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Saline Valley Fire Protection District Pension Plan

**Cost Statement of Proposed
Plan Changes**

October 21, 2024



Statement Outline

- Certification
- Proposed Change
- Reasons and Requirements
- Current and Projected Financial Impacts
- Assumptions
- Required Statements



Certification

This cost statement was prepared for the Saline Valley Fire Protection District to document impacts of implementing proposed pension plan changes under current consideration. The information contained in this document was prepared in order to meet the requirements of Missouri Statute 105.665 and 105.684.

Except where indicated otherwise, the results included in this cost statement are based on the same data, assumptions, methods, and provisions as the 1/1/2024 valuation. This cost statement has been prepared in accordance with generally accepted actuarial principles and practice using methods and assumptions we believe to be reasonable.

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

- Plan experience differing from that anticipated by the economic or demographic assumptions;
- Changes in economic or demographic assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- Changes in plan provisions or applicable law.

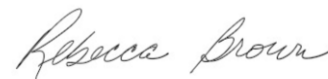
We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement.

Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report.

The consultants indicated below are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States.



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October 21, 2024

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Proposed Change

Current Structure

- Monthly retirement benefit of \$110 times years of service to a maximum of 36 years
- Monthly temporary supplement benefit of \$500 from age 60 to 65*

Proposed Structure – for retirements on or after 1/1/2025

- Monthly retirement benefit of \$120 times years of service to a maximum of 36 years
- Monthly temporary supplement benefit of \$750 from age 60 to 65*

All other plan provisions are the same as those used for the 1/1/2024 valuation and are summarized in the appendix to this study.

**For participants who terminated on or after age 55 with at least 20 years of service.*



2024 Actuarial Determined Contribution

Based on the January 1, 2024, valuation for the plan:

- The level normal cost of plan benefits currently in effect is \$132,797 or 5.0% of expected payroll. This amount includes \$15,000 in expected administrative expenses to be paid during 2024.
- The contribution for unfunded accrued liabilities currently payable by the plan is \$44,268 or 1.7% of expected payroll.
- The total contribution rate for 2024 is \$177,065. With interest to the end of the year, the total actuarial determined contribution is 189,460 or 7.1% of payroll.



Reasons and Requirements

Reasons for the Statement

- Required by law (Missouri statute 105.665)
- Document various impacts of making changes to plan benefits
- Uniform information for every legislative body/committee before approving and implementing plan changes

Requirements of the Statement

- Immediate impacts to liabilities, normal costs, contributions and funded levels
- Must use the methods of the most recent valuation
- 10-year projections of similar information
- Assumptions and methods used to calculate the impacts
- Specific statements about the plan's ability to make necessary contributions before and after the proposed changes
- The cost statement must be available as public information for 45 days prior to implementing the changes
- The cost statement must be kept on file by the legislative body/committee and filed with the joint committee on public employee retirement



Summary of Projection Assumptions

Assumption/Method	Description
Funding Interest Rate	7.00%
Asset Performance	7.00% per year
Asset Method	Market Value
District Contributions	Greater of Actuarial Contribution and \$300,000 each year
Population	The working population is projected to remain flat
New Entrants	Based on new hire demographic data in 2023
Total Payroll Growth ¹	3.00%
Administrative Expenses	Increasing 3% per year
All other assumptions	Same as January 1, 2024 valuation summarized later in this report

The cost projections contained in this report are based on the January 1, 2024 valuation results. Census data and asset information were provided by the plan sponsor and asset advisor and are summarized in the January 1, 2024 actuarial valuation report. Reasonable actuarial techniques and assumptions were used to produce the cost projections.

¹Used to determine projected contribution as a percent of payroll.



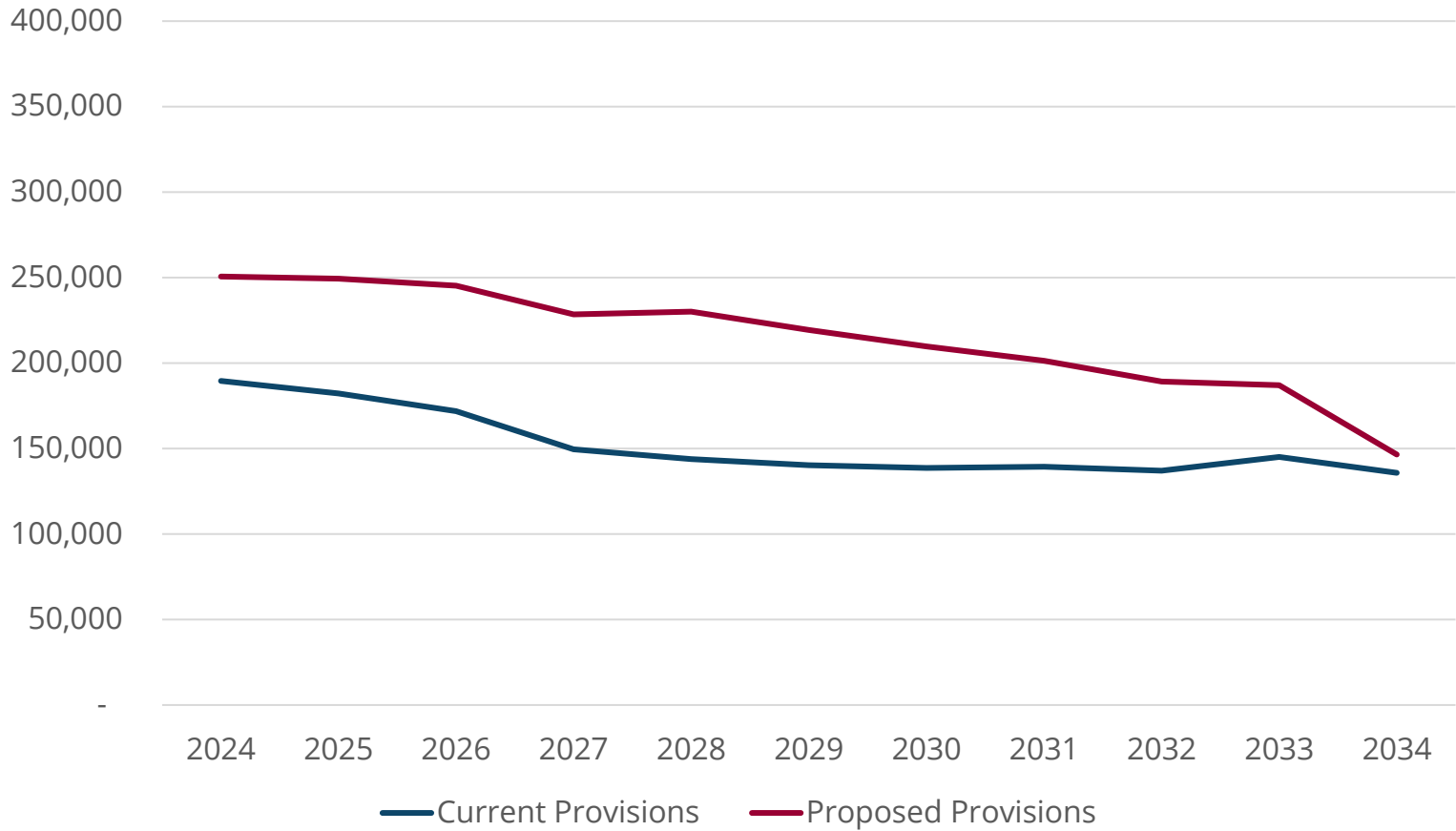
Financial Impacts: 7.00% return all years

Current Provisions	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Liability	6,144,085	6,605,410	7,102,950	7,635,708	8,130,959	8,666,422	9,162,561	9,634,723	10,071,780	10,459,227	10,857,686
Actuarial Value of Assets	5,642,285	6,226,723	6,852,325	7,522,022	8,173,828	8,869,441	9,540,381	10,200,930	10,839,787	11,445,225	12,069,545
Unfunded Accrued Liability	501,800	378,687	250,625	113,686	(42,869)	(203,019)	(377,820)	(566,207)	(768,007)	(985,998)	(1,211,859)
Funded Percentage	91.8%	94.3%	96.5%	98.5%	100.5%	102.3%	104.1%	105.9%	107.6%	109.4%	111.2%
Normal Cost	117,797	120,850	120,545	110,987	117,472	114,080	112,583	112,159	110,038	116,567	107,842
Administrative Expenses	15,000	15,000	16,000	16,000	17,000	17,000	17,000	18,000	18,000	19,000	19,000
Amortization of UAL	44,268	34,487	24,107	12,752	-	-	-	-	-	-	-
Actuarial Contribution BOY	177,065	170,337	160,652	139,739	134,472	131,080	129,583	130,159	128,038	135,567	126,842
Actuarial Contribution EOY	189,460	182,261	171,898	149,521	143,885	140,256	138,654	139,270	137,001	145,057	135,721
EOY as % of Payroll	7.1%	6.6%	6.0%	5.1%	4.8%	4.5%	4.3%	4.2%	4.0%	4.1%	3.8%
Payroll	2,680,734	2,761,156	2,843,991	2,929,311	3,017,190	3,107,706	3,200,937	3,296,965	3,395,874	3,497,750	3,602,683
Expected Disbursements	91,329	90,697	90,007	152,214	153,555	224,053	279,063	344,284	419,362	441,607	573,900
Proposed Provisions											
Liability	6,646,406	7,151,703	7,696,432	8,279,592	8,816,604	9,397,244	9,936,926	10,448,994	10,921,670	11,340,689	11,773,607
Assets	5,642,285	6,221,770	6,842,098	7,506,182	8,141,129	8,818,795	9,466,195	10,095,278	10,693,651	11,249,716	11,821,453
Unfunded Accrued Liability	1,004,121	929,933	854,334	773,410	675,475	578,449	470,731	353,716	228,019	90,973	(47,846)
Funded Percentage	84.9%	87.0%	88.9%	90.7%	92.3%	93.8%	95.3%	96.6%	97.9%	99.2%	100.4%
Normal Cost	130,676	133,833	133,416	122,665	129,524	125,716	123,859	123,209	120,655	127,586	117,879
Administrative Expenses	15,000	15,000	16,000	16,000	17,000	17,000	17,000	18,000	18,000	19,000	19,000
Amortization of UAL	88,581	84,197	79,733	74,845	68,494	62,229	55,027	46,992	38,155	28,259	-
Actuarial Contribution BOY	234,257	233,030	229,149	213,510	215,018	204,945	195,886	188,201	176,810	174,845	136,879
Actuarial Contribution EOY	250,655	249,342	245,189	228,456	230,069	219,291	209,598	201,375	189,187	187,084	146,461
EOY as % of Payroll	9.4%	9.0%	8.6%	7.8%	7.6%	7.1%	6.5%	6.1%	5.6%	5.3%	4.1%
Payroll	2,680,734	2,761,156	2,843,991	2,929,311	3,017,190	3,107,706	3,200,937	3,296,965	3,395,874	3,497,750	3,602,683
Expected Disbursements	96,118	95,460	94,741	167,441	168,693	243,382	304,462	376,272	457,204	479,210	628,202
Change in Contribution											
Contribution EOY	61,195	67,081	73,291	78,935	86,184	79,035	70,944	62,105	52,186	42,027	10,740
% of Payroll	2.3%	2.4%	2.6%	2.7%	2.9%	2.5%	2.2%	1.9%	1.5%	1.2%	0.3%



Comparisons of Contributions: 7.00% return all years

Actuarial Contributions





Additional Comments on Projections

- Missouri Statute 105.684 requirements for a local public retirement system to increase benefits are met:
 - The Plan is at least 80% funded prior to adopting the change; and
 - The Plan is at least 75% funded after adopting the change.

- 10-year projections shows the proposed changes starting January 1, 2024 even though the change is expected to be effective January 1, 2025. This shows the sensitivity of the results on the current population. Additional information on the demographics of the population can be found in the January 1, 2024 Valuation Report.

- These projections reflect numerous assumptions, and one should focus on the general trend of the results rather than the absolute dollar amounts.

- The cost projections assume current demographic and economic assumptions are met. Actual results will vary from projections shown in this report, perhaps significantly, due to changes in the assumptions, plan provisions, participant demographics, interest rate movement, actual asset performance, and other actual experience of the plan. Depending on the use of this information, additional cost projections may be necessary to quantify the sensitivity of results.



Valuation Assumptions

The following assumptions all match the January 1, 2024 valuation report as required, except where stated otherwise:

- Investment Return: 7.00%
 This assumption has set by the plan sponsor in conjunction with their asset advisor. We believe this assumption is reasonable based on an application of the JP Morgan capital market assumptions by class to the plan's asset allocation.
- Mortality: Pub-2010 Public Safety Mortality Table with generational improvements from Scale MP 2021; None while active
- Retirement:
 - 100% at age 60
- Disability: None assumed
- Withdrawal: Varies by Service

<u>Years of Service</u>	<u>Rate</u>
0-4	4.00%
5-9	3.00%
10-19	2.00%
20+	1.00%



Required Statements

- Current Contributions
 - The plan sponsor has made and plans to continue to make contributions exceeding the contributions as calculated and recommended under current plan provisions.

- Proposed Contributions
 - To our knowledge, the additional contributions described as part of the proposed benefit changes will be met based on recent contributions levels. These funds will be provided by designated tax revenue and general funds, if needed. The projected improvement of the funding ratio of the plan under the proposed changes over the next 10 years demonstrates this outcome.

- Assumptions
 - The actuarial assumptions and methods used for the valuation were chosen by the employer. In our opinion, all actuarial assumptions and methods used in both the valuation and projections are individually reasonable, and in aggregate produce results which are reasonable.



Actuarial Funding Method

- The actuarial cost method used in the valuation was the Entry Age Normal cost method.
- Under this method, the normal cost is the sum of the individual normal costs for all participants. For an active participant, the individual normal cost is determined by spreading the present value at the current age of the projected benefit at the assumed retirement age in such a way that produces a level annual cost over expected earnings for the individual between entry age and assumed retirement age. For a non-active participant, the normal cost is zero.
- The actuarial accrued liability is the sum of the individual accrued liabilities for all plan participants. For an active participant, the individual accrued liability is the accumulation of past normal costs up to the valuation date. For non-active participants, the individual accrued liability is the present value at the current age of future benefits. The unfunded actuarial accrued liability equals the actuarial accrued liability less the actuarial value of assets.
- The total annual contribution of the plan is calculated as the normal cost plus an amount to amortize the unfunded actuarial accrued liability. The unfunded liability is recognized using a 20-year layered level dollar amortization schedule. Each year, new sources of gains and losses will be amortized in a separate amortization base over 20 years.



Summary of Plan Provisions as of 1/1/2024

Description	
Eligibility	Retro to January 1 of year of hire after age 21
Normal Retirement Benefit	\$110 per month per year of service, max of 36 years, payable at age 60. ¹
Early Retirement Benefit	Actuarial equivalent of normal retirement benefit at age 55 with 20 years of service.
Termination Benefit	Vested accrued benefit payable at age 60. Benefit is 20% vested at 3 years of service, and increases by 20% per year of service to 100% vesting at 7 years of service.
Normal Form of Benefit	Life annuity for single participants and qualified joint and survivor annuity for married participants
Optional Forms of Benefit	Life annuity; 50%, 75%, or 100% joint and survivor annuity with or without pop-up, and 5, 10, 15, or 20 year certain and life annuity

¹ Proposed change increases benefit formula multiplier from \$110 per month per year of service to \$120 per month per year of service for active participants effective January 1, 2025.



Summary of Plan Provisions as of 1/1/2024 - Continued

Description	
Post-Retirement Supplement	Participants terminating after the attainment of age 55 and completion of at least 20 years of service are entitled to receive a monthly post-retirement supplemental benefit of \$500 commencing on the later of the first day of the month which retirement begins or the attainment of age 60. The benefit will cease upon the attainment of age 65. If the participant dies after beginning receipt of the supplemental benefit, the participant's spouse shall receive the remaining payments, ceasing when the participant would have attained age 65. ¹
Pre-retirement death benefit	Pre-retirement survivor annuity based on a 50% joint and survivor annuity if married, based on a 5-year certain and life if single.
Disability benefit	Actuarially reduced vested benefit payable immediately.

¹ Proposed change increases the supplemental benefit from \$500 to \$750 for active participants effective January 1, 2025.