)	
Benefit payments and withdrawals	(1,551,182)	(44,088)	(25,536)	(1,620,806)	
Administrative expenses	(12,711)	-	-	(12,711)	
Other changes	953			953	
Net change in plan fiduciary net position	(1,436,397)	(116,613)	(80,950)	(1,633,960)	
Accrued transfers to/from VSFs	<u>-</u>	_	_	_	
Plan fiduciary net position - beginning	18,908,561	568,740	414,297	19,891,598	
Plan fiduciary net position - ending (b) **	17,472,164	452,127	333,347	18,257,638	
Employer's net pension liability - ending (a)-(b)	\$ 7,496,271	\$ 14,036	\$ (40,651)	\$ 7,469,656	
Plan fiduciary net position as a percentage of					
the total pension liability	69.98%	96.99%	113.89%	70.97%	
Covered payroll	\$ 1,401,378	N/A	N/A	\$ 1,401,378	
Employer's net pension liability as a percentage of					
covered payroll	534.92%	N/A	N/A	533.02%	

<sup>\*</sup>Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

<sup>\*\*</sup>Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

## REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

### June 30, 2021 (In thousands)

		QPP*	FFVSF		FOVSF		TOTAL	
Total pension liability:								
Service cost	\$	557,190	\$	8,645	\$	4,994	\$	570,829
Interest	Ψ	1,619,391	Ψ	33,008	*	20,282	Ψ.	1,672,681
Differences between expected and actual experience		(18,712)		(7,733)		(1,068)		(27,513)
Changes of assumptions		117,706		(2,933)		(1,612)		113,161
Benefit payments and withdrawals		(1,475,836)		(44,143)		(20,726)		(1,540,705)
Net change in total pension liability		799,739		(13,156)		1,870		788,453
Total pension liability - beginning		23,302,435		484,604		294,939		24,081,978
Total pension liability - ending (a)	2	24,102,174		471,448		296,809		24,870,431
Plan fiduciary net position:								
Employer contributions		1,436,977		-		-		1,436,977
Member contributions		112,566		-		-		112,566
Net investment income		3,757,865		119,157		86,235		3,963,257
Benefit payments and withdrawals		(1,475,835)		(44,144)		(20,726)		(1,540,705)
Administrative expenses		(10,345)		-		-		(10,345)
Other changes		758						758
Net change in plan fiduciary net position		3,821,986		75,013		65,509		3,962,508
Accrued transfers to/from VSFs		-		_		-		_
Plan fiduciary net position - beginning		15,086,575		493,727	-	348,788		15,929,090
Plan fiduciary net position - ending (b) **		18,908,561		568,740		414,297		19,891,598
Employer's net pension liability - ending (a)-(b)	\$	5,193,613	\$	(97,292)	\$	(117,488)	\$	4,978,833
Plan fiduciary net position as a percentage of								
the total pension liability		78.45%		120.64%		139.58%		79.98%
Covered payroll	\$	1,348,006		N/A		N/A	\$	1,348,006
Employer's net pension liability as a percentage of								
covered payroll		385.28%		N/A		N/A		369.35%

<sup>\*</sup>Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

<sup>\*\*</sup>Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

# June 30, 2020 (In thousands)

	QPP*		FFVSF		FOVSF		TOTAL	
Total pension liability:	_				_			
Service cost	\$	559,171	\$	8,526	\$	4,958	\$	572,655
Interest		1,562,741		33,410		20,386		1,616,537
Differences between expected and actual experience		150,563		(3,291)		(3,547)		143,725
Benefit payments and withdrawals		(1,447,071)		(44,850)		(25,802)		(1,517,723)
Net change in total pension liability		825,404		(6,205)		(4,005)		815,194
Total pension liability - beginning		22,477,031		490,809		298,944		23,266,784
Total pension liability - ending (a)		23,302,435		484,604		294,939		24,081,978
Plan fiduciary net position:								
Employer contributions		1,419,270		-		-		1,419,270
Member contributions		106,821		-		-		106,821
Net investment income		681,383		21,517		15,839		718,739
Benefit payments and withdrawals		(1,447,071)		(44,850)		(25,802)		(1,517,723)
Administrative expenses		(9,131)		-		-		(9,131)
Other changes		(17,315)		12,792		7,365		2,842
Not change in plan fiducion, not position		722 057		(10 541)		(2 500)		720 010
Net change in plan fiduciary net position		733,957		(10,541)	-	(2,598)		720,818
Accrued transfers to/from VSFs		15,000		(15,000)		_		_
Plan fiduciary net position - beginning		14,337,618		519,268		351,386		15,208,272
Plan fiduciary net position - ending (b) **		15,086,575		493,727		348,788		15,929,090
3 ( )		.,,.		,				
Employer's net pension liability - ending (a)-(b)	\$	8,215,860	\$	(9,123)	\$	(53,849)	\$	8,152,888
Plan fiduciary net position as a percentage of								
the total pension liability		64.74%		101.88%		118.26%		66.15%
Covered payroll	\$	1,336,843		N/A		N/A	\$	1,336,843
Employer's not name in linkility on a narrowtone of								
Employer's net pension liability as a percentage of covered payroll		614.57%		N/A		N/A		609.86%
							_	

<sup>\*</sup>Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

<sup>\*\*</sup>Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

## June 30, 2019 (In thousands)

	QPP*	FFVSF	FOVSF	TOTAL
Total pension liability:	407.400	40.004		<b>A</b> 404.007
Service cost	\$ 467,493	. ,	\$ 6,373	\$ 484,827
Interest	1,460,537	,	25,708	1,523,611
Differences between expected and actual experience	154,208	·	(20,300)	140,780
Changes of assumptions	697,113	, ,	(61,110)	571,768
Benefit payments and withdrawals	(1,376,090	) (45,218)	(24,806)	(1,446,114)
Net change in total pension liability	1,403,261	(54,254)	(74,135)	1,274,872
Total pension liability - beginning	21,073,770	545,063	373,079	21,991,912
Total pension liability - ending (a)	22,477,031	490,809	298,944	23,266,784
Plan fiduciary net position:				
Employer contributions	1,398,565	-	_	1,398,565
Member contributions	108,015	-	_	108,015
Net investment income	933,889	27,979	20,480	982,348
Benefit payments and withdrawals	(1,376,090	) (45,218)	(24,806)	(1,446,114)
Administrative expenses	(9,861		· · ·	(9,861)
Other changes	2,057	<u>-</u>		2,057
Net change in plan fiduciary net position	1,056,575	(17,239)	(4,326)	1,035,010
Accrued transfers to/from VSF's	14,000	(14,000)	-	-
Plan fiduciary net position - beginning	13,267,043	550,507	355,712	14,173,262
Plan fiduciary net position - ending (b) **	14,337,618	519,268	351,386	15,208,272
Employer's net pension liability - ending (a)-(b)	\$ 8,139,413	\$ (28,459)	\$ (52,442)	\$ 8,058,512
Plan fiduciary net position as a percentage of				
the total pension liability	63.79%	105.80%	117.54%	65.36%
Covered payroll	\$ 1,302,872	N/A	N/A	\$ 1,302,872
Employer's net pension liability as a percentage of				
covered payroll	624.73%	<u>N/A</u>	N/A	618.52%

<sup>\*</sup>Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

<sup>\*\*</sup>Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

### June 30, 2018 (In thousands)

	QPP*	FFVSF	FOVSF	TOTAL	
Total pension liability:	ф 440.000	ф 40.004	ф 4.00C	ф 400 000	
Service cost	\$ 419,209 1,422,180	\$ 12,234 37,221	\$ 4,926 25,208	\$ 436,369	
Interest	, ,	,	,	1,484,609	
Changes of benefit terms  Differences between expected and actual experience	14,335 141,892	(2,416) (12,073)	(317) (5,183)	11,602 124,636	
Benefit payments and withdrawals	(1,308,467)	(12,073) (46,976)	(24,090)	(1,379,533)	
benefit payments and withdrawais	(1,300,407)	(40,970)	(24,090)	(1,379,333)	
Net change in total pension liability	689,149	(12,010)	544	677,683	
Total pension liability - beginning	20,384,622	557,073	372,535	21,314,230	
Total pension liability - ending (a)	21,073,771	545,063	373,079	21,991,913	
Plan fiduciary net position:					
Employer contributions	1,200,417	-	-	1,200,417	
Member contributions	108,338	-	-	108,338	
Net investment income	1,188,860	35,406	25,465	1,249,731	
Benefit payments and withdrawals	(1,308,467)	(46,976)	(24,090)	(1,379,533)	
Administrative expenses	(6,412)	-	-	(6,412)	
Other changes	9,411			9,411	
Net change in plan fiduciary net position	1,192,147	(11,570)	1,375	1,181,952	
Accrued transfers to/from VSF's	(15,000)	15,000	_	_	
Plan fiduciary net position - beginning	12,089,896	547,077	354,337	12,991,310	
Plan fiduciary net position - ending (b) **	13,267,043	550,507	355,712	14,173,262	
Employer's net pension liability - ending (a)-(b)	\$ 7,806,728	\$ (5,444)	\$ 17,367	\$ 7,818,651	
Plan fiduciary net position as a percentage of					
the total pension liability	62.96%	101.00%	95.34%	64.45%	
Covered payroll	\$ 1,164,528	N/A	N/A	\$ 1,164,528	
Employer's net pension liability as a percentage of					
covered payroll	670.38%	N/A	N/A	671.40%	

<sup>\*</sup>Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

<sup>\*\*</sup>Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

## REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

# June 30, 2017 (In thousands)

	QPP*	FFVSF	FOVSF	TOTAL
Total pension liability:				
Service cost	\$ 415,221	\$ 12,180	\$ 5,081	\$ 432,482
Interest	1,375,677	38,029	25,099	1,438,805
Differences between expected and actual experience	148,046	(13,683)	115	134,478
Benefit payments and withdrawals	(1,265,817)	(47,667)	(21,859)	(1,335,343)
Net change in total pension liability	673,127	(11,141)	8,436	670,422
Total pension liability - beginning	19,711,495	568,214	364,099	20,643,808
Total pension liability - ending (a)	20,384,622	557,073	372,535	21,314,230
Plan fiduciary net position:				
Employer contributions	1,061,170	-	-	1,061,170
Member contributions	108,368	-	-	108,368
Net investment income	1,284,871	46,755	40,095	1,371,721
Benefit payments and withdrawals	(1,265,817)	(47,667)	(21,859)	(1,335,343)
Administrative expenses	-	-	-	-
Other changes	47,284			47,284
Net change in plan fiduciary net position	1,235,876	(912)	18,236	1,253,200
Accrued transfers to/from VSF's	(45,743)	23,914	21,829	_
Plan fiduciary net position - beginning	10,899,763	524,075	314,272	11,738,110
Plan fiduciary net position - ending (b) **	12,089,896	547,077	354,337	12,991,310
Employer's net pension liability - ending (a)-(b)	\$ 8,294,726	\$ 9,996	\$ 18,198	\$ 8,322,920
Plan fiduciary net position as a percentage of				
the total pension liability	59.31%	98.21%	95.12%	60.95%
Covered payroll	\$ 1,145,919	N/A	N/A	\$ 1,145,919
Employer's net pension liability as a percentage of				
covered payroll	723.85%	N/A	N/A	726.31%

<sup>\*</sup>Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

<sup>\*\*</sup>Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

## REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

### June 30, 2016 (In thousands)

		QPP*		FFVSF		FOVSF		TOTAL
Total pension liability:								
Service cost	\$	414,614	\$	11,652	\$	5,002	\$	431,268
Interest	Ψ	1,332,473	Ψ	38,716	Ψ	24,546	Ψ	1,395,735
Differences between expected and actual experience		324,429		3,728		(4,548)		323,609
Changes of assumptions		386,534		12,421		6,544		405,499
Benefit payments and withdrawals		(1,290,862)		(46,407)		(21,826)		(1,359,095)
Net change in total pension liability		1,167,188		20,110		9,718		1,197,016
Total pension liability - beginning		18,544,307		548,104		354,381		19,446,792
Total pension liability - ending (a)		19,711,495		568,214		364,099		20,643,808
Plan fiduciary net position:								
Employer contributions		1,054,478		_		_		1,054,478
Member contributions		116,619		_		_		116,619
Net investment income		197,398		4,669		1,037		203,104
Benefit payments and withdrawals		(1,290,862)		(46,407)		(21,826)		(1,359,095)
Other changes		43,673						43,673
Net change in plan fiduciary net position		121,306		(41,738)		(20,789)		58,779
Accrued transfers to/from VSF's		(36,873)		18,739		18,134		_
Plan fiduciary net position - beginning		10,815,330		547,074		316,927		11,679,331
Plan fiduciary net position - ending (b) **		10,899,763		524,075		314,272		11,738,110
Employer's net pension liability - ending (a)-(b)	\$	8,811,732	\$	44,139	\$	49,827	\$	8,905,698
Plan fiduciary net position as a percentage of								
the total pension liability		55.30%		92.23%		86.31%		56.86%
Covered payroll	\$	1,129,470		N/A		N/A	\$	1,129,470
Employer's net pension liability as a percentage of covered payroll		780.17%		N1/A		N1/A		788.48%
covered payroll		100.1170		N/A		N/A		100.4070

<sup>\*</sup>Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

<sup>\*\*</sup>Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

### June 30, 2015 (In thousands)

	QPP*	FFVSF	FOVSF	TOTAL
Total pension liability:				
Service cost	\$ 403,514	\$ 11,500	\$ 4,561	\$ 419,575
Interest	1,251,448	37,447	23,920	1,312,815
Differences between expected and actual experience	180,533	(4,324)	(4,862)	171,347
Benefit payments and withdrawals	(1,150,505)	(47,819)	(22,117)	(1,220,441)
Net change in total pension liability	684,990	(3,196)	1,502	683,296
Total pension liability - beginning ***	17,859,317	551,300	352,879	18,763,496
Total pension liability - ending (a)	18,544,307	548,104	354,381	19,446,792
Plan fiduciary net position:				
Employer contributions	988,784	-	-	988,784
Member contributions	108,582	-	-	108,582
Net investment income	271,430	18,888	12,249	302,567
Benefit payments and withdrawals	(1,150,505)	(47,819)	(22,117)	(1,220,441)
Other changes	41,201			41,201
Net change in plan fiduciary net position	259,492	(28,931)	(9,868)	220,693
Accrued transfers to/from VSF's	(40,000)	30,000	10,000	-
Plan fiduciary net position - beginning	10,595,838	546,005	316,795	11,458,638
Plan fiduciary net position - ending (b) **	10,815,330	547,074	316,927	11,679,331
Employer's net pension liability - ending (a)-(b)	\$ 7,728,977	\$ 1,030	\$ 37,454	\$ 7,767,461
Plan fiduciary net position as a percentage of				
the total pension liability	71.46%	0.19%	11.82%	66.51%
Covered payroll	\$ 1,111,744	N/A	N/A	\$ 1,111,744
Employer's net pension liability as a percentage of				
covered payroll	695.21%	N/A	N/A	698.67%

<sup>\*</sup>Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

<sup>\*\*</sup>Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

<sup>\*\*\*</sup>The beginning total pension liability does not agree to the prior year ending total pension liability because amounts were revised to include costs and liabilities associated with the Special Accidental Death Benefits payable under Section 208-F of the General Municipal Law.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

# June 30, 2014 (In thousands)

	QPP*	FFVSF	FOVSF	TOTAL
Total pension liability:				
Service cost	\$ 397,03	37 \$ 11,403	\$ 4,471	\$ 412,911
Interest	1,153,70	02 37,757	23,818	1,215,277
Benefit payments and withdrawals	(1,099,16	62) (50,822)	(22,014)	(1,171,998)
Net change in total pension liability	451,57	77 (1,662)	6,275	456,190
Total pension liability - beginning	16,624,73	36 552,962	346,604	17,524,302
Total pension liability - ending (a)	17,076,3	13 551,300	352,879	17,980,492
Plan fiduciary net position:				
Employer contributions	969,95	56 -	-	969,956
Member contributions	108,85	59 -	-	108,859
Net investment income	1,569,01	13 69,027	51,445	1,689,485
Benefit payments and withdrawals	(1,099,16	62) (50,822)	(22,014)	(1,171,998)
Other changes	39,98	80 -		39,980
Net change in plan fiduciary net position	1,588,64	46 18,205	29,431	1,636,282
Accrued transfers to/from VSF's	(120,00	00) 110,000	10,000	-
Plan fiduciary net position - beginning	9,127,19	92 417,800	277,364	9,822,356
Plan fiduciary net position - ending (b) **	10,595,83	38 546,005	316,795	11,458,638
Employer's net pension liability - ending (a)-(b)	\$ 6,480,47	75 \$ 5,295	\$ 36,084	\$ 6,521,854
Plan fiduciary net position as a percentage of				
the total pension liability	62.05	5% 99.04%	89.77%	63.73%
Covered payroll	\$ 1,102,39	96 N/A	N/A	\$ 1,102,396
Employer's net pension liability as a percentage of				
covered payroll	587.85	5% N/A	N/A	591.61%

<sup>\*</sup>Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

<sup>\*\*</sup>Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) QUALIFIED PENSION PLAN SCHEDULES OF EMPLOYER CONTRIBUTIONS

# Fiscal years ended June 30, (In thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially determined contribution	\$ 1,446,992	\$ 1,436,977	\$ 1,419,270	\$ 1,398,565	\$ 1,200,417	\$ 1,061,170	\$ 1,054,478	\$ 988,784	\$ 969,956	\$ 962,173
Contributions in relation to the actuarially determined contribution	1,446,992	1,436,977	1,419,270	1,398,565	1,200,417	1,061,170	1,054,478	988,784	969,956	962,173
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered payroll*	\$ 1,401,378	\$ 1,348,006	\$ 1,336,843	\$ 1,302,872	\$ 1,164,528	\$ 1,145,919	\$ 1,129,470	\$ 1,111,744	\$ 1,102,396	\$ 1,129,921
Contributions as a percentage of covered payroll*	103.25%	106.60%	106.17%	107.34%	103.08%	92.60%	93.36%	88.94%	87.99%	85.15%

Projected payroll at time 1.0 under previous roll-forward methodology through 2018. Actual payroll at valuation date (time = 0) beginning in 2019.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) QUALIFIED PENSION PLAN SCHEDULES OF EMPLOYER CONTRIBUTIONS

## Fiscal years ended June 30, (In thousands)

#### Notes to Schedule:

The above actuarially determined contributions were developed using a One-Year Lag Methodology, under which the actuarial valuation determines the Employer contribution for the second following fiscal year (e.g., fiscal year 2022 contributions were determined using an actuarial valuation as of June 30, 2020). The methods and assumptions used to determine the actuarially determined contributions are as follows:

Valuation Dates	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016
Actuarial cost method	Entry age	Entry age	Entry age	Entry age	Entry age
Amortization method for unfunded					
actuarial accrued liabilities:					
Initial unfunded	Increasing dollar	Increasing dollar	Increasing dollar	Increasing dollar	Increasing dollar
Post-2010 unfundeds	Level dollar	Level dollar	Level dollar	Level dollar	Level dollar
Initial unfunded	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	16 years (closed)
2011 Actuarial gain/loss	6 years (closed)	7 years (closed)	8 years (closed)	9 years (closed)	10 years (closed)
2012 Actuarial gain/loss	7 years (closed)	8 years (closed)	9 years (closed)	10 years (closed)	11 years (closed)
2013 Actuarial gain/loss	8 years (closed)	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)
2014 Actuarial gain/loss	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)
2014 Assumption change	14 years (closed)	15 years (closed)	16 years (closed)	17 years (closed)	18 years (closed)
2015 Actuarial gain/loss	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)
2016 Actuarial gain/loss	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)
2016 SADB	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)
2016 Enhanced ADR	18 years (closed)	19 years (closed)	20 years (closed)	21 years (closed)	22 years (closed)
2017 Actuarial gain/loss	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA
2017 VSF escalation offset	18 years (closed)	19 years (closed)	20 years (closed)	21 years (closed)	NA
2017 Non-uniformed service	17 years (closed)	18 years (closed)	19 years (closed)	20 years (closed)	NA
2017 Assumptions/methods	17 years (closed)	18 years (closed)	19 years (closed)	20 years (closed)	NA
2018 Actuarial gain/loss	13 years (closed)	14 years (closed)	15 years (closed)	NA	NA
2019 Actuarial gain/loss	14 years (closed)	15 years (closed)	NA	NA	NA
2019 Assumptions/methods	19 years (closed)	20 years (closed)	NA	NA	NA
2020 Actuarial gain/loss	15 years (closed)	NA	NA	NA	NA
Actuarial asset valuation method <sup>1</sup>	Five-year moving average of market values with a "Market Value Restart" as of June 30, 2019.	Five-year moving average of market values with a "Market Value Restart" as of June 30, 2019.	Modified six-year moving average of market values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of market values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of market values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.

<sup>&</sup>lt;sup>1</sup> As of June 30, 2014 (Lag) valuation, the AVA is constrained to be no more than 20% of Market Value.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) QUALIFIED PENSION PLAN SCHEDULES OF EMPLOYER CONTRIBUTIONS

### Fiscal years ended June 30, (In thousands)

#### Notes to Schedule:

The above actuarially determined contributions were developed using a One-Year Lag Methodology, under which the actuarial valuation determines the Employer contribution for the second following fiscal year (e.g., fiscal year 2022 contributions were determined using an actuarial valuation as of June 30, 2020). The methods and assumptions used to determine the actuarially determined contributions are as follows:

Valuation Dates	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012	June 30, 2011
Actuarial cost method	Entry age				
Amortization method for unfunded					
actuarial accrued liabilities:					
Initial unfunded	Increasing dollar				
Post-2010 unfundeds	Level dollar				
Initial unfunded	17 years (closed)	18 years (closed)	19 years (closed)	20 years (closed)	21 years (closed)
2011 Actuarial gain/loss	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)
2012 Actuarial gain/loss	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA
2013 Actuarial gain/loss	13 years (closed)	14 years (closed)	15 years (closed)	NA	NA
2014 Actuarial gain/loss	14 years (closed)	15 years (closed)	NA	NA	NA
2014 Assumption change	19 years (closed)	20 years (closed)	NA	NA	NA
2015 Actuarial gain/loss	15 years (closed)	NA	NA	NA	NA
2016 Actuarial gain/loss	NA	NA	NA	NA	NA
2016 SADB	NA	NA	NA	NA	NA
2016 Enhanced ADR	NA	NA	NA	NA	NA
2017 Actuarial gain/loss	NA	NA	NA	NA	NA
2017 VSF escalation offset	NA	NA	NA	NA	NA
2017 Non-uniformed service	NA	NA	NA	NA	NA
2017 Assumptions/methods	NA	NA	NA	NA	NA
2018 Actuarial gain/loss	NA	NA	NA	NA	NA
2019 Actuarial gain/loss	NA	NA	NA	NA	NA
2019 Assumptions/methods	NA	NA	NA	NA	NA
2020 Actuarial gain/loss	NA	NA	NA	NA	NA
Actuarial asset valuation method <sup>1</sup>	Modified six-year moving average of market values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of market values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of market values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of market values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of market values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.

<sup>&</sup>lt;sup>1</sup> As of June 30, 2014 (Lag) valuation, the AVA is constrained to be no more than 20% of Market Value.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) QUALIFIED PENSION PLAN SCHEDULES OF EMPLOYER CONTRIBUTIONS

## Fiscal years ended June 30, (In thousands)

Valuation Dates	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016
Actuarial assumptions: Assumed rate of return <sup>2</sup>	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.
Post-retirement mortality <sup>3</sup>	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2016.
Active service: withdrawal, death, disability, service retirement <sup>3</sup>	Tables adopted by Board of	Tables adopted by Board of	Tables adopted by Board of	Tables adopted by Board of	Tables adopted by Board of
	Trustees during Fiscal Year	Trustees during Fiscal Year	Trustees during Fiscal Year	Trustees during Fiscal Year	Trustees during Fiscal Year
	2019.	2019.	2019.	2019.	2012.
Salary increases <sup>2</sup>	In general, merit and	In general, merit and	In general, merit and	In general, merit and	In general, merit and
	promotion increases plus	promotion increases plus	promotion increases plus	promotion increases plus	promotion increases plus
	assumed General Wage	assumed General Wage	assumed General Wage	assumed General Wage	assumed General Wage
	Increases of 3.0% per year.	Increases of 3.0% per year.	Increases of 3.0% per year.	Increases of 3.0% per year.	Increases of 3.0% per year.
Cost-of-living adjustments <sup>2</sup>	1.5% per annum for	1.5% per annum for	1.5% per annum for	1.5% per annum for	1.5% per annum for
	AutoCOLA. 2.5% per annum	AutoCOLA. 2.5% per annum	AutoCOLA. 2.5% per annum	AutoCOLA. 2.5% per annum	AutoCOLA. 2.5% per annum
	for Escalation.	for Escalation.	for Escalation.	for Escalation.	for Escalation.

<sup>&</sup>lt;sup>2</sup> Developed using a long-term Consumer Price Inflation assumption of 2.5% per year.

<sup>&</sup>lt;sup>3</sup> As of June 30, 2019, applied mortality improvement scale MP-2020 published by the Society of Actuaries to post-retirement mortality, active ordinary death mortality rates, and pre-commencement mortality rates terminated vesteds. Prior to June 30, 2019, MP-2018 was applied to post-retirement mortality. Prior to June 30, 2017, MP-2015 was applied to post-retirement mortality. Prior to June 30, 2014, Scale AA was applied to post-retirement mortality.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) QUALIFIED PENSION PLAN SCHEDULES OF EMPLOYER CONTRIBUTIONS

## Fiscal years ended June 30, (In thousands)

Valuation Dates	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012	June 30, 2011
Actuarial assumptions: Assumed rate of return <sup>2</sup>	7.0% per annum, net of investment expenses.				
Post-retirement mortality <sup>3</sup>	Tables adopted by Board of Trustees during Fiscal Year 2016.	Tables adopted by Board of Trustees during Fiscal Year 2016.	Tables adopted by Board of Trustees during Fiscal Year 2012.	Tables adopted by Board of Trustees during Fiscal Year 2012.	Tables adopted by Board of Trustees during Fiscal Year 2012.
Active service: withdrawal, death, disability, service retirement <sup>3</sup>	Tables adopted by Board of Trustees during Fiscal Year 2012.	Tables adopted by Board of Trustees during Fiscal Year 2012.	Tables adopted by Board of Trustees during Fiscal Year 2012.	Tables adopted by Board of Trustees during Fiscal Year 2012.	Tables adopted by Board of Trustees during Fiscal Year 2012.
Salary increases <sup>2</sup>	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.
Cost-of-living adjustments <sup>2</sup>	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.

<sup>&</sup>lt;sup>2</sup> Developed using a long-term Consumer Price Inflation assumption of 2.5% per year.

<sup>&</sup>lt;sup>3</sup> As of June 30, 2019, applies mortality improvement scale MP-2020 published by the Society of Actuaries to post-retirement mortality, active ordinary death mortality rates, and pre-commencement mortality rates for terminated vesteds. Prior to June 30, 2019, MP-2018 was applied to post-retirement mortality. Prior to June 30, 2017, MP-2015 was applied to post-retirement mortality. Prior to June 30, 2014, Scale AA was applied to post-retirement mortality.

### REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF INVESTMENT RETURNS

June 30, 2022 and 2021

The following table displays annual money-weighted rate of return, net of investment expense, for the Funds for each of the past nine fiscal years:

Fiscal Years Ended	QPP	FFVSF	FOVSF
June 30, 2022	(7.64%)	(13.34%)	(13.76%)
June 30, 2021	24.86%	25.39%	25.43%
June 30, 2020	4.80%	4.35%	4.54%
June 30, 2019	7.11%	5.70%	5.93%
June 30, 2018	9.34%	7.28%	7.75%
June 30, 2017	12.82%	13.48%	14.53%
June 30, 2016	1.37%	0.88%	0.24%
June 30, 2015	3.28%	4.13%	4.02%
June 30, 2014	17.51%	18.03%	19.57%

Note: In accordance with paragraph 50 of GASB Statement No. 67, *Financial Reporting for Pension Plans* ("GASB 67"), this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB 67. Additional years will be added until the 10-year requirement is met.