Public School Retirement System of the City of St. Louis

Presentation to the Board of Education of the City of St. Louis

Susan Kane
Executive Director

Introduction

- ▶ Public School Retirement System of the City of St. Louis was created by the Missouri legislature in 1944
 - Retirement System is organized under Sections 169.410 to 169.540 of the Missouri Revised Statutes
- Retirement System provides pension benefits to all personnel employed by the St. Louis Public Schools and Charter Schools operating in the City of St. Louis
- ▶ Retirement System has:
 - ▶ 4,984 Active members (who pay into the system)
 - ▶ 4,334 Retired members (who currently receive benefits)
 - ▶ 3,560 Inactive members
- ► Funded ratio is currently 73.56%

Challenges Facing the Retirement System

- Number of Active members has slowly decreased over the years:
 - ▶ 6,067 in 2000
 - > 5,549 in 2005
 - ▶ 4,825 in 2010
 - ▶ 4,984 in 2021
- ► Funded ratio has largely remained flat since 2017
 - > 73.7% in 2017
 - > 73.56% in 2022
- One of the most important factors for a well funded pension plan is the system receiving the full actuarially required contribution necessary to fund the benefits promised to members
 - ► This has not occurred in recent years

Challenges Facing the Retirement System (cont.)

- In 2017 the Missouri legislature decreased overall contributions to the Retirement System, while at the same time increasing benefits.
- ▶ Beginning in 2018, the employer contribution was capped at 16% and will decrease 0.5% every year until capped at 9.0% in 2032
 - ▶ These contribution caps have been lower than the ARC contribution
- Normal Retirement eligibility was lowered to Rule of 80 from the Rule of 85
- While member contribution was increased to 9.0%, member contributions are treated as liabilities as Missouri law allows terminated members to withdraw their accumulated contributions with interest
- The cap on contributions puts a much greater emphasis on investment returns
- ► However, cap on contributions prevents the Retirement System from making up for years with lower investment returns

Proposed Legislative Solution

- Retirement System proposes an agreed upon legislative fix modeled on the legislative proposal agreed to by Kansas City Public School Retirement System and Kansas City Public Schools in 2018
- ▶ In 2013 legislation was passed that similarly limited the KCPSRS to 9% for employer contributions and 9% for member contributions.
 - ▶ These contribution caps were likewise lower that the ARC contribution
- ▶ Looking to have legislation introduced for 2023 legislative session
- ► Goal is to stop slide of contribution rate and to increase Retirement System funding, while also limiting costs for contributing employers

Proposed Legislative Solution (cont.)

- Overview of proposed legislation:
 - Employer contribution rate would remain at 14% for 2023
 - For 2024 and thereafter:
 - ▶ If the funded ratio is less than 100%, then the Employer contribution is the greater of 14% or the difference between the total ARC rate and the 9% Employee rate;
 - ▶ Employer and Employee rates limited to annual 1% increase or 0.5% decrease
 - ▶ If the funded ratio exceeds 100%, and the total ARC rate exceeds 18% then the Employer contribution rate is the difference between the total ARC rate and the 9% Employee rate;
 - ▶ Employer and Employee rates limited to annual 1% increase or 0.5% decrease
 - ▶ If the funded ratio exceeds 100%, and the total ARC is 18% or less, then the contribution rate is allocated equally between Employer and Employee.
 - ▶ (i.e. if 16%, 8% would be paid by employer and 8% by member)
- Member benefits and Rule of 80 would be unchanged

Proposed Legislative Solution (cont.)

- Maintains stability and lower cost for employer contributions
- Limits increases for employer contributions (increases limited to 1% per year)
- ▶ Provides path for 100% funding
- ▶ Puts Retirement System in better financial footing even if years of lower investment returns
- ▶ Retirement System would be in a better position to consider a COLA

Public School Retirement System of the City of St. Louis January 1, 2022 Projections

Scenario 3 – Proposed Plan Provisions: Achieve Expected Return on Assets (EROA) (7.00% Actual Asset Return) (amounts in thousands)

2024 2027 2029 2030 2022 2023 2025 2026 2028 2031 2032 2033 2034 2035 2036 Liabilities Present Value of Future Benefits 1.395.565 1.395.326 1.395.936 1.397.011 1.399.188 1.402.072 1,405,083 1,409,791 1.415.555 1.422.307 1,430,739 1.440.950 1.452.194 1.465.044 1.478.806 Entry Age Normal (EAN) Accrued Liability 1,269,693 1,267,512 1,266,384 1,265,400 1,265,400 1,266,058 1,266,451 1,268,567 1,271,382 1,274,985 1,280,156 1,287,196 1,294,787 1,303,843 1,313,370 Entry Age Normal Funded Ratio¹ 73.56% 74.57% 75.72% 77.06% 78.61% 80.34% 82.23% 84.33% 86.64% 89.17% 91.94% 94.94% 98.19% 101.71% 105.49% Salary 75,484 68,636 56,086 40,328 Employees Hired before January 1, 2018 157,483 143,191 130,782 119,735 109,609 100,040 91,169 82,969 62,110 50,463 45,178 Employees Hired on or after January 1, 2018 70,808 57,700 48.724 42.419 38,219 34.953 32,063 29,603 27.460 25,527 23.741 22,126 20.640 19,267 17.988 95,794 117,653 137,166 155,171 172,412 189,023 204.687 220,000 234,823 249,429 263,811 277,851 291,489 New Employees 39.995 70.546 275,300 295.644 327.641 271.437 279.807 284.994 290.164 301.595 307.631 320,674 334.914 342,296 349.805 Total 268,286 314.163 **Employee Contribution Rates** Employees Hired before January 1, 2018 7.50% 8.00% 8.50% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 7.94% Employees Hired on or after January 1, 2018 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 9.00% 7.94% **Employer Contribution Rates** 10.19% Calculated Rate in Prior Year 17.10% 13.87% 13.36% 12.85% 12.32% 11.96% 11.58% 11.16% 10.69% 9.62% 9.03% 8.36% 7.65% 6.87% 14.00% 14.00% Statutory Rate for Current Year 14.00% 14.00% 14.00% 14.00% 14.00% 14.00% 14.00% 14.00% 14.00% 14.00% 14.00% 14.00% 7.94% Shortfall in Statutory Rate - Board of Education 2.60% -0.13% -0.64% -1.15% -1.68% -2.04% -2.42% -2.84% -3.31% -3.81% -4.38% -4.97% -5.64% -6.35% -7.13% Shortfall in Statutory Rate - All Others 3.10% -0.13% -0.64% -1.15% -1.68% -2.04% -2.42% -2.84% -3.31% -3.81% -4.38%-4.97% -5.64% -6.35% -1.07% **Employee Contributions** 12,149 9,265 Legacy 18.184 16.648 15.502 14.594 13.305 11.091 10.131 8.475 7.727 7.039 6.399 5.800 4.627 New Employees 3,600 6,349 10,589 12,345 13,965 15,517 18,422 19,800 21,134 22,449 23,743 25,007 23,130 8,621 17,012 26,114 26,608 Total Employee Contributions 21,784 22,997 24,123 25,183 25.650 27,143 27,687 28,275 28,861 29,488 30,142 30,807 27,757 Employer Contributions 33,658 26,186 Calculated 45.877 37.648 36,780 35.955 35,111 34.704 34.236 32,886 32,013 30,849 29,586 27,999 24,032 37.694 38,734 39.394 40,119 40.857 44.260 45.191 46,180 Statutory 38,129 38,166 41.644 42,481 43.347 47,203 41.782 Shortfall/(Excess) in Statutory Contribution 7.748 (46)(1,386)(2,779)(4,283)(5,415)(6.621)(7,986)(9.595)(11.334)(13.411)(15.605)(18.181)(21,017)(17.750)(20,768)Cumulative Shortfall Amount/(Excess Funding) 7,748 7,702 3,537 (12,782)(30, 363)6,316 (746)(6,161)(41.697)(55,108)(70,713)(88,894)(109,911)(127,661)Assets Market Value (MVA) 963.989 975.210 988.931 1.005.133 1.024.777 1.047.106 1.071.430 1.099.848 1.131.582 1.166.950 1.206.935 1.252.096 1.301.415 1.356.084 1.415.468 Actuarial Value (AVA) 933,984 945,206 975,128 994,772 1,176,930 1,222,091 1.271,410 1.385,463 958,926 1.017,101 1.041.425 1.069.843 1.101.578 1,136,946 1.326.079 Contribution Development for Following Year 307,457 335.709 322,306 290,272 270,627 248 957 225.026 198,724 169,804 138,039 103,226 65,105 23,377 (22.235)(72.093)Unfunded Actuarial Accrued Liability Amortization of UAAL 34,448 34,443 34,386 34,190 33,843 33,391 32,813 32,101 31,231 30,180 28,930 27,454 25,718 23,694 21,339 22,583 22.843 23,134 23,475 23.905 24.346 24.804 25.309 25.827 26.385 26.953 27.548 28,185 28.829 29,464 Normal Cost Interest Adjustment 1,962 1,971 1,979 1,984 1,987 1,987 1,983 1,975 1,963 1,946 1,923 1,892 1,855 1,807 1,748 59,724 59,021 58,512 56.894 52,551 Total Annual Cost** 58,993 59,257 59,500 59,649 59,735 59,600 59,385 57,806 55,758 54,330 21,783 22,997 25,183 25,649 26,115 26,608 27,687 28,275 28,861 30,807 27,757 Employee Contributions 24,123 27,144 29,488 30,142 33,609 Total Employer Cost** 37,210 36,260 35,377 34,467 34,085 32,992 32,242 31,335 30,238 28,946 27,406 25,616 23,523 24,794 Employer Contribution Rate 13.87% 13.36% 12.85% 12.32% 11.96% 11.58% 11.16% 10.69% 10.19% 9.62% 9.03% 8.36% 7.65% 6.87% 7.09%

^{*} Using EAN Liability and AVA

^{**} Totals may differ from summing due to rounding

Public School Retirement System of the City of St. Louis

January 1, 2022 Projections

Scenario 4 – Proposed Plan Provisions: Adverse Investment Conditions (5.50% Actual Asset Return for 10 years, then 7.00%) (amounts in thousands)

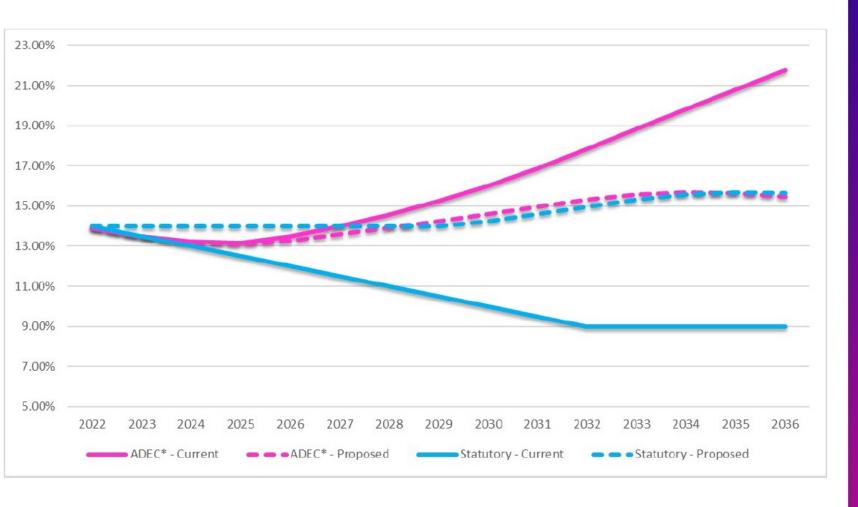
| I to be strate - | 2022 | <u>2023</u> | 2024 | <u>2025</u> | 2026 | <u>2027</u> | 2028 | 2029 | 2030 | <u>2031</u> | 2032 | 2033 | <u>2034</u> | <u>2035</u> | <u>2036</u> |
|--|-----------|-------------|-----------|-------------|-----------|-------------|---------------|-----------|-----------|-------------|-----------|---------------|---------------|---------------|---------------|
| Liabilities Present Value of Future Benefits | 1.395.565 | 1.395.326 | 1.395.936 | 1.397.011 | 1.399.188 | 1.402.072 | 1.405.083 | 1,409,791 | 1.415.555 | 1.422.307 | 1,430,739 | 1.440.950 | 1.452.194 | 1.465.044 | 1.478.806 |
| Entry Age Normal (EAN) Accrued Liability | 1,269,693 | 1,395,326 | 1,395,936 | 1,265,400 | 1,399,100 | 1,402,072 | 1,405,063 | 1,409,791 | 1,415,555 | 1,422,307 | 1,430,739 | 1,287,196 | 1,452,194 | 1,303,843 | 1,313,370 |
| Entry Age Normal Funded Ratio* | 73.56% | 74.35% | 74.99% | 75.51% | 75.94% | 76.23% | 76.59% | 77.06% | 77.62% | 78.30% | 79.17% | 80.49% | 82.34% | 84.73% | 87.63% |
| Likely rigo Norman'i dilada Nado | 70.0070 | 14.5576 | 14.0070 | 10.0170 | 10.0470 | 70.2070 | 70.5576 | 77.5076 | 77.0270 | 70.5070 | 75.1770 | 00.4070 | 02.5470 | 04.7570 | 07.0070 |
| Salary | | | | | | | | | | | | | | | |
| Employees Hired before January 1, 2018 | 157,483 | 143,191 | 130,782 | 119,735 | 109,609 | 100,040 | 91,169 | 82,969 | 75,484 | 68,636 | 62,110 | 56,086 | 50,463 | 45,178 | 40,328 |
| Employees Hired on or after January 1, 2018 | 70,808 | 57,700 | 48,724 | 42,419 | 38,219 | 34,953 | 32,063 | 29,603 | 27,460 | 25,527 | 23,741 | 22,126 | 20,640 | 19,267 | 17,988 |
| New Employees | 39,995 | 70,546 | 95,794 | 117,653 | 137,166 | 155,171 | 172,412 | 189,023 | 204,687 | 220,000 | 234,823 | 249,429 | 263,811 | 277,851 | 291,489 |
| Total | 268,286 | 271,437 | 275,300 | 279,807 | 284,994 | 290,164 | 295,644 | 301,595 | 307,631 | 314,163 | 320,674 | 327,641 | 334,914 | 342,296 | 349,805 |
| Employee Contribution Rates | | | | | | | | | | | | | | | |
| Employees Hired before January 1, 2018 | 7.50% | 8.00% | 8.50% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% |
| Employees Hired on or after January 1, 2018 | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% | 9.00% |
| Employees Filled on or after bandary 1, 2010 | 5.0070 | 3.00% | 3.0070 | 3.00% | 3.0070 | 3.00% | 3.00% | 5.5576 | 3.0070 | 3.0070 | 3.0070 | 3.0070 | 3.00% | 3.0070 | 3.0070 |
| Employer Contribution Rates | | | | | | | | | | | | | | | |
| Calculated Rate in Prior Year | 17.10% | 13.87% | 13.47% | 13.21% | 13.08% | 13.27% | 13.59% | 13.91% | 14.24% | 14.60% | 14.96% | 15.33% | 15.57% | 15.67% | 15.63% |
| Statutory Rate for Current Year | 14.00% | 14.00% | 14.00% | 14.00% | 14.00% | 14.00% | <u>14.00%</u> | 14.00% | 14.24% | 14.60% | 14.96% | <u>15.33%</u> | <u>15.57%</u> | <u>15.67%</u> | <u>15.63%</u> |
| Shortfall in Statutory Rate - Board of Education | 2.60% | -0.13% | -0.53% | -0.79% | -0.92% | -0.73% | -0.41% | -0.09% | 0.24% | 0.36% | 0.36% | 0.37% | 0.24% | 0.10% | -0.04% |
| Shortfall in Statutory Rate - All Others | 3.10% | -0.13% | -0.53% | -0.79% | -0.92% | -0.73% | -0.41% | -0.09% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Employee Contributions | | | | | | | | | | | | | | | |
| Legacy | 18,184 | 16,648 | 15,502 | 14,594 | 13,305 | 12,149 | 11,091 | 10,131 | 9,265 | 8,475 | 7,727 | 7,039 | 6,399 | 5,800 | 5,248 |
| New Employees | 3,600 | 6,349 | 8,621 | 10,589 | 12,345 | 13,965 | 15,517 | 17,012 | 18,422 | 19,800 | 21,134 | 22,449 | 23,743 | 25,007 | 26,234 |
| Total Employee Contributions | 21,784 | 22,997 | 24,123 | 25,183 | 25,650 | 26,114 | 26,608 | 27,143 | 27,687 | 28,275 | 28,861 | 29,488 | 30,142 | 30,807 | 31,482 |
| Employer Contributions | | | | | | | | | | | | | | | |
| Calculated | 45,877 | 37.648 | 37.083 | 36,963 | 37.277 | 38,505 | 40,178 | 41.952 | 43,807 | 45.868 | 47,973 | 50.227 | 52,146 | 53,638 | 54.675 |
| Statutory | 38,129 | 37,694 | 38,166 | 38,734 | 39,394 | 40,119 | 40,857 | 41,644 | 42,705 | 44,434 | 46,509 | 48,659 | 50,812 | 52,600 | 53,953 |
| Shortfall/(Excess) in Statutory Contribution | 7.748 | (46) | (1.083) | (1,771) | (2,117) | (1.614) | (679) | 308 | 1,102 | 1.434 | 1.464 | 1,568 | 1,334 | 1.038 | 722 |
| Cumulative Shortfall Amount/(Excess Funding) | 7,748 | 7.702 | 6.619 | 4.848 | 2.731 | 1.117 | 438 | 746 | 1,848 | 3,282 | 4.746 | 6.314 | 7.648 | 8,686 | 9,408 |
| Canada Constant Anodio (Excess Farang) | 1,140 | 7,702 | 0,010 | 4,040 | 2,701 | 1,117 | 455 | 140 | 1,040 | 0,202 | 4,140 | 0,014 | 7,040 | 0,000 | 0,400 |
| Assets | | | | | | | | | | | | | | | |
| Market Value (MVA) | 963,989 | 961,333 | 960,230 | 960,579 | 963,242 | 967,355 | 972,127 | 979,539 | 988,681 | 999,959 | 1,014,856 | 1,048,844 | 1,087,439 | 1,131,810 | 1,180,950 |
| Actuarial Value (AVA) | 933,984 | 942,430 | 949,634 | 955,511 | 960,950 | 965,103 | 969,957 | 977,496 | 986,815 | 998,324 | 1,013,516 | 1,036,097 | 1,066,096 | 1,104,705 | 1,150,945 |
| Contribution Development for | | | | | | | | | | | | | | | |
| Following Year | | | | | | | | | | | | | | | |
| Unfunded Actuarial Accrued Liability | 335,709 | 325,082 | 316,750 | 309,888 | 304,450 | 300,955 | 296,494 | 291,071 | 284,566 | 276,661 | 266,640 | 251,099 | 228,691 | 199,139 | 162,425 |
| Amortization of UAAL | 34,448 | 34,728 | 35,351 | 36,253 | 37,450 | 39,016 | 40,680 | 42,461 | 44,364 | 46,380 | 48,457 | 50,267 | 51,684 | 52,683 | 53,270 |
| Normal Cost | 22,583 | 22,843 | 23,134 | 23,475 | 23,905 | 24,346 | 24,804 | 25,309 | 25,827 | 26,385 | 26,953 | 27,548 | 28,185 | 28,829 | 29,464 |
| Interest Adjustment | 1,962 | 1,981 | 2,012 | 2,055 | 2,111 | 2,180 | 2,253 | 2,332 | 2,415 | 2,504 | 2,595 | 2,677 | 2,748 | 2,805 | 2,847 |
| Total Annual Cost** | 58,993 | 59,552 | 60,498 | 61,784 | 63,466 | 65,542 | 67,738 | 70,101 | 72,607 | 75,269 | 78,005 | 80,492 | 82,616 | 84,317 | 85,581 |
| Employee Contributions | 21,783 | 22,997 | 24,123 | 25,183 | 25,649 | 26,115 | 26,608 | 27,144 | 27,687 | 28,275 | 28,861 | 29,488 | 30,142 | 30,807 | 31,482 |
| Total Employer Cost** | 37,210 | 36,554 | 36,375 | 36,601 | 37,816 | 39,428 | 41,130 | 42,958 | 44,920 | 46,995 | 49,144 | 51,005 | 52,474 | 53,510 | 54,098 |
| Employer Contribution Rate | 13.87% | 13.47% | 13.21% | 13.08% | 13.27% | 13.59% | 13.91% | 14.24% | 14.60% | 14.96% | 15.33% | 15.57% | 15.67% | 15.63% | 15.47% |
| | | | | | | | | | | | | | | | |

^{*} Using EAN Liability and AVA

^{**} Totals may differ from summing due to rounding

Contribution Rates

Adverse Investment Conditions



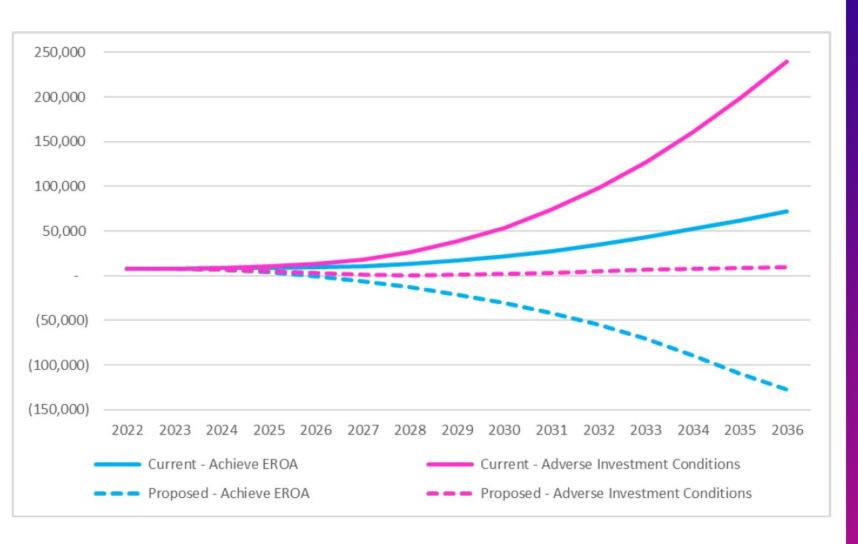
^{*}Actuarially Determined Employer Contributions.

- Graph assumes 5.5% actual investment return for first 10 years of projection, and 7% achieved thereafter
- Demonstrates risk of current statutory funding under adverse investment conditions
 - Much larger gap between amounts needed and amounts received (solid lines)
- Proposed legislation mitigates the impact
 - Small gap between amounts needed and amounts received (dotted lines)
 - Less volatility in amounts needed under proposed legislation (dotted pink line) compared to current legislation (solid pink line)



Cumulative Contribution Shortfall/(Excess)

(amount in thousands)



- Contribution Shortfall/(Excess) is difference between amounts needed (ADEC) and amounts received (Statutory)
- Blue lines assume 7% actual investment return each year in projection (Achieve EROA)
- Pink lines assume 5.5% actual investment return for first 10 years and 7% thereafter (Adverse Investment Conditions)
- Significant contribution shortfalls expected based on current statutory funding - significantly worse under adverse investment conditions (solid pink line)
- Proposed legislation limits contribution shortfall when Adverse Investment Conditions occur (dotted pink line)



Summary of Projections for 2036 Plan Year

(amounts in thousands)

| | Scenario 1 - Current Achieve EROA | Scenario 2 - Current Adverse Inv. Conditions | Scenario 3 - Proposed Achieve EROA | Scenario 4 - Proposed Adverse Inv. Conditions |
|---|--------------------------------------|---|---------------------------------------|---|
| Actuarially Determined Employer Contribution (ADEC) | 41,067 | 72,759 | 24,032 | 54,675 |
| Covered Payroll | 349,805 | 349,805 | 349,805 | 349,805 |
| ADEC as % of Covered Payroll | 11.74% | 20.80% | 6.87% | 15.63% |
| Statutory Annual Required Contribution Rate | 9.00% | 9.00% | 7.94% | 15.63% |
| Statutory Annual Required Contribution* | 31,012 | 31,012 | 41,782 | 53,953 |
| Employee Contribution Rate | 9.00% | 9.00% | 7.94% | 9.00% |
| Cumulative Contribution Shortfall/(Excess Funding) | 72,103 | 239,903 | (127,661) | 9,408 |
| Actuarial Value of Assets | 1,223,717 | 973,669 | 1,385,463 | 1,150,945 |
| Entry Age Normal (EAN) Actuarial Accrued Liability | 1,313,370 | 1,313,370 | 1,313,370 | 1,313,370 |
| EAN Funded Ratio – Actuarial Value of Assets | 93.2% | 74.1% | 105.5% | 87.6% |

^{*}Reflects one-year lag in Board of Education employer contributions



Proposed Legislative Solution (cont.)

- Proposal is preliminary
- Not looking for a commitment today
- Looking to have agreement amongst all major stakeholders
- ▶ Retirement System will do the heavy lifting in Jefferson City

Conclusion

- ► Thank you for allowing me to present today.
- I hope for your support for legislation to improve the funding of the Retirement System to protect the pension benefits of SLPS employees for years to come.