# **City of Farmington Hills Retiree Health Plan** Actuarial Valuation as of June 30, 2023



## **Table of Contents**

Section	Page	_
		Introduction
А	1-3	Executive Summary
В	1 2 3 4-6 7 8	Financial Objective Computed Contributions Determination of Unfunded Accrued Liability Retiree Premium Rate Development Assets and Accrued Liabilities Computed Employer Contributions - Comparative Statement
С	1	Supplemental Information
D	1-3 4 5 6 7-9	Summary of Benefit Provisions Financial Data Valuation Assets Retired Life Data Active Member Data
E	1 2-7 8 9	Valuation Methods Actuarial Assumptions Miscellaneous Technical Assumptions Glossary





November 8, 2023

The Retirement Board City of Farmington Hills Retiree Health Plan Farmington Hills, Michigan

#### Re: City of Farmington Hills Retiree Health Plan Actuarial Valuation as of June 30, 2023 Actuarial Disclosures

Dear Board Members:

The results of the June 30, 2023 Actuarial Valuation of the City of Farmington Hills Retiree Health Plan are presented in this report.

This report was prepared at the request of the Board and is intended for use by the City and those designated or approved by the City. This report may be provided to parties other than the City only in its entirety, and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the Plan's funding progress and to determine the employer contribution for the fiscal years ending June 30, 2025 and June 30, 2026. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified above, may be significantly different. This report does not include actuarial information needed to satisfy reporting requirements under Governmental Accounting Standards Board Statements No. 74 or No. 75.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

Results presented in this report are developed using the actuarial assumptions and methods disclosed in this report. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. This report does not include a robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment. We encourage a review and assessment of the investment and other significant risks that may have a material effect on the plan's financial condition.

The Retirement Board November 8, 2023 Page 2

The findings in this report are based on information furnished by the City of Farmington Hills concerning retiree health care benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-toyear consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the City of Farmington Hills.

This report was prepared using assumptions adopted by the Board. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. The combined effect of the assumptions is expected to have no significant bias (i.e. not significantly optimistic or pessimistic). All actuarial assumptions and methods used in the valuation follow the guidance in the applicable Actuarial Standards of Practice. Additional information about the actuarial assumptions is included in the section of this report entitled Actuarial Assumptions.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This report has been prepared by actuaries who have substantial experience valuing public retiree health programs. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

James D. Anderson and Stephanie Sullivan are Members of the American Academy of Actuaries (MAAA). These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor, and all actuarial assumptions used in this report are reasonable for the purposes of this valuation.

Gabriel, Roeder, Smith & Company will be pleased to answer any questions pertaining to the valuation.

Respectfully submitted, Gabriel, Roeder, Smith & Company

James D. anderson James D. Anderson, FSA, EA, FCA, MAAA

JDA/SS:ah

C0481



Stephanie Sullivan, ASA, MAAA

**SECTION A** 

**EXECUTIVE SUMMARY** 

### **Executive Summary**

### 1. Actuarially Determined Contributions - Fiscal Year Beginning July 1, 2024

The required employer contributions for each division are shown below:

	Employer			
Division	Contributions			
General	\$	0		
Court		3,436		
Police		0		
Fire		242,536		
Total	\$	245,972		

The fiscal year 2025 employer contributions in this report are intended to replace the fiscal year 2025 employer contributions provided in the June 30, 2022 valuation report dated November 2, 2022.

#### 2. Contribution Comparison

The chart below compares the contributions in this valuation with those of the 2022 actuarial valuation of the Plan.

by Valuation date						
Division	Jun	e 30, 2022	Jun	e 30, 2023		
General	\$	0	\$	0		
Court		5,420		3,436		
Police		11,872		0		
Fire		257,294		242,536		
Total	\$	274,586	\$	245,972		

### Actuarially Computed Employer Contributions

#### 3. Reasons for Change

There are three general reasons why contribution requirements change from one valuation to the next.

- 1) The first is a change in the benefits or eligibility conditions of the Plan.
- 2) The second is a change in the valuation assumptions used to predict future occurrences and methods.
- 3) The third is the difference during the year between the Plan's actual experience and what the assumptions predicted.

The impact of each on this valuation is discussed on the following page.



## **Executive Summary (Continued)**

#### 4. Changes in Benefit Provisions

The following changes in benefit provisions were reported to the actuary:

- Upon retirement, a retiree health care stipend of \$200/month for single coverage or \$400/month for double coverage will be credited to a retiree health care savings account each year for Tier 2 General, Court, Police, and Fire employees satisfying certain conditions at retirement;
- The eligibility requirements to be satisfied at the time of retirement for the retiree health care stipend are as follows:
  - Police Patrol: 25 or more years of credited service;
  - Police Command: attained age of 50 with 25 or more years of credited service, or 30 or more years of credited service regardless of age;
    - All Other Groups: attained age of 60 with 15 or more years of credited service;
- For retiree health care stipend eligibility purposes, service back to date of hire is considered;
- Tier 1 Fire employees who retire on or after October 10, 2022 will contribute a monthly premium of \$50 for single coverage and \$100 for double coverage to participate in the retiree health care plan; and
- Tier 1 Police employees (both Patrol and Command) who retire on or after January 1, 2022 will contribute a monthly premium of \$50 for single coverage and \$50 for double coverage to participate in the retiree health care plan.

Section D of this report details the plan provisions valued. The combined impact of the changes in benefit provisions increased the actuarial accrued liabilities by \$0.9 million as of the valuation date.

#### 5. Changes in Assumptions

This valuation of the Retiree Health Plan reflects changes in the medical/prescription drug trend assumption to better reflect anticipated future experience. This change increased Plan accrued liabilities by \$3.8 million as of the valuation date. The new medical/prescription drug trend assumption is noted in Section B of this report.

#### 6. Plan Experience

System experience for the year ending June 30, 2023 was favorable overall. The positive experience was driven primarily by medical and prescription drug costs increasing less than expected. During the 2022-2023 plan year, while the rate of investment return on System assets was higher than long-term expectations on a market value basis, the rate of investment return on valuation assets (i.e., a smoothed market value basis) was lower than the long-term expectations. Overall, positive experience attributable to medical and prescription drug costs was sufficient to offset increases associated with changes in plan provisions, changes in assumptions, and negative investment experience, to keep the employer contribution requirements relatively level compared to the prior valuation.



## **Executive Summary (Concluded)**

### 7. 2023 Funding Position

As of June 30, 2023, the Plan's funding ratio was 116.0%. As of June 30, 2022, the funding ratio was 113.9%. If the market value of assets was used to determine the Plan's funding ratio as of June 30, 2023, the result would be a funding ratio of 113.8%.

### 8. Fiscal Year 2026 Contributions

Based on current GASB standards and the Board's policy, biennial valuations of the Plan are performed (the next valuation of this plan will occur as of June 30, 2025). This valuation includes employer contributions for fiscal year 2025 on page A-1 of this report. Employer contributions for fiscal year 2026 are shown below:

	Employer			
Division	Contributions			
General	\$	0		
Court		1,219		
Police		0		
Fire		237,222		
Total	\$	238,441		



# **SECTION B**

VALUATION RESULTS

## **Financial Objective**

The financial objective of the Retiree Health Plan is to establish and receive contributions, such that when combined with present assets and future investment income will be sufficient to meet the financial obligations of the fund to present and future retirees and beneficiaries.

Your annual actuarial valuations determine how well the objective is being met. This report covers the portion of the valuation dealing with retiree health insurance benefits.

### **Actuarially Determined Contribution**

The Retiree Health Plan benefits are supported by contributions from the active members (1.50% of pay), contributions by the City and by the investment income earned on its assets. The City provides an actuarially determined contribution needed to meet the financial objective.

City contributions cover both (i) normal cost, and (ii) the financing of the unfunded accrued liability over a period of future years. The normal cost is the portion of plan costs allocated to the current year by the valuation method described in Section E. The unfunded accrued liability is the portion of Plan costs not covered by present assets and future normal costs.

The contribution requirements for retiree health benefits for the fiscal year beginning July 1, 2024 are presented on page B-2. We have developed and shown in a separate report the costs of basic Retirement System benefits.



## Contributions to Provide Retiree Health Benefits Member and Employer Portions for the Fiscal Year Beginning July 1, 2024

<b>Contributions for</b>	General Contributions for Members		Court Members		Police Members		Fire Members	
Normal cost of benefits:								
Age & service	\$	173,174	\$	47,114	\$	391,335	\$	171,434
Disability		6,053		1,948		24,265		10,052
Death before retirement		1,681		354		1,765		372
Opt-Out		7,061		2,922		9,265		3,909
Stipend		47,188		4,128		38,721		2,849
Total		235,157		56,466		465,351		188,616
Member contributions:								
Total		50,439		13,284		66,178		27,921
Future refunds		12,105		3,011		5,735		2,420
Available for benefits		38,334		10,273		60,443		25,501
Administrative expenses		16,859		16,858		16,858		16,858
Employer normal cost		213,682		63,051		421,766		179,973
Amortization charges / (credits)		<u>(1,063,913)</u>		(59,615)		(558,541)		62,563
Actuarially Determined Contribution	\$	0	\$	3,436	\$	0	\$	242,536

Unfunded actuarial accrued liabilities were amortized using a level dollar method over a period of 12 years for all divisions.



# Determination of Unfunded Accrued Liability as of June 30, 2023

	-	General	Court	Police	Fire	Total
Α.	Accrued Liability					
	1. For retirees and beneficiaries	\$19,362,000	\$1,744,314	\$23,147,304	\$7,024,633	\$51,278,251
	2. For vested terminated members	0	0	0	0	0
	3. For present active members					
	a. Value of expected future benefit payments	11,294,386	1,920,160	16,568,755	6,855,326	36,638,627
	b. Value of future normal costs	1,552,309	490,137	3,535,569	1,298,765	6,876,780
	c. Active member liability: (a) - (b)	9,742,077	1,430,023	13,033,186	5,556,561	29,761,847
	4. Total	29,104,077	3,174,337	36,180,490	12,581,194	81,040,098
В.	Valuation Assets	37,450,900	3,677,375	40,868,836	12,037,784	94,034,895
C.	Unfunded Accrued Liability					
	(A.4) - (B)	(8,346,823)	(503,038)	(4,688,346)	543,410	(12,994,797)
D.	Funding Ratio: (B) / (A.4)	129%	116%	113%	96%	116%



### **Retiree Premium Rate Development**

#### **Rate Development**

Initial premium rates were developed separately for each class (pre-65 and post-65). The rates were calculated by using actual paid claims and exposure data for the period of April 2020 to March 2023 adjusted for catastrophic claims, plus the load for administration and stop loss fees. The self-insured medical and prescription drug data were provided by Farmington Hills. For pre-65 retirees, both the medical and the prescription drugs are self-insured. For the post-65 retirees, the medical is self-insured, and the prescription drug is fully insured. The self-insured medical data was analyzed separately for the pre-65 and post-65 participants since Medicare is available for the post-65 participants and has a significant impact on the claim experience. Furthermore, since the prescription drug claims and the medical claims exhibit different trends and claim payment patterns, we analyzed these claims separately as well.

For the post-65 Medicare Advantage Rx plans, the fully-insured premium rates were used as the basis of the initial per capita cost without adjustments since the rate reflects the demographics of the post-65 retiree group.

For the current active employees, different benefits are available upon retirement. All future retirees will go into BCBS Community Blue 2 (Division 0017), BCBS Community Blue 3a (Division 0014), or Blue Care Network-I. We have developed separate premium rates for future retirees in order to reflect the benefit differences.

A small number of retirees were reported as members of the fully-insured BCN benefit plan. We ignored these retirees in the development of the rates since including them would not have a material impact.

Age-graded and sex-distinct premiums are utilized by this valuation. The premiums developed by the preceding process are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific premiums more accurately reflect the health care utilization and cost at that age.

The tables below show the results of the premium rate development process. Specifically, the combined monthly one-person medical and drug premiums (or per capita costs) at select ages. These premiums reflect the use of age grading and were used in this valuation of the retiree health plan.

	For Retirees Not Eligible For Medicare					
	Current	Retirees	Future	Retirees		
Age	Male	Female	Male	Female		
45	\$ 777.96	\$1,073.69	\$ 760.84	\$1,050.06		
60	1,721.62	1,695.21	1,683.74	1,657.90		
64	2,093.54	1,975.73	2,047.47	1,932.26		

	Fo	For Retirees Eligible For Medicare					
	Current	Retirees	Future I	Retirees			
Age	Male	Female	Male	Female			
65	\$ 390.76	\$ 368.57	\$ 358.52	\$ 338.16			
75	457.19	446.12	419.47	409.31			
85	483.45	489.14	443.56	448.79			



## **Retiree Premium Rate Development**

#### **Health Care Cost Trend Assumption**

The health care cost trend rate is the rate of change in per capita health care claims over time as a result of factors such as medical inflation, utilization of health care services, plan design, and technological improvements. It is a crucial economic assumption that is required for measuring retiree health care benefit obligations.

Retiree health care valuations use a health care cost trend assumption (trend vector) that changes over the years. The trend vector used in this valuation begins with a near-term trend assumption and declines over a time to an ultimate trend rate. The near-term rates reflect the increases in the current cost of health care goods and services. The process of trending down to a lower ultimate trend relies on the theory that premiums will moderate over the long term, otherwise the healthcare sector would eventually consume the entire GDP. It is on this basis that we project premium rate increases will continue to exceed wage inflation for the next fifteen years, but by less each year until leveling off at an ultimate rate, assumed to be 3.50% in this valuation.

While experience is often the best starting point for future costs, GRS does not rely on a group's experience in setting the near-term trend assumptions since trends vary significantly from year to year and are not credible for most groups. Therefore, professional judgment, trends from GRS' book of business and industry benchmarks (e.g., trend reports from various Pharmacy Benefit Management (PBM) organizations and national healthcare benefit consulting firms) are used in conjunction with a group's historical experience to establish the trend assumptions.

	<b>Retiree Health Care</b>				
Year Beginning	Cost Inc	reases			
July 1,	Non-Medicare	Medicare			
2024	7.25%	6.50%			
2025	7.00	6.25			
2026	6.75	6.00			
2027	6.50	5.75			
2028	6.25	5.75			
2029	6.00	5.50			
2030	5.75	5.25			
2031	5.50	5.00			
2032	5.00	4.75			
2033	4.75	4.50			
2034	4.50	4.25			
2035	4.25	4.25			
2036	4.00	4.00			
2037	3.75	3.75			
2038	3.50	3.50			
Thereafter	3.50	3.50			



## **Retiree Premium Rate Development**

#### **Actuarial Disclosures**

The premium rates used in this valuation were developed using the proprietary Excel models which, in James E. Pranschke's professional judgment, provide the initial projected costs which are consistent with the purposes of the valuation. We performed tests to ensure that the models, in their entirety, reasonably represent that which is intended to be modeled.

Aging factors used in the premium development models were developed based on the information and data from a 2013 study commissioned by the Society of Actuaries entitled "Health Care Costs – From Birth to Death."

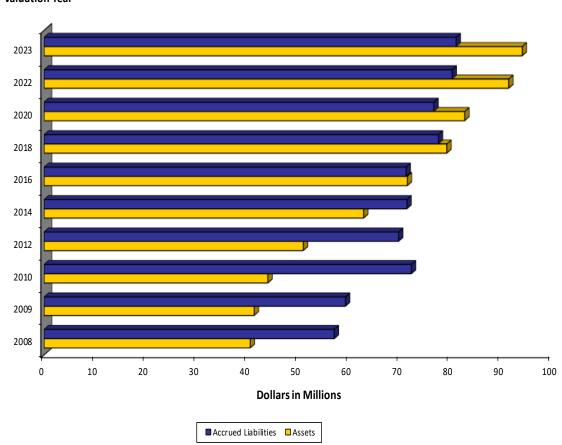
James E. Pranschke is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to certify the per capita retiree health care rates shown above.

James E. Pranschle

James E. Pranschke, FSA, FCA, MAAA



### **Assets and Accrued Liabilities**



Valuation Year

2008 assets equaled 71.1% of accrued liabilities 2023 assets equaled 116.0% of accrued liabilities



## Actuarially Determined Contributions Comparative Statement

		Covered En	mbers	Covered	Actuarially	
Valuation		Valua	Valuation Payroll			Determined
Date	No. <sup>1</sup>	Total	Total Average % Incr.		Recipients <sup>2</sup>	Contributions <sup>3</sup>
12-31-97 <sup>5</sup>	385	\$16,435,104	\$ 42,689	3.1%	36	4.59%
12-31-97	398	17,707,128	44,490	4.2%	47	4.79%
12-31-99 <sup>5</sup>	411	18,879,095	45,935	3.2%	54	5.45%
12-31-00 <sup>5</sup>	408	19,612,045	48,069	4.6%	58	5.62%
12-31-01 <sup>4,5</sup>	415	20,558,629	49,539	3.1%	58	8.19%
12-31-02 <sup>4,5</sup>	424	21,567,711	50,867	2.7%	69	10.94%
12-31-03 <sup>4</sup>	419	22,246,938	53,095	4.4%	78	11.38%
12-31-04 <sup>4</sup>	414	22,612,504	54,620	2.9%	89	10.99%
6-30-06 <sup>4</sup>	414	23,302,473	56,286	3.1%	103	12.11%
6-30-07 <sup>5</sup>	416	24,080,517	57,886	2.8%	108	12.41%
6-30-08 <sup>5</sup>	402	24,662,884	61,350	6.0%	115	\$2,971,747
6-30-09 <sup>4</sup>	386	24,904,782	64,520	5.2%	121	3,186,426
6-30-10 <sup>4</sup>	323	21,494,819	66,547	3.1%	169	3,955,250
6-30-12 <sup>4,5</sup>	292	19,889,835	68,116	2.4%	177	2,892,858
6-30-14 <sup>4</sup>	255	17,633,733	69,152	1.5%	203	1,808,068
6-30-16	233	17,092,987	73,360	6.1%	214	776,762
6-30-18	204	16,003,657	78,449	6.9%	235	554,427
6-30-20 <sup>4</sup>	176	15,005,716	85,260	8.7%	254	307,862
6-30-22 <sup>4</sup>	136	12,435,716	91,439	7.2%	243	274,586
6-30-23 <sup>4,5</sup>	393	31,307,511	79,663	(12.9%)	254	245,972

<sup>1</sup> Includes Tier 1 actives covered by Traditional Defined Benefit Retiree Health Care Coverage and Tier 2 actives covered by Stipend Retiree Health Care Coverage.

<sup>2</sup> Includes Tier 1 benefit recipients covered by Traditional Defined Benefit Retiree Health Care Coverage, potential future Tier 1 benefit recipients who may opt back into Traditional Defined Benefit Retiree Health Care Coverage, and Tier 2 benefit recipients covered by Stipend Retiree Health Care Coverage.

<sup>3</sup> Prior to the June 30, 2008 valuation, the computed employer contribution was determined as a percent of payroll.

<sup>4</sup> Actuarial assumptions/methods revised.

<sup>5</sup> Benefit changes.



# **SECTION C**

# **SUPPLEMENTAL INFORMATION**

## **Supplemental Information**

### Schedule of Health Funding Progress (\$ Amount in Millions)

Valuation Date June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2016	\$ 71.4	\$ 71.2	\$(0.2)	100.3%	\$17.1	(1.2%)
2018	79.2	77.6	(1.6)	102.1	16.0	(10.0)
2020	82.7	76.7	(6.0)	107.9	15.0	(40.0)
2022	91.4	80.3	(11.1)	113.9	12.4	(89.5)
2023	94.0	81.0	(13.0)	116.0	31.3	(41.5)

### Schedule of Employer Health Contributions

Valuation Date June 30	Fiscal Year Ended June 30	Actuarially Determined Contributions	Actual Contributions
2014	2016	\$ 1,808,068	\$ 1,808,068
2014	2017	1,794,724	1,794,724
2016	2018	776,762	776,762
2016	2019	767,528	767,528
2018	2020	559,360	559 <i>,</i> 360
2018	2021	540,667	540,667
2020	2022	307,862	307,862
2020	2023	285,085	285,085
2022	2024	274,586	1
2023	2025	245,972	1

<sup>1</sup> Not yet available.



**SECTION D** 

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

## Summary of Benefit Provisions as of June 30, 2023

### Traditional Defined Benefit Retiree Health Care Coverage

Employee Group	Eligibility	Benefit Amount	Spouse Coverage	Member Contribution	
General	Retirement after effective date of coverage at age 60 with 15 years of service or under Rule of 80 (minimum age 55) and receiving Retirement System Pension.	Until age 65 - the same medical coverage as is in effect for General City employees. Beginning at age 65 - Medicare supplementary coverage. Retiree coverage can be different	Yes	1.50%	
Court	Retirement after effective date of coverage at age 60 with 15 years of service or under Rule of 80 (minimum age 55) and receiving Retirement System Pension.	Until age 65 - the same medical coverage as is in effect for General City employees. Beginning at age 65 - Medicare supplementary coverage. Retiree coverage can be different	Yes	1.50%	
Police Patrol and Fire	At any age with 25 or more years of service.	Until age 65 - the same medical coverage as is in effect for Police Department employees. Beginning at age 65 - Medicare supplementary coverage. Retiree coverage can be different from active employees.	Yes	1.50%	
Police Command	At age 50 with 25 years of service or 30 years regardless of age.	Until age 65 - the same medical coverage as is in effect for Police Department employees. Beginning at age 65 - Medicare supplementary coverage. Retiree coverage can be different from active employees.	Yes	1.50%	



## Summary of Benefit Provisions as of June 30, 2023

### Traditional Defined Benefit Retiree Health Care Coverage

- 1. Health age and service requirements do not apply to retirees receiving a System Disability Pension.
- 2. Benefits cover medical benefits and prescription drugs. Certain retirees have grandfathered benefit amounts which differ from those shown in the chart below.

Employment Group(s)		Eligibility Requirement	Monthly Maximum
TPOAM (f.k.a. AFSCME), Executive, General Exempt, Dispatch, Teamsters & Court	•	Age 60 with 15 years of service Rule of 80 minimum age 55 minimum 20 years of service	\$400* None
Police Command	•	Age 50 with 25 years of service or 30 years of service regardless of age	None
Police Patrol & Fire	٠	25 years of service	None

\* This is a combined maximum. Retirees with single life and multiple life coverage have the same maximum.

When a retiree waives coverage under this plan, the City will pay the retiree a waiver allowance. Opt-out allowance monthly maximum equals \$400 for two people and \$200 for one person.

- 3. Applicable to spouses of retired members who are covered for Plan medical insurance. The same medical benefits for which the retired member is covered as long as the retired member is alive or after member's death if the spouse is receiving System pension payments.
- 4. Retiree contributions for participation in the Plan are as follows:
  - Retirements on or after October 1, 2013 for Fire: \$50 for single and \$50 for double coverage;
  - Retirements on or after October 10, 2022 for Fire: \$50 for single and \$100 for double coverage;
  - Retirements on or after January 1, 2013 for Police: \$50 for single and \$100 for double coverage;
  - Retirements on or after January 1, 2022 for Police: \$50 for single and \$50 for double coverage; and
  - Retirements on or after January 1, 2013 for all other groups: \$50 for single and \$100 for double coverage.
- 5. Tier 2 employees are not covered under the traditional defined benefit retiree health care provisions described previously. Tier 2 employees are as follows:
  - TPOAM and General Exempt and Executive employees hired after July 1, 2006;
  - Dispatch employees hired after January 1, 2007;
  - Teamster employees hired after January 1, 2008;
  - Fire employees hired after July 1, 2008;
  - Police Patrol employees hired after January 1, 2008, including those promoted to Police Command Officer; and
  - Court employees hired after September 1, 2015.



## Summary of Benefit Provisions as of June 30, 2023

### Stipend Retiree Health Care Coverage

- 1. Tier 2 employees are eligible for a Retiree Health Savings (RHS) Plan. One feature of the RHS Plan is that upon retirement, the employer will credit a retiree health care stipend of \$200/month for single coverage or \$400/month for double coverage to the account for employees satisfying certain conditions at retirement.
- 2. The chart below outlines the eligibility requirements to be satisfied at the time of retirement for payment of the stipend:

Employment Group(s)	Eligibility Requirement			
TPOAM, Executive, General Exempt, Dispatch, Teamsters, Court & Fire	• Age 60 with 15 years of service			
Police Command	• Age 50 with 25 years of service or 30 years of service regardless of age			
Police Patrol	• 25 years of service			

3. For purposes of meeting the retiree health care stipend eligibility, service back to date of hire is included.



## Reported Financial Information for the Period June 30, 2021 to June 30, 2023 Retiree Health Trust Assets

### **Reconciliation of the Market Value of Assets**

	2021-2022	2022-2023
Market Value of Assets - Beginning of the Year:	\$ 101,061,175	\$ 88,032,321
Revenues:		
a. Member contributions	195,527	178,283
b. Employer contributions	307,862	285,085
c. Net investment return	(10,110,429)	7,350,311
d. Total	(9,607,040)	7,813,679
Disbursements:		
a. Health insurance benefits paid	3,340,851	3,570,891
b. Refund of member contributions	36,671	22,449
c. Administrative expenses	44,292	67,433
d. Total	3,421,814	3,660,773
Market Value of Assets - End of the Year:	\$88,032,321	\$92,185,227

### Trust Assets and Reserves (Market Value) as of June 30, 2023

Assets:		Reserve Accounts:	
a. Payables	\$ (701,586)	a. Member contributions	\$ 4,487,783
b. Cash & short term investments**	1,236,326	b. Reserve for benefits	
c. Fixed income	15,084,712	now being paid	55,665,969
d. Equities	57,916,056	c. Reserve for future benefits	32,031,475
e. Real estate	13,242,321		
f. Other investments	5,407,398	Total	\$92,185,227
g. Total assets	92,185,227		
Retiree Health Assets	\$92,185,227		

\*\* Includes receivables.



Valuation Date June 30:	2021	2022	2023
1. Beginning of Year Assets			
a) Market Value	\$ 78,013,220	\$101,061,175	\$ 88,032,321
b) Valuation Assets	82,722,745	88,889,452	91,388,986
2. End of Year Market Value Assets	101,061,175	88,032,321	92,185,227
3. Net Additions to Market Value			
a) Contributions	756,692	503,389	463,368
b) Net Investment Income	25,671,154	(10,110,429)	7,350,311
c) Benefit Payments, Refunds and Administrative Expenses	(3,379,891)	(3,421,814)	(3,660,773)
d) Total Additions to Market Value	23,047,955	(13,028,854)	4,152,906
4. Average Valuation Assets	81,411,146	87,430,240	89,790,284
5. Expected Income at Valuation Rate = 7.0% x (4)	5,698,780	6,120,117	6,285,320
6. Gain (Loss) = (3b) - (5)	19,972,374	(16,230,546)	1,064,991
7. Phased-In Recognition of Investment Return			
a) Current Year: 0.2 x (6)	3,994,475	(3,246,109)	212,998
b) First Prior Year	(952,284)	3,994,475	(3,246,109)
c) Second Prior Year	(451,084)	(952,284)	3,994,475
d) Third Prior Year	(47,157)	(451,084)	(952,284)
e) Fourth Prior Year	547,176	(47,156)	(451,086)
f) Total Recognized Investment Gain (Loss)	3,091,126	(702,158)	(442,006)
8. Change in Valuation Assets			
(3a) + (3c) + (5) + (7f)	6,166,707	2,499,534	2,645,909
9. Valuation Assets = (1b) + (8)	88,889,452	91,388,986	94,034,895
10. Recognized Rate of Return	10.80%	6.20%	6.51%
11. Market Rate of Return	33.47%	(10.15%)	8.50%

## **Derivation of Valuation Assets**



# Retirees Receiving Plan Benefits – June 30, 2023 Tabulated by Attained Age

	No. of C	ontracts
Attained	Tier 1	Tier 2
Age	Traditional DB	Stipend
Under 50	0	0
50	2	0
51	4	0
52	3	0
53	1	0
54	3	0
55	3	0
56	4	0
57	3	0
58	7	0
59	4	0
60	5	0
61	2	0
62	12	0
63	9	0
64	5	0
65	7	0
66	19	0
67	10	2
68	10	0
69	13	0
70	17	0
71	14	0
72	8	0
73	2	0
74	6	0
75	4	0
76	6	0
77	6	0
78	3	0
79	2	0
80+	30	0
Totals	224	2

Average Age at Retirement: 57.0 years Average Age Now: 69.1 years

In addition to the retiree counts shown above, there are 65 retirees who have "opted out" of the Traditional Defined Benefit Retiree Health Care Coverage as of June 30, 2023. Of the 65 individuals who have "opted out" of benefits, 28 are assumed to "opt back into" coverage upon reaching age 65. **Therefore, there are 254 retiree records with a non-zero liability in the valuation as of June 30, 2023.** 



# Active Members Comparative Schedule

Valuation	Active Members - Tier 1									
Date						Valuation		Avera	ge	
June 30, *	General	Court	Police	Fire	Totals	Payroll	Age	Service	Pay	% Inc.
2002	270	**	114	40	424	\$ 21,567,711	43.1 yrs.	11.3 yrs.	\$50,867	2.7%
2003	265	**	114	40	419	22,246,938	43.9	, 11.8	53,095	4.4
2004	263	**	111	40	414	22,612,504	44.1	11.9	54,620	2.9
2006	259	**	115	40	414	23,302,473	44.5	12.3	56,286	3.1
2007	252	**	120	44	416	24,080,517	44.9	12.8	57,886	2.8
2008	239	**	118	45	402	24,662,884	45.3	13.4	61,350	6.0
2009	225	**	117	44	386	24,904,782	46.0	14.3	64,520	5.2
2010	181	**	101	41	323	21,494,819	45.3	14.0	66,547	3.1
2012	133	26	93	40	292	19,889,835	46.2	15.5	68,116	2.4
2014	111	25	85	34	255	17,633,733	46.9	16.6	69,152	1.5
2016	101	23	78	31	233	17,092,987	48.4	17.9	73,360	6.1
2018	84	23	66	31	204	16,003,657	49.5	19.2	78,449	6.9
2020	68	20	59	29	176	15,005,716	50.4	20.5	85,260	8.7
2022	52	14	48	22	136	12,435,716	50.6	21.1	91,439	7.2
2023	46	14	42	18	120	11,656,686	50.8	21.5	97,139	6.2

\* Prior to 2006, the year ended was December 31.

\*\*Included in the General division prior to 2012.

Valuation	4	ctive M	embers -	Tier 2						
Date						Valuation		Avera	ge	
June 30,	General	Court	Police	Fire	Totals	Payroll	Age	Service	Pay	% Inc.
2023	155	7	69	42	273	\$19,650,825	40.0 yrs.	5.3 yrs.	\$71,981	N/A



# Active Members Comparative Schedule

Year	Number Added	Те	rminations Sinc	e the Last V	aluation		Active Members
Ended June 30, *	During Year	Normal Retirement	Disability Retirement	Died-in Service	Vested	Other	End of Year
Julie 50,	Tear	Retirement	Kethement	Service	vesteu	Other	Tear
2002	30	7			1	13	424
2003	13	11				7	419
2004	23	12			2	14	414
2006	32	15		1	3	13	414
2007	19	7				10	416
2008	9	10		1	3	9	402
2009	5	6		1	2	12	386
2010	1	52		2	1	9	323
2012	1	22		1	5	4	292
2014	4	33		1	3	4	255
2016	1	17			5	1	233
2018		25	1		1	2	204
2020		27				1	176
2022		38			2		136
2023	276	15			1	3	393

\* Prior to 2006, the year ended was December 31.

Beginning with the June 30, 2023 valuation, Tier 2 members eligible for stipend coverage are included in this exhibit.



## Total Active Members, June 30, 2023 by Age and Years of Service

	Years of Service on Valuation Date Totals							Totals	
									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
20-24	14							14	\$ 906,626
25-29	46	6						52	3,634,077
30-34	35	11	2					48	3,603,592
35-39	12	14	16	4				46	3,644,710
40-44	9	13	13	23	8			66	5,628,167
45-49	8	1	5	6	11	3		34	3,262,540
50-54	10	8	3	8	7	13	2	51	4,542,136
55-59	12	5	5	4	2	4	3	35	2,838,399
60	1	1		1	1	1		5	361,770
61	2	1	1	2	1	1		8	598,679
62		2	_	2	_	2		6	519,388
63	1	2	2	_				5	257,852
64	2	1	1	2				6	316,026
65		2	1	2				5	309,218
66		2		2				4	296,533
67		1			1			2	126,031
68							1	1	50,296
69					1		1	2	199,601
71				1				1	69,087
73							1	1	96,578
75			1					1	46,205
Totals	152	70	50	57	32	24	8	393	\$31,307,511

This includes 120 Tier 1 active members and 273 Tier 2 active members.

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age:	43.3 years
Service:	10.2 years
Annual Pay:	\$79 <i>,</i> 663



**SECTION E** 

ACTUARIAL COST METHODS, ASSUMPTIONS AND GLOSSARY

## **Valuation Methods**

**Actuarial Cost Method:** Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an individual entry-age actuarial cost method having the following characteristics:

- (i) The annual normal costs for each individual active member, payable from the hire date to the date of retirement, are sufficient to accumulate to the value of the member's benefit earned.
- (ii) Each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Asset Valuation Method: The actuarial value equals:

- (i) Actuarial value of assets from the previous valuation, plus
- (ii) employer and member contributions since the last valuation, minus
- (iii) benefit payments and refunds since the last valuation, plus
- (iv) estimated investment income at the assumed investment return, plus
- (v) portion of gain/(loss) recognized in the current valuation.

For the above purpose, gain/(loss) is defined as the excess during the period of the investment return on the market value of assets over the expected investment income. 20% of the difference is recognized each year over a 5-year period in the actuarial value of assets.

This method was first adopted for the December 31, 2003 actuarial valuation. Prior to 2006, the valuation date was December 31<sup>st</sup> of each year.

The Funding Value of Assets is allocated between groups based on actual non-investment net cash-flows.

*Financing of Unfunded Actuarial Accrued Liabilities:* Unfunded actuarial accrued liabilities were amortized by level (principal & interest combined) dollar contributions over 12 years for all employees.



## **Actuarial Assumptions Used for the Valuation**

Investment Return (net of investment expenses):

7.00% per year compounded annually. This rate consists of a real rate of return of 4.00% a year plus a long-term assumed rate of pay inflation of 3.00% a year.

This assumption is used to equate the value of payments due at different points in time and was first used for the December 31, 2020 valuation. Approximate rates of investment return, for the purpose of comparisons with assumed rates, are shown below.

	Year Ended June 30				
	2023	2022	2020	2018	2016
Rate of Investment Return					
(Recognized on Valuation Assets)	6.5%	6.2%	4.8%	6.4%	4.7%

The nominal rate of return was computed using the approximate formula i = I divided by 1/2 (A + B - I), where I is actual investment income net of expenses, A is the beginning of year asset value, and B is the end of year asset value.

These rates of return should not be used for measurement of an investment advisor's performance or for comparisons with other systems.

*Pay Projections:* These assumptions are used to project current pays for contribution development purposes.

### **Annual Rate of Pay Increase**

	General and Court Members			
Years of	Base			
Service	(Economic)	Longevity	Total	
1 to 5	3.0%	4.0%	7.0%	
6 to 10	3.0%	2.0%	5.0%	
thereafter	3.0%	1.0%	4.0%	

	Police Members			Fire Members		
Years of	Base	Merit &		Base	Merit &	
Service	(Economic)	Longevity	Total	(Economic)	Longevity	Total
1	3.0%	20.0%	23.0%	3.0%	17.0%	20.0%
2	3.0%	15.0%	18.0%	3.0%	12.0%	15.0%
3	3.0%	7.0%	10.0%	3.0%	12.0%	15.0%
thereafter	3.0%	1.0%	4.0%	3.0%	1.0%	4.0%



The mortality tables (a risk assumption) used in the valuation are described below:

### **General and Court**

- **Healthy Pre-Retirement**: The Pub-2010 Amount-Weighted, General, Employee, Male and Female tables, with future mortality improvements projected generationally through 2025 using scale MP-2018.
- **Healthy Post-Retirement**: The Pub-2010 Amount-Weighted, General, Healthy Retiree, Male and Female tables, with future mortality improvements projected generationally through 2025 using scale MP-2018.
- **Disability Retirement**: The Pub-2010 Amount-Weighted, General, Disabled Retiree, Male and Female tables, with future mortality improvements projected generationally through 2025 using scale MP-2018.

### Police and Fire

- **Healthy Pre-Retirement**: The Pub-2010 Headcount-Weighted, Safety, Employee, Male and Female tables, with future mortality improvements projected generationally through 2025 using scale MP-2018.
- **Healthy Post-Retirement**: The Pub-2010 Headcount-Weighted, Safety, Healthy Retiree, Male and Female tables, with future mortality improvements projected generationally through 2025 using scale MP-2018.
- **Disability Retirement**: The Pub-2010 Headcount-Weighted, Safety, Disabled Retiree, Male and Female tables, with future mortality improvements projected generationally through 2025 using scale MP-2018.

	General and Court							
	Healthy Pre	-Retirement	Healthy Pos	t-Retirement	Disabled I	Retirement		
Sample	Future Life Exp	pectancy (Years)	Future Life Exp	pectancy (Years)	Future Life Exp	pectancy (Years)		
Ages*	Men	Women	Men	Women	Men	Women		
50	37.72	39.84	33.79	36.65	24.62	27.11		
55	33.00	35.02	29.29	32.05	21.52	24.08		
60	28.37	30.26	24.93	27.54	18.72	21.22		
65	23.86	25.57	20.75	23.12	16.09	18.27		
70	19.43	20.95	16.75	18.85	13.50	15.17		
75	15.08	16.44	13.04	14.84	10.94	12.12		
80	10.82	12.06	9.73	11.20	8.52	9.37		

Police and Fire							
	Healthy Pre	Disabled I	Retirement				
Sample	Future Life Exp	ectancy (Years)	Future Life Exp	ectancy (Years)	Future Life Exp	ectancy (Years)	
Ages*	Men	Women	Men	Women	Men	Women	
50	36.28	39.00	32.74	35.20	31.04	32.59	
55	31.51	34.21	28.17	30.56	26.73	28.17	
60	26.83	29.47	23.73	26.12	22.61	24.07	
65	22.28	24.78	19.57	21.88	18.75	20.18	
70	17.87	20.15	15.63	17.85	15.13	16.41	
75	13.67	15.69	12.02	14.10	11.78	12.91	
80	9.72	11.51	8.85	10.74	8.81	9.93	

\* The Pub-2010 rates shown above were based on a generational projection of mortality rates through the year 2025 using the MP-2018 projection scale and sample ages as of the valuation date.

75% of deaths are assumed to be non-duty for the General and Court groups, while 50% of deaths are assumed to be non-duty for the Police and Fire groups.

These tables were first used for the June 30, 2020 valuation of the Plan.



**Rates of separation from active membership:** The rates do not apply to members eligible for regular retirement and do not include separation on account of death or disability. This assumption measures the probabilities of members remaining in employment.

	% of Active Members Separating within Next Year				
Years of Service	General	Court	Police	Fire	
10	2.70%	2.70%	1.10%	1.10%	
15	1.40	1.40	0.50	0.50	
20	1.40	1.40	0.40	0.40	
25	1.40	1.40	0.40	0.40	
30 & over	1.40	1.40	0.40	0.40	

The rates were first used for the December 31, 2020 valuation.

*Rates of disability:* These rates represent the probabilities of active members becoming disabled.

Sample	Number of Disabilities		
Ages	Per 100 Eligible Members		
20	0.01		
25	0.02		
30	0.04		
35	0.07		
40	0.12		
45	0.19		
50	0.28		
55	0.40		
60	0.57		

These rates were first used for the December 31, 1993 valuation.



*Rates of retirement:* These rates are used to measure the probability of eligible members retiring during the next year. Early retirement rates do not apply to members eligible for regular retirement.

	Percent of Eligible Active Members Retiring			
Retirement			Police	
Ages	General	Court	Command	
50			30%	
51			30	
52			30	
53			30	
54			30	
55	30%	20%	20	
56	25	15	15	
57	25	15	15	
58	25	15	15	
59	25	15	15	
60	25	20	100	
61	25	25		
62	30	30		
63	20	20		
64	25	25		
65	25	25		
66	30	30		
67	30	30		
68	30	30		
69	30	30		
70	100	100		

#### Percent of Eligible Active Members Retiring

Years of			Police
Service	Police Patrol	Fire	Command
25	30%	30%	
26	30	30	
27	30	30	
28	30	30	
29	30	30	
30	100	100	40%
31			40
32			40
33			40
34			40
35			100

General and Court division members who retire under Rule of 80 (with minimum age of 55) and age 60 with completion of 15 or more years of service are eligible for benefits under the Plan. Police patrol and firefighters who retire with 25 or more years of service are eligible for benefits under the Plan. Police Command Officers who retire at age 50 with 25 or more years of service (or with 30 years of service at any age) are eligible for benefits under the Plan.

For Tier 2 Fire members, it was assumed that a 1% incidence of early retirement decrement applied at each age where the conditions for an early retirement pension benefit were satisfied but the conditions for a normal retirement pension benefit were not.



#### Health care coverage at retirement and continuation percentage to survivor – Traditional DB:

90% of eligible future retirees are assumed to elect coverage from this plan at the time of retirement.

#### **General and Court**

		Two-Pers	Two-Person/Family	
	One-Person	Electing	Continuing	Opt-Out
Male	36%	54%	100%	10%
Female	36%	54%	100%	10%

#### Police and Fire

		Two-Person/Family		
	One-Person	Electing	Continuing	Opt-Out
Male	23%	67%	100%	10%
Female	23%	67%	100%	10%

For the 10% of eligible, future retirees expected to "opt out" of coverage, it was assumed these individuals continued to opt out of coverage while under age 65. The opt out benefit payable to these individuals in lieu of coverage is quantified in the pension actuarial valuation. Upon reaching age 65, it was assumed that these individuals elected to "opt back into" the retiree medical plan with their eligible coverage.

Retirees under age 65 who are "opting out" of coverage as of the valuation date are treated similarly to future retirees opting out. While under age 65, these individuals are assumed to continue to opt out of coverage and have cash in lieu of coverage benefits quantified in the pension actuarial valuation. Upon reaching age 65, these individuals are assumed to "opt back into" the retiree medical plan with their eligible coverage.

Retirees age 65 and older who are "opting out" of coverage as of the valuation date are assumed to do so indefinitely. The opt out benefit payable to these individuals in lieu of coverage is quantified in the pension actuarial valuation.

#### Health care coverage at retirement and continuation percentage to survivor - Stipend:

100% of future Tier 2 retirees who satisfy the eligibility for the stipend are assumed to receive it.

The assumed one-person and two-person election percentages for the stipend, as well as the assumed continuation percentages, are outlined in the chart below:

	Portion with		
	1-Person	2-Person	
Group	Stipend	Stipend	Continuation %
TPOAM, Executive, General	40%	60%	100%
Exempt, Dispatch, Teamster, Court	4078	00%	100%
Police Patrol, Police Command,	20%	80%	100%
Fire	20%	80%	100%



*Non-investment administrative expenses*: Administrative expenses used in the contribution determination are based on the actual administrative expenses paid during the 2023 fiscal year. This flat dollar administrative expense load is allocated between the General, Court, Police, and Fire groups evenly (a 25% share).

**Other**: Liabilities were loaded by 18% for future contingencies including fluctuation in health care claims experience and volatility associated with the size of the Plan.



## Miscellaneous and Technical Assumptions June 30, 2023

Decrement Operation:	Disability also does not operate during retirement eligibility.
Decrement Relativity:	Decrement rates are used directly from experience, without adjustment for multiple decrement table effects.
Decrement Timing:	Decrements of all types are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
Marriage Assumption:	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
Medicare Coverage:	Assumed to be available for all covered employees on attainment of age 65.
Pay Increase Timing:	Middle of (Fiscal) year.
Service Credit Accruals:	It is assumed that members accrue one year of service credit per year.
Stipend Coverage:	It is assumed the retiree health care stipend meets the stipulations to be considered an Other Post Employment Benefit (OPEB) and will be paid from the Retiree Health Care Plan.



## Glossary

Actuarial Accrued Liability - The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability." Under the actuarial cost method used the "AAL" differs somewhat from the value of future payments based on benefits earned as of the valuation date.

**Accrued Service -** The service credited under the plan which was rendered before the date of the actuarial valuation.

Actuarial Assumptions - Estimates of future plan experience with respect to rates of mortality, disability, retirement, investment income and salary increases. Decrement assumptions (rates of mortality, separation and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate appropriate in an inflation-free environment plus a provision for a long-term average rate of inflation.

**Actuarial Cost Method** - A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the normal costs to be paid in the future and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent - Benefits whose actuarial present values are equal.

**Actuarial Present Value -** The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Amortization** - Paying of an interest-bearing liability by means of periodic contributions of interest and principal, as opposed to a lump sum payment.

**Experience Gain (Loss)** - A measure of the difference between actual experience and experience anticipated by a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

**Normal Cost** - The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." An amortization payment toward the unfunded actuarial accrued liability is in addition to the normal cost.

**Plan Termination Liability** - The actuarial present value of future plan benefits based on the assumption that there will be no further accruals for the future service and salary. The termination liability will generally be less than the liabilities computed on a "going-concern" basis and is not normally determined in a routine actuarial valuation.

**Reserve Account -** An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

**Unfunded Actuarial Accrued Liability -** The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

Valuation Assets - The value of current plan assets recognized for valuation purposes.





November 8, 2023

The Retirement Board City of Farmington Hills Retiree Health Care Plan 31555 West Eleven Mile Road Farmington Hills, Michigan 48336-1165

Dear Board Members:

Enclosed is a copy of the report of the annual actuarial valuation of the City of Farmington Hills Retiree Health Plan as of June 30, 2023. We would be pleased to meet with you to discuss the report.

Sincerely, Gabriel, Roeder, Smith & Company

James D. anderson

James D. Anderson, FSA, EA, FCA, MAAA

JDA:ah Enclosures