



## **The Police Retirement System of St. Louis**

**GASB 67/68 Report  
as of September 30, 2021**

**Produced by Cheiron**

**February 2022**

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**LETTER OF TRANSMITTAL**

February 4, 2022

Board of Trustees  
The Police Retirement System of St. Louis  
2020 Market Street  
St. Louis, Missouri 63101

Dear Members of the Board:

The purpose of this report is to provide accounting and financial disclosure information under GASB 67 for the Police Retirement System of St. Louis and under GASB 68 for the City of St. Louis. This information includes:

- Determination of the discount rate as of September 30, 2021,
- Projection of the Total Pension Liability from the valuation date to the measurement date,
- Calculation of the Net Pension Liability at the discount rate as well as discount rates 1% higher and lower than the discount rate,
- Changes in the Net Pension Liability,
- Schedule of Employer Contributions,
- Disclosure of Deferred Inflows and Outflows, and
- Calculation of the Annual Pension Expense for the System.

If you have any questions about the report or would like additional information, please let us know.

Sincerely,  
Cheiron



Stephen T. McElhaney, FSA, FCA, EA  
Principal Consulting Actuary



Patrick T. Nelson, FSA, CERA, EA  
Consulting Actuary



Michael J. Noble, FSA, FCA, EA  
Principal Consulting Actuary

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS  
GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**SECTION I – BOARD SUMMARY**

The purpose of this report is to provide accounting and financial disclosure information under Governmental Accounting Standards Board Statements 67 and 68 for the Police Retirement System of St. Louis (System) and the City of St. Louis. This information includes:

- Determination of the discount rate as of September 30, 2021,
- Projection of the Total Pension Liability from the valuation date to the measurement date,
- Calculation of the Net Pension Liability at the discount rate as well as discount rates 1% higher and lower than the discount rate,
- Changes in the Net Pension Liability,
- Schedule of Employer Contributions,
- Disclosure of Deferred Inflows and Outflows, and
- Calculation of the Annual Pension Expense for the System.

**Highlights**

The reporting date for the Police Retirement System of St. Louis is September 30, 2021. Measurements as of the reporting date are based on the fair value of assets as of September 30, 2021, and the Total Pension Liability as of the valuation date, October 1, 2020, projected to September 30, 2021. There have been changes in actuarial assumptions since the prior measurement date which had the net effect of decreasing the Net Pension Liability. Other than the change in assumptions, there were no significant events between the valuation date and the measurement date, so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments, based on the revised assumptions.

Whereas there remains a lot of uncertainty during the COVID-19 pandemic, we continue to monitor developments and the impact it may have on the System. Actual experience, both demographic and economic, will be reflected in subsequent valuations as experience emerges.

The table below provides a summary of the key results during this reporting period.

	Measurement Date	
	September 30, 2021	September 30, 2020
Net Pension Liability	\$ 225,146,431	\$ 359,733,083
Deferred Outflows	(14,097,587)	(85,600,336)
Deferred Inflows	<u>81,166,554</u>	<u>10,948,561</u>
Net Impact on Statement of Net Position	\$ 292,215,398	\$ 285,081,308
Pension Expense (\$ Amount)	\$ 39,973,124	\$ 46,378,876
Pension Expense (% of Payroll)	48.12%	56.12%

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS**  
**GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**SECTION I – BOARD SUMMARY**

The Net Pension Liability (NPL) decreased approximately \$134.6 million since the prior measurement date, primarily due to an investment gain. An actuarial gain and a change in actuarial assumptions helped to further reduce the NPL. The investment gain is recognized over five years, and the actuarial gain and assumption changes are recognized over the average remaining service life, which is three years. Unrecognized amounts are reported as deferred inflows and deferred outflows. As of the end of the reporting year, the System and the City would report a Net Pension Liability of \$225,146,431, Deferred Inflows of \$81,166,554, and Deferred Outflows of \$14,097,587. Consequently, the net impact on the City’s Statement of Net Position due to the System would be \$292,215,398 at the end of the reporting year. In addition, any contributions between the measurement date and the City’s reporting date would be reported as deferred outflows to offset the cash outflow reported.

For the measurement year ending September 30, 2021, the annual pension expense is \$39,973,124 or 48.12% of covered-employee payroll. This amount is not equal to the City’s contribution to the System (\$32,839,034), but instead represents the change in the net impact on the City’s Statement of Net Position plus employer contributions (\$292,215,398 – \$285,081,308 + \$32,839,034). The pension expense for the current year is less than the expense for the prior year. Volatility in pension expense from year to year is to be expected. It will largely be driven by investment gains or losses, but other changes, such as changes in assumptions, can also have a significant impact. A breakdown of the components of the net pension expense is shown in the report.

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS**  
**GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**SECTION II – CERTIFICATION**

The purpose of this report is to provide accounting and financial reporting information under GASB 67 for the Police Retirement System of St. Louis and under GASB 68 for the City of St. Louis. This report is for the use of the Police Retirement System, the City of St. Louis, and their auditors in preparing financial reports in accordance with applicable law and accounting requirements. This report is not appropriate for other purposes, including the measurement of funding requirements for the System or estimating the price to settle the System’s obligations.

In preparing our report, we relied on information (some oral and some written) supplied by the System. This information includes, but is not limited to, the plan provisions, employee data, and financial information. In accordance with the Actuarial Standard of Practice No. 23, we performed an informal examination of the obvious characteristics of the data for reasonableness and consistency and found the data to be appropriate for Actuarial Valuation purposes.

Future actuarial measurements may differ significantly from the current measurements 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; and changes in plan provisions or applicable law.

The membership data and plan provisions are the same as were described in the October 1, 2020 Actuarial Valuation Report. The actuarial assumptions, including both the discount rate and other assumptions, have been updated following an experience study performed by Cheiron subsequent to the October 1, 2020 actuarial valuation. These assumptions, except for the blended discount rate described in Section III, are the same as will be used for the October 1, 2021 actuarial valuation.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board, as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This report was prepared for the Police Retirement System of St. Louis for the purposes described herein and for the use by the Plan auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

Sincerely,  
Cheiron



Stephen T. McElhaney, FSA, FCA, EA  
Principal Consulting Actuary



Patrick T. Nelson, FSA, CERA, EA  
Consulting Actuary



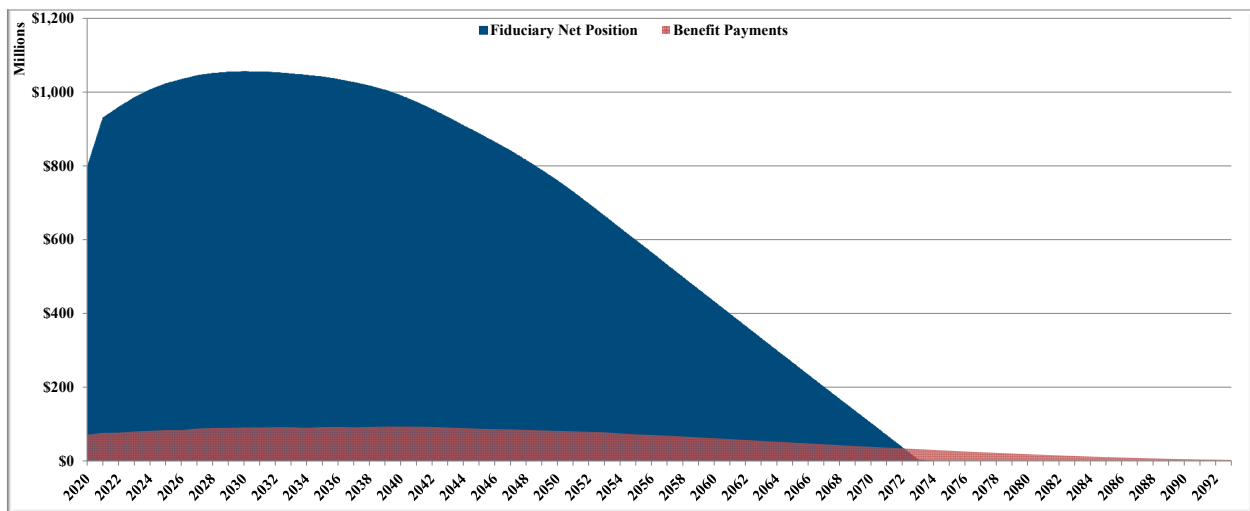
Michael J. Noble, FSA, FCA, EA  
Principal Consulting Actuary

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS  
GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**SECTION III – DETERMINATION OF DISCOUNT RATE**

The City’s funding policy is to contribute exactly the Actuarially Determined Contribution annually. This contribution is equal to the employer’s normal cost. The employer’s normal cost is calculated according to the Aggregate Actuarial Cost Method and is equal to the actuarial present value of future benefits minus the sum of the actuarial value of assets and the present value of future employee contributions, funded over the present value of future salary for current participants.

The discount rate used to measure the Total Pension Liability is 6.51% which is a blend of the assumed long-term expected rate of return of 7.00% on System investments and a municipal bond index rate of 2.26% based on the Bond Buyer GO 20-Year Municipal Bond Index as of September 30, 2021. Following the procedures described in paragraphs 39 - 45 of GASB Statement 67, projections of the System’s fiduciary net position have indicated that it is not expected to be sufficient to make projected benefit payments for current Plan members after 2074. Therefore, the portion of future projected benefit payments after 2074 are discounted at the municipal bond index rate. The results of these projections are shown in the chart below.



This discount rate is intended to be used for accounting and financial reporting but is not appropriate for estimating the price to settle the plan’s liability.

A similar calculation was made as of September 30, 2020 and the fiduciary net position was only expected to be sufficient to make projected benefit payments for current members until 2066. Thus using a blend of the assumed long-term expected rate of return of 7.50% on System investments and a municipal bond index rate of 2.21%, this calculation resulted in a blended discount rate of 6.33% as of September 30, 2020.

The projection of cash flows used to determine the discount rate assumed that employer contributions continued to be made in accordance with the contribution policy in effect for the July 1, 2020 actuarial valuation.

Appendix D shows the details of this calculation.

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS  
GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**SECTION IV – PROJECTION OF TOTAL PENSION LIABILITY**

The Total Pension Liability (TPL) at the end of the measurement year, September 30, 2021, is measured as of a valuation date of October 1, 2020 and projected to September 30, 2021. There were no significant events during the projection period of which we are aware. Because the TPL shown in the prior report was measured as of September 30, 2019 and projected to September 30, 2020, as well as being determined using different actuarial assumptions, it will not match the amounts measured as of September 30, 2020 that are shown in this exhibit.

The table below shows the projection of the TPL at discount rates equal to the rate used for disclosure and plus and minus one percent from the rate used for disclosure.

<b>Projection of Total Pension Liability from Valuation to Measurement Date</b>			
<b>Discount Rate</b>	<b>5.51%</b>	<b>6.51%</b>	<b>7.51%</b>
<b>Valuation Total Pension Liability, September 30, 2020</b>			
Actives	\$ 266,815,083	\$ 224,091,629	\$ 190,388,047
DROP and Re-entered	225,873,250	202,905,785	184,134,151
Retirees	<u>778,961,061</u>	<u>711,578,232</u>	<u>654,328,882</u>
<b>Total</b>	<b>\$ 1,271,649,394</b>	<b>\$ 1,138,575,646</b>	<b>\$ 1,028,851,080</b>
<b>Service Cost</b>	21,675,242	17,375,502	14,156,451
<b>Benefit Payments</b>	71,382,914	71,382,914	71,382,914
<b>Interest</b>	68,716,797	72,391,049	75,156,760
<b>Total Pension Liability, September 30, 2021</b>	<b>\$ 1,290,658,519</b>	<b>\$ 1,156,959,283</b>	<b>\$ 1,046,781,377</b>



**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS**  
**GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**SECTION V – NOTE DISCLOSURES**

The table below shows the changes in the Total Pension Liability (TPL), the Plan Fiduciary Net Position (i.e., fair value of System assets), and the Net Pension Liability (NPL) during the Measurement Year.

	Change in Net Pension Liability		
	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
<b>Balances at September 30, 2020</b>	\$ 1,158,383,361	\$ 798,650,278	\$ 359,733,083
<b>Changes for the year:</b>			
Service cost	20,487,163		20,487,163
Interest	71,739,532		71,739,532
Changes of benefits	0		0
Differences between expected and actual experience	(16,689,147)		(16,689,147)
Changes of assumptions	(5,578,712)		(5,578,712)
Contributions - employer		32,839,034	(32,839,034)
Contributions - member		5,898,084	(5,898,084)
Net investment income		167,232,266	(167,232,266)
Benefit payments	(71,382,914)	(71,382,914)	0
Administrative expense		(1,423,896)	1,423,896
<b>Net changes</b>	<u>(1,424,078)</u>	<u>133,162,574</u>	<u>(134,586,652)</u>
<b>Balances at September 30, 2021</b>	<u>\$ 1,156,959,283</u>	<u>\$ 931,812,852</u>	<u>\$ 225,146,431</u>

During the measurement year, the NPL decreased by approximately \$134.6 million. The service cost and interest cost increased the NPL by approximately \$92.2 million while contributions and investment returns offset by administrative expenses decreased the NPL by approximately \$204.5 million.

There were no changes in benefits during the year. There were actuarial experience gains during the year of approximately \$16.7 million. Assumption changes decreased the NPL by \$5.6 million.

Changes in the discount rate affect the measurement of the TPL. Lower discount rates produce a higher TPL and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the NPL can be very significant for a relatively small change in the discount rate. The table on the next page shows the sensitivity of the NPL to the discount rate.

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS  
GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**SECTION V – NOTE DISCLOSURES**

<b>Sensitivity of Net Pension Liability to Changes in Discount Rate</b>			
	<b>1% Decrease 5.51%</b>	<b>Discount Rate 6.51%</b>	<b>1% Increase 7.51%</b>
Total Pension Liability	\$ 1,290,658,519	\$ 1,156,959,283	\$ 1,046,781,377
Plan Fiduciary Net Position	<u>931,812,852</u>	<u>931,812,852</u>	<u>931,812,852</u>
Net Pension Liability	<u>\$ 358,845,667</u>	<u>\$ 225,146,431</u>	<u>\$ 114,968,525</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	72.2%	80.5%	89.0%

A one percent decrease in the discount rate increases the TPL by approximately 11.6% and increases the NPL by approximately 59.4%. A one percent increase in the discount rate decreases the TPL by approximately 9.5% and decreases the NPL by approximately 48.9%.

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS**  
**GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**SECTION VI – REQUIRED SUPPLEMENTARY INFORMATION**

The schedules of Required Supplementary Information generally start with information as of the implementation of GASB 67 and eventually will build up to 10 years of information. The schedule below shows the changes in NPL and related ratios required by GASB for the eight years since implementation.

Schedule of Changes in Net Pension Liability and Related Ratios								
	FYE 2021	FYE 2020	FYE 2019	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014
<b>Total Pension Liability</b>								
Service cost (MOY)	\$ 20,487,163	\$ 18,188,606	\$ 15,678,890	\$ 16,369,318	\$ 17,988,134	\$ 12,617,971	\$ 12,977,679	\$ 12,991,999
Interest (includes interest on service cost)	71,739,532	72,663,853	71,309,613	68,899,130	66,042,714	67,036,489	66,579,275	65,906,383
Changes of benefit terms	0	0	0	0	0	0	0	0
Differences between expected and actual experience	(16,689,147)	(16,422,842)	22,854,628	(4,886,531)	3,911,067	(3,684,265)	(2,041,444)	0
Changes of assumptions	(5,578,712)	42,292,759	59,418,045	(59,545,809)	(55,153,649)	131,846,504	16,248,637	6,650,362
Benefit payments, including refunds of member contributions	(71,382,914)	(69,963,781)	(68,548,936)	(68,576,111)	(63,452,580)	(62,637,432)	(69,533,077)	(60,973,465)
<b>Net change in total pension liability</b>	<b>\$ (1,424,078)</b>	<b>\$ 46,758,595</b>	<b>\$ 100,712,240</b>	<b>\$ (47,740,003)</b>	<b>\$ (30,664,314)</b>	<b>\$ 145,179,267</b>	<b>\$ 24,231,070</b>	<b>\$ 24,575,279</b>
<b>Total pension liability - beginning</b>	<b>1,158,383,361</b>	<b>1,111,624,766</b>	<b>1,010,912,526</b>	<b>1,058,652,529</b>	<b>1,089,316,843</b>	<b>944,137,576</b>	<b>919,906,506</b>	<b>895,331,227</b>
<b>Total pension liability - ending</b>	<b>\$ 1,156,959,283</b>	<b>\$ 1,158,383,361</b>	<b>\$ 1,111,624,766</b>	<b>\$ 1,010,912,526</b>	<b>\$ 1,058,652,529</b>	<b>\$ 1,089,316,843</b>	<b>\$ 944,137,576</b>	<b>\$ 919,906,506</b>
<b>Plan fiduciary net position</b>								
Contributions - employer	\$ 32,839,034	\$ 35,335,830	\$ 35,970,630	\$ 33,104,561	\$ 33,826,528	\$ 30,778,664	\$ 30,600,069	\$ 32,324,823
Contributions - member	5,898,084	6,169,551	5,228,438	5,129,154	4,653,968	4,376,867	4,487,942	4,438,346
Net investment income	167,232,266	43,802,433	17,514,881	51,089,258	93,520,079	52,927,643	(8,325,611)	48,094,636
Benefit payments, including refunds of member contributions	(71,382,914)	(69,963,781)	(68,548,936)	(68,576,111)	(63,452,580)	(62,637,432)	(69,533,077)	(60,973,465)
Administrative expense	(1,423,896)	(1,446,227)	(1,572,951)	(1,165,930)	(1,206,161)	(1,102,866)	(1,125,310)	(1,095,653)
<b>Net change in plan fiduciary net position</b>	<b>\$ 133,162,574</b>	<b>\$ 13,897,806</b>	<b>\$ (11,407,938)</b>	<b>\$ 19,580,932</b>	<b>\$ 67,341,834</b>	<b>\$ 24,342,876</b>	<b>\$ (43,895,987)</b>	<b>\$ 22,788,687</b>
<b>Plan fiduciary net position - beginning</b>	<b>798,650,278</b>	<b>784,752,472</b>	<b>796,160,410</b>	<b>776,579,478</b>	<b>709,237,644</b>	<b>684,894,768</b>	<b>728,790,755</b>	<b>706,276,668</b>
<b>Plan fiduciary net position - ending</b>	<b>\$ 931,812,852</b>	<b>\$ 798,650,278</b>	<b>\$ 784,752,472</b>	<b>\$ 796,160,410</b>	<b>\$ 776,579,478</b>	<b>\$ 709,237,644</b>	<b>\$ 684,894,768</b>	<b>\$ 729,065,355</b>
<b>Net pension liability - ending</b>	<b>\$ 225,146,431</b>	<b>\$ 359,733,083</b>	<b>\$ 326,872,294</b>	<b>\$ 214,752,116</b>	<b>\$ 282,073,051</b>	<b>\$ 380,079,199</b>	<b>\$ 259,242,808</b>	<b>\$ 190,841,151</b>
<b>Plan fiduciary net position as a percentage of the total pension liability</b>	80.54%	68.95%	70.60%	78.76%	73.36%	65.11%	72.54%	79.25%
<b>Covered payroll</b>	\$ 83,068,458	\$ 82,639,813	\$ 82,494,022	\$ 76,710,452	\$ 76,141,625	\$ 72,684,487	\$ 72,325,153	\$ 72,151,450
<b>Net pension liability as a percentage of covered payroll</b>	271.04%	435.30%	396.24%	279.95%	370.46%	522.92%	358.44%	264.50%



**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS  
GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**SECTION VII – EMPLOYER REPORTING AMOUNTS**

The City of St. Louis was required to implement GASB 68 for its reporting date of June 30, 2015. The schedules in this section are provided for the City of St. Louis for its 2022 reporting.

The impact of experience gains or losses and assumption changes on the TPL are recognized in expense over the average expected remaining service life of all active and inactive members of the System. As of the measurement date, this recognition period was 2.86 years. The value rounded to the nearest year and used in this calculation was 3 years.

The impact of investment gains or losses is recognized over a period of five years.

The table below summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over the next five years.

<b>Schedule of Deferred Inflows and Outflows of Resources</b>		
	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience	\$ 0	\$ 16,600,378
Changes in assumptions	14,097,587	3,719,141
Net difference between projected and actual earnings on pension plan investments	0	60,847,035
<b>Total</b>	<b><u>\$ 14,097,587</u></b>	<b><u>\$ 81,166,554</u></b>
Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:		
<b>Measurement year ended June 30:</b>		
2022	\$ (8,301,114)	
2023	(18,123,219)	
2024	(18,927,030)	
2025	(21,717,604)	
2026	0	
Thereafter	0	

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS**  
**GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**SECTION VII – EMPLOYER REPORTING AMOUNTS**

The table below provides details on the current balances of deferred inflows and outflows of resources along with the recognition of each base for each of the current and following five years, as well as the total for any years thereafter.

Detailed Schedule of Deferred Inflows and Outflows of Resources									
<b>Recognition of Experience (Gains) and Losses</b>									
<b>Experience</b>	<b>Recognition</b>	<b>Total</b>	<b>Remaining Amounts</b>		<b>Recognition Year</b>				
<u>Year</u>	<u>Period</u>	<u>Amount</u>	<u>BOY</u>	<u>EOY</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
2021	3.00	\$ (16,689,147)	\$ (16,689,147)	\$ (11,126,098)	\$ (5,563,049)	\$ (5,563,049)	\$ (5,563,049)	\$ 0	\$ 0
2020	3.00	(16,422,842)	(10,948,561)	(5,474,280)	(5,474,281)	(5,474,280)	0	0	0
2019	3.00	22,854,628	7,618,210	0	7,618,210	0	0	0	0
2018	3.00	(4,886,531)	0	0	0	0	0	0	0
Deferred Outflows			\$ 7,618,210	\$ 0	\$ 7,618,210	\$ 0	\$ 0	\$ 0	\$ 0
Deferred Inflows			(27,637,708)	(16,600,378)	(11,037,330)	(11,037,329)	(5,563,049)	0	0
Net Change in Pension Expense		\$ (20,019,498)	\$ (16,600,378)	\$ (3,419,120)	\$ (11,037,329)	\$ (5,563,049)	\$ 0	\$ 0	\$ 0
<b>Recognition of Assumption Changes</b>									
<b>Experience</b>	<b>Recognition</b>	<b>Total</b>	<b>Remaining Amounts</b>		<b>Recognition Year</b>				
<u>Year</u>	<u>Period</u>	<u>Amount</u>	<u>BOY</u>	<u>EOY</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
2021	3.00	\$ (5,578,712)	\$ (5,578,712)	\$ (3,719,141)	\$ (1,859,571)	\$ (1,859,571)	\$ (1,859,570)	\$ 0	\$ 0
2020	3.00	42,292,759	28,195,173	14,097,587	14,097,586	14,097,587	0	0	0
2019	3.00	59,418,045	19,806,015	0	19,806,015	0	0	0	0
2018	3.00	(59,545,809)	0	0	0	0	0	0	0
Deferred Outflows			\$ 48,001,188	\$ 14,097,587	\$ 33,903,601	\$ 14,097,587	\$ 0	\$ 0	\$ 0
Deferred Inflows			(5,578,712)	(3,719,141)	(1,859,571)	(1,859,571)	(1,859,570)	0	0
Net Change in Pension Expense		\$ 42,422,476	\$ 10,378,446	\$ 32,044,030	\$ 12,238,016	\$ (1,859,570)	\$ 0	\$ 0	\$ 0
<b>Recognition of Investment (Gains) and Losses</b>									
<b>Experience</b>	<b>Recognition</b>	<b>Total</b>	<b>Remaining Amounts</b>		<b>Recognition Year</b>				
<u>Year</u>	<u>Period</u>	<u>Amount</u>	<u>BOY</u>	<u>EOY</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
2021	5.00	#####	\$(108,588,012)	\$(86,870,410)	\$(21,717,602)	\$(21,717,602)	\$(21,717,602)	\$(21,717,602)	\$(21,717,604)
2020	5.00	13,952,852	11,162,282	8,371,712	2,790,570	2,790,570	2,790,570	2,790,572	0
2019	5.00	41,132,152	24,679,292	16,452,862	8,226,430	8,226,430	8,226,432	0	0
2018	5.00	5,994,001	2,397,601	1,198,801	1,198,800	1,198,801	0	0	0
2017	5.00	(41,291,193)	(8,258,237)	0	(8,258,237)	0	0	0	0
Net Change in Pension Expense		\$ (78,607,074)	\$ (60,847,035)	\$ (17,760,039)	\$ (9,501,801)	\$ (10,700,600)	\$ (18,927,030)	\$ (21,717,604)	\$ (21,717,604)

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**SECTION VII – EMPLOYER REPORTING AMOUNTS**

The annual pension expense recognized by the City of St. Louis can be calculated in two different ways. First, it is the change in the amounts reported on the City’s Statement of Net Position that relate to PRS and are not attributable to employer contributions. That is, it is the change in NPL plus the changes in deferred outflows and inflows plus employer contributions.

Alternatively, annual pension expense can be calculated by its individual components. While GASB does not require or suggest the organization of the individual components shown in the table below, we believe it helps to understand the level and volatility of pension expense.

<b>Calculation of Pension Expense</b>		
	<b>Measurement Year Ending</b>	
	<b>2021</b>	<b>2020</b>
Change in Net Pension Liability	\$ (134,586,652)	\$ 32,860,789
Change in Deferred Outflows	71,502,749	(11,288,858)
Change in Deferred Inflows	70,217,993	(10,528,885)
Employer Contributions	<u>32,839,034</u>	<u>35,335,830</u>
<b>Pension Expense</b>	<b>\$ 39,973,124</b>	<b>\$ 46,378,876</b>
<b>Pension Expense as % of Payroll</b>	<b>48.12%</b>	<b>56.12%</b>
<b>Operating Expenses</b>		
Service cost	\$ 20,487,163	\$ 18,188,606
Employee contributions	(5,898,084)	(6,169,551)
Administrative expenses	<u>1,423,896</u>	<u>1,446,227</u>
Total	\$ 16,012,975	\$ 13,465,282
<b>Financing Expenses</b>		
Interest cost	\$ 71,739,532	\$ 72,663,853
Expected return on assets	<u>(58,644,254)</u>	<u>(57,755,285)</u>
Total	\$ 13,095,278	\$ 14,908,568
<b>Changes</b>		
Benefit changes	\$ 0	\$ 0
Recognition of assumption changes	32,044,030	14,054,998
Recognition of liability gains and losses	(3,419,120)	515,085
Recognition of investment gains and losses	<u>(17,760,039)</u>	<u>3,434,943</u>
Total	\$ 10,864,871	\$ 18,005,026
<b>Pension Expense</b>	<b>\$ 39,973,124</b>	<b>\$ 46,378,876</b>

First, there are components referred to as operating expenses. These are items directly attributable to the operation of the System during the measurement year. Service cost less employee contributions represent the increase in employer-provided benefits attributable to the year, and administrative expenses are the cost of operating the System for the year.

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**SECTION VII – EMPLOYER REPORTING AMOUNTS**

Second, there are the financing expenses: the interest on the Total Pension Liability less the expected return on assets.

The final category is changes. This category will drive most of the volatility in pension expense from year to year. It includes any changes in benefits made during the year and the recognized amounts due to assumption changes, gains or losses on the TPL, and investment gains or losses. The total pension expense for the current year is less than that of the prior year, decreasing by about \$6.4 million. The recognition of changes decreased by about \$7.1 million, which is somewhat more than the total pension expense change.



**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS  
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**APPENDIX A – MEMBERSHIP INFORMATION**

<b>Participant Data Reconciliation</b>					
	<b>Actives</b>	<b>DROP</b>	<b>Retirees</b>	<b>Surviving Spouses and Children</b>	<b>Total</b>
<b>Participants as of October 1, 2019</b>	<b>1,195</b>	<b>80</b>	<b>1,444</b>	<b>484</b>	<b>3,203</b>
New Entrants	117				117
Return to Active	1		(1)		0
Nonvested terminations	(64)				(64)
Retired	(29)	(4)	33		0
Entered into DROP	(7)	7			0
Re-Entry from DROP	25	(25)			0
Deaths without beneficiary			(17)	(20)	(37)
Deaths with Beneficiary	(1)	(1)	(28)	31	1
Disabled	(8)		8		0
Benefits Expired				(1)	(1)
Data Correction					0
Net Change	34	(23)	(5)	10	16
<b>Participants as of October 1, 2020</b>	<b>1,229</b>	<b>57</b>	<b>1,439</b>	<b>494</b>	<b>3,219</b>

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**APPENDIX A – MEMBERSHIP INFORMATION**

Distribution of Active Participants									
Years of Service									
Age	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 +	Total
Under 20									<b>0</b>
20 – 24	68 \$46,700								<b>68 \$46,700</b>
25 – 29	191 \$51,241	13 \$55,335							<b>204 \$51,502</b>
30 – 34	94 \$50,964	61 \$60,487	27 \$65,151						<b>182 \$56,260</b>
35 – 39	42 \$51,399	35 \$62,420	144 \$67,486	17 \$68,361					<b>238 \$63,965</b>
40 – 44	15 \$53,483	13 \$62,305	63 \$68,142	83 \$70,578	4 \$72,995				<b>178 \$67,725</b>
45 – 49	6 \$52,313	5 \$61,720	19 \$69,168	34 \$69,025	50 \$74,240	6 \$74,883			<b>120 \$70,373</b>
50 – 54	2 \$44,731		7 \$69,114	20 \$68,756	65 \$74,926	32 \$78,434	1 \$69,387		<b>127 \$73,999</b>
55 – 59	1 \$47,815		1 \$83,490	5 \$73,521	31 \$73,534	50 \$76,771			<b>88 \$75,193</b>
60 – 64			2 \$66,036	1 \$66,913	7 \$76,383	9 \$79,925	3 \$106,893		<b>24 \$80,237</b>
65 +								2 \$76,006	<b>0</b>
<b>Total</b>	<b>419 \$50,514</b>	<b>127 \$60,727</b>	<b>263 \$67,618</b>	<b>160 \$69,854</b>	<b>157 \$74,448</b>	<b>97 \$77,496</b>	<b>4 \$97,516</b>	<b>2 \$76,006</b>	<b>1,229 \$63,129</b>

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS  
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**APPENDIX A – MEMBERSHIP INFORMATION**

Statistics for Active Participants

	Count	Age	Average	
			Service	Compensation
As of October 1, 2020				
Continuing	1,112	40.6	12.8	\$ 64,889
New	117	27.8	0.5	46,398
Total	1,229	39.4	11.6	63,129
As of October 1, 2019				
Continuing	1,089	40.4	12.8	\$ 64,972
New	106	29.6	0.5	45,203
Total	1,195	39.4	11.7	63,218

Statistics for DROP Participants

	Count	Age	Service	Compensation	Average	
					DROP Account Balance	Monthly Benefit Amount
As of October 1, 2020	57	52.5	23.2	\$ 74,814	\$ 87,011	\$ 3,069
As of October 1, 2019	80	51.3	21.5	\$ 73,521	\$ 86,369	\$ 2,584

Statistics for Inactive Participants

	Count	Total Monthly Benefits	Average Monthly Benefits
As of October 1, 2020			
Service Retirees	1,271	\$3,744,775	\$ 2,946
Ordinary Disabilities	20	28,362	1,418
Accidental Disabilities	148	414,364	2,800
Surviving Spouses	448	671,853	1,500
Children	46	27,500	598
Total	1,933	\$4,886,854	\$ 2,528
As of October 1, 2019			
Service Retirees	1,278	\$3,727,111	\$ 2,916
Ordinary Disabilities	21	28,124	1,339
Accidental Disabilities	145	393,560	2,714
Surviving Spouses	437	643,153	1,472
Children	47	27,410	583
Total	1,928	\$4,819,358	\$ 2,500

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS  
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**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of September 30, 2021 (except for the discount rate as described in Section III) is provided below, including any assumptions that differ from those used in the October 1, 2020 actuarial valuation.

**A. Actuarial Assumptions**

**1. Mortality Rates:**

- Actives, Ordinary: Pub-2010 Safety Employee Below-Median Income Weighted mortality, projected fully generationally with Scale MP-2020
- Actives, Accidental: 0.03% per year for all ages in addition to ordinary mortality rates.
- Healthy Retirees: Pub-2010 Safety Healthy Retiree Below-Median Income Weighted mortality, projected fully generationally with Scale MP-2020
- Disabled Retirees: Pub-2010 Safety Disabled Retiree mortality, projected fully generationally with Scale MP-2020
- Beneficiaries: Pub-2010 General Retiree Below-Median Income Weighted mortality, projected fully generationally with Scale MP-2020

**2. Disability:**

10% of disabilities are assumed ordinary and the remaining 90% are accidental disabilities.

Age	Disability (%)
25	0.0256
35	0.5080
45	0.9400
55	1.0000
60	1.0000

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**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

**3. Withdrawal Rates before Retirement:**

Service-related rates based on experience; see the table of sample rates.

Years of Service	Withdrawal (%)	Years of Service	Withdrawal (%)
0	13.0	8	5.0
1	12.0	9	4.0
2	11.0	10	3.5
3	10.0	11	3.0
4	9.0	12	2.5
5	8.0	13	2.0
6	7.0	14	1.5
7	6.0	15+	1.5

**4. DROP Rates:**

Years of Service	DROP Rate (%)
20	40
21	15
22-29	5
30	65

**5. Retirement Rates:**

Years of Service	Retirement Rate (%)
20	14
21	10
22-23	8
24-26	4
27-29	2
30	35

DROP and retirement rates are additive, so at 30 years of service, the chance of either entering DROP or retirement is 100%. All members are assumed to retire by age 65.

**6. Marriage**

75% of male active members are assumed to be married and 50% of female active members. The male spouse is assumed to be 3 years older than the female.

**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

**7. Children**

Each member is assumed to have 1.5 children at retirement, disability, or death; the child is assumed to be 30 years younger than the member and to receive benefits until he or she is 20 years old.

**8. DROP Participation**

Members participate in DROP based on their completed service; see table for rates

- No disability is assumed while in DROP
- One-third of participants are expected to retire from DROP after four years
- One-third of participants are expected to re-enter the plan after five years in DROP and remain in the plan for two years
- The remaining third of participants are expected to re-enter the plan after five years in DROP and remain in the plan for eight years

**9. Special Advisor and Consultant Benefits**

Assumed to be paid to all eligible members.

**10. Form of Payment**

There are no optional forms of payment; automatic survivor benefits are paid to all members.

**11. Investment Return**

7.00% compounded annually for funding purposes.

**12. Salary Increases**

Wage inflation is assumed to be 3.0%. Individual salaries are expected to increase according to the following table which includes wage inflation and promotion.

Service	Salary Increase (%)
0-9	6.25
10-19	3.50
20+	3.00

**13. Cost-of-Living Adjustments**

2.5% per year.

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**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

**14. Expenses**

Prior year actual expenses increased by the assumed inflation rate (2.5%), rounded to the nearest \$1,000.

**15. Interest on Member Contributions**

4% per year

**16. Rationale for actuarial assumptions**

The actuarial assumptions were adopted by the Board of Trustees based upon recommendations made in an actuarial experience study performed by Cheiron covering the years 2015 through 2020 subsequent to the October 1, 2020 valuation. The rationale for such changes is contained in the experience study report presented to the Board on June 23, 2021 and in a discount rate review presented to the Board on September 29, 2021.

**17. Changes in Actuarial Assumptions from the October 1, 2020 actuarial valuation**

The mortality, termination, DROP and retirement, investment return, and percent married investment assumptions were changed since the October 1, 2020 actuarial valuation. Please refer to the October 1, 2020 actuarial valuation report for a complete list of prior assumptions.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

**B. Actuarial Methods**

**1. Actuarial Value of Assets**

The market value of assets less unrecognized returns in each of the last five years, but no earlier than October 1, 2005. Initial unrecognized return is equal to the difference between the actual market return and expected return on the actuarial value of assets and is recognized over a five-year period. The actuarial value is further adjusted, if necessary, to be within 20% of the market value. The actuarial asset value was initialized at the market value as of October 1, 2005.

**2. Actuarial Cost Method**

For determining contributions, the cost method used in this valuation is the Aggregate Cost method. Under this method, the difference between the present value of future benefits and the actuarial value of assets is allocated as a level percentage over the future salary of the participants.

There is no actuarial accrued liability with this method. For accounting purposes, the actuarial accrued liability is determined under the entry age normal method.

**3. Valuation Software**

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in the assumptions or output of ProVal that would affect this actuarial valuation.

Projections in this valuation were developed using P-scan, our proprietary tool for the intended purpose of developing projections. The projections shown in this presentation cover multiple individual scenarios and the variables are not necessarily correlated. We are not aware of any material inconsistencies, unreasonable output resulting from the aggregation of assumptions, material limitations, or known weaknesses that would affect the projections shown in this presentation.

**4. Changes in Actuarial Methods since the October 1, 2019 actuarial valuation**

None



**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS  
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**APPENDIX C – SUMMARY OF PLAN PROVISIONS**

The plan provisions are the same as those summarized in the October 1, 2020 Actuarial Valuation Report.

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**APPENDIX D – DETERMINATION OF DISCOUNT RATE**

<b>FYE</b>	<b>Projected Beginning Fiduciary Net Position</b>	<b>Projected Total Contributions</b>	<b>Projected Benefit Payments</b>	<b>Projected Administrative Expense</b>	<b>Projected Investment Earnings</b>	<b>Projected Ending Fiduciary Net Position</b>	<b>"Funded" Portion of Benefit Payments</b>	<b>"Unfunded" Portion of Benefit Payments</b>
2021	798,650,278	38,737,118	71,382,914	1,423,896	167,232,266	931,812,852	71,382,914	0
2022	931,812,852	41,738,174	75,794,232	1,386,997	64,007,373	960,377,169	75,794,232	0
2023	960,377,169	38,529,472	76,658,073	1,344,314	65,868,216	986,772,470	76,658,073	0
2024	986,772,470	35,024,342	80,015,351	1,283,887	67,481,844	1,007,979,418	80,015,351	0
2025	1,007,979,418	30,763,403	81,757,075	1,233,245	68,761,533	1,024,514,034	81,757,075	0
2026	1,024,514,034	26,693,647	83,754,503	1,203,741	69,711,212	1,035,960,648	83,754,503	0
2027	1,035,960,648	25,332,781	84,092,532	1,174,676	70,455,019	1,046,481,241	84,092,532	0
2028	1,046,481,241	23,642,597	87,479,031	1,112,641	71,018,916	1,052,551,082	87,479,031	0
2029	1,052,551,082	22,659,584	89,501,037	1,085,665	71,341,337	1,055,965,301	89,501,037	0
2030	1,055,965,301	20,942,136	90,036,310	1,005,830	71,505,567	1,057,370,864	90,036,310	0
2031	1,057,370,864	19,680,391	91,027,872	955,722	71,528,149	1,056,595,810	91,027,872	0
2032	1,056,595,810	18,698,117	90,829,068	921,857	71,448,102	1,054,991,104	90,829,068	0
2033	1,054,991,104	17,893,132	91,757,019	888,338	71,277,299	1,051,516,177	91,757,019	0
2034	1,051,516,177	17,117,582	91,710,756	861,435	71,009,887	1,047,071,456	91,710,756	0
2035	1,047,071,456	16,560,402	90,319,335	842,097	70,728,126	1,043,198,552	90,319,335	0
2036	1,043,198,552	15,834,490	92,439,395	813,567	70,360,080	1,036,140,160	92,439,395	0
2037	1,036,140,160	15,167,972	92,791,997	798,315	69,831,452	1,027,549,271	92,791,997	0
2038	1,027,549,271	14,062,757	91,496,597	753,477	69,238,176	1,018,600,130	91,496,597	0
2039	1,018,600,130	13,193,998	92,783,518	720,925	68,538,684	1,006,828,370	92,783,518	0
2040	1,006,828,370	11,909,156	94,083,158	663,780	67,627,700	991,618,287	94,083,158	0
2041	991,618,287	10,208,314	93,863,454	568,842	66,515,298	973,909,603	93,863,454	0
2042	973,909,603	8,778,748	93,715,570	490,054	65,234,301	953,717,029	93,715,570	0
2043	953,717,029	7,845,483	92,305,875	440,202	63,838,929	932,655,363	92,305,875	0
2044	932,655,363	7,083,249	91,482,920	396,381	62,368,209	910,227,520	91,482,920	0
2045	910,227,520	6,382,746	89,103,432	354,632	60,857,467	888,009,669	89,103,432	0
2046	888,009,669	5,664,806	87,404,283	307,063	59,337,616	865,300,746	87,404,283	0
2047	865,300,746	4,968,197	86,389,343	264,145	57,760,421	841,375,876	86,389,343	0
2048	841,375,876	3,990,394	85,755,794	214,129	56,075,556	815,471,903	85,755,794	0
2049	815,471,903	2,999,831	83,928,108	164,130	54,292,802	788,672,299	83,928,108	0
2050	788,672,299	2,066,999	83,041,366	110,258	52,417,098	760,004,773	83,041,366	0

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**APPENDIX D – DETERMINATION OF DISCOUNT RATE**

<b>FYE</b>	<b>Projected Beginning Fiduciary Net Position</b>	<b>Projected Total Contributions</b>	<b>Projected Benefit Payments</b>	<b>Projected Administrative Expense</b>	<b>Projected Investment Earnings</b>	<b>Projected Ending Fiduciary Net Position</b>	<b>"Funded" Portion of Benefit Payments</b>	<b>"Unfunded" Portion of Benefit Payments</b>
2051	760,004,773	1,076,371	81,926,082	53,808	50,416,602	729,517,855	81,926,082	0
2052	729,517,855	316,059	80,725,560	0	48,299,516	697,407,870	80,725,560	0
2053	697,407,870	230,620	79,306,805	0	46,097,694	664,429,379	79,306,805	0
2054	664,429,379	123,927	77,682,353	0	43,841,423	630,712,377	77,682,353	0
2055	630,712,377	37,026	74,746,407	0	41,579,263	597,582,259	74,746,407	0
2056	597,582,259	28,396	72,401,322	0	39,340,547	564,549,880	72,401,322	0
2057	564,549,880	24,700	70,511,629	0	37,093,174	531,156,125	70,511,629	0
2058	531,156,125	9,825	68,307,846	0	34,830,927	497,689,030	68,307,846	0
2059	497,689,030	0	65,862,150	0	32,572,044	464,398,924	65,862,150	0
2060	464,398,924	0	63,616,959	0	30,318,990	431,100,955	63,616,959	0
2061	431,100,955	0	61,346,336	0	28,066,259	397,820,878	61,346,336	0
2062	397,820,878	0	59,053,441	0	25,815,548	364,582,985	59,053,441	0
2063	364,582,985	0	56,754,241	0	23,568,007	331,396,751	56,754,241	0
2064	331,396,751	0	54,451,989	0	21,324,186	298,268,948	54,451,989	0
2065	298,268,948	0	52,149,920	0	19,084,450	265,203,478	52,149,920	0
2066	265,203,478	0	49,847,989	0	16,849,072	232,204,561	49,847,989	0
2067	232,204,561	0	47,548,595	0	14,618,265	199,274,231	47,548,595	0
2068	199,274,231	0	45,253,972	0	12,392,096	166,412,355	45,253,972	0
2069	166,412,355	0	42,979,867	0	10,170,012	133,602,500	42,979,867	0
2070	133,602,500	0	40,732,174	0	7,950,661	100,820,986	40,732,174	0
2071	100,820,986	0	38,510,233	0	5,732,407	68,043,160	38,510,233	0
2072	68,043,160	0	36,316,421	0	3,513,444	35,240,183	36,316,421	0
2073	35,240,183	0	34,154,882	0	1,291,610	2,376,912	34,154,882	0
2074	2,376,912	0	32,026,573	0	0	0	2,376,912	29,649,662
2075	0	0	29,933,325	0	0	0	0	29,933,325
2076	0	0	27,877,811	0	0	0	0	27,877,811
2077	0	0	25,863,806	0	0	0	0	25,863,806
2078	0	0	23,895,878	0	0	0	0	23,895,878
2079	0	0	21,979,188	0	0	0	0	21,979,188
2080	0	0	20,119,442	0	0	0	0	20,119,442

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS  
GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**APPENDIX D – DETERMINATION OF DISCOUNT RATE**

FYE	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2081	0	0	18,322,206	0	0	0	0	18,322,206
2082	0	0	16,593,199	0	0	0	0	16,593,199
2083	0	0	14,938,211	0	0	0	0	14,938,211
2084	0	0	13,362,543	0	0	0	0	13,362,543
2085	0	0	11,871,283	0	0	0	0	11,871,283
2086	0	0	10,469,138	0	0	0	0	10,469,138
2087	0	0	9,160,167	0	0	0	0	9,160,167
2088	0	0	7,947,638	0	0	0	0	7,947,638
2089	0	0	6,833,900	0	0	0	0	6,833,900
2090	0	0	5,820,112	0	0	0	0	5,820,112
2091	0	0	4,906,239	0	0	0	0	4,906,239
2092	0	0	4,091,060	0	0	0	0	4,091,060
2093	0	0	3,371,894	0	0	0	0	3,371,894
2094	0	0	2,744,877	0	0	0	0	2,744,877
2095	0	0	2,205,118	0	0	0	0	2,205,118
2096	0	0	1,746,688	0	0	0	0	1,746,688
2097	0	0	1,362,931	0	0	0	0	1,362,931
2098	0	0	1,046,607	0	0	0	0	1,046,607
2099	0	0	790,133	0	0	0	0	790,133
2100	0	0	585,849	0	0	0	0	585,849
2101	0	0	426,187	0	0	0	0	426,187
2102	0	0	303,896	0	0	0	0	303,896
2103	0	0	212,218	0	0	0	0	212,218
2104	0	0	145,010	0	0	0	0	145,010
2105	0	0	96,878	0	0	0	0	96,878
2106	0	0	63,233	0	0	0	0	63,233
2107	0	0	40,301	0	0	0	0	40,301
2108	0	0	25,068	0	0	0	0	25,068
2109	0	0	15,213	0	0	0	0	15,213
Discount Rate:							7.00%	2.26%

**THE POLICE RETIREMENT SYSTEM OF ST. LOUIS  
GASB 67 AND 68 REPORTING FOR SEPTEMBER 30, 2021 MEASUREMENT DATE**

**APPENDIX D – DETERMINATION OF DISCOUNT RATE**

FYE	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
						Present Value:	\$ 1,155,078,745	\$ 82,458,382
						Total Present Value:		\$ 1,271,658,740
						GASB Discount Rate:		6.33%

**APPENDIX E – GLOSSARY OF TERMS**

**1. Actuarially Determined Contribution**

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

**2. Actuarial Valuation Date**

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer’s reporting date.

**3. Deferred Inflow of Resources**

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

**4. Deferred Outflow of Resources**

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability, or investment losses that are recognized in future reporting periods.

**5. Entry Age Actuarial Cost Method**

The actuarial cost method required for GASB 67 and 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.

**6. Measurement Date**

The date as of which the Total Pension Liability and Plan Fiduciary Net Position are measured. The Total Pension Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the plan.

**APPENDIX E – GLOSSARY OF TERMS**

**7. Net Pension Liability**

The liability of employers and nonemployer contributing entities for employees for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Plan Fiduciary Net Position.

**8. Plan Fiduciary Net Position**

The fair or market value of assets.

**9. Reporting Date**

The last day of the plan or employer’s fiscal year.

**10. Service Cost**

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 67 and 68. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

**11. Total Pension Liability**

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 67 and 68. The Total Pension Liability is the actuarial liability calculated under the entry age actuarial cost method. This measurement generally is not appropriate for estimating the cost to settle the Plan’s liabilities.



*Classic Values, Innovative Advice*