City of Sioux Falls Firefighters' Pension Fund

Annual Actuarial Valuation Report

December 31, 2025

Outline of Contents

800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

April 17, 2026

Retirement Board
City of Sioux Falls Firefighters' Pension Fund
Sioux Falls, South Dakota

Ladies and Gentlemen:

The results of the December 31, 2025 actuarial valuation of the City of Sioux Falls Firefighters' Pension Fund are presented in this report. The purpose of this valuation was to measure the Fund's funding progress, and to determine the employer contribution for the 2027 fiscal year. This report should not be relied upon for any other purpose. This report may be distributed to parties other than the Retirement Board only in its entirety and only with the permission of the Board. Gabriel, Roeder, Smith & Company is not responsible for unauthorized use of this report.

This valuation was based upon the assumptions and methods adopted by the Board, and information furnished by the Fund concerning Pension Fund benefits, financial transactions, individual members, terminated members, retirees, and beneficiaries. Data was checked for internal and year-to-year consistency, but was not audited by us. As a result, we are unable to assume responsibility for the accuracy or completeness of the data provided by the Pension Fund's staff.

Future actuarial measurements may differ significantly from those presented in this report due to such factors as experience differing from that anticipated by actuarial assumptions, changes in plan provisions, actuarial assumptions/methods or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. This valuation was based on the assumption that the plan sponsor will continue to make the contributions necessary to fund this plan in the future. 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.

The fiscal year 2027 contributions shown in this report were determined using the actuarial methods and assumptions disclosed in Section C of this report. This report includes risk metrics on page D-1 but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. This report also includes a discussion of the required Low-Default-Risk Obligation Measure (LDROM) on page Appendix-2. Additional assessment of risk metrics was beyond the scope of this assignment. We encourage a review and assessment of investment and other significant risks which may have a material impact on the Fund's financial position.

This report was prepared using assumptions adopted by the Retirement Board. All actuarial assumptions are reasonable for the purpose of this valuation. The combined effect of the assumptions is expected to have no significant bias (i.e., not significantly optimistic or pessimistic).

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.

To the best of our knowledge, this report is complete and accurate and was made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards Board and in compliance with the applicable state statutes.

Stephanie Sullivan and Michael D. Kosciuk are independent of the plan sponsor and are Members of the American Academy of Actuaries (MAAA) who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. It is our opinion that the actuarial assumptions used for this valuation produce results which are reasonable.

Respectfully submitted,
Gabriel, Roeder, Smith & Company

Stephanie Sullivan, ASA, MAAA

Michael D. Kosciuk, FSA, EA, FCA, MAAA

SS/MDK:rl

C0199

SECTION A

VALUATION RESULTS

Financial Objective

The financial objective of the Pension Fund is to establish and receive contributions that will accumulate reserves during members' working lifetimes which will be sufficient to pay promised benefits throughout retirement.

Contributions

The Pension Fund is supported by member contributions, City contributions, State contributions (insurance premium taxes), and investment income from Pension Fund assets.

Contributions which satisfy the financial objective are determined by an annual actuarial valuation and are sufficient to:

- Cover the actuarial present value of benefits assigned to the current year by the actuarial cost methods described in Section C (the normal cost); and

- Amortize over a period of future years the actuarial present value of benefits not covered by valuation assets and anticipated future normal costs (unfunded actuarial accrued liability).

Pension contribution requirements for the year beginning January 1, 2027 are shown on page A-2.

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 7.00% on the actuarial value of assets), then the following outcomes are expected:

- The employer normal cost is expected to trend downward over time due to the closure of the plan to new hires;

- The unfunded liability is expected to be paid off by the year 2038; and

- The funded status of the plan will gradually trend toward a 100% funded ratio.

Contributions Computed to Meet the Financial Objective of the Pension Fund for the Fiscal Year Beginning January 1, 2027

Contributions for	Contribution Dollars
Total Normal Cost	$2,571,438
Employee Portion	972,556
Plan Sponsor Portion	1,598,882
Unfunded Actuarial Accrued Liabilities (UAAL) Contribution	$2,944,878
Total Computed Contribution[1]	$4,543,760

[1] *Plan sponsor contribution which includes City and State contributions.*

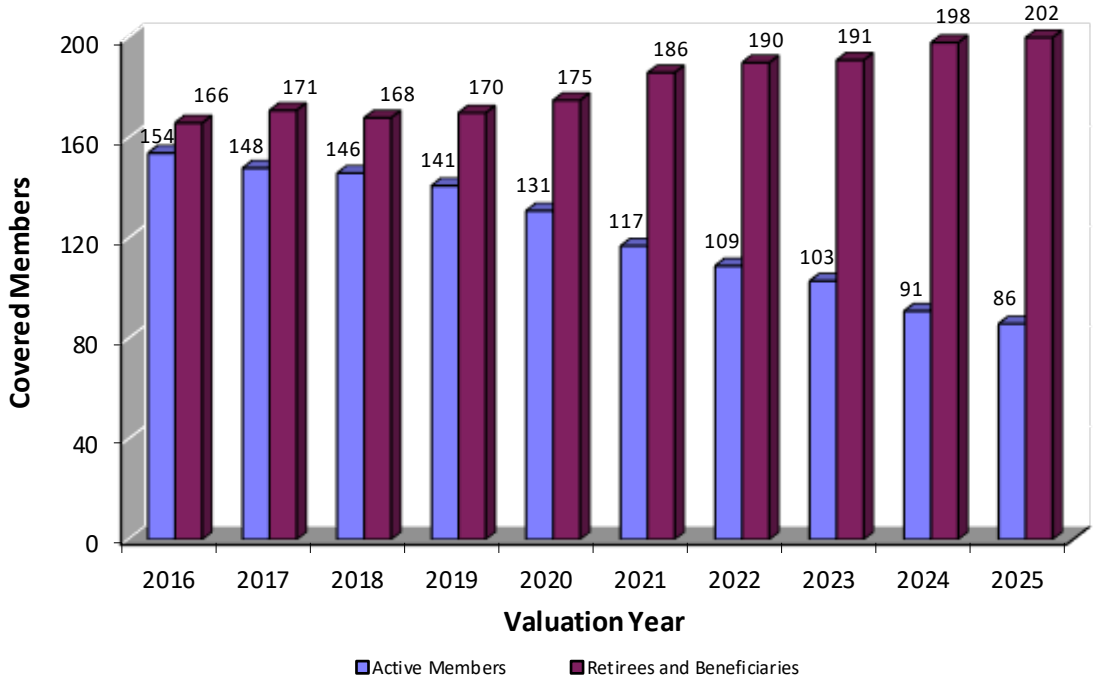
City Firefighter employees hired on or after July 1, 2013 become members of the South Dakota Retirement System (SDRS) instead of joining the Pension Fund. Contributions are expressed in terms of dollars in this report instead of as percentages of payroll. This is due to the use of the level dollar amortization method (appropriate for systems closed to new hires) to finance the Pension Fund's Unfunded Actuarial Accrued Liabilities (UAAL).

The Pension Fund's UAAL was amortized as a level dollar amount over a period of 12 years.

The employee contribution to the Pension Fund shown above was based on an employee contribution rate of 10.0% and plan member payroll projected to the year 2027.

The total computed contribution shown above includes contributions for the stipend benefit which became effective on January 1, 2014.

Active and Retired Pension Fund Members



Computed Pension Contributions
Comparative Statement

Fiscal Year	Valuation Date December 31	% of Payroll Contributions	Dollar Contributions^
2013	2011 @	24.31 %	
2014	2012 @#		$4,484,256
2015	2013 @		4,424,656
2016	2014 @		4,407,249
2017	2015 @		4,663,613
2018	2016		4,270,282
2019	2017 @		3,991,024
2020	2018		3,965,830
2021	2019		4,099,545
2022	2020		4,034,916
2023	2021 @		3,496,950
2024	2022 @		4,053,561
2025	2023		4,239,946
2026	2024		4,527,737
2027	2025		4,543,760

@ *After changes in actuarial assumptions or methods.*
\# *After changes in benefit provisions.*
^ *Includes state paid pension contributions.*

Actuarial Balance Sheet - December 31, 2025

Present Pension Resources and Expected Future Resources

A.	Valuation assets	$201,669,449
B.	Actuarial present value of expected future employer contributions	
	1. For normal costs	9,502,612
	2. For unfunded actuarial accrued liabilities	25,336,813
	3. Total	34,839,425
C.	Actuarial present value of expected future member contributions	5,871,744
D.	Total actuarial present value of present and expected future resources	$242,380,618

Actuarial Present Value of Expected Future Pension Benefit Payments and Reserves

A.	To retirees and beneficiaries	$152,270,247
B.	To vested terminated members	2,841,722
C.	To present active members	
	1. Allocated to service rendered prior to valuation date	71,894,293
	2. Allocated to service likely to be rendered after valuation date	15,374,356
	3. Total	87,268,649
D.	Total actuarial present value of expected future benefit payments	$242,380,618

Derivation of Actuarial Gain (Loss)
Year Ended December 31, 2025

The actuarial gains or losses realized in the operation of the Pension Fund provide an experience test. Gains and losses are expected to cancel each other over a period of years but sizable year-to-year fluctuations are common. Details on the derivation of the actuarial gain (loss) are shown below, along with a year-to-year comparative schedule:

(1) UAAL at the start of the year	$25,134,318
(2) Normal cost	2,649,668
(3) Contributions	5,282,981
(4) Interest accrual	1,667,236
(5) Expected UAAL before changes	24,168,241
(6) Change from benefit changes	0
(7) Change from revised actuarial assumptions	0
(8) Expected UAAL after changes	24,168,241
(9) Actual UAAL at end of year	25,336,813
(10) Total Gain (loss): (8) - (9)	(1,168,572)
As percent of AAL at beginning of year ($220,597,096)	(0.5)%
(11) Investment Gain (loss)	(3,837,226)
(12) Non-Investment Gain (loss): (10) - (11)	2,668,654

Note, item (12) includes a $3.0 million transfer from UIR.

Valuation Date December 31	Actuarial Gain (Loss) as % of Beginning Accrued Liabilities
2021	0.6 %
2022	(3.4)
2023	(1.1)
2024	(1.3)
2025	(0.5)

Comments

Comment A: There were no benefit or assumption changes reported to the actuary in connection with this actuarial valuation of the Pension Fund.

Comment B: Pension Fund experience was overall, unfavorable during the 2025 plan year. The investment return on Fund assets was higher than long-term expectations. However, the market smoothing techniques used in this valuation of the Fund recognize both current and prior year investment income by phasing it in over a five-year period. As a result, the recognized net, rate of return on pension assets was 5.00%. Details of the asset smoothing method are shown on page B-3. Additionally, there was a loss in retiree experience due to fewer retiree deaths than expected. These losses were slightly offset by a gain due to pay increases for active members being lower than projected by actuarial assumptions.

Comment C: As of the valuation date, the Pension Fund's funding percent based on the total value of assets held in trust is 103.7%. As of December 31, 2024, the funding percent was 105.3% measured on the same basis. If the market value of assets was used to determine the funding percent, the result would be 110.1% as of the valuation date.

Unless otherwise indicated, the funding status measurement presented in this report is based upon the actuarial accrued liability and the actuarial value of assets (including assets held in the unallocated income reserve). With regard to the funding status measurement presented in this report, it is important to note the following:

- The measurement is inappropriate for assessing the sufficiency of pension plan assets to cover the estimated cost of settling the plan's benefit obligations;
- The measurement is inappropriate for assessing the need for or the amount of future employer contributions; and
- The measurement will produce a different result if the market value of assets is used instead of the actuarial value of assets, unless the actuarial value of assets equals the market value of assets.

Comment D: As directed by the Retirement System, $3,000,000 was transferred from the UIR to the pension assets used to determine City pension contributions. Page B-3 shows the Pension Fund's assets in detail.

Comment E: The market value of assets exceeds the funding value of assets by approximately $14.6 million. This means that over the course of the next four valuation cycles, there are approximately $14.6 million more in asset gains to recognize in the asset smoothing process than asset losses; however, the pattern in the recognition of asset gains and losses is not uniform from year-to-year. Currently, there is a net scheduled asset loss to be recognized in next year's valuation (i.e., the December 31, 2026 valuation) of approximately $1.4 million followed by net asset gains to be recognized in the following three valuations. As such, in the absence of offsetting gains, the net scheduled asset loss in next year's valuation is expected to put upward pressure on the resulting employer contribution requirements.

Please note, a 5-year Experience Study for the Retirement Plan for the City of Sioux Falls Firefighters' Pension Fund is expected to be performed after this year's actuarial valuation, with assumption implementation anticipated for the December 31, 2026 pension valuation.

SECTION B

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

Benefit Provisions Evaluated and/or Considered (December 31, 2025)

Pension Fund Eligibility:

New City Firefighter employees hired on or before June 30, 2013 will become members of the Firefighters Pension Fund. Individuals hired after June 30, 2013 will become members of the South Dakota Retirement System.

Regular Retirement:

Eligibility - Age 55 with 20 or more years of service; or the sum of a member's age and years of service equals eighty (80) with a minimum retirement age of 50.

Annual Amount - Final average compensation times the sum of a) 2.5% times the first 25 years of service, plus b) 1.5% times service in excess of 25 years.

Type of Final Average Compensation - Average of last 3 years before retirement. Some lump sums are included.

Early Reduced Retirement:

Eligibility - 20 or more years of service.

Annual Amount - Same as regular retirement except that the benefit is actuarially reduced.

Deferred Retirement (vested benefit):

Eligibility - 15 years of service; benefit payable at deferred retirement age.

Annual Amount- Computed as a regular retirement benefit but based on service and final average compensation at termination.

Duty Disability Retirement:

Eligibility - No age or service requirements. Must be in receipt of Workers' Compensation.

Annual Amount - Computed as a regular retirement benefit, based on a minimum of 10 years of service. Minimum benefit is 50% of a first-class firefighter's salary. Workers' Compensation payments are offset.

Non-Duty Disability Retirement:

Eligibility - 10 years of service.

Annual Amount - Computed as a regular retirement benefit. Minimum benefit is 20% of a first-class firefighter's salary.

Benefit Provisions Evaluated and/or Considered (December 31, 2025)

Duty Death Before Retirement:

Eligibility - No age or service requirement. Also payable in case of death of duty-disability retirant within 5 years of retirement. Workers' Compensation must be payable.

Annual Amount - Refund of accumulated contributions. Spouse receives a pension of 1/3 of first-class firefighter's salary until death. Unmarried children under age 18 or an eligible handicapped child will receive equal share of 1/4 of a first-class firefighter's salary (if no spouse, each child receives 1/4 to a maximum of 1/2). The minimum monthly benefit for each eligible child is $200. If there are no spouse or eligible children, dependent parents each receive 1/6 of a first-class firefighter's salary. Workers' Compensation payments are offset.

Non-Duty Death Before Retirement:

Eligibility - 10 years of service.

Annual Amount - Surviving spouse receives a monthly benefit for life computed as a regular retirement benefit but actuarially reduced in accordance with a 100% joint and survivor election. In addition each eligible or handicapped child is paid a minimum monthly benefit of $200.

Post-Retirement Cost-of-Living Adjustments:

An annual increase equal to 100% of the June CPI change each year (with a cap of 3%) applied to the member's current benefit. The first increase is granted after 36 months of retirement.

Member Contributions:

8% of compensation until January 1, 2014.
9% of compensation effective January 6, 2014.
10% of compensation on and after January 5, 2015.

Stipend Benefit:

Eligibility - Members who retire from City employment (regular, early reduced or disability retirement) after December 31, 2013 are eligible to receive a monthly stipend benefit payable from the Pension Fund until age 65 (or Medicare eligibility) in lieu of retiree health plan benefits.

Annual Amount - $40 per month times years of service at retirement. Benefit is payable to the member only until he/she becomes eligible for Medicare or dies (if earlier). No benefit is payable to a surviving spouse or child of a deceased Pension Fund Member. This benefit increases by 3% each year beginning in January 2015.

Derivation of Valuation Assets

	Pension	Unallocated Income Reserve	Total
A. Funding Value, 12/31/24	$ 195,462,778		
B. Market Value, Beginning of Year	189,448,330	$ 36,751,694	$ 226,200,024
C. Audit Adjustment			
D. Non-Investment Net Cash Flow	(6,414,007)		
E1. Investment Income (Market Total)	30,191,937		
E2. UI Reserve Transfer	3,000,000	(3,000,000)	
F. Market Value, End of Year	216,226,260	33,751,694	249,977,954
G. Phase-in Factor	20%		
H. Expected Income	$ 13,457,904		
I. Market Value Gain (Loss): [(E1) – (H)]	16,734,033		
J. Recognition of Gain (Loss)			
J1. Year One	3,346,807		
J2. Year Two	1,694,462		
J3. Year Three	2,502,452		
J4. Year Four	(8,918,704)		
J5. Year Five	(2,462,243)		
J6. Total (J1…J5)	(3,837,226)		
K. Funding Value, 12/31/25 [(A) + (C) + (D) + (E2) (H) + (J6)]	201,669,449	33,751,694	235,421,143
L1. Upper Corridor Limit: 120% X (F)			299,973,545
L2. Lower Corridor Limit: 80% X (F)			199,982,363
L3. Adjustment to Funding Value			0
L4. Funding Value End of Year	201,669,449	33,751,694	235,421,143
M. Funding Value Rate of Return	5.00%		

The net market value rate of return on total Fund assets held in trust was 13.54%.

Asset Information Reported for Valuation
Comparative Statement - Market Value

Year Ended Dec. 31	Assets Beginning of Year	Revenues			Expenses			Assets Year-End
		Employee Contrib.	Employer Contrib.	Investment Income	Retirement Benefits	Contrib. Refunds	Misc. Expenses[1,2]	
2011	$ 97,142,070	$ 916,965	$3,718,003	$ 1,987,241	$ 5,558,803	$ 3,589	$ 541,016	$ 97,660,871
2012	97,660,871	911,291	3,970,160	13,981,467	5,848,569	0	478,398	110,196,822
2013	110,196,822	926,949	4,016,011	21,915,937	5,937,848	16,103	461,128	130,640,640
2014	130,640,640	1,056,622	4,089,313	8,885,483	6,470,814	70,653	412,698	137,717,893
2015	137,717,893	1,150,548	4,424,656	(250,585)	6,881,461	32,636	401,620	135,726,795
2016	135,726,795	1,169,466	4,407,249	11,314,306	7,092,026	31,061	435,230	145,059,499
2017	145,059,499	1,188,155	4,663,612	23,857,466	7,460,482	0	2,432,979	164,875,271
2018	164,875,271	1,181,980	4,443,152	(6,743,039)	7,695,194	0	117,337	155,944,833
2019	155,944,833	1,202,997	3,991,024	30,551,368	7,950,984	0	137,166	183,602,072
2020	183,602,072	1,270,599	3,965,830	23,132,415	8,428,579	81,477	(125,646)	203,586,506
2021	203,586,506	1,222,310	4,176,197	28,908,626	8,511,368	629,865	144,418	228,607,988
2022	228,607,988	1,146,519	4,034,916	(31,819,427)	10,042,187	0	130,898	191,796,911
2023	191,796,911	1,107,477	3,496,950	25,229,130	10,460,848	162,955	133,135	210,873,530
2024	210,873,530	1,129,325	4,053,561	21,474,940	11,176,986	0	154,346	226,200,024
2025	226,200,024	1,043,035	4,239,946	30,342,692	11,696,988	0	150,755	249,977,954

[1] *Up to and including the year 2017, this item reflects retiree health benefits including any transfers out of the Fund.*
[2] *Includes a reported audit adjustment in calendar year 2021.*

Note: Employer contributions in 2013 include contributions to the unallocated income reserve.
Note: Employer contributions in 2014 and 2018 are before reserve transfer.

Additions to and Removals from Retired/Survivor Membership
Comparative Statement

Year Ended Dec. 31	Additions[1] No.	Additions[1] Annual Benefits[2]	Removals No.	Removals Annual Benefits	End of Year Totals No.	End of Year Totals Annual Benefits[3]	Average Annual Benefits	Present Value of Benefits	Expected Removals
2011	11	$ 567,883	6	$ 159,270	156	$ 5,757,512	$ 36,907	$ 79,914,932	4.0
2012	2	190,469	4	124,027	154	5,823,954	37,818	82,278,462	4.2
2013	3	219,347	4	125,800	153	5,917,501	38,676	84,573,093	3.7
2014	16	871,488	6	176,262	163	6,612,727	40,569	97,235,026	3.7
2015	6	430,488	6	209,943	163	6,833,272	41,922	102,197,293	3.4
2016	5	212,268	2	67,529	166	6,978,011	42,036	103,629,811	3.4
2017	8	505,288	3	115,406	171	7,367,893	43,087	107,941,613	3.6
2018	2	190,946	5	177,670	168	7,381,169	43,936	107,121,666	3.9
2019	8	573,882	6	171,790	170	7,783,261	45,784	113,332,540	4.1
2020	9	579,444	4	188,801	175	8,173,904	46,708	118,206,661	3.8
2021	15	914,681	4	116,599	186	8,971,986	48,236	129,855,425	3.9
2022	6	537,758	2	112,929	190	9,396,815	49,457	134,520,938	4.5
2023	6	551,682	5	239,375	191	9,709,122	50,833	137,883,309	5.0
2024	13	881,599	6	254,412	198	10,336,308	52,204	146,773,320	5.1
2025	6	650,517	2	88,515	202	10,898,310	53,952	152,270,247	5.3

1 *Includes survivor beneficiaries.*
2 *Includes post-retirement Cost-of-Living Adjustments.*
3 *Pension benefits only.*

Retirees and Beneficiaries December 31, 2025
Tabulated by Type of Benefits Being Paid

Type of Benefits Being Paid	No.	Annual Pension Benefit	No.	Annual Stipend Benefit
Age and Service Benefits	160	$ 9,279,512	57	$ 921,112
Disability Retirement Benefits[1]	13	482,055	6	72,645
Survivor Benefits	29	1,136,743	0	0
Total	**202**	**$ 10,898,310**	**63**	**$ 993,757**

[1] *Includes survivors of disabled retirees.*

Retirees and Beneficiaries by Age as of December 31, 2025

Age	No.	Annual Pension Benefits
45 - 49	6	$ 270,239
50 - 54	5	281,573
55 - 59	23	1,400,752
60 - 64	33	1,928,436
65 - 69	37	2,083,668
70 - 74	45	2,582,253
75 - 79	26	1,263,851
80 - 84	13	680,387
85 - 89	7	251,066
90 & Over	7	156,086
Total	**202**	**$ 10,898,311**

Vested Deferred Retirements as of December 31, 2025

There were 8 inactive members reported as of December 31, 2025 with deferred estimated pension benefits totaling $331,243. An inactive member is a person who has left City employment with entitlement to retirement benefits upon meeting the conditions for deferred retirement. The table below shows the inactive members by attained age.

Age	No.	Annual Benefits
40-44	1	$ 43,063
45-49	1	39,643
50-54	2	60,987
55-59	4	187,550
Totals	**8**	**$ 331,243**

Active Members Included in Valuation

Valn. Date	Active Members			Valuation	Average			
Dec. 31	Chiefs	Other	Total	Payroll	Age	Service	Pay	% Incr.
2011	11	165	176	$ 10,827,592	40.0	10.5	$ 61,520	1.5%
2012	13	169	182	11,525,947	41.0	11.2	63,329	2.9
2013	11	168	179	11,573,294	42.0	12.2	64,655	2.1
2014	8	155	163	10,910,044	42.0	12.2	66,933	3.5
2015	8	150	158	11,230,191	43.0	12.8	71,077	6.2
2016	8	146	154	11,479,484	44.0	13.6	74,542	4.9
2017	10	138	148	11,406,732	44.0	14.1	77,073	3.4
2018	11	135	146	11,710,123	45.0	15.1	80,206	4.1
2019	11	130	141	11,623,173	46.0	15.5	82,434	2.8
2020	11	120	131	12,117,714	46.0	16.2	92,502	12.2
2021	11	106	117	11,222,429	46.0	16.3	95,918	3.7
2022	11	98	109	10,872,658	47.0	17.0	99,749	4.0
2023	12	91	103	10,662,079	47.0	17.8	103,515	3.8
2024	12	79	91	10,502,425	47.0	18.4	115,411	11.5
2025	10	76	86	9,987,439	48.0	19.2	116,133	0.6

Additions to and Removals from Active Membership Actual and Expected Numbers

Year Ended	Number Added During Year		Retirement		Disability Retirement		Died-in-Service		Other Terminations		Active Members End of
Dec. 31	A	E	A	E	A	E	A	E	A	E	Year
2016	0	0	3	2.1	0	0.3	0	0.2	1	1.3	154
2017	0	0	6	5.4	0	0.4	0	0.2	0	1.2	148
2018	0	0	1	4.5	0	0.4	0	0.2	1	1.1	146
2019	2*	0	7	5.6	0	0.4	0	0.2	0	0.9	141
2020	0	0	5	6.2	1	0.4	1	0.2	3*	0.8	131
2021	0	0	13	7.6	0	0.4	0	0.2	1	0.7	117
2022	0	0	5	4.2	1	0.4	0	0.1	2	0.6	109
2023	0	0	4	5.2	1	0.3	0	0.1	1	0.4	103
2024	0	0	10	5.6	1	0.3	0	0.1	1	0.4	91
2025	0	0	4	3.1	1	0.2	0	0.1	0	0.3	86
5-Year Totals	**0**	**0**	**36**	**25.7**	**4**	**1.6**	**0**	**0.6**	**5**	**2.4**	

** Includes transfers.*

A - Represents actual number.
E - Represents the expected number based on assumptions outlined in Section C of this report.

Active Firefighter Members
December 31, 2025
by Age and Years of Service

	Years of Service on Valuation Date							Totals	
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 Plus**	**No.**	**Payroll**
35-39			4	1				5	$ 531,294
40-44			5	9				14	1,536,127
45-49			3	13	10			26	2,969,582
50-54			1	12	6	3		22	2,521,407
55-59				7	1			8	906,833
60				1				1	114,320
Totals	**0**	**0**	**13**	**43**	**17**	**3**	**0**	**76**	**$ 8,579,563**

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

Age: 48.1 years
Service: 18.7 years
Annual Pay: $112,889

Active Member Fire Management
December 31, 2025
by Age and Years of Service

	Years of Service on Valuation Date							Totals	
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 Plus**	**No.**	**Payroll**
40-44				2				2	$ 263,696
45-49					4	2		6	887,923
50-54				1		1		2	256,257
Totals	**0**	**0**	**0**	**3**	**4**	**3**	**0**	**10**	**$ 1,407,876**

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

Age: 47.0 years
Service: 23.1 years
Annual Pay: $140,788

SECTION C

ACTUARIAL METHODS AND ASSUMPTIONS AND DEFINITIONS OF TECHNICAL TERMS

Actuarial Methods Used for the Valuation

Actuarial Cost Method

The normal cost and the allocation of actuarial present 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 member's actual date of employment to projected date of retirement, are sufficient to accumulate the actuarial present value of the member's benefit at the time of retirement;

(ii) Each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Amortization of Unfunded Actuarial Accrued Liabilities

The Pension Fund's Unfunded Actuarial Accrued Liability (UAAL) was determined using the funding value of assets and actuarial accrued pension liability calculated as of the valuation date. The UAAL amortization payment (one component of the contribution requirement), was developed using a level dollar amortization method that fully amortizes the UAAL over a 12-year period. This UAAL payment reflects payments expected to be made between the valuation date and the date contributions determined by this report are scheduled to begin.

Asset Valuation Method

The funding value of assets used in the Pension Fund valuation recognizes assumed investment income fully each year. Differences between actual and assumed investment income are phased-in over a five-year period. During periods when investment performance exceeds the assumed rate, the funding value of assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, the funding value of assets will tend to be greater than market value. This is the result of phasing-in differences between actual investment income (market value basis) and expected investment income (funding value basis). Transfers to or from the UIR may be implemented based on budget needs. The total value of assets is not permitted to deviate from the market value of assets by more than 20%.

Unallocated Income Reserve (UIR)

The UIR is a reserve fund within the pension trust. The purpose of the UIR is to stabilize City contributions due to actuarial gains and losses and changes in actuarial assumptions or methods.

Actuarial Assumptions Used for the Valuation

The actuarial assumptions used in this valuation of the Pension Fund were based upon the results of a study of Pension Fund experience covering the period January 1, 2016 through December 31, 2020. A report dated July 27, 2021 presented the results of the study.

Investment Return (net of investment and administrative expenses): 7.00% per year, compounded annually for the pension plan. This rate consists of a net real rate of return of 3.50% per year plus a long-term rate of wage inflation of 3.50% per 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, 2021 valuation.

Net Market rates of investment return during the last five plan years are shown below:

	For the Year Ending December 31				
	2025	2024	2023	2022	2021
Rate of Investment Return	13.54%	10.26%	13.29%	(14.13)%	14.26%

Pay Projections: These assumptions are used to project current pays to those upon which benefits will be based. The base economic assumptions were first used for the December 31, 2021 valuation. The merit and longevity assumptions shown below were first used for the December 31, 2012 valuation.

	Annual Rate of Pay Increase for Sample Ages		
Service (Years)	Base (Economic)	Merit and Longevity	Total
1-4	3.50 %	4.50 %	8.00 %
5-12	3.50	2.00	5.50
13	3.50	1.00	4.50
14+	3.50	0.00	3.50

The base wage inflation assumption was first used in the December 31, 2021 actuarial valuation of the Pension Fund.

The assumed rate of price inflation used in the pension valuation is 2.50% per year.

Actuarial Assumptions Used for the Valuation

The rates of mortality used for individual members are based upon the sex distinct Pub-2010 tables, as published by the Society of Actuaries, and include a margin for future mortality improvement. These tables were first used in the 2021 valuation of the Pension Fund and are described below.

- **Pre-Retirement:** The Pub-2010, Headcount-Weighted, Safety, Employee, Male and Female tables, with future mortality improvements projected to 2030 using scale MP-2020.

- **Healthy Post-Retirement:** The Pub-2010, Headcount-Weighted, Safety, Healthy Retiree, Male and Female tables, with future mortality improvements projected to 2030 using scale MP-2020.

- **Disability Retirement:** The Pub-2010, Headcount-Weighted, Safety, Disabled Retiree, Male and Female tables, with future mortality improvements projected to 2030 using scale MP-2020.

Sample Ages	Pre-Retirement Future Life Expectancy (Years)		Healthy Post-Retirement Future Life Expectancy (Years)		Disabled Retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women	Men	Women
50	36.38	39.11	32.93	35.44	31.26	32.91
55	31.61	34.30	28.36	30.78	26.94	28.45
60	26.92	29.55	23.89	26.30	22.79	24.29
65	22.35	24.84	19.70	22.03	18.89	20.36
70	17.91	20.19	15.72	17.96	15.22	16.53
75	13.67	15.71	12.05	14.15	11.81	12.97
80	9.69	11.48	8.83	10.72	8.78	9.91

Actuarial Assumptions Used for the Valuation

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

Sample Ages	Years of Service	Percent Separating within Next Year
ALL	0	6.00 %
	1	2.00
	2	1.50
	3	1.25
	4	1.25
25	5 & Over	2.50
30		2.00
35		1.50
40		1.00
45		0.50
50		0.00
55		0.00
60		0.00

The service-based rates were first used in the December 31, 2012 valuation. The age-based rates were first used in the December 31, 2004 valuation.

Rates of Disability: These assumptions represent the probabilities of active members becoming disabled.

Sample Ages	Percent Becoming Disabled within Next Year
20	0.08 %
25	0.08
30	0.08
35	0.08
40	0.20
45	0.27
50	0.49
55	0.89

Actuarial Assumptions Used for the Valuation

Rates of Retirement: These rates are used to measure the probabilities of an eligible member retiring under the Regular and Early reduced retirement provisions during the next year.

Percents of Active Members Retiring within the Next Year

Retirement Ages	Regular Retirement Rates	Service (Yrs)	Early Retirement Rates
50	50 %	20	2 %
51	50	21	2
52	50	22	2
53	50	23	2
54	60	24	2
55	60	25	2
56	60	26	2
57	70	27	2
58	70	28	2
59	70	29	2
60 & Over	100	30 & Over	2

A member was assumed to be eligible for regular retirement after attaining age 55 and completing 20 or more years of service, or if the sum of age and service equals eighty (80). A member was assumed to be eligible for early reduced retirement after completing 20 years of service.

The early retirement rates were first used for the December 31, 2004 valuation. The regular retirement rates were first used for the December 31, 2012 valuation.

Miscellaneous and Technical Assumptions

Marriage Assumption:	80% of participants are assumed to be married for purposes of death-in-service benefits. In each case males were assumed to be 3 years older than females.
Pay Increase Timing:	Beginning of year.
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 December 31st of each year.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Other:	Disability and turnover decrements do not operate during retirement eligibility.
Miscellaneous Loading Factors:	The active accrued liabilities were increased by 10% to account for the inclusion of unused sick leave and vacation time in the calculation of Final Average Compensation (FAC).
Death/Disability Assumption:	50% of disabilities and deaths were assumed to be duty related. 50% were assumed to be unrelated to duty. The recovery rate from disability was assumed to be 0 (i.e., no disabled individual was assumed to recover and return to work).
Forfeiture Assumption:	All vested terminated members were assumed to elect a deferred retirement benefit.

Definitions of Technical Terms

Accrued Service - Service credited under the system which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability - The difference between the actuarial present value of system benefits and the actuarial present value of future normal costs. Also referred to as "past service liability."

Actuarial Assumptions - Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover 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 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 benefits" between future normal costs and actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent - One series of payments is said to be actuarially equivalent to another series of payments if the two series have the same actuarial present value.

Actuarial Gain (Loss) - The difference between actual unfunded actuarial accrued liabilities and anticipated unfunded actuarial accrued liabilities -- during the period between two valuation dates. It is a measurement of the difference between actual and expected experience.

Actuarial Present Value - The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

Amortization - Paying off an interest-discounted amount with periodic payments of interest and (generally) principal -- as opposed to paying it off with a lump sum payment.

Normal Cost - The portion of the actuarial present value of future benefits that is assigned to the current year by the actuarial cost method. Sometimes referred to as "current service cost."

Unfunded Actuarial Accrued Liabilities - The difference between actuarial accrued liabilities and valuation assets. Sometimes referred to as "unfunded past service liability" or "unfunded supplemental present value."

Most pension funds have unfunded actuarial accrued liabilities. They arise each time new benefits are added and each time an actuarial loss occurs. The existence of unfunded actuarial accrued liabilities is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liabilities do not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liabilities and the trend in their amount (after due allowance for devaluation of the dollar).

SECTION D

ADDITIONAL DISCLOSURES

Supplementary Information

Schedule of Pension Funding Progress

Actuarial Valuation Year	Actuarial Value of Assets[1] (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	$ 139,937,741	$ 163,234,586	$ 23,296,845	85.7 %	$ 11,479,484	202.9 %
2017	167,923,784	168,734,146	810,362	99.5	11,406,732	7.1
2018	171,591,228	174,209,235	2,618,007	98.5	11,710,123	22.4
2019	178,720,608	182,469,022	3,748,414	97.9	11,623,173	32.2
2020	190,192,464	192,840,258	2,647,794	98.6	12,117,714	21.9
2021	227,599,154	199,220,398	(28,378,756)	114.2	11,222,429	0.0
2022	226,529,019	204,015,854	(22,513,165)	111.0	10,872,658	0.0
2023	230,295,647	209,757,471	(20,538,176)	109.8	10,662,079	0.0
2024	232,214,472	220,597,096	(11,617,376)	105.3	10,502,425	0.0
2025	235,421,143	227,006,262	(8,414,881)	103.7	9,987,439	0.0

[1] *Includes assets (if any) held in the Unallocated Income Reserve.*

Schedule of Employer Contributions

Valuation Year Ended December 31	Fiscal Year Ended December 31	Computed Dollar Contributions	Actual Contributions	% Contributed
2016	2018	$4,270,282	$4,443,152	100%
2017 ^	2019	3,991,024	3,991,024	100
2018	2020	3,965,830	3,965,830	100
2019	2021	4,099,545	4,176,197	100
2020	2022	4,034,916	4,034,916	100
2021 ^	2023	3,496,950	3,496,950	100
2022 ^	2024	4,053,561	4,053,561	100
2023	2025	4,239,946	4,239,946	100
2024	2026	4,527,737		
2025	2027	4,543,760		

^ *New methods and/or assumptions.*

APPENDIX

RISK MEASURES

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the actuarial liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the actuarial liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

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 due to changing conditions; 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 System's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. **Investment Risk** – actual investment returns may differ from the expected returns;
2. **Asset/Liability Mismatch** – changes in asset values may not match changes in liabilities, thereby altering the gap between the actuarial liability and assets and consequently altering the funded status and contribution requirements;
3. **Contribution Risk** – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. **Salary and Payroll Risk** – actual salaries and total payroll may differ from expected, resulting in actual future actuarial liability and contributions differing from expected;
5. **Longevity Risk** – members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
6. **Other Demographic Risks** – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future actuarial liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

Low-Default-Risk Obligation Measure

Introduction

In December 2021, the Actuarial Standards Board (ASB) adopted a revision to Actuarial Standard of Practice (ASOP) No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. The revised ASOP No. 4 requires the calculation and disclosure of a liability referred to by the ASOP as the "Low-Default-Risk Obligation Measure" (LDROM). The rationale that the ASB cited for the calculation and disclosure of the LDROM was included in the Transmittal Memorandum of ASOP No. 4 and is presented below (emphasis added):

> "The ASB believes that the calculation and disclosure of this measure provides **appropriate, useful information for the intended user regarding the funded status of a pension plan**. The calculation and disclosure of this additional measure is **not intended to suggest that this is the "right" liability measure** for a pension plan. However, the ASB does believe that **this additional disclosure provides a more complete assessment of a plan's funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date.**"

Comparing the Accrued Liabilities and the LDROM

One of the fundamental financial objectives of the City of Sioux Falls Firefighters' Pension Fund is to finance each member's retirement benefit over the period from the member's date of hire until the member's projected date of retirement (entry-age actuarial cost method) as a level percentage-of-payroll. To fulfill this objective, the discount rate that is used to value the accrued liabilities of the Pension Fund is set equal to the expected return on the Fund's diversified portfolio of assets (referred to sometimes as the investment return assumption). Effective with the December 31, 2025 valuation of the Pension Fund, the investment return assumption is 7.00%.

The LDROM is meant to approximately represent the lump sum cost to a plan to purchase low-default-risk fixed income securities whose resulting cash flows essentially replicate in timing and amount the benefits earned (or the costs accrued) as of the measurement date. The LDROM is very dependent upon market interest rates at the time of the LDROM measurement. The lower the market interest rates, the higher the LDROM, and vice versa. The LDROM results presented in this report are based on the entry age actuarial cost method and discount rates based upon the December 2025 Treasury Yield Curve Spot Rates (end of month). The 1-, 5-, 10- and 30-year rates follow: 3.57%, 3.73%, 4.22% and 5.00%. This measure may not be appropriate for assessing the need for or amount of future contributions. This measure may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligation.

The difference between the two measures (Valuation and LDROM) is one illustration of the savings the sponsor anticipates by taking on risk in a diversified portfolio.

Accrued Liabilities as of December 31, 2025
Using Alternate Discount Rates

Valuation Rate (7.00%)	LDROM (Spot Rates)
$227,006,262	$298,698,692