Midland Firemen's Relief and Retirement Fund

Actuarial Valuation as of December 31, 2024

September 4, 2025

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September 4, 2025

Board of Trustees
Midland Firemen's Relief and
Retirement Fund
c/o Mr. A. J. Weber, Administrator
Lauterbach & Amen, LLP
668 N. River Road
Naperville, IL 60563

Members of the Board of Trustees:

At your request, we have prepared this report of the results of the actuarial valuation of the fund as of December 31, 2024. This valuation was prepared to determine whether the fund has an adequate contribution arrangement.

In a separate report earlier this year, we provided the necessary disclosures for the fund's compliance with the Governmental Accounting Standards Board (GASB) Statement No. 67 for the plan year ending December 31, 2024. Similarly, we will provide a separate report later this year containing the pension expense, net pension liability, and disclosure information for the city's compliance with GASB 68 for the fiscal year ending September 30, 2025. GASB 68 prescribes the city's accounting for your fund, while this actuarial valuation report reflects the new funding policy.

We certify that we are members of the American Academy of Actuaries who meet Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report.

Sincerely,

Mark R. Fenlaw

Mark R. Fenlaw, F.S.A.

Rebecca B. Morris

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MRF/RBM:nlg

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Section I

Valuation Summary

An actuarial valuation of the assets and liabilities of the Midland Firemen's Relief and Retirement Fund as of December 31, 2024 has been completed. The valuation was based on the Present Plan (plan effective April 1, 2025) and the provisions of the Texas Local Fire Fighters' Retirement Act (TLFFRA). Section II shows the key results of the actuarial valuation as of December 31, 2024 and discusses the changes since the prior valuation as of December 31, 2023.

This is the first actuarial valuation following the February 2025 agreement between the city and the board that includes an actuarially determined contribution (ADC) percentage rate funding policy. The total contribution rate in 2025 is 38.40%, comprised of 14.2% by the firefighters and 24.2% by the city. **The calculated ADC for 2026 based on this December 31, 2024 valuation is also 38.40% of total payroll.** The initial unfunded actuarial accrued liability as of December 31, 2023 is amortized over the closed 30-year period that began January 1, 2024. Subsequent actuarial gains and losses are each amortized over a closed 20-year period. This valuation reflects several minor changes in actuarial assumptions as described below in this section. We have assumed that the change in actuarial liability resulting from the changes in assumptions is also amortized over a closed 20-year period. The calculated ADC rate of 38.40% for 2026 is the sum of the normal cost rate of 24.59% plus 13.81% to amortize the unfunded actuarial accrued liability (UAAL) of $64,255,562. The amortization is with a level percentage of payroll assuming that the total payroll increases at the rate of 3% per year in the future. The equivalent single amortization period is 28.8 years in this December 31, 2024 actuarial valuation.

In order for a retirement plan to have an adequate contribution arrangement, contributions must be made that are sufficient to pay the plan's normal cost and to amortize the plan's UAAL over a reasonable period of time. Based on the Texas State Pension Review Board guidelines for pension funding, our professional judgment, and the actuarial assumptions and methods used in making this valuation, we consider amortization periods of 10 to 20 years to be preferable and 30 years to be the current maximum acceptable amortization period. The total contributions are determined according to the ADC funding policy to be sufficient to pay the fund's normal cost and to amortize the fund's UAAL within the maximum acceptable period. Therefore, we are of the opinion that the fund, based on present levels of benefits and the ADC funding policy, **has an adequate contribution arrangement.**

Actuarially Determined Contribution Rate Funding Policy

The calculated 2026 ADC results based on this December 31, 2024 valuation are summarized below and compared to the 2025 rates. Any contribution rate changes are to be effective on the January 1 following the presentation of the actuarial valuation and ADC to the board and the city council. See Section II for further details of the determination of the ADC.

Contribution Rate Description	Current 2025 Contribution Rate	Calculated 2026 ADC
Normal cost	24.50%	24.59%
UAAL	13.90%	13.81%
Total	38.40%	38.40%
City	24.20%	24.20%
Firefighters	14.20%	14.20%
Total	38.40%	38.40%

The board and the city both approved an administration and funding agreement in February of 2025 that included an actuarially determined contribution (ADC) percentage rate funding policy. The initial unfunded actuarial accrued liability (UAAL) as of December 31, 2023 (reflecting the benefit changes) is to be amortized over a closed 30-year period that began January 1, 2024. Actuarial gains and losses in each subsequent actuarial valuation, which increase or decrease the total UAAL, are to be amortized over a new closed 20-year period. Each actuarial valuation is to include an ADC. Any contribution rate changes are to be shared between the city and the firefighters on a 2 to 1 city to firefighter ratio basis. The cumulative firefighter contribution rate changes from the initial rate of 14.2% may not exceed 3%, for a potential maximum rate of 17.2%.

We recommend that the board and the city amend the administration and funding agreement to avoid small changes in the city and firefighter contribution rates. This could be done by adding a corridor around the ADC so that if a change from the current year to the next year of less than a certain amount, such as 0.1%, was indicated by the calculated ADC, then the final ADC for the next year would be unchanged from the current year ADC. In addition, it could be beneficial if the city and the board would have the option of refusing an indicated reduction in the ADC within the wording of the administration and funding agreement. If exercised, this option could accelerate the amortization of the UAAL or reduce the size of a future increase in the ADC.

Assumptions

As a part of each actuarial valuation, we review the actuarial assumptions used in the prior actuarial valuation. As a result of our review, we have selected actuarial assumptions we consider to be reasonable and appropriate estimates of future experience for the fund for the long-term future. Their selection complies with the applicable actuarial standards of practice. Significant actuarial assumptions used in this valuation are:

1. 7% annual investment return net of investment-related expenses;

2. 3% general annual compensation increase combined with promotion, step, and longevity increases that average 2.89% per year over a 30-year career;

3. 3% aggregate payroll growth (for the purpose of calculating the ADC);

4. Retirement rates which result in an average expected age at retirement of 54.2; and

5. PubS-2016 (public safety) total dataset mortality tables for employees and for retirees, projected for mortality improvement generationally using the projection scale MP-2021.

The following actuarial assumption changes have been made, and the new assumptions are compared to those used in the special study analysis of the April 1, 2025 plan provisions:

1. We updated the mortality assumption from the PubS-2010 total dataset mortality tables, projected generationally using the projection scale MP-2019, to the recently released PubS-2016 total dataset mortality tables, projected for mortality improvement generationally using the projection scale MP-2021.

2. We make an assumption of the amount of unscheduled overtime on average for each participant. Previously we assumed that unscheduled overtime would increase all other compensation by 10%. For this valuation, we recognized a trend of less unscheduled overtime than in the past, and lowered the assumption from 10% to 9%. Although we do not have a long history of information on unscheduled overtime, the 2024 information shows less unscheduled overtime than 2023.

3. We slightly reduced the assumed administrative expenses as a percentage of covered payroll from 1.70% to 1.65%, a small step in anticipation of a reduction in the percentage during and after the transition to new administrators and the new plan of benefits.

A summary of all the assumptions and methods used in the valuation is shown in Exhibits 11 and 12. In our opinion, the assumptions used, both in the aggregate and individually, are reasonably related to the experience of the fund and to reasonable expectations of the fund over the long-term future. In addition, we believe that the combined effect of the actuarial assumptions used is expected to have no significant bias, i.e., not significantly optimistic or pessimistic.

Plan Provisions

A new plan effective April 1, 2025 is reflected in this actuarial valuation as of December 31, 2024. The key changes were:

- The monthly retirement benefit formula was changed from 75% of the final average salary plus $80/year for years above 20 to a percentage of the final average salary, with the percentage based on years of service, equal to 3.3%/year for years 1-20, 2.0%/year for years 21-30, and 1.0%/year for years above 30.
- The averaging period for the final average salary was changed from 60 months to 72 months.
- The DROP provisions were changed to increase the eligibility provisions by two years and to exclude any firefighter contributions and any interest from the DROP lump sum determination.
- The supplemental $500 per month benefit for those retiring with at least 20 years of service at age 50 or above was removed.
- These changes were accompanied by an acceptable transition protecting those eligible for normal retirement or within one year of normal retirement eligibility as of December 31, 2024. For all others, the vested accrued benefit as of March 31, 2025 was protected.
- The City of Midland made a lump sum contribution in February 2025 of over $54 million.

These changes together with the city's lump sum contribution restored an adequate contribution arrangement. The package of changes also included an actuarially determined contribution rate funding policy that will maintain an adequate contribution arrangement.

Participant and Asset Data

We have relied on and based our valuation on the active firefighter data, pensioner data, and asset data provided on behalf of the board of trustees by Lauterbach & Amen, the administrator of the fund. We have not audited the data provided but have reviewed it for reasonableness and consistency relative to the data provided for the December 31, 2023 actuarial valuation. Exhibit 1 is a distribution of the active firefighters by age and service. The assumed 2025 compensation used for projecting future benefits for each active firefighter in the valuation was the actual pay excluding unscheduled overtime pay for calendar year 2024 increased by 1.8% to fully reflect the 2.5% general pay increase effective October 1, 2024. For projecting contributions, we assumed that 2025 compensation including unscheduled overtime pay would be 9% more than the compensation excluding the unscheduled overtime used for projecting benefits. The total of the compensation amounts with the on-average 9% unscheduled overtime pay is our assumed annualized covered payroll for the plan year beginning January 1, 2025 and is used in the valuation to determine the ADC. The averages of the assumed compensation amounts used for contribution purposes, including unscheduled overtime, for the 2025 plan year are shown in Exhibit 1.

Exhibit 2 contains summary information on the pensioners. The monthly benefit payments are generally based on the amounts paid January 31, 2025. Exhibit 3 is a reconciliation of firefighters and pensioners from December 31, 2023 to December 31, 2024. Exhibit 4 shows a breakdown of the dollar amount of the monthly benefits for retirees and surviving spouses. Exhibit 5 shows a historical comparison of the actuarial accrued liability and the actuarial value of assets.

The summary of assets contained in Exhibit 6 is based on the allocation of the December 31, 2024 market value of assets. This exhibit also shows a comparison with the market values and actuarial values of assets as of December 31, 2023 and December 31, 2024. Exhibit 7 contains the statement of changes in assets for 2024 and 2023. Exhibit 8 shows the development of the actuarial value of assets. Exhibit 9 shows a historical comparison between the market value and actuarial value of assets. A comparison of the market value asset allocation by major asset class as of December 31, 2023 and December 31, 2024 is shown in Exhibit 10.

Supporting Exhibits

Exhibit 13 contains definitions of terms used in this actuarial valuation report. Exhibit 14 summarizes the plan provisions of the Present Plan. Appendix A documents our review of the economic assumptions. Appendix B includes other required disclosures. Appendix C contains a history of actuarial information while Appendix D includes historical asset information.

Variability in Future Actuarial Measurement

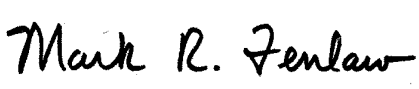
Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- Plan experience differing from that anticipated by the current economic or demographic assumptions;

- Increases or decreases expected as part of the natural operation of the methodology used for these measurements;
- Changes in economic or demographic assumptions; and
- Changes in plan provisions.

Analysis of the potential range of such future measurements resulting from the possible sources of measurement variability is outside of the scope of this actuarial valuation. See a summary of different types of risk that could affect the fund's future actuarial condition in Appendix B.

Respectfully submitted,
RUDD AND WISDOM, INC.



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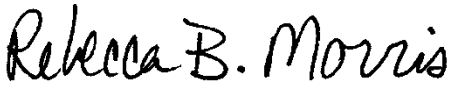

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Section II

Key Results of the Actuarial Valuations

	December 31, 2023[1]	December 31, 2023[2]	December 31, 2024[2]
1. Actuarial present value of future benefits			
a. Those now receiving benefits or former firefighters entitled to receive benefits	$ 116,767,189	$ 116,767,189	$ 120,907,516
b. Firefighters	165,218,316	150,579,426	158,025,236
c. Total	$ 281,985,505	$ 267,346,615	$ 278,932,752
2. Actuarial present value of future normal cost contributions	$ 69,575,030	$ 62,905,288	$ 67,292,498
3. Actuarial accrued liability (Item 1c – Item 2)	$ 212,410,475	$ 204,441,327	$ 211,640,254
4. Actuarial value of assets	$ 91,467,898	$ 141,935,188[3]	$ 147,384,692[3]
5. Unfunded actuarial accrued liability (UAAL) (Item 3 - Item 4)	$ 120,942,577	$ 62,506,139	$ 64,255,562
6. Contributions (percent of pay)			
a. Firefighters	14.20%	14.20%	14.20%
b. City of Midland	24.20%	24.20%	24.20%
c. Total	38.40%	38.40%	38.40%
7. Normal cost (percent of payroll)	27.28%	24.50%	24.59%
8. Percent of payroll available to amortize the UAAL (Item 6c - Item 7)	11.12%	13.90%	13.81%
9. Annualized covered payroll	$ 25,874,745	$ 25,874,745	$ 27,051,279
10. Years to amortize the UAAL	never	29.3	28.8
11. Funded ratio (Item 4 ÷ Item 3)[4]	43.1%	69.4%	69.6%

[1] All items reflect the plan provisions effective January 1, 2024.
[2] All items reflect the plan provisions effective April 1, 2025.
[3] Determined reflecting the $54,442,231 contribution by the City of Midland in mid-February of 2025, discounted to the actuarial valuation date.
[4] The funded ratio is not appropriate for assessing either the need for or the amount of future contributions or the adequacy of the assumed contribution rates. Using the market value of assets instead of the actuarial value of assets for Item 11 would have resulted in funded ratios of 39.4% as of December 31, 2023 with the plan provisions effective January 1, 2024, 67.4% as of December 31, 2023 with the plan provisions effective April 1, 2025, and 68.6% as of December 31, 2024. **The best indicator of the fund's health is Item 10.**

Changes in the Unfunded Actuarial Accrued Liability

In comparing this actuarial valuation to the prior one, the UAAL increased by $1,749,423 from $62,506,139 in the December 31, 2023 actuarial valuation of the special study analysis of the April 1, 2025 plan provisions to $64,255,562 as of December 31, 2024. The table below summarizes the reasons for the increase.

Reason for Change	Amount
• Expected increase (interest on UAAL more than expected amortization payments, accumulated with interest)	$ 659,220
• Investment loss for the year 2024 (based on the AVA annual return of 4.7%)	2,107,363
• Experience gain (net difference between actual experience and assumed experience for pay increases, retirements, mortality, and terminations)	(1,126,065)
• Changes in assumptions	108,905
Total	$ 1,749,423

Details of the Calculated ADC by UAAL Base

Year Established	Description	Years Remaining	Remaining UAAL Base	Contribution Rate
2024	12/31/2023 special study analysis (2025 changes and cash infusion)	29	$ 63,165,359	13.52%
2025	12/31/2024 valuation (experience and assumption change)	20	1,090,203	0.29
	UAAL Total Contribution Rate	28.8[1]	$64,255,562	13.81%
	Normal Cost Contribution Rate			24.59%
	Calculated ADC for 2026			38.40%

[1] Weighted average years remaining

Changes in the ADC

The table below summarizes the effects of the changes in the ADC from the December 31, 2023 actuarial valuation to the calculated ADC in this December 31, 2024 actuarial valuation reflecting the plan provisions effective April 1, 2025. The component pieces of the ADC are the normal cost contribution rate (NCR) and the UAAL contribution rate (UAALCR).

Reconciliation of Changes	NCR	UAALCR	ADC
12/31/2023 actuarial valuation	24.50%	13.90%	38.40%
Reason for change			
Investment loss	--	0.57	
Experience gain	(0.05)	(0.30)	
Changes in assumptions	0.14	0.16	
Payroll growth	--	(0.52)	
Total changes	0.09	(0.09)	
12/31/2024 actuarial valuation	24.59%	13.81%	38.40%

Exhibit 1

Distribution of Firefighters by Age and Service on December 31, 2024 with Average Annual Compensation

Years of Service	Age									Total	Average Compen-sation
	Under 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 or Over		
0	4	2	1	1	0	0	0	0	0	8	$ 65,400
1	14	7	7	6	0	0	0	0	0	34	76,446
2	10	9	6	1	0	0	0	0	0	26	80,486
3	2	4	4	3	0	1	0	0	0	14	83,121
4	0	10	4	8	0	0	0	0	0	22	93,341
5	0	4	5	5	2	0	0	0	0	16	94,659
6	0	2	2	5	0	0	0	0	0	9	106,519
7	0	2	4	4	3	0	0	0	0	13	103,396
8	0	1	1	2	0	0	0	0	0	4	117,731
9	0	3	3	0	3	0	0	0	0	9	110,125
10	0	1	4	2	0	1	0	0	0	8	119,111
11	0	0	3	2	5	1	0	0	0	11	120,113
12	0	0	0	4	1	1	0	0	0	6	120,416
13	0	0	1	2	2	1	0	0	0	6	125,812
14	0	0	0	0	1	0	0	0	0	1	158,793
15	0	0	0	0	0	2	0	0	0	2	139,213
16	0	0	0	3	1	0	0	0	0	4	137,426
17	0	0	0	0	2	3	2	0	0	7	136,211
18	0	0	0	1	7	4	1	0	0	13	139,120
19	0	0	0	0	3	3	0	0	0	6	147,386
20-24	0	0	0	0	3	11	1	0	0	15	150,285
25-29	0	0	0	0	0	3	9	0	2	14	152,782
30-34	0	0	0	0	0	0	2	1	0	3	158,744
35+	0	0	0	0	0	0	0	0	1	1	85,434
Totals	30	45	45	49	33	31	15	1	3	252	$107,346

Average Compensation	$71,380	$97,171	$135,275	$149,563	$120,678	
	$87,143	$106,426	$133,623	$189,040	$107,346	

Average age	35.5
Average years of service	9.2
Average age at hire	26.3

Exhibit 2

Summary of Pensioner Data

Type of Benefit	Pensioner Data Used in December 31, 2024 Valuation	
	Number of Recipients	Total Monthly Benefit Payments
Service Retirement	161[1]	$ 772,595
Disability Retirement	4	13,107
Vested Terminated (Deferred)	6	17,247
Surviving Spouse	29	72,552
Surviving Child	6	5,290
Total	206	$ 880,791

Type of Benefit	Comparison of Pensioner Count by Type as of The Prior and Current Actuarial Valuations			
	December 31, 2023	New	Ceased	December 31, 2024
Service Retirement	159[2]	+7[3]	-5[4]	161[1]
Disability Retirement	4	0	0	4
Vested Terminated (Deferred)	8	0	-2	6
Surviving Spouse	30	+1	-2	29
Surviving Child	8	0	-2	6
Total	209	+8	-11	206

[1] Includes six alternate payees receiving benefits according to the terms of a Qualified Domestic Relations Order (QDRO).

[2] Includes seven alternate payees receiving benefits according to the terms of a QDRO.

[3] Includes two vested terminated participants whose benefit commenced.

[4] Includes one alternate payee whose benefit terminated with the death of the retiree.

Exhibit 3

Firefighter and Pensioner Reconciliation

	Firefighters	Current Payment Status	Vested Terminated Firefighters	Total
1. As of December 31, 2023	249	201 [1]	8	458
2. Change of status				
a. retirement	(5)	7	(2)	0
b. disability	0	0	0	0
c. death	0	(6)	0	(6)
d. survivor payment begins	0	1	0	1
e. withdrawal	(23)	0	0	(23)
f. vested termination	0	0	0	0
g. QDRO alternate payee	0	(1)	0	(1)
h. child benefit ceases	0	(2)	0	(2)
i. correction	0	0	0	0
j. net changes	(28)	(1)	(2)	(31)
3. New firefighters	31	0	0	31
4. As of December 31, 2024	252	200 [2]	6	458

[1] Includes seven alternate payees receiving benefits according to the terms of a Qualified Domestic Relations Order (QDRO).

[2] Includes six alternate payees receiving benefits according to the terms of a QDRO.

Exhibit 4

Breakdown of Monthly Benefit Payment Amounts as of December 31, 2024

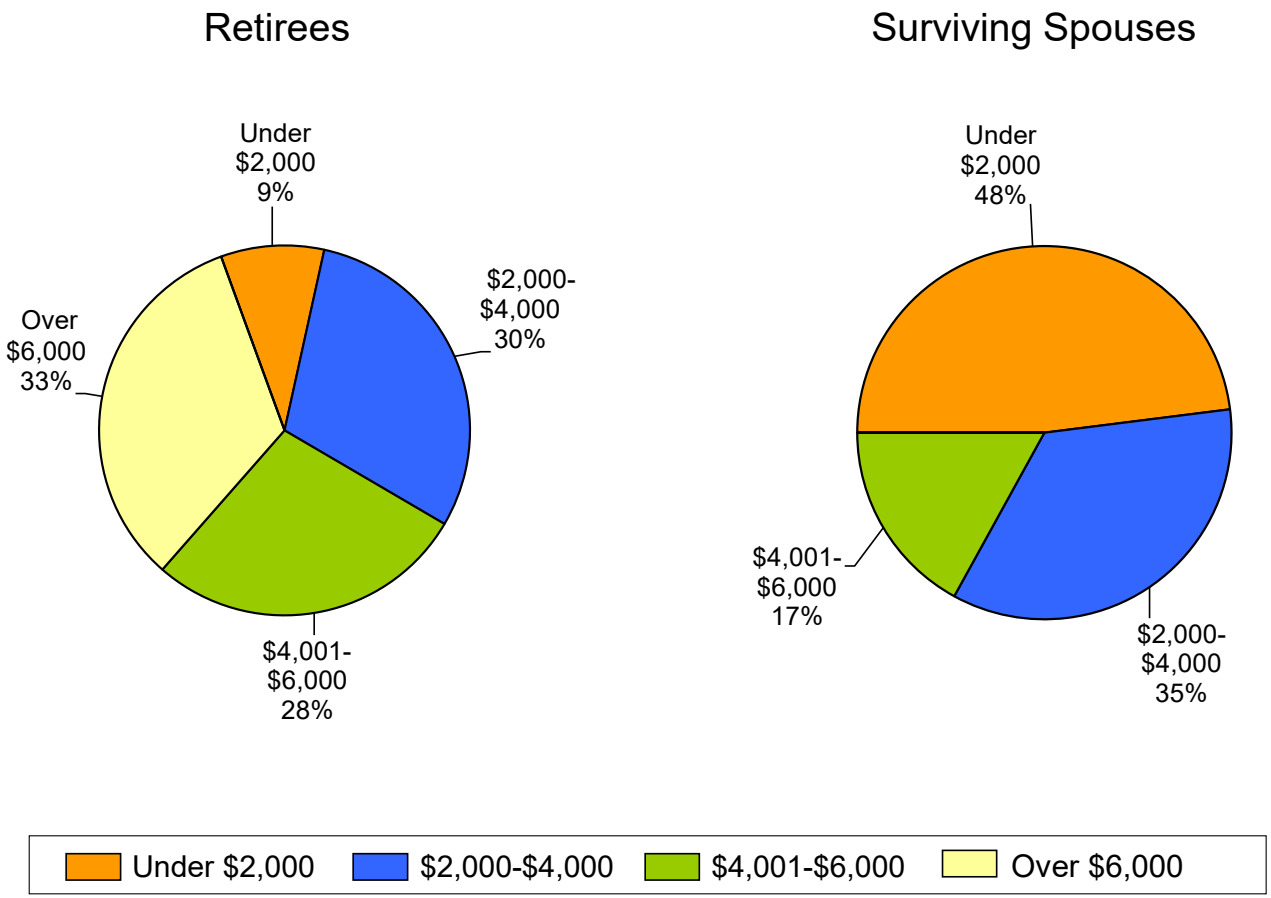


Exhibit 5

Historical Comparison of Actuarial Accrued Liability and Actuarial Value of Assets (Present Plan Valuations as of December 31)

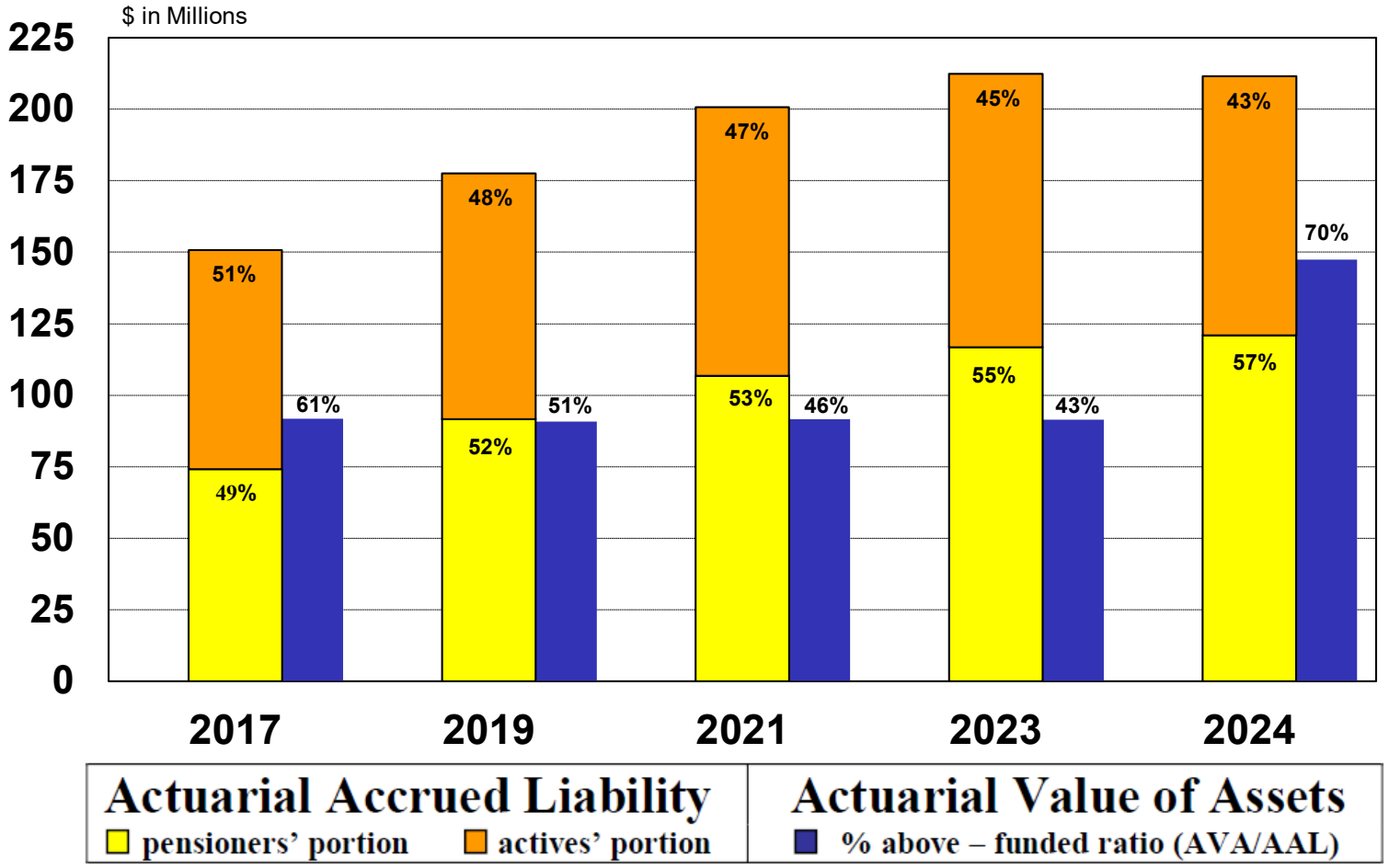


Exhibit 6

Summary of Asset Data

Asset Type	Market Value as of December 31, 2024	Allocation As a Percent of Grand Total
Equities		
U.S. Large Cap	$20,370,949	22.4%
U.S. Small/Mid Cap	5,499,582	6.0
International	10,142,624	11.1
Total	36,013,155	39.5
Alternatives		
Venture Capital/Private Equity	9,748,416	10.7
Real Estate	8,446,474	9.3
Master Limited Partnerships	12,111,027	13.3
Private Credit	3,642,252	4.0
Total	33,948,169	37.3
Fixed Income	19,338,779	21.2
Cash Equivalents, Net of Payables	1,793,363	2.0
Grand Total	$91,093,466 [1]	100.0%

[1] The grand total is the audited amount for the December 31, 2024 financial report. The invested amounts are from the investment consultant's December 31, 2024 report. Cash is the balancing item.

Comparison of Asset Values as of the Prior and Current Actuarial Valuation Dates		
	December 31, 2023	December 31, 2024
Market Value	$83,710,694	$91,093,466
Actuarial Value	$91,467,898	$93,384,692[2]
Actuarial Value as a Percent of Market Value	109.3%	102.5%

[2] Before reflecting the discounted value as of December 31, 2024 of the city's lump sum contribution in February 2025.

Exhibit 7

Statement of Changes in Audited Assets for the Years Ended December 31, 2024 and 2023

	12/31/2024	12/31/2023
Additions		
1. Contributions		
a. Employer	$ 6,616,532	$ 5,580,525
b. Employees	3,906,248	3,569,340
c. Total	$ 10,522,780	$ 9,149,865
2. Investment Income		
a. Interest and dividends	$ 2,316,923	$ 1,666,307
b. Net appreciation in fair value	8,089,147	4,433,325
c. Total	$ 10,406,070	$ 6,099,632
3. Other Additions	0	0
Total Additions	**$ 20,928,850**	**$ 15,249,497**
Deductions		
4. Benefit Payments	$ 12,334,370	$ 11,521,513
5. Expenses		
a. Investment-related	$ 706,107	$ 616,170
b. General administrative	486,570	399,589
c. Total	$ 1,192,677	$ 1,015,759
Total Deductions	**$ 13,527,047**	**$ 12,537,272**
Net Increase in Assets	**$ 7,401,803**	**$ 2,712,225**
Market Value of Assets (Fiduciary Net Position)		
Beginning of Year	$ 83,691,663	$ 80,979,438
End of Year	$ 91,093,466	$ 83,691,663
Rate of Return		
Net of All Expenses	11.13%	6.37%
Net of Investment-Related Expenses	11.75%	6.89%
Gross	12.66%	7.69%
Direct Investment-Related Expenses	0.91%	0.80%

Exhibit 8

Development of Actuarial Value of Assets

Calculation of Actuarial Investment Gain/(Loss) Based on Market Value for Plan Years Ending December 31				
	2024	2023	2022	2021
1. Market Value of Assets as of beginning of year	$83,691,663	$80,979,438	$93,771,847	$86,345,309
2. Firefighter Contributions	3,906,248	3,569,340	3,326,782	3,138,754
3. City Contributions	6,616,532	5,580,525	5,201,025	4,907,065
4. Benefit Payments and Administrative Expenses[1]	(12,820,940)	(11,921,102)	(11,264,121)	(13,075,523)
5. Expected Investment Return[2]	5,777,981	5,571,567	6,468,258	6,287,284
6. Expected Market Value of Assets as of end of year	87,171,484	83,779,768	97,503,791	87,602,889
7. Actual Market Value of Assets as of end of year	91,093,466	83,691,663	80,979,438	93,771,847
8. Actuarial Investment Gain/(Loss)	3,921,982	(88,105)	(16,524,353)	6,168,958
9. Market Value Rate of Return Net of Expenses	11.75%	6.89%	(10.88)%	14.86%
10. Rate of Actuarial Investment Gain/(Loss)	4.75%	(0.11)%	(17.88)%	7.36%

[1] Administrative expenses are included for all years to retroactively make the investment return assumption net of investment-related expenses.
[2] Assuming uniform distribution of contributions and payments during the plan year; annual investment return assumed to be 7.0% for 2022 and 2023 and 7.5% for 2020 and 2021.

Plan Year	Investment Gain/(Loss)	Deferral Percentage	Deferred Gain/(Loss) as of 12/31/2024
2024	$ 3,921,982	80%	$ 3,137,586
2023	(88,105)	60%	(52,863)
2022	(16,524,353)	40%	(6,609,741)
2021	6,168,958	20%	1,233,792
Total			$ (2,291,226)

Actuarial Value of Assets as of December 31, 2024	
11. Market Value of Assets as of December 31, 2024	$ 91,093,466
12. Deferred Gain/(Loss) to be Recognized in Future	(2,291,226)
13. Preliminary Value (Item 11 – Item 12)	$ 93,384,692
14. Corridor for Actuarial Value of Assets	
a. 80% of Market Value as of December 31, 2024 (minimum)	$ 72,874,773
b. 120% of Market Value as of December 31, 2024 (maximum)	$109,312,159
15. Actuarial Value as of December 31, 2024	$ 93,384,692
16. Write Up/(Down) of Assets (Item 15 – Item 11)	$ 2,291,226

Exhibit 9

Historical Comparison of Market and Actuarial Value of Assets
(Valuation as of December 31)

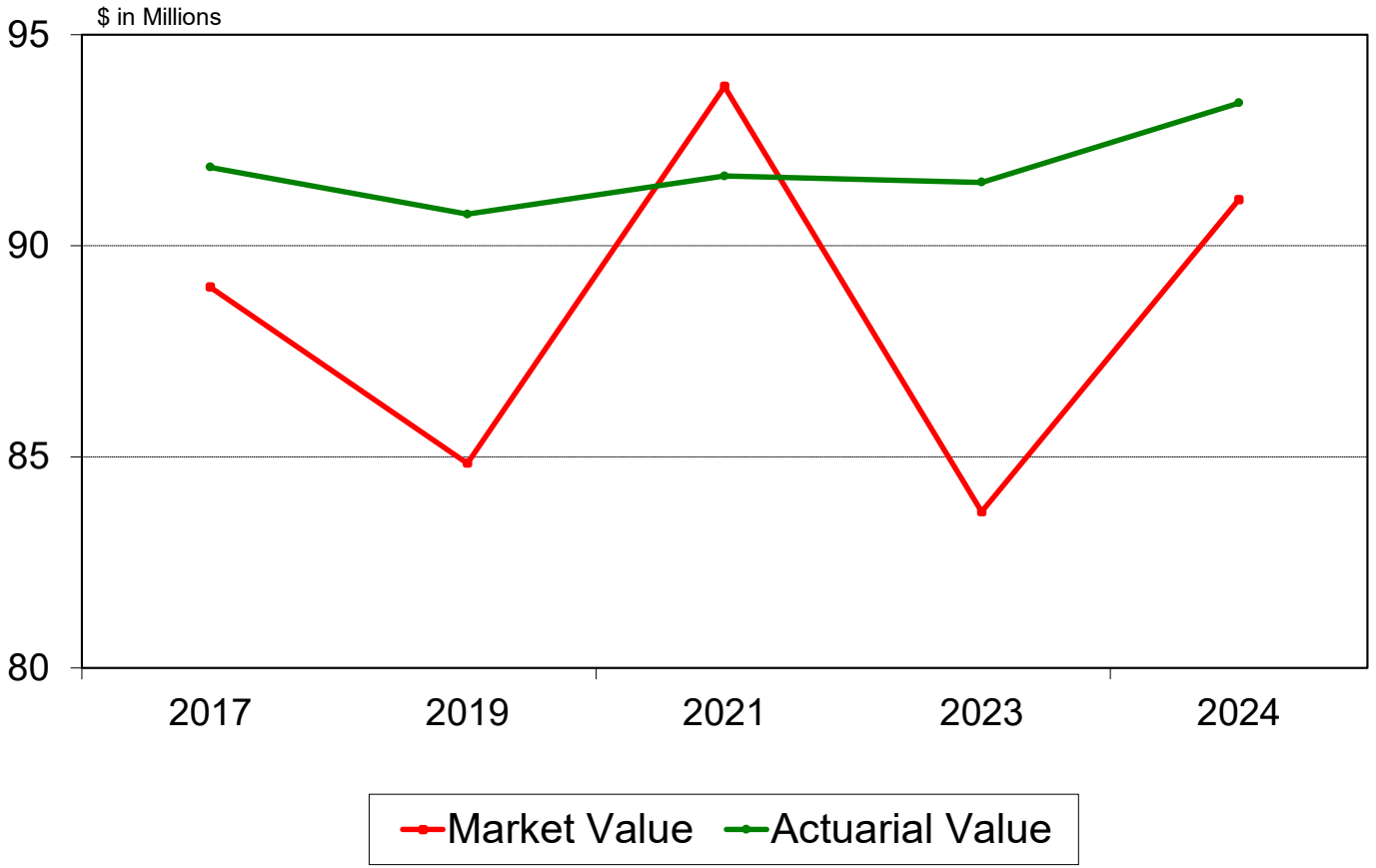
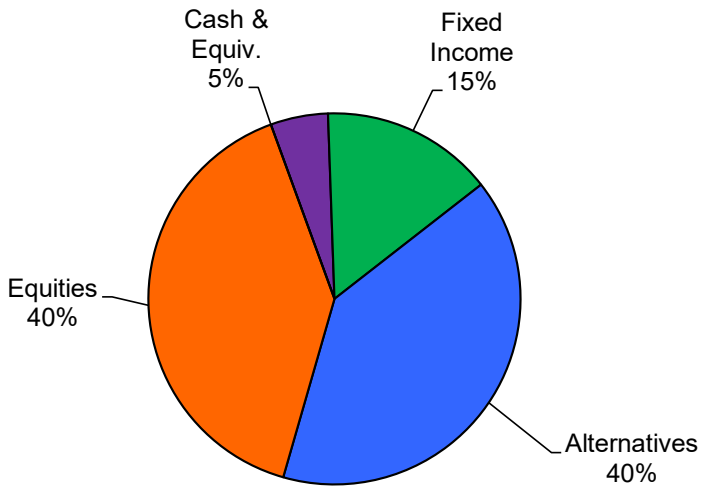


Exhibit 10

Market Value Asset Allocation for Prior and Current Actuarial Valuation Dates

December 31, 2023



December 31, 2024

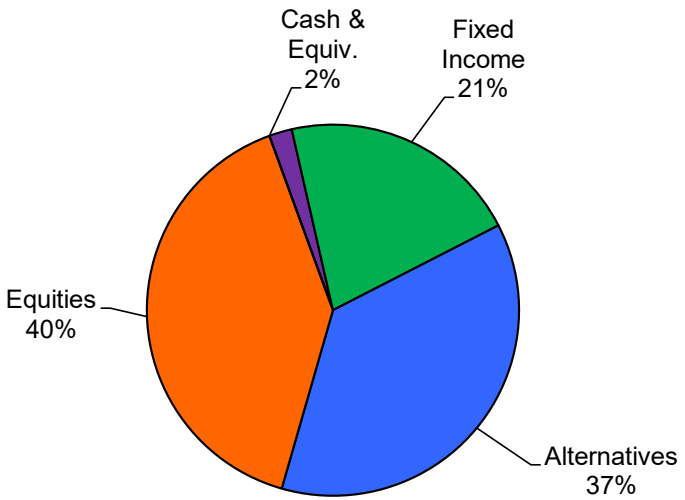


Exhibit 11

Actuarial Methods and Assumptions

A. Actuarial Methods

1. Actuarial Cost Method

The Entry Age Actuarial Cost Method is an actuarial cost method in which the actuarial present value of projected benefits of each active firefighter included in the valuation is allocated as a level percentage of compensation over the period from age at hire to the last age before 100% assumed retirement. Each active firefighter's normal cost is the current annual contribution in a series of annual contributions which, if made throughout the firefighter's total period of employment, would fund his expected benefits. Each firefighter's normal cost is calculated to be a constant percentage of his expected compensation in each year of employment. The normal cost for the fund is the sum of the normal costs for each active firefighter for the year following the valuation date. The normal cost as a percent of payroll reflects that contributions are made biweekly.

The fund's actuarial accrued liability is the excess of the actuarial present value of projected benefits over the actuarial present value of all future remaining normal cost contributions. The unfunded actuarial accrued liability (UAAL) is the amount by which the actuarial accrued liability exceeds the actuarial value of assets. The UAAL is recalculated each time a valuation is performed. Experience gains and losses, which represent deviations of the UAAL from its expected value based on the prior valuation, are determined at each valuation and are amortized over a closed 20-year period. The initial UAAL reflecting the plan effective April 1, 2025 is being amortized over the closed 30-year period beginning January 1, 2024.

2. Amortization Method

The UAAL is assumed to be amortized with level percentage of payroll contributions based on assumed payroll growth of 3% per year. The actuarially determined contribution rate for the UAAL reflects that contributions are made biweekly.

3. Actuarial Value of Assets Method

All assets are valued at market value with an adjustment made to uniformly spread actuarial gains or losses (as measured by actual market value investment return vs. expected market value investment return) over a five-year period. The total adjustment amount shall be limited as necessary such that the actuarial value of assets shall not be less than 80% of market value nor greater than 120% of market value. See Exhibit 8.

B. Actuarial Assumptions

As a part of each actuarial valuation, we review the actuarial assumptions used in the prior actuarial valuation. The investment return assumption is reviewed using the building block approach that includes several asset allocations, assumed real rates of return for each asset class, an assumed rate of investment-related expenses, and an assumed rate

of inflation, with all assumptions for the long-term future. Our economic assumptions are influenced both by long-term historical experience and by future expectations of investment consultants and economists, but we select the economic assumptions and try to discuss them with the board before completing the actuarial valuation. See our review of the economic assumptions in Appendix A.

We review the termination and retirement experience since the prior valuation and periodically look back more than two years. We also periodically review the average salaries by years of service to get insights into the promotion, step, and longevity compensation patterns for the purpose of reviewing our compensation increase assumption. For the mortality assumptions, we use an appropriate published mortality table with projections for improvement beyond the valuation date. We are guided in our review and selection of assumptions by the relevant actuarial standards of practice. As a result of our review, we have selected actuarial assumptions we consider to be reasonable and appropriate estimates of future experience for the fund for the long-term future.

1. Investment Return

   7% per year net of investment-related expenses.

2. Inflation

   2.75% per year included in compensation increases and investment return assumptions.

3. Mortality Rates

   PubS-2016 (public safety) total dataset mortality tables for employees and for retirees (sex distinct), projected for mortality improvement generationally using the projection scale MP-2021.

4. Compensation Increases

   General increases of 3% per year combined with promotion, step, and longevity increases that average 2.89% per year over a 30-year career. See Exhibit 12.

5. Retirement Rates

Age	Rate per Year for Firefighters Eligible to Retire
50	15%
51	5
52	20
53	10
54	25
55-59	50
60	100

   The average expected retirement age for paid firefighters not yet eligible to retire based on these rates is 54.2.

6. DROP Elections

   a. Percent of firefighters eligible electing Retroactive DROP: 100% of service retirements eligible to elect at least a 24-month lump sum.

   b. Months assumed for Retroactive DROP lump sum: Maximum they are eligible for, up to 36 months.

   c. Percent of firefighters electing Reverse DROP: 100% of service retirements not eligible to elect at least a 24-month lump sum Retroactive DROP.

   d. Percent of firefighters electing Forward DROP and Combined DROP: 0%

7. Termination Rates

   See Exhibit 12.

8. Disability Rates

   See Exhibit 12.

9. Reduction in Benefit after 2½ Years of Disability Retirement

   15% weighted average reduction in benefit.

10. Percent Married

    90% of the firefighters are assumed to be married at retirement, disability, or death while employed, with male firefighters having a spouse three years younger and female firefighters having a spouse three years older.

11. Payment Form for Retirement Benefits Due to Service Retirement, Disability Retirement, or Vested Termination

    - Joint and 75% to surviving spouse for the 90% assumed to be married
    - Life annuity for the 10% assumed to be single

12. Surviving Child's Death Benefit

    None are assumed as a result of future deaths.

13. Compensation for First Year Following Valuation Date for Projecting Benefits

    The actual pay for 2024 for each firefighter, excluding compensation for unscheduled overtime, increased by 1.8% to fully reflect the general pay increase of 2.5% effective October 1, 2024. For those hired in 2024 with less than a full year, we assumed $60,000.

14. Compensation for First Year Following Valuation Date for Projecting Contributions

    The compensation for each firefighter for projecting benefits (described in item 13 above that excludes unscheduled overtime) increased by 9% to reflect the inclusion of unscheduled overtime for projecting contributions.

15. Administrative Expenses

    The expenses paid by fund assets for other than investment-related expenses are assumed to be 1.65% of payroll. The normal cost rate as a percent of payroll is assumed to be 1.65% of payroll higher to reflect these expenses.

16. Conditional 2% Increase in Benefits

    The Present Plan's Section F conditional 2% increase in benefits to certain pensions when the fund's investment rate of return averages at least 8.25% over the most recent five consecutive years will never be triggered.

Exhibit 12

Disability and Termination Rates per 1,000 Active Members
Compensation Increases by Years of Service

Disability Rates		Termination Rates		Compensation Increases	
Attained Age	Rate per 1,000	Years of Service	Rate per 1,000	Years of Service	Increase Percent
20	0.14	0	119	1	15.88%
21	0.15	1	107	2	15.88
22	0.16	2	95	3	15.88
23	0.17	3	84	4	6.09
24	0.18	4	73	5	6.09
25	0.19	5	63	6	6.09
26	0.21	6	54	7	6.09
27	0.23	7	48	8	6.09
28	0.25	8	42	9	6.09
29	0.28	9	38	10	6.09
30	0.31	10	33	11	6.09
31	0.35	11	28	12	6.09
32	0.40	12	24	13	6.09
33	0.45	13	21	14	6.09
34	0.49	14	19	15	6.09
35	0.52	15	18	16	6.09
36	0.54	16	18	17	6.09
37	0.57	17	16	18	6.09
38	0.62	18	15	19	6.09
39	0.73	19	15	20	6.09
40	0.92	20 & Over	0	21	3.00
41	1.14			22	3.00
42	1.32			23	3.00
43	1.48			24	3.00
44	1.73			25	3.00
45	2.09			26	3.00
46	2.55			27	3.00
47	2.98			28	3.00
48	3.34			29	3.00
49	3.62			30	3.00
50	3.79			31	3.00
51	3.92			32	3.00
52	4.04			33	3.00
53	4.24			34	3.00
54	4.56			35	3.00
55	0.00			36	3.00
56	0.00			37	3.00
57	0.00			38	3.00
58	0.00			39	3.00
59	0.00			40	3.00

Exhibit 13

Definitions

1. Actuarial Accrued Liability	That portion, as determined by the particular actuarial cost method used, of the Actuarial Present Value of future pension plan benefits as of the Valuation Date that is not provided for by the Actuarial Present Value of future Normal Costs.
2. Actuarial Assumptions	Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, termination, disablement and retirement; changes in compensation; rates of investment earnings and asset appreciation; and other relevant items.
3. Actuarially Equivalent	Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.
4. Actuarial Gain (Loss)	A measure of the difference between actual experience and that expected based on the Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with the particular actuarial cost method used.
5. Actuarial Present Value	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date (the Valuation Date) by the application of the Actuarial Assumptions.
6. Actuarial Valuation	The determination, as of a Valuation Date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets and related Actuarial Present Values for a pension plan.
7. Actuarial Value of Assets	The value of cash, investments and other property belonging to a pension plan, as determined by a method and used by the actuary for the purpose of an Actuarial Valuation.

8. Entry Age Actuarial Cost Method	An actuarial cost method under which the Actuarial Present Value of the Projected Benefits of each individual included in the Actuarial Valuation is allocated as a level percentage of compensation over the period from age at hire to the last age before 100% assumed retirement. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a Valuation Date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability. Under this method, Actuarial Gains (Losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.
9. Plan Year	A 12-month period beginning January 1 and ending December 31.
10. Normal Cost	That portion of the Actuarial Present Value of pension plan benefits that is allocated to a valuation year by the actuarial cost method.
11. Projected Benefits	Those pension plan benefit amounts that are expected to be paid at various future times according to the Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future qualified service.
12. Overfunded Actuarial Accrued Liability	The excess, if any, of the Actuarial Value of Assets over the Actuarial Accrued Liability.
13. Unfunded Actuarial Accrued Liability	The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.
14. Valuation Date	The date upon which the Normal Cost, Actuarial Accrued Liability and Actuarial Value of Assets are determined. Generally, the Valuation Date will coincide with the end of a Plan Year.
15. Years to Amortize the Unfunded Actuarial Accrued Liability	The period determined in each Actuarial Valuation after December 31, 2023 will be the weighted average number of years, beginning with the Valuation Date, to amortize the Unfunded Actuarial Accrued Liability (UAAL) with a level percent of payroll. The actuarially determined contribution rate for each separate remaining base of the UAAL will be weighted by the remaining number of years in its closed amortization period.

Exhibit 14

Summary of Present Plan

1.	Normal Service or Disability Retirement Monthly Benefit	
	(a) Percentage of Highest 72-Month Average Salary	
	(b) Percentage based on years of service	
	(i) For years 1 to 20	3.3% per year
	(ii) For years above 20 to 30	2.0% per year
	(iii) For years above 30	1.0% per year
	(c) Not less than frozen vested accrued minimum benefit as of December 31, 2023	
	(d) Not less than frozen vested accrued minimum benefit as of March 31, 2025	
2.	Normal Service Retirement Eligibility (Minimum)	Age 50 and 20 Years or 25 Years and Under 50
3.	Actuarially Equivalent Early Service Retirement Eligibility	Age 45 and 20-24 Years
4.	Retroactive Deferred Retirement Option Plan (RETRO DROP)	
	(a) Earliest RETRO DROP benefit calculation date	2 Years Beyond Normal Service Retirement Eligibility
	(b) Maximum RETRO DROP benefit accumulation period	36 Months
	(c) RETRO DROP lump sum is the sum of the monthly benefits that would have been received between RETRO DROP benefit calculation date and termination of employment. There is no return of accumulated contributions made by the firefighter after the RETRO DROP benefit calculation date, and no interest is credited.	
5.	Reverse DROP	
	(a) Eligible after 2 years beyond Normal Service Retirement Eligibility	
	(b) Monthly benefit of 90% of regular benefit	
	(c) Lump sum of 24 times the reduced monthly benefit	
	(d) No return of accumulated contributions and no interest	
6.	Forward DROP	
	(a) Earliest Forward DROP irrevocable election	2 Years Beyond Normal Service Retirement Eligibility
	(b) Maximum Forward DROP accumulation period	36 months
	(c) Forward DROP lump sum is the sum of the monthly benefits that would have been received between the DROP election date and termination of employment. There is no return of accumulated contributions made by the firefighter after the DROP election date, and no interest is credited.	

7. Deferred Vested Terminated Benefit
   (a) Eligible if firefighter has at least 10 years of service but has not reached normal service retirement eligibility at termination of employment
   (b) Benefit is deferred to date person would have satisfied normal service retirement eligibility date

8. Disability Retirement Monthly Benefit for Firefighters Who Become Totally Disabled while Employed
   (a) For initial 30-month period is (i) plus (ii) if not able to perform job in fire department
      (i) Minimum monthly amount based on 20 years
      (ii) Additional amount per year of service over 20 years
   (b) Following initial 30-month period is (i), or (ii), or (iii), depending upon status
      (i) Initial benefit
      (ii) Initial benefit multiplied by one-half
      (iii) Zero
   (c) Upon attaining eligibility for normal retirement, the member's vested retirement benefit becomes payable if the disability benefit has been reduced or terminated

9. Surviving Spouse's Monthly Benefit as a Percentage of Benefit Active Would Have Been Entitled to as a Normal Service Retirement Benefit with a Minimum of 20 Years of Service — 75%

10. Surviving Children's Monthly Benefit as a Percentage of Highest 72-Month Average Salary
   (a) Where the spouse is receiving a benefit — 9.90%
   (b) Where the spouse is not receiving a benefit or there is no spouse — 19.80%

11. Contributions as a Percent of Payroll by:
   (a) Firefighters in 2025 — 14.20%
   (b) City of Midland in 2025 — 24.20%
   (c) Actuarially determined contribution rates after 2025, with any changes shared one-third by firefighters and two-thirds by City, with maximum of 17.2% by firefighters

12. The normal form of annuity payment at retirement is a Joint and 75% to Surviving Spouse. In lieu of the normal form, an optional reduced Joint and 100% to Surviving Spouse may be elected. Payment is the last day of each month.

13. Salary before January 1, 2024 used to determine the Highest 72-Month Average Salary includes total pay except any lump sum distributions for unused sick leave or vacation are excluded. Beginning January 1, 2024, the salary used also excludes pay for unscheduled overtime. The average is based on the pay for the consecutive 72 months during which the includable pay was highest.

14. The plan provisions in effect prior to January 1, 2024 are applicable for 'grandfathered' participants. This group of participants were within two years of eligibility for normal retirement as of December 31, 2023. This group includes those at least age 48 and 18 years of service, or 23 years of service at any age, as of December 31, 2023.

15. Refund of firefighters' accumulated contributions without interest will be made to firefighters who terminate employment and either are not eligible for any other benefit from the fund or request a refund from the fund.

16. Pensioners who have received benefits for five full plan years or more will receive a 2% cost-of-living adjustment on August 1 provided the fund's investment performance over the five plan years ending the previous December 31 averages 8.25% or more. DROP participation does not constitute time credited to the five-year requirement. The $500 per month supplemental benefit will not be increased by the 2% cost-of-living adjustments.

17. A lump sum death benefit of $10,000 will be paid to the designated beneficiary of a deceased firefighter, whether active or inactive (retired firefighter or a vested terminated firefighter).

Appendix A

Review of the Actuarial Economic Assumptions for the December 31, 2024 Actuarial Valuation

Theoretical Investment Return Assumption Development

Asset Class	Gross Annual Real Rate of Investment Return (ROR)[1]	Asset Allocation	
		Target[2]	12/31/2024[3]
Domestic Equities			
Large Cap	6.5%	20%	22.4%
Small/Mid Cap	7.0	5	6.0
		25	28.4
International Equities	7.0	15	11.1
Fixed Income	2.0	15	21.2
Alternatives			
Venture Capital/Private Equity	8.5	15	10.7
Real Estate	5.5	10	9.3
Master Limited Partnerships	8.0	10	13.3
Private Credit	5.0	5	4.0
		40	37.3
Cash	0.0	5	2.0
Total		100%	100.0%
Weighted Average Gross Real ROR Assumption		5.88%	5.76%
Weighted Average Net Real ROR Assumption[4]		4.63%	4.51%
Possible Theoretical Annual Investment Return Assumption: Net Real ROR Plus Assumed Annual Rate of Inflation			
Assumed 2.75% Inflation		7.38%	7.26%

[1] A gross **real** rate of return is an assumed total annual rate of investment return, before expenses, that is in excess of the assumed annual inflation rate. These are long-term assumptions made by Rudd and Wisdom, Inc.

[2] This allocation is based on the investment consultant's asset allocation target.

[3] Based on the investment consultant's December 31, 2024 report for all the assets except cash. The grand total from the audited financial report was used to determine cash as the balancing item.

[4] A weighted average Net Real ROR is an annual rate equal to the weighted average Gross Real ROR reduced by investment-related expenses, both direct and indirect, of an assumed annual rate of 1.25%. Before the change to the current investment consultant, investment-related expenses had been averaging 1.25% of assets. In the future, these expenses should be somewhat lower, but the large allocation to alternatives suggests the level could still be close to 1.00%.

Appendix A (continued)

Price Inflation in the USA - Average Annual Rates of Increase in the CPI-U

Years (Dec. to Dec.)	Number of Years	Average Annual Increase
1959 – 2024	65	3.72%
1964 – 2024	60	3.93
1969 – 2024	55	3.94
1974 – 2024	50	3.68
1979 – 2024	45	3.19
1984 – 2024	40	2.78
1989 – 2024	35	2.66
1994 – 2024	30	2.52
1999 – 2024	25	2.55
2004 – 2024	20	2.56

Most inflation forecasts are for 10 years or less. For example, the average 10-year forecast in the June 2025 Livingston Survey published by the Federal Reserve Bank of Philadelphia was 2.26%. However, 10 years is too short a forecast period for a public employee defined benefit pension plan. In the 2025 annual report of the OASDI Trust Funds (Social Security), the ultimate inflation assumptions for their 75-year projections are 3.0%, 2.4%, and 1.8% for the low-cost, intermediate, and high-cost assumptions, respectively. Looking at the average annual increase in the CPI-U over historical periods of 30 to 65 years above and considering the Social Security forecasts, we believe that reasonable assumed rates of inflation for the long-term future would range from 2.25% to 3.00%.

Administrative Expenses Paid by the Fund

Plan Year Ending 12/31 (1)	Administrative Expenses Paid by the Fund (2)	Covered Payroll (3)	% of Payroll (2) ÷ (3) (4)
2024	$ 486,570	$27,508,789	1.77%
2023	399,589	25,136,197	1.59
2022	388,777	23,428,042	1.66
2021	406,490	22,103,901	1.84
2020	330,045	20,196,734	1.63
2019	390,407	19,403,712	2.01
2021-2024	$1,681,426	$98,176,929	1.71%

The administrative expenses are not reflected in the investment return assumption but are reflected as a percent of payroll that is added to the normal cost contribution rate. We recommend 1.65%, somewhat less than the average developed above for the last four plan years. (The covered payroll was determined as the contributions by the firefighters or the city for the plan year divided by the appropriate contribution rate during the plan year.) This is slightly less than the 1.70% assumption for the prior valuation. We expect the administrative expenses to be lower in the future after the transition to new administrators and the new plan of benefits. But for now, we recommend only a small reduction.

Appendix A (continued)

Comparison of 12/31/2023 Actuarial Economic Assumptions with 12/31/2024 Actuarial Economic Assumptions

Actuarial Assumption[1]	12/31/2023 Actuarial Economic Assumptions	12/31/2024 Actuarial Economic Assumptions
Inflation (Price)	2.75%	2.75%
Net real rate of return[2]	4.25	4.25
Net total investment return[2]	7.00%	7.00%
Firefighter pay increase[3]	5.89%	5.89%
Aggregate payroll increase	3.00%	3.00%
Administrative expenses	1.70% of payroll	1.65% of payroll

[1] All assumptions are annual rates.
[2] Net of all investment-related expenses.
[3] For both 12/31/2023 and 12/31/2024, a 3% annual general compensation increase combined with annual promotion, step, and longevity pay increases that vary by length of service, which together average 5.89% over a 30-year career.

Appendix B

Other Disclosures as of December 31, 2024

Potential Risks

- Investment risk is the potential that investment returns will be different than assumed. Adverse investment experience would increase the unfunded actuarial accrued liability (UAAL) and the UAAL amortization period. Favorable investment experience would have the opposite effects.

- Compensation risk is the potential that compensation increases for individuals will be different than assumed. Greater-than-assumed increases would increase the UAAL and the UAAL amortization period. Less-than-assumed increases would have the opposite effects.

- Payroll risk is the potential that the total (aggregate) payroll will increase differently than assumed due to general compensation increases and changes in the number of active members. Greater-than-assumed aggregate payroll increases would lower the UAAL amortization period. Less-than-assumed aggregate payroll increases would increase the UAAL amortization period.

- Longevity risk is the potential that retirees and surviving spouses may live longer or shorter than expected.

- Other demographic risks are the potential that active members may terminate, become disabled, die, or retire at times other than assumed.

Plan Maturity Measures

The following measures may help the board and the city better understand some of the potential risks described above. The measures are for the actuarial valuation date or the year ending December 31.

Measure	2024	2023	2021	2019	2017	2015
1. Ratio of retired life actuarial accrued liability to total actuarial accrued liability	57.1%	55.0%	53.2%	51.6%	49.2%	47.1%
Commentary: Mature plans have 50% or more of the total actuarial accrued liability attributable to retirees and surviving spouses. Mature plans are generally more sensitive to investment risk. Increases in the ratio are the result of the actuarial accrued liability of pensioners growing faster than the actuarial accrued liability of active members.						
2. Ratio of net cash flow (contributions less benefit payments less administrative expenses) to assets	-2.5%	-3.3%	-5.4%	-3.9%	-3.2%	-1.1%
Commentary: A negative net cash flow means benefit payments and administrative expenses exceed contributions. A certain amount of negative net cash flow is expected as a plan matures. One reason for the variability of the numbers is the variability of the DROP lump sums paid from year to year. Recent increases in the number of active members increased contributions as well as an increase in the city contribution rate, helping to reduce the absolute numbers.						
3. Ratio of actuarial value of assets to total payroll	5.45	3.54	4.16	4.52	5.64	5.09
Commentary: Maturing plans usually have the ratio generally increasing over time as the assets grow faster than the payroll. However, the ratio may not increase as much or may decrease if the total payroll increases more than assumed over an extended period of years. Investment experience also affects the growth of the actuarial value of assets.						

Negative Amortization

- As of this actuarial valuation, the fund is expected to have negative amortization for about seven more years. At that time, the unfunded actuarial accrued liability is expected to gradually decrease from one actuarial valuation to the next.

Reasonable Actuarially Determined Contribution Rate

- The actuarially determined contribution (ADC) rate in the section on ADC funding policy on page 1 is a reasonable ADC consistent with actuarial standards of practice.

Actuarial Valuation Software

- We have utilized software licensed from Winklevoss Technologies, LLC in the development of the liabilities summarized in the report. We have independently confirmed the model developed by Winklevoss and have sufficiently tested it to ensure the model is an accurate representation of the system's liabilities.

Low-Default-Risk Obligation Measure (LDROM)

- The LDROM is a required disclosure calculated as of the date of the actuarial valuation using a discount rate based on high quality bond yields instead of the expected return on the fund's diversified investment portfolio.

Low-Default-Risk Obligation Measure	$307,590,603
Actuarial Accrued Liability	$211,640,254

- The difference between the LDROM and the actuarial accrued liability determined in this actuarial valuation could be viewed as the expected savings from investing in the fund's diversified portfolio instead investing only in high quality bonds.

- For our calculation of the LDROM, we have used the same actuarial cost method and actuarial assumptions from this actuarial valuation summarized in Exhibits 11 and 12, except for an assumed discount rate of 4.06% instead of the investment return assumption of 7%. To determine the assumed discount rate, we used the Bond Buyer Index of general obligation bonds with 20 years to maturity, which has an average rating roughly equivalent to Moody's Investors Services' Aa2 rating and Standard and Poor's Corporation AA. The weekly index closest to the December 31, 2024 measurement date was 4.06%.

- Because the fund's assets are not invested only in high-quality bonds, the LDROM does not reflect the fund's actuarial condition, nor does it offer insights into the total contribution required for an adequate contribution arrangement or the security of participant benefits.

Appendix C

Historical Actuarial Valuation Information

Actuarial Valuation Date	Unfunded Actuarial Accrued Liability (UAAL)	UAAL Amortization Period in Years	Number of Actives	Assumed Contribution Rates			Contribution Rates		Key Assumptions		Funded Ratio
				Actives	City	Total	Normal Cost	UAAL Amortization	Investment Return	Rate of Inflation	
12/31/2024	$ 64.3 million	28.8	252	14.20%	24.20%	38.40%	24.59%	13.81%	7.00%	2.75%	69.6%
12/31/2023	120.9	never	249	14.20	24.20	38.40	27.28	11.12	7.00	2.75	43.1
12/31/2021	109.1	never	230	14.20	22.20	36.40	31.54	4.86	7.00	2.75	45.6
12/31/2019	86.8	never	227	14.20	22.20	36.40	26.30	10.10	7.50	3.00	51.1
12/31/2017	59.0	never	207	14.20	22.20	36.40	25.98	10.42	7.75	3.25	60.9
12/31/2015	45.3	44.7	193	13.20	22.20	35.40	24.27	11.13	8.00	3.00	65.8
12/31/2013	39.0	59.1	178	13.20	21.70	34.90	24.81	10.09	8.00	3.00	66.8
12/31/2011	28.1	86.3	190	13.20	20.20	33.40	25.80	7.60	8.00	3.00	72.2

Appendix D

Historical Asset Information

Date	Total Contributions	Benefit Payments	Administrative Expenses	Net Cash Flow (2) – (3) – (4)	Market Value of Assets	(5) ÷ (6)	Rate of Return
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
12/31/2024	$10,522,780	$12,334,370	$486,570	$(2,298,160)	$91,093,466	(2.5)%	11.75%
12/31/2023	9,149,865	11,521,513	399,589	(2,771,237)	83,691,663	(3.3)	6.89
12/31/2022	8,527,807	10,875,344	388,777	(2,736,314)	80,979,438	(3.4)	(10.88)
12/31/2021	8,045,819	12,669,033	406,490	(5,029,704)	93,771,847	(5.4)	14.86
12/31/2020	7,351,660	10,356,445	330,045	(3,334,830)	86,345,309	(3.9)	5.81
12/31/2019	7,062,823	9,976,378	390,407	(3,303,962)	84,848,966	(3.9)	10.39
12/31/2018	6,239,847	8,609,277	230,738	(2,600,168)	80,013,420	(3.2)	(8.07)
12/31/2017	5,669,204	8,252,601	279,569	(2,862,966)	89,754,731	(3.2)	12.28
12/31/2016	5,711,927	6,843,836	251,621	(1,383,530)	82,664,948	(1.7)	3.87
12/31/2015	5,988,075	6,684,894	211,422	(908,261)	80,942,385	(1.1)	(0.85)
12/31/2014	5,373,610	6,301,043	222,705	(1,150,138)	82,552,420	(1.4)	3.38