

**PUBLIC SCHOOL RETIREMENT SYSTEM
OF THE CITY OF ST. LOUIS**
MINUTES OF THE BOARD OF TRUSTEES REGULAR MEETING
June 26, 2023

I. ROLL CALL AND ANNOUNCEMENT OF A QUORUM

The April meeting of the Board of Trustees of the Public School Retirement System of the City of St. Louis (PSRSSTL) was called to order at around 4:35 p.m. on Monday, June 26, 2023. The meeting was conducted by video conference through Zoom and a Livestream on YouTube. Louis Cross, Chairman of the Board of Trustees, was the presiding officer.

Roll Call was taken. Christina Bennett, Louis Cross, Sheila Goodwin, Shanise Johnson, Donna Jones, Yvette Levy, Bobbie Richardson, and Dorris Walker were present. The Board of Trustees had a quorum at the meeting. Trustees Angela Banks and Martel Mann were absent. Trustee Albert Sanders joined the meeting in progress.

Executive Director Susan Kane, Accounting Specialist Terry Mayes, Attorney Representative Matt Gierse, Actuary Representatives Michael Ribble and Matt Staback and Business Insurance Consultant Representatives Allison Benney and Steve Fitzsimmonds were also in attendance.

II. APPROVAL OF MINUTES FROM LAST MEETING

Sheila Goodwin made a motion, seconded by Bobbie Richardson, to approve the minutes of the Regular Board of Trustees Meeting from April 17, 2023. By voice vote, the motion was carried.

III. READING OF COMMUNICATIONS TO THE BOARD OF TRUSTEES

The Executive Director read a letter from Retired Member Erma Nevels regarding the presentation from Xponance at the June Investment Committee Meeting requesting a change to the structure of the Manager of Manager accounts with US Bank. Ms. Nevels requested that the Trustees maintain US Bank as the Custodian for PSRSSTL Defined Benefit and not select Xponance. Trustee Bennett, Co-Chair of the Investment Committee, explained that Xponance was one of the System's managers and was not being considered for the role of custodian as they did not have that capability. The request that Xponance made in the presentation to the Investment Committee was a change in internal administration. Chairman Cross requested the Executive Director send a response to Ms. Nevels clarifying this.

IV. PRESENTATIONS BY INTERESTED PARTIES

None

V. CONSENT AGENDA

Bobbie Richardson made a motion, seconded by Dorris Walker, to approve the Retirements and Benefits of May and June 2023. By voice vote, motion carried.

Bobbie Richardson made a motion, seconded by Dorris Walker, to approve the refunds and bills of April and May 2023. By voice vote, motion carried.

VI. REPORT OF THE CHAIRPERSON

The Chairman suggested adding a new Q&A section to the newsletter where members could submit questions and receive a response in the newsletter. He also mentioned that the Trustees should consider attending one of the upcoming approved conferences.

VII. REPORT OF THE EXECUTIVE DIRECTOR

The Executive Director began her report by introducing the System's Business Insurance Consultants, Allison Benney and Steve Fitzsimmonds from Gallagher to discuss the renewal on fiduciary liability coverage. Ms. Benney reminded the Trustees that the fiduciary liability coverage was split between two different providers, since Travelers had decided to reduce the amount of coverage that they were writing in Missouri. Mr. Fitzsimmonds began by thanking the Trustees for their partnership and then outlined the renewal process, which included requesting quotes from other carriers. However, the results from the requested quotes showed that the pricing would be more expensive if the System changed insurance carriers. Gallagher believes that the pricing for fiduciary coverage should improve soon as they are seeing more positive signs toward lower renewals.

Sheila Goodwin made a motion, seconded by Bobbie Richardson, to accept the renewal from Traveler's Insurance and Markel for the Fiduciary Policy as recommended by Gallagher, the System's Business Insurance consultant.

A roll call vote was taken.

Christina Bennett	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Shanise Johnson	Yes	Donna Jones	Yes	Yvette Levy	Yes
Bobbie Richardson	Yes	Albert Sanders	Yes	Dorris Walker	Yes

The motion was carried with nine yes votes.

The Executive Director continued her report by explaining that registrations had been submitted for the upcoming conferences and reminding the Trustees to make their travel arrangements as soon as possible to take advantage of the discounted hotel rates offered by the organization sponsoring the Conference.

She also mentioned that PSRSSTL staff had developed a new retiree packet. All the materials previously sent to those contemplating retirement had been put together into one document. Additional information was added to the application and within the instructions to provide more clarification on members' retirement options as requested by Chairman Cross.

Finally, she concluded her report by providing an update on PSRSSTL staff changes. Monica Brewer, who had been the Clerical Services Assistant for over 4 years, was promoted to the Insurance Specialist role, leaving another position vacant. The Executive Director indicated that she would provide a further update to the Trustees when a new Clerical Services Assistant was selected.

VIII. REPORT OF THE INVESTMENT CONSULTANT

None

IX. REPORT OF THE ACTUARY

The Executive Director introduced Michael Ribble and Matthew Staback from Buck to present the 2023 Actuarial Valuation Results. Mr. Ribble reminded the Trustees that many of the concepts in the report were reviewed at the Training held earlier in June. He also gave an overview of the changes in methodology used this year, which were approved in the Experience Study. Mr. Staback began the presentation on the Valuation results discussing the census and the changes in numbers from the 2022 Valuation. The presentation continued with a review of the System’s assets and liabilities. He explained that there was a change in assumptions regarding the Expense and Contingency Reserve due to more data being received on those individuals that were enrolled in PSRSSTL sponsored medical, dental, and vision plans and receiving a subsidy from the System. The lower medical premiums for the Medicare Advantage Plans that were negotiated in 2022 also contributed to some lowering of the amount needed in the Expense and Contingency Reserve.

Mr. Ribble then discussed the funding status of the System, which was based on the Assets and Liabilities. The System’s investments suffered a loss in 2022, which significantly impacted the funding ratio. The Valuation Report also included analysis of the required contribution amount. While there is a statutory contribution amount, the Valuation also includes a calculation of the actuarially required calculation. The required contribution amount is lower than the previous year and the statutorily required contribution, mainly due to the higher-than-expected increase in annual payroll.

After all questions had been answered, Chairman Cross asked for Board approval of the Valuation Report. Albert Sanders made a motion, seconded by Bobbie Richardson, to accept the 2023 Actuarial Valuation Report as presented by the Actuary.

A roll call vote was taken.

Christina Bennett	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Shanise Johnson	Yes	Donna Jones	Yes	Yvette Levy	Yes
Bobbie Richardson	Yes	Albert Sanders	Yes	Dorris Walker	No

The motion was carried with eight yes votes.

X. REPORTS OF COMMITTEES OF THE BOARD OF TRUSTEES

Benefits Committee

No report

Trustee Business Committee

Committee Co-Chair Goodwin indicated that she would like to recommend adding international travel to the Travel Policy. After discussion, Trustee Goodwin indicated that she would work on some revised wording and coordinate a future Committee meeting with Legislative Rules & Regulation Co-Chairs Walker and Levy to discuss this addition to the Travel Policy.

Investment Committee

Chairman Cross made a motion, seconded by Bobbie Richardson, to approve liquidation of the Xponance fixed income investment as recommended by Investment Consultant AndCo and the PSRSSTL Investment Committee.

A roll call vote was taken.

Christina Bennett	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Shanise Johnson	Yes	Donna Jones	Yes	Yvette Levy	Yes
Bobbie Richardson	Yes	Albert Sanders	Yes	Dorris Walker	No

The motion was carried with eight yes votes.

Louis Cross made a motion to invest \$10 Million Dollars with Strategic Value Capital Solutions Fund II as recommended by Investment Consultant AndCo and the PSRSSTL Investment Committee.

A roll call vote was taken.

Christina Bennett	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Shanise Johnson	Yes	Donna Jones	Yes	Yvette Levy	Yes
Bobbie Richardson	Yes	Albert Sanders	Yes	Dorris Walker	Yes

The motion was carried with nine yes votes.

Louis Cross made a motion to approve the rebalancing plan per the proposed target asset allocation as recommended by Investment Consultant AndCo and the PSRSSTL Investment Committee.

A roll call vote was taken.

Christina Bennett	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Shanise Johnson	Yes	Donna Jones	Yes	Yvette Levy	Yes
Bobbie Richardson	Yes	Albert Sanders	Yes	Dorris Walker	Yes

The motion was carried with nine yes votes.

Albert Sanders made a motion, seconded by Bobbie Richardson, to approve allocation from Xponance Fixed Income liquidation with the full amount invested with current core fixed income Manager, Manulife, as recommended by Investment Consultant AndCo and the PSRSSTL Investment Committee.

A roll call vote was taken.

Christina Bennett	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Shanise Johnson	Yes	Donna Jones	Yes	Yvette Levy	Yes
Bobbie Richardson	Yes	Albert Sanders	Yes	Dorris Walker	Yes

The motion was carried with nine yes votes.

Albert Sanders made a motion, seconded by Bobbie Richardson, to approve the IMP account structure for Xponance Global Equity as recommended by Investment Consultant AndCo and the PSRSSTL Investment Committee.

A roll call vote was taken.

Christina Bennett	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Shanise Johnson	Yes	Donna Jones	Yes	Yvette Levy	Yes
Bobbie Richardson	Yes	Albert Sanders	Yes	Dorris Walker	Yes

The motion was carried with nine yes votes.

Legislative, Rules & Regulations Committee

No report.

Personnel & Professional Contracts Committee

Co-Chair Richardson asked the Executive Director to update the Trustees on the Custodian Request for Proposal (RFP). The Executive Director explained that the RFP response would be due by Friday and that additional meetings would need to be scheduled to review the results.

XI. NEW BUSINESS

None

XII. UNFINISHED BUSINESS

XIII. REPORT OF THE ATTORNEY

The Attorney Representative recommended that his report be conducted in closed session. Albert Sanders made the motion, seconded by Bobbie Richardson, to close the meeting, and that all records and votes, to the extent permitted by law, pertaining to and/or resulting from this closed meeting be closed under R.S.MO § 610.021 (1) and (12) for the purpose of having a confidential or privileged communication with the legal counsel for the PSRSSTL on legal matters.

A roll call vote was taken.

Christina Bennett	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Shanise Johnson	Yes	Donna Jones	Yes	Yvette Levy	Yes
Bobbie Richardson	Yes	Albert Sanders	Yes	Dorris Walker	Yes

The motion was carried with nine yes votes and the meeting continued in closed session.

The Trustees approved one motion during the closed session.

Sheila Goodwin made a motion, seconded by Dorris Walker, to approve the hiring of the law firm of Fisher Broyles, as assigned by Sompo International, to provide assistance with a possible third-party provider security event pursuant to the terms of the Assignment Letter.

A roll call vote was taken.

Christina Bennett	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Shanise Johnson	Yes	Donna Jones	Yes	Yvette Levy	Yes
Bobbie Richardson	Yes	Albert Sanders	Yes	Dorris Walker	Yes

The motion was carried with nine yes votes

At the conclusion of the discussion, Albert Sanders made a motion, seconded by Dorris Walker, to open the meeting, pursuant to Section 610.021, of the Missouri Revised Statutes.

A roll call vote was taken.

Angie Banks	Yes	Christina Bennett	Yes	Louis Cross	Yes
Sheila Goodwin	Yes	Shanise Johnson	Yes	Donna Jones	Yes
Bobbie Richardson	Yes	Albert Sanders	Abstain	Dorris Walker	Yes

The motion was carried with eight yes votes.

XIV. ADJOURNMENT

Since there was no further business, Albert Sanders made a motion, seconded by Bobbie Richardson, to adjourn the meeting. By voice vote, motion carried, and the meeting adjourned at around 7:10 p.m.

Attachments:

- Retirement & Benefit: May and June 2023
- Refunds and Bills—April and May 2023
- Actuarial Valuation Results

Distributions - April, 2023

CHECK NUMBER	CHECK DATE	LAST NAME	FIRST NAME/MI	GROSS (B+C)	FEDERAL TAXES W/H	NET PAY	STATUS A(ctive) R(etired)	REASON D(eath) S(eparation)	NOTES	Dec Mem SSN
079734	04/12/23	HENDERSON	DAMON	7,116.57		7,116.57	A	D	DEC: T ATKINSON	
079735	04/12/23	HENDERSON	DERICK I	7,116.56		7,116.56	A	D	DEC: T ATKINSON	
079736	04/12/23	BOATNER	TERRINA	18,336.16	1,628.50	16,707.66	A	D	DEC: C BOATNER	
079737	04/12/23	GALLOWAY	GLORIA	1,146.79		1,146.79	A	D	DEC: A GALLOWAY	
079738	04/12/23	GALLOWAY	CORNELL	1,146.80		1,146.80	A	D	DEC: A GALLOWAY	
079739	04/12/23	RICHARDSON	MATTHEW	25,062.39	2,466.00	22,596.39	A	D	DEC: V RICHARDSON	
079156	09/23/22	ZUBI	SARA O	(9,215.71)		(9,215.71)	A	S	VOID AND REISSUE	
079740	04/12/23	ZUBI	SARA O	9,215.71		9,215.71	A	S	VOID AND REISSUE	
079765	04/24/23	ADAMS	KAREN E	9,102.21		9,102.21	A	S	CA	
079766	04/24/23	ARMSTRONG	LADORA	2,820.39	564.08	2,256.31	A	S	KIPP	
079767	04/24/23	ASHPOLE	MICHAEL T	12,565.02		12,565.02	A	S	STL/P	
079768	04/24/23	BLOCKETTE	BILLY	1,612.26	322.45	1,289.81	A	S		
079769	04/24/23	BRADFORD	BRITTNAY	5,658.11	1,131.62	4,526.49	A	S		
079770	04/24/23	CAIN	ANDREA	936.88	187.38	749.50	A	S	KIPP	
079771	04/24/23	CASEY	PATRICK	9,313.27		9,313.27	A	S		
079772	04/24/23	COLUMBUS	ADRIENNE	3,957.21	791.44	3,165.77	A	S	LFL	
079773	04/24/23	CONLEY	JOSHUA	9,623.32	1,924.66	7,698.66	A	S		
079774	04/24/23	DEAN	ANNE	4,159.85	831.97	3,327.88	A	S	MOME LFL	
079775	04/24/23	DEW	ASHLEY	6,896.33	1,379.27	5,517.06	A	S		
079776	04/24/23	GRANT	BRITTNAY	6,518.07	1,303.61	5,214.46	A	S		
079777	04/24/23	HEGRE	CARLA	170.61	34.12	136.49	A	S		
079778	04/24/23	HENDERSON	JASMINE	4,353.26	870.65	3,482.61	A	S		
079779	04/24/23	HOOPER	GERNETTA	685.83	137.17	548.66	A	S	KAIROS	
079780	04/24/23	HOWELL	ROBERT	3,664.43	732.89	2,931.54	A	S	LFL	
079781	04/24/23	JONES	ANTHONY	1,538.10	307.62	1,230.48	A	S	MOME	
079782	04/24/23	KRUEGER	AMY	2,978.61	595.72	2,382.89	A	S		
079783	04/24/23	LEMKEMEIER	SALLY	7,547.86		7,547.86	A	S	KAIROS	
079784	04/24/23	LINDSEY	CANDICE	77,221.09	15,444.22	61,776.87	A	S		
079785	04/24/23	MOLCZYK	CORRIN	10,981.55		10,981.55	A	S	SLPS KAIROS	
079786	04/24/23	MU'MIN	WALLACE	63,796.29	12,759.26	51,037.03	A	S		
079787	04/24/23	PEAK	EVA	2,112.23	422.45	1,689.78	A	S		
079788	04/24/23	PENNIX	MILTANYA L	2,224.63	444.93	1,779.70	A	S		
079789	04/24/23	SMITH	MICKEL R	24,077.72	4,815.54	19,262.18	A	S		
079790	04/24/23	SOAIB	TAETUMN	3,051.66	610.33	2,441.33	A	S		
079791	04/24/23	SUTHERLAND	LINDA	24,963.33		24,963.33	A	S		
079792	04/24/23	SYKES	DARNIECE	15,054.85	3,010.97	12,043.88	A	S		
079793	04/24/23	TIPSWORD	MICHAEL	7,641.05	1,528.21	6,112.84	A	S	CA	
079794	04/24/23	WALLACE	NIKIA	3,026.61	605.32	2,421.29	A	S		
079795	04/24/23	WAYNE	AMBRYANNAH	5,007.43	1,001.49	4,005.94	A	S		

Distributions - April, 2023

CHECK NUMBER	CHECK DATE	LAST NAME	FIRST NAME/MI	GROSS (B+C)	FEDERAL TAXES W/H	NET PAY	STATUS A(ctive) R(etired)	REASON D(eath) S(eparation)	NOTES	Dec Mem SSN
079796	04/24/23	WEAVER	SHAINA	3,434.60	686.92	2,747.68	A	S	LFL	
079797	04/24/23	WILLIAMS	VICKIE	11,570.53	2,314.11	9,256.42	A	S		
TOTAL				\$ 408,190.46	\$ 58,852.90	\$ 349,337.56				

Distributions - May, 2023

CHECK NUMBER	CHECK DATE	LAST NAME	FIRST NAME/MI	GROSS (B+C)	FEDERAL TAXES W/H	NET PAY	STATUS A(ctive) R(etired)	REASON D(eath) S(eparation)	NOTES	
079829	05/10/23	BOLDEN	KARI	10,482.08	1,048.21	9,433.87	A	D	KRISTA J BOLDEN	
079830	05/10/23	CALL	SAVANNA	959.53	95.95	863.58	A	D	SANDRA L CALL	
079831	05/10/23	CALL -VOSSEKUIL	VICTORIA L	959.52	95.95	863.57	A	D	SANDRA L CALL	
079832	05/10/23	DABNEY	DONALD	2,012.49	181.93	1,830.56	A	D	DORCAS M DABNEY	
079833	05/10/23	STEPHENS	TARA	45,750.60	4,575.06	41,175.54	A	D	MARIA HILL	
079834	05/10/23	MAJOR III	LEOTIS	58,200.64	5,820.06	52,380.58	A	D	BARBARA J MAJOR	
079835	05/10/23	GRAY	AHQUESHA	27,471.85	2,747.18	24,724.67	A	D	TERRY J ROBINSON	
079858	05/23/23	AZIZ	ATERRIA	2,490.28	498.06	1,992.22	A	S	KAIROS	
079859	05/23/23	BARD	COURTNEY	8,663.19	1,732.64	6,930.55	A	S	CA	
079860	05/23/23	DAVIS	KAYLEE	2,906.21	581.24	2,324.97	A	S	KIPP	
079861	05/23/23	DUNCAN	ANTONISHA	1,333.09	266.62	1,066.47	A	S	LFL	
079862	05/23/23	FARGER-SMITH	ODESSA	8,256.89	1,651.38	6,605.51	A	S		
079863	05/23/23	FERRELL	BRITTANY	2,241.86	448.37	1,793.49	A	S		
079864	05/23/23	GORRELL	JANINE V	28,984.16		28,984.16	A	S	NSCS	
079865	05/23/23	GRIFFIN	KENNETH	36,462.15	7,292.43	29,169.72	A	S		
079866	05/23/23	HARNEY-SCHLUETER	MICHELLE	453.83	90.77	363.06	A	S	KIPP	
079867	05/23/23	HEMINGHAUS	CHRISTI	18,038.28	3,607.66	14,430.62	A	S		
079868	05/23/23	HEUERMANN	DEVINN	4,007.79		4,007.79	A	S		
079869	05/23/23	HOPKINS	SHERITA	60,194.17		60,194.17	A	S		
079870	05/23/23	JONES	ABRIELLA	23,302.96	4,660.59	18,642.37	A	S		
079871	05/23/23	KINNEY	TASHIMA M	18,357.03		18,357.03	A	S		
079872	05/23/23	LATO	CHRISTINE	37,231.54	7,446.31	29,785.23	A	S		
079873	05/23/23	LEONARD	ZACHARY R	19,801.38	3,960.28	15,841.10	A	S	GSA CA	
079874	05/23/23	LICHTENBERG	ANGELIQUE M	47,645.94	9,529.19	38,116.75	A	S		
079875	05/23/23	LUBELL	JARED	1,070.75	214.15	856.60	A	S		
079876	05/23/23	MCCOY	SONYA	1,945.17	389.03	1,556.14	A	S		
079877	05/23/23	MEYER	DEANNA	35,440.21	7,088.04	28,352.17	A	S	ICP SLPS KAIROS	
079878	05/23/23	MOREHOUSE	BLAKE	5,276.90	1,055.38	4,221.52	A	S	KIPP	
079879	05/23/23	MORRIS	TIERRA	3,237.24	647.45	2,589.79	A	S		
079880	05/23/23	MOWCZKO	KATHERINE	14,184.59		14,184.59	A	S	SCPA LPA	
079881	05/23/23	MUDGE	LAUREN B	3,624.46	724.89	2,899.57	A	S	PREM	
079882	05/23/23	RABIA	ALLISON	14,245.41	2,849.08	11,396.33	A	S	CLA HLSCG	
079883	05/23/23	REED	KENITRIA	12,869.76	2,573.95	10,295.81	A	S	KIPP	
079884	05/23/23	REED-OWENS	LACONNIE	1,383.03	276.61	1,106.42	A	S	MOM PREM	
079885	05/23/23	SHARP	KIMBERLY	20,103.73	4,020.75	16,082.98	A	S		
079886	05/23/23	SIMPSON	LAURA	12,147.80		12,147.80	A	S	CAL NSCS KIPP	
079887	05/23/23	SMALL	KELLY	25,239.90		25,239.90	A	S		
079888	05/23/23	SMITH	MEGAN	38,820.43	7,764.09	31,056.34	A	S	IAAS IESM SLPS	
079889	05/23/23	SYKES	JEFFERY	3,785.71	757.14	3,028.57	A	S	LFL	

Distributions - May, 2023

CHECK NUMBER	CHECK DATE	LAST NAME	FIRST NAME/MI	GROSS (B+C)	FEDERAL TAXES W/H	NET PAY	STATUS A(ctive) R(etired)	REASON D(eath) S(eparation)	NOTES	
079890	05/23/23	THOMAS	CORNELLE	5,151.85	1,030.37	4,121.48	A	S		
079891	05/23/23	THOMAS	COURTNEY	775.06	155.01	620.05	A	S	KIPP	
079892	05/23/23	WEBB	SHANICE	14,902.64	2,980.53	11,922.11	A	S		
079893	05/23/23	WILLIAMSON	MARA	8,381.43	1,676.29	6,705.14	A	S		
079894	05/23/23	XU	ZHILING	546.77		546.77	A	S	SLIS	
TOTAL				\$ 689,340.30	\$ 90,532.64	\$ 598,807.66				

Public School Retirement System of the City of St. Louis Checks Written During the Month of April, 2023			
Payee	Ck. Number	Description	Amount
Date Paid April 5, 2023			
Ameren Missouri	79715	Electric Service	2,097.51
ACC Business	79716	Telephone Fiberoptics	608.66
Charter Communications	79717	Charter Internet and Voice	177.95
St. Louis Mat & Linen Company	79718	Floor Mats	260.00
Scottish Rite Preservation	79719	April 2023 Parking - 2 Employees	146.00
Office Essentials	79720	Office Supplies	1,318.50
Tech Electronics, Inc.	79721	City of St. Louis ARFAM Permit Fee	55.00
Advanced Medical Reviews	79722	Shirley Gunn	234.90
BildingStars STL Operations, Inc.	79723	Janitorial Services	1,386.00
Specialty Mailing	79724	Service - Retiree Newsletter	1,374.40
Specialty Mailing	79725	Service - Active Newsletter	1,734.93
Anders CPAs & Advisors	79726	Audit of Financial Statements	30,000.00
Gregory F.X. Daly, Collector of Revenue	79727	Water - City	113.16
Jupiter Consulting Services, LLC	79728	Programming Consulting	4,914.00
Intelica Commercial Real Estate	79729	Engineer Services	284.89
Starbeam Lighting Supply	79730	Lithonia Emergency Lights	144.63
Board of Education St. Louis Benefits Trust	79731	Office Employees Insurance - Dental	189.56
Board of Education St. Louis Benefits Trust	79732	Office Employees Insurance - Vision	16.66
Board of Education St. Louis Benefits Trust	79733	Office Employees Insurance - Life	200.22
Date Paid April 7, 2023			
Office Payroll	ACH	Office Payroll	12,596.83
AXA Equitable	ACH	457 Contributions	1,500.00
Integrated Payroll Services (IPS)	ACH	Payroll Processing Fee	59.95
Date Paid April 14, 2023			
Republic Services #346	79741	Trash Pick-Up	332.26
American City Business Journals, Inc.	79742	12 Subscriptions	1,140.00
Randy Elam	79743	J2EFAX Annual Subscription	124.99
Murphy Company	79744	Thermostat Repair	805.00
Date Paid April 20, 2023			
Absopure Water Company	79745	Water Cooler Service	47.80
Blade Technologies, Inc.	79746	Professional Services	3,319.89
Gallagher Benefit Services, Inc.	79747	Group Ins. Consulting Services Monthly Fee	3,320.25
Konika Minolta Business Solutions USA Inc.	79748	Service for Copier C360I, C364E	232.85
Purchase Power	79749	Postage	719.00
Buck Global, LLC	79750	Actuarial & Consulting Services - March 2023	4,015.00
Mitel	79751	Telephone Service	243.31
Midwest Elevator Co., Inc.	79752	Monthly Maintenance	352.00
Hartnett Reyes-Jones L.L.C.	79753	Legal Fees	6,321.50
MSD	79754	Sewer Service	54.37
Specialty Mailing	79755	Daily Pick-Up	230.00
Blue Chip Pest Services	79756	Pest Control	50.00
HITS Scanning Solutions	79757	Imagining Hosting, Scanned Images	523.62
St. Louis Post Dispatch	79758	Classified Ad - Insurance Benefits Specialist	178.12
Full Care	79759	Snow and Ice Management	2,176.43
Intelica Commercial Real Estate	79760	Building Management Fee-April 2023	1,000.00
Intelica Commercial Real Estate	79761	Engineer Services	579.61
Green Sky Cleaning Supply	79762	Janitorial Supplies	47.46
EARNEST Partners, LLC	79763	1st Quarter 2023 Management Fee	9,456.20
Systematic Financial Management, LP	79764	1st Quarter 2023 Management Fee	75,276.95
Date Paid April 21, 2023			

Public School Retirement System of the City of St. Louis Checks Written During the Month of April, 2023			
<u>Payee</u>	<u>Ck. Number</u>	<u>Description</u>	<u>Amount</u>
Office Payroll	ACH	Office Payroll	12,521.82
AXA Equitable	ACH	457 Contributions	1,500.00
Integrated Payroll Services (IPS)	ACH	Payroll Processing Fee	67.36
		TOTAL	\$184,049.54

Public School Retirement System of the City of St. Louis Checks Written During the Month of May, 2023			
Payee	Ck. Number	Description	Amount
Date Paid May 5, 2023			
Office Payroll	ACH	Office Payroll	15,447.99
AXA Equitable	ACH	457 Contributions	1,500.00
Integrated Payroll Services (IPS)	ACH	Payroll Processing Fee	59.95
Date Paid May 5, 2023			
Ameren Missouri	79798	Electric Service	1,511.73
ACC Business	79799	Telephone Fiberoptics	608.66
Charter Communications	79800	Charter Internet and Voice	169.96
Republic Services #346	79801	Trash Pick-Up	332.26
St. Louis Mat & Linen Company	79802	Floor Mats	208.00
Scottish Rite Preservation	79803	May 2023 Parking - 2 Employees	146.00
Office Essentials	79804	Office Supplies	429.25
Tech Electronics, Inc.	79805	Monitoring of Fire and Security Alarm	360.00
Advanced Medical Reviews	79806	DaJuan Blunt	855.90
Anders CPAs & Advisors	79807	Audit of Financial Statements	29,000.00
HITS Scanning Solutions	79808	Image Hosting, Scanned Images	534.78
Stericycle, Inc.	79809	Document Shredding	136.12
St. Louis American	79810	Classified Ad-Receptionist/Admin. Assistant	326.90
St. Louis Post Dispatch	79811	Classified Ad-Receptionist/Admin. Assistant	643.00
Nexcess	79812	Web Hosting	143.40
ActiveTrak	79813	Internet Security	432.00
St. Louis Select Landscaping	79814	Monthly Property Landscaping	229.64
Intelica Commercial Real Estate	79815	Engineer Services	1,012.10
Causeway Capital Management LLC.	79816	1st Quarter 2023 Management Fee	82,660.35
Fidelity Institutional Asset Mgmt. Trust Company	79817	1st Quarter 2023 Management Fee	62,673.92
INTECH Investment Management LLC	79818	01/01/2023-01/10/2023 Management Fee	2,434.79
Manulife Investment Management U.S. LLC	79819	1st Quarter 2023 Management Fee	27,184.59
TCW Asset Management Company	79820	1st Quarter 2023 Management Fee	41,981.28
Westfield Capital Management Company, LP	79821	1st Quarter 2023 Management Fee	64,889.59
Xponance, Inc.	79822	1st Quarter 2023 Management Fee	67,774.01
Xponance, Inc.	79823	1st Quarter 2023 Management Fee	8,451.31
AndCo	79824	1st Quarter 2023 Consulting Fee Fee	47,500.00
US Bank	79825	1st Quarter 2023 Custodial Fee	23,887.52
Board of Education St. Louis Benefits Trust	79826	Office Employees Insurance - Dental	141.30
Board of Education St. Louis Benefits Trust	79827	Office Employees Insurance - Vision	12.88
Board of Education St. Louis Benefits Trust	79828	Office Employees Insurance - Life	191.22
Date Paid May 19, 2023			
Office Payroll	ACH	Office Payroll	10,969.98
AXA Equitable	ACH	457 Contributions	1,500.00
Integrated Payroll Services (IPS)	ACH	Payroll Processing Fee	64.51
Date Paid May 22, 2023			
Absopure Water Company	79836	Water Cooler Service	12.00
Blade Technologies, Inc.	79837	Professional Services	3,311.89
Gallagher Benefit Services, Inc.	79838	Group Ins. Consulting Services Monthly Fee	3,320.25
Konika Minolta Business Solutions USA Inc.	79839	Service for Copier C360I, C364E	232.85
Purchase Power	79840	Postage	500.00
Buck Global, LLC	79841	Actuarial & Consulting Services - April 2023	5,915.00
Buck Global, LLC	79842	Compensation Evaluation Project - April 2023	10,000.00
Mitel	79843	Telephone Service	290.29
Midwest Elevator Co., Inc.	79844	Monthly Maintenance	352.00
Hartnett Reyes-Jones L.L.C.	79845	Legal Fees	13,277.50

Public School Retirement System of the City of St. Louis Checks Written During the Month of May, 2023			
<u>Payee</u>	<u>Ck. Number</u>	<u>Description</u>	<u>Amount</u>
MSD	79846	Sewer Service	54.37
Specialty Mailing	79847	Daily Pick-Up	200.00
Blue Chip Pest Services	79848	Pest Control	50.00
BuildingStars STL Operations, Inc.	79849	Janitorial Services	1,330.09
Arthur J. Gallagher Risk Mgmt. Services, LLC	79850	Crime - IDC Issued	2,270.00
Intelica Commercial Real Estate	79851	Building Management Fee-May 2023	1,000.00
Intelica Commercial Real Estate	79852	Maintenance	1,083.48
Green Sky Cleaning Supply	79853	Janitorial Supplies	683.20
The Edgar Lomax Company	79854	1st Quarter 2023 Management Fee	77,082.91
Mellon Investments Corporation	79855	1st Quarter 2023 Management Fee	1,504.05
Mellon Investments Corporation	79856	1st Quarter 2023 Management Fee	1,581.88
Mellon Investments Corporation	79857	01/12/2023-03/31/2023 Management Fee	1,192.72
		TOTAL	\$621,649.37

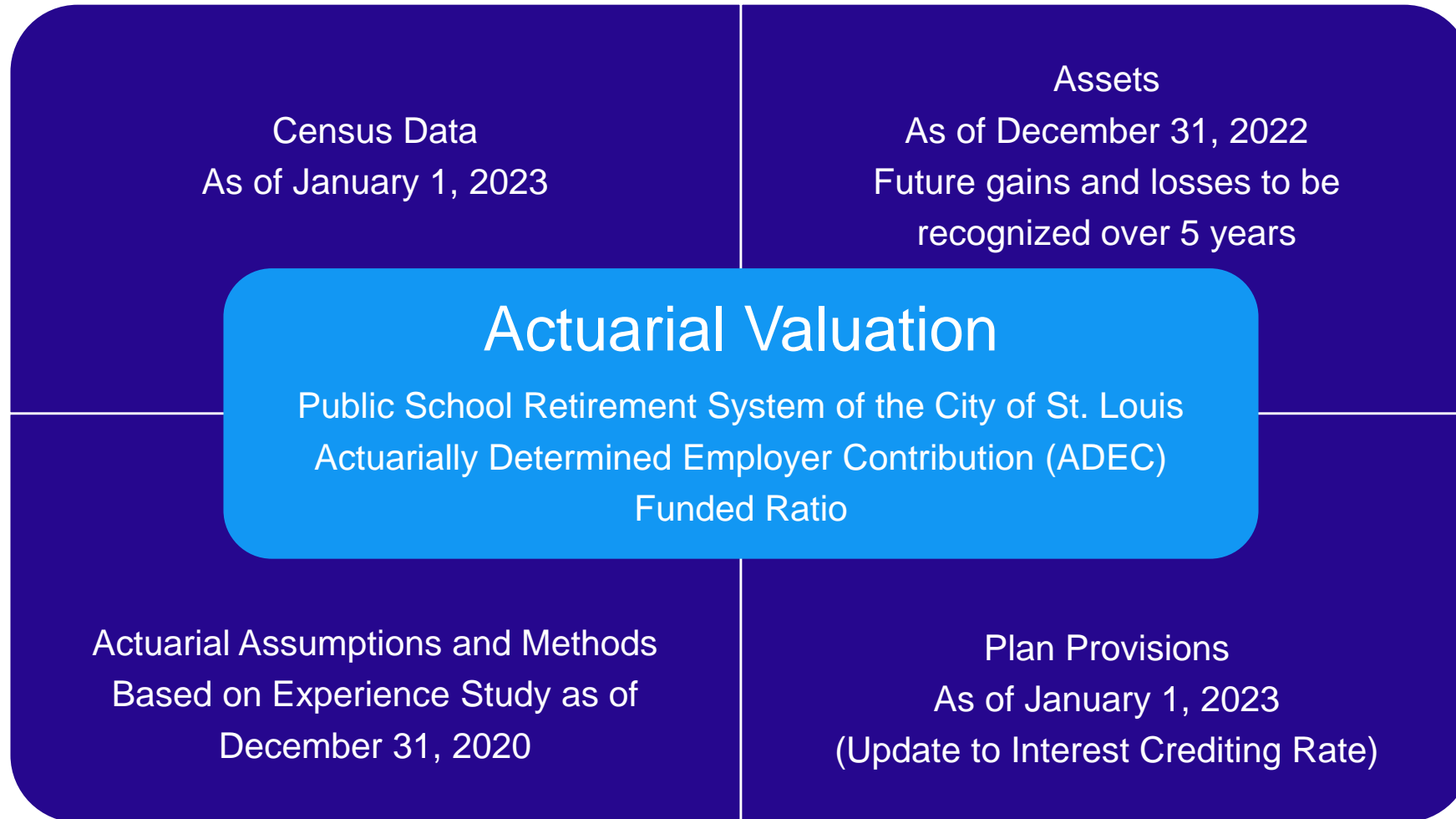


Public School Retirement System of the City of St. Louis, Missouri

2023 Valuation Results
June 26, 2023



Overview – Valuation Process



Data – Population as of January 1

	2023	2022	Change
Total Actives	4,940	4,594	346
School District	3,130	2,903	227
Charter Schools	1,803	1,684	119
Retirement System	7	7	0
Total Terminated Records	4,568	4,256	312
Deferred Vested	1,002	940	62
Nonvested with Balance	3,566	3,316	250
Total in Pay Status	4,310	4,363	(53)
Retirees	3,846	3,879	(33)
Beneficiaries	260	265	(5)
Disabled	204	219	(15)
Total	13,818	13,213	605



Data – Member census information

As of January 1st	2023	2022
Active Members		
Tier 1	2,137	2,446
Tier 2	<u>2,803</u>	<u>2,148</u>
Total Number of Actives	4,940	4,594
Average Age	43.5	43.8
Average Service	7.7	8.1
Average Covered Payroll	\$ 57,885	\$ 56,474
Vested Terminated Members		
Number	1,002	940
Average Account Balance	\$ 36,987	\$ 35,941
Non-vested Terminated Members		
Number	3,566	3,316
Average Account Balance	\$ 5,030	\$ 4,750



Data – Member census information continued

As of January 1st	2023	2022
Retired Benefit Recipients		
Number	3,846	3,879
Average Age	75.5	76.2
Average Monthly Benefit	\$ 2,128	\$ 2,120
Beneficiary Benefit Recipients		
Number	260	265
Average Age	79.4	80.6
Average Monthly Benefit	\$ 1,058	\$ 1,041
Disabled Benefit Recipients		
Number	204	219
Average Age	69.6	70.1
Average Monthly Benefit	\$ 1,282	\$ 1,276
Total Benefit Recipients	4,310	4,363



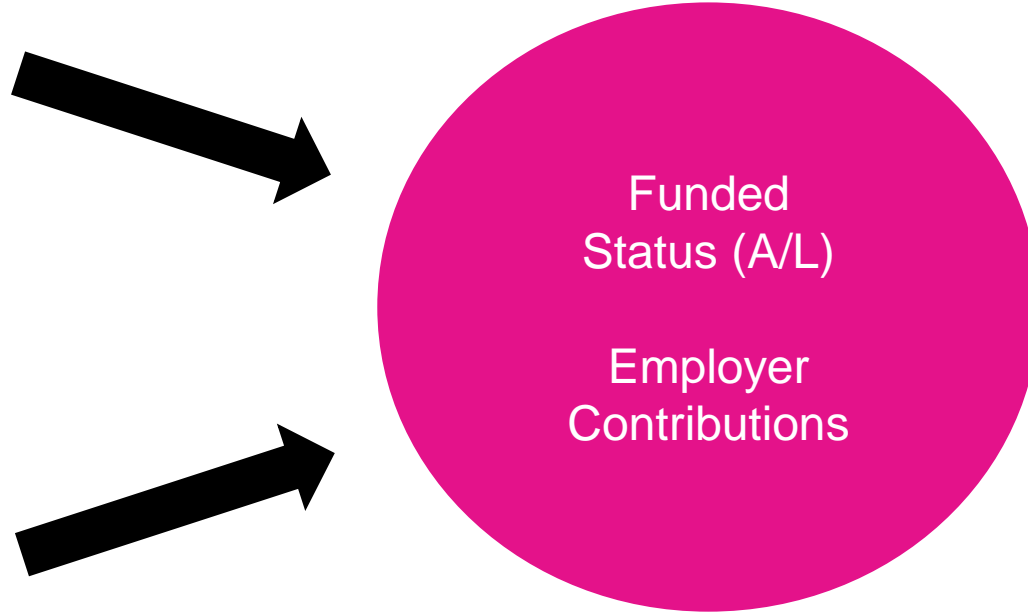
Understanding Assets & Liabilities

Assets (A)

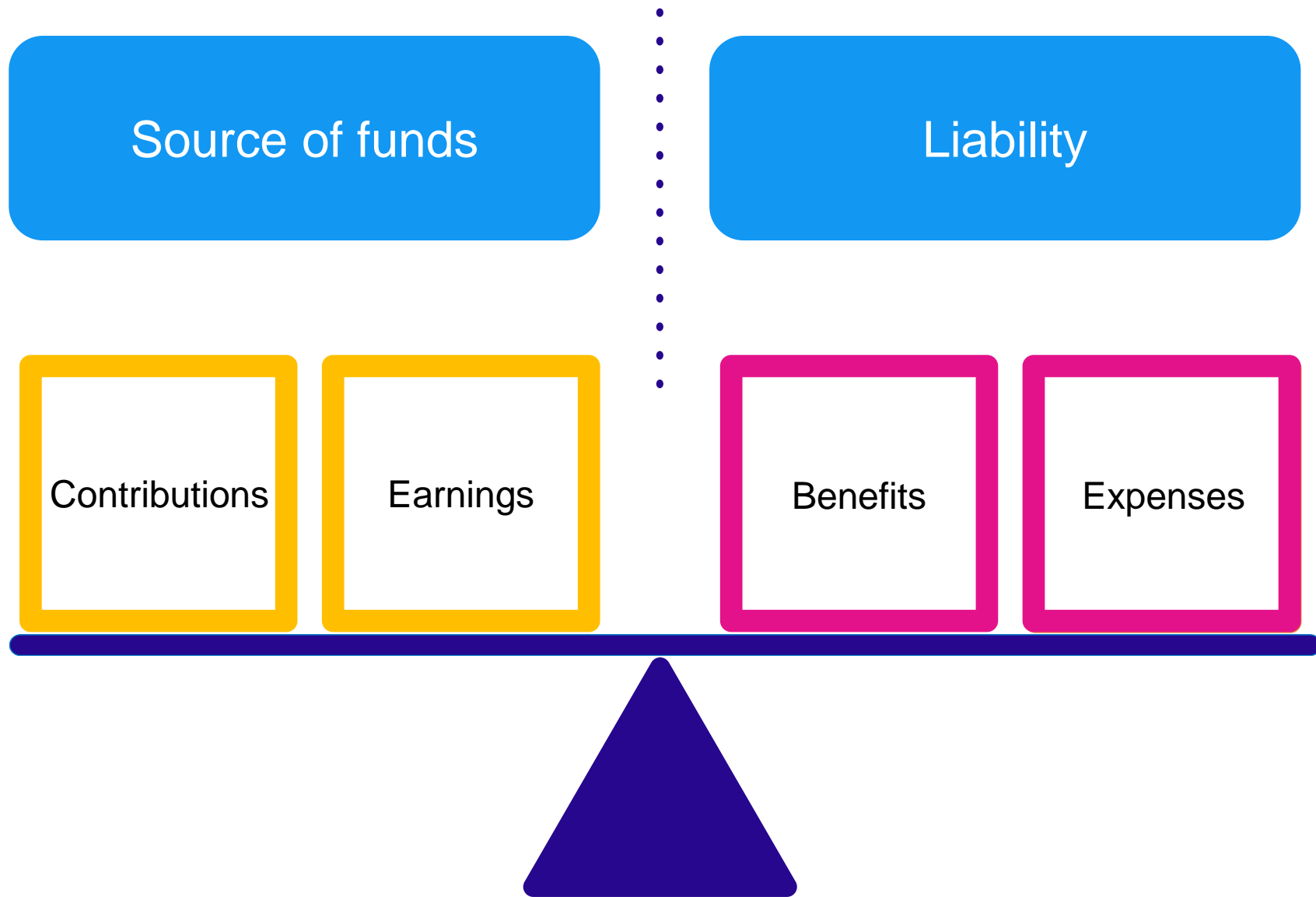
Staff, boards, and committee members typically are more knowledgeable and comfortable with information and decisions related to assets

Liabilities (L)

But financial decisions rely just as much on an understanding of the liabilities



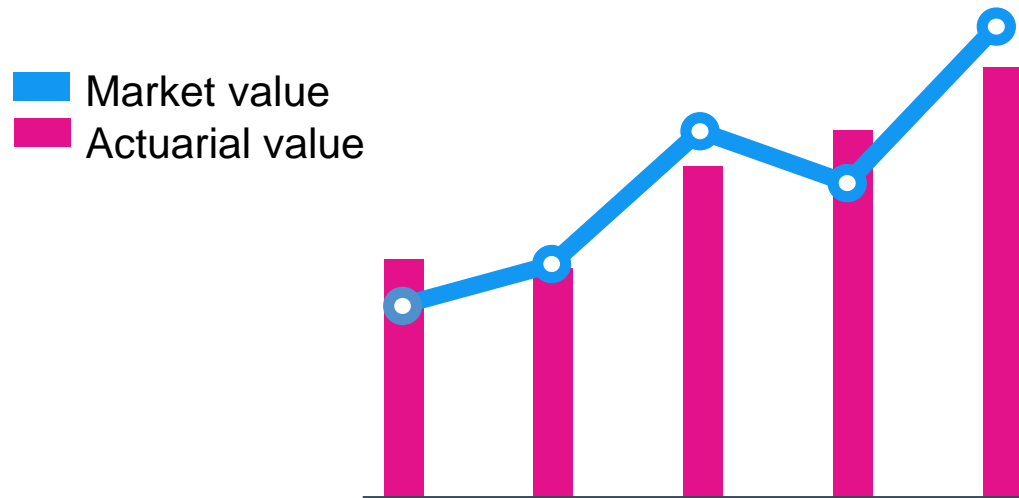
The real key is to understand the interplay of the assets and the liability for the pension plan and its ultimate 'cost'



Assets

Purpose of Actuarial Value of Assets

- Market value of assets – may be volatile
- Smoothed value of assets – reduces market volatility
 - Difference between expected asset value versus actual asset value paid over a predetermined amount of time
 - Plan uses a 5-year period of difference in expected versus actual market value
 - Corridor around market value – symmetrical, example 80%/120%



Why use an Actuarial Value of Assets?

- Adopted by the Board on Advice of Actuary
- Dampens Volatility of Market Value
- Reflects Investment Activities
- Is Understandable
- Is Acceptable to Accountants
- Stabilizes Employer Contributions

Development of Actuarial Valuation of Assets as of January 1, 2023*

A.	Market value of assets (MVA) on January 1, 2022	\$972,827,656
B.	Member Contributions	22,794,266
C.	Employer Contributions	41,034,190
D.	Benefits paid	(114,552,519)
E.	Administrative Expenses	(1,319,797)
F.	Investment return (net of investment expenses only)	(102,915,817)
G.	Market value of assets on January 1, 2023	817,867,979
H.	Expense and Contingency Reserve as of January 1, 2023	12,582,184
I.	MVA on January 1, 2023 minus Expense & Contingency Reserve (G. - H.)	805,285,795
J.	Yield for the 2022 plan year based upon Market Value of Assets	-10.87%
K.	Expected Return on Assets	66,307,209
L.	Gain/(Loss)	
(a)	2022	(\$169,223,026)
(b)	2021	N/A
(c)	2020	N/A
(d)	2019	N/A
(e)	2018	N/A

*Snapshot of key components in section 2.1 of the report



Development of Actuarial Valuation of Assets as of January 1, 2023* (continued)

M. Amount to be Recognized

(a) 2022	(33,844,605)
(b) 2021	N/A
(c) 2020	N/A
(d) 2019	N/A
(e) 2018	N/A

N. Amount not Recognized

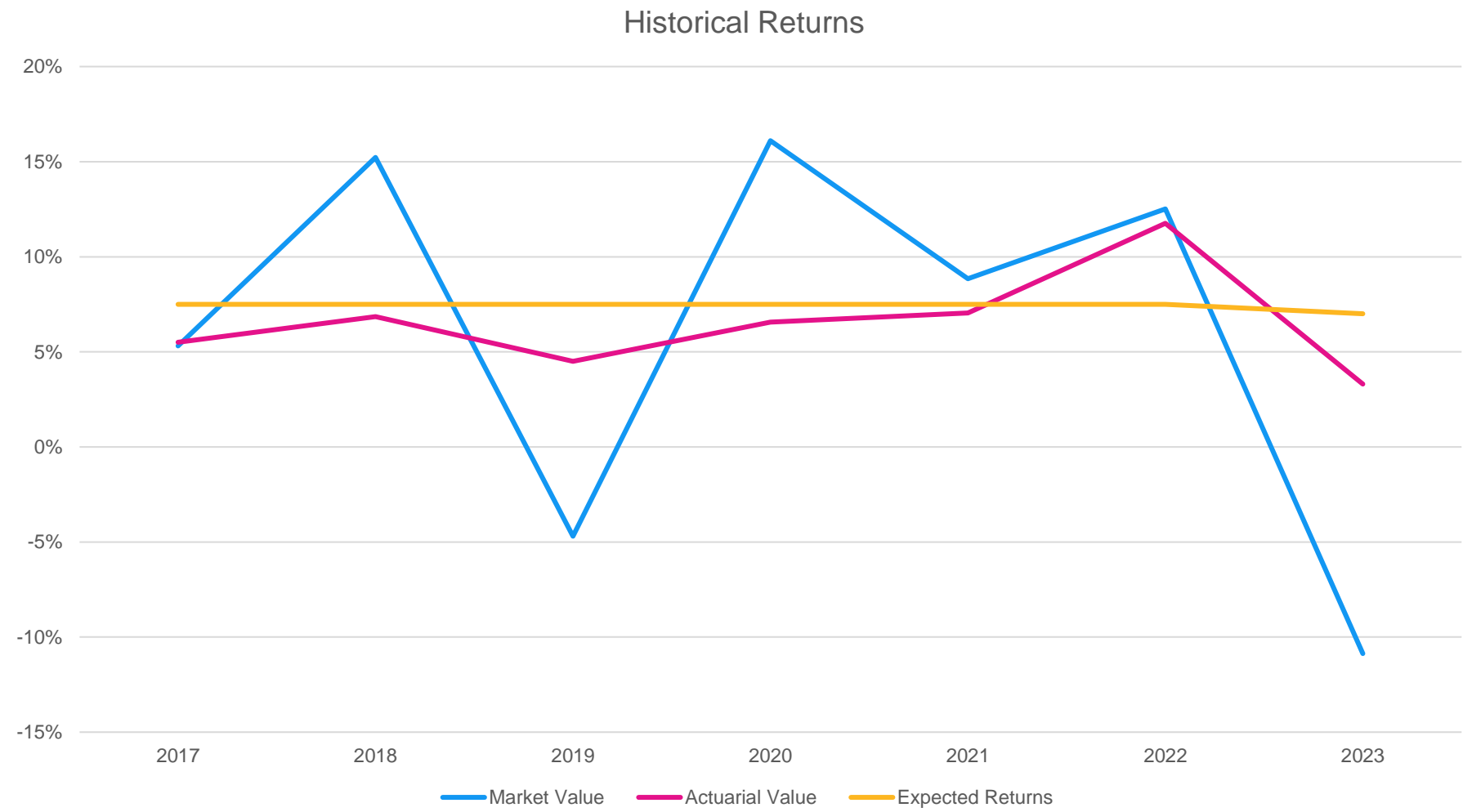
(a) 2022 (La x 4/5)	(\$135,378,421)
(b) 2021 (Lb x 3/5)	N/A
(c) 2020 (Lc x 2/5)	N/A
(d) 2019 (Ld x 1/5)	N/A
(e) 2018 (Le x 0/5)	N/A
(f) Total	(\$135,378,421)

O. Actuarial value of assets at January 1, 2023, (I) - (Nf)	940,664,216
P. Minimum Corridor of Actuarial Value of Assets (80% x I.)	644,228,636
Q. Maximum Corridor of Actuarial Value of Assets (120% x I.)	966,342,954
R. Actuarial value of assets at January 1, 2023 adjusted for limits	940,664,216
S. Yield for the 2022 plan year based upon the Actuarial Value of Assets	3.31%

*Snapshot of key components in section 2.1 of the report



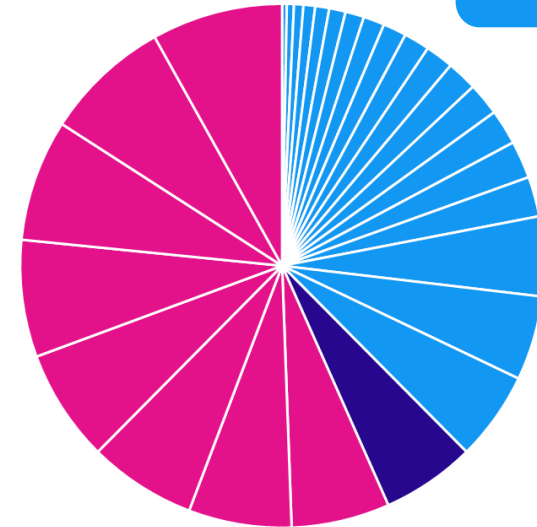
Historical Asset Rate of Return



Liabilities

Present Value of *Future Benefits* (PVFB)

- For every possible benefit amount and payment date, assumptions are made about
 - The amount of the benefit (future salaries, service, early retirement reduction)
 - When the benefit starts and how long it will be paid
- Every possible benefit payment is adjusted for
 - The probability that it is actually paid
 - The present value of all the payments in today's dollars
- Add all this up to get the Present Value of Future Benefits



PV of Future Employer Contributions:

Portion of the PVFB expected to be paid by the employer

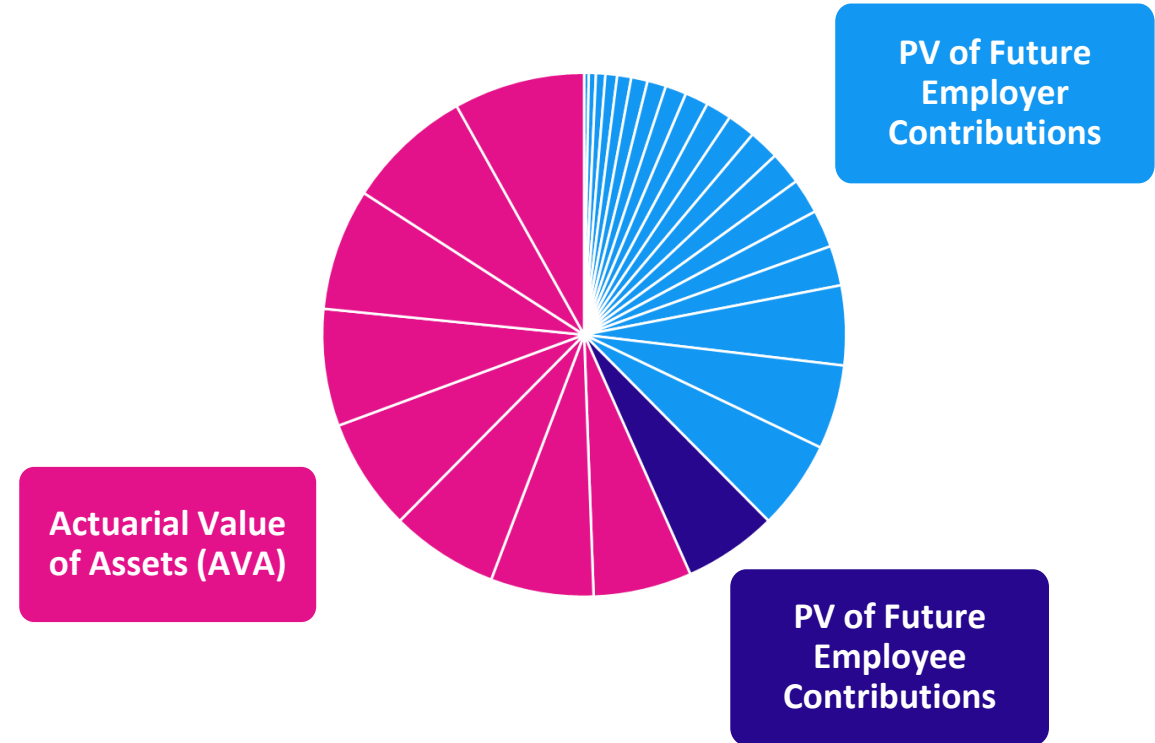
Actuarial Value of Assets (AVA): portion of the PVFB funded by the Plan's AVA

PV of Future Employee Contributions:

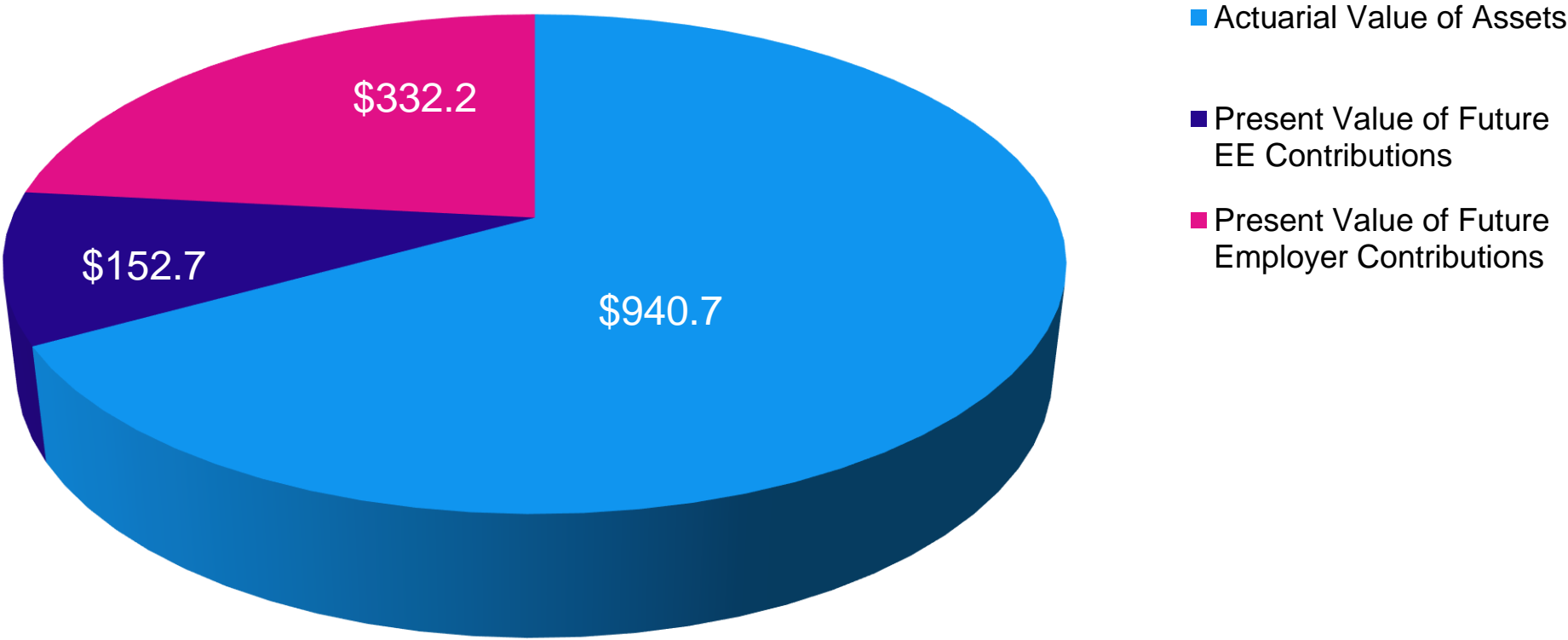
Portion of the PVFB expected to be paid by employee contributions

Present Value of Future Benefits

- Future benefits are all possible amounts paid out of the pension trust at any possible time
 - Retirement benefits
 - Death benefits
 - Disability benefits
- Amount depends on:
 - Years worked
 - Salary earned while working (if pay based)
 - Time benefits start
 - How they choose to receive benefits (form of payment)
 - How long they (and their spouse) live



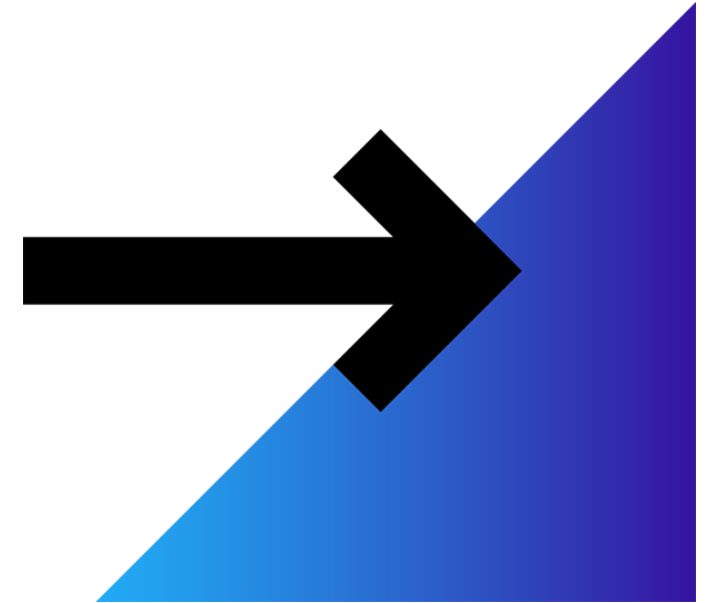
Present Value of Future Benefits



Total Present Value of Plan Benefits
(\$1,425.6 million)

Normal Cost and Accrued Liability

- Each year, an employee's benefit increases
- Normal Cost: the cost of the employee working another year, growing their benefit and getting closer to retirement
- Accrued Liability: sum of all of the prior Normal Costs, so the cost of the growth of the benefit to-date



Liabilities: Plan's Actuarial Cost Method

A cost method is used to convert the total liability of everything that might be paid (Present Value of Future Benefits) into a 'payment plan' so the benefits are prefunded but in a smooth pattern as the employee works and earns a benefit.

- The choice of funding method does not affect overall costs.
- Controlling factor in determining how much of the eventual cost is to be paid at a particular point in time.
- Present Value of Future Benefits can be divided into three categories.

Normal Cost

- Cost of the employee working another year, growing their benefit and getting closer to retirement
- Current year normal cost is accounted for in Plan's contributions

Accrued Liability

- Sum of all prior Normal Costs, so the cost of the growth of the benefit to-date
- Amortized under a 15-year layered amortization method to be paid in contributions

Present Value of Future Normal Cost

- Present value of all future cost of employees for working an additional year
- Will be paid at a later valuation date

*Details of the Plan's cost method can be found in the Appendix

Gain and Losses

Types of Assumptions

Demographic

- Withdrawal / termination
- Retirement
- Death (mortality)
- Disability

Economic

- Discount rate / return on assets
- Salary increases
- Inflation

Each demographic and economic assumptions used in the valuation should represent a reasonable long-term expectations to calculate the Plan's Present Value of Future Benefits.

Gains / Losses

- No crystal ball
 - actual experience will NOT match expected
- Difference creates an actuarial gain or loss
 - Better than expected = Gain
 - Worse than expected = Loss

Uncertainty = Volatility



Volatility can destroy budgets

Gain/loss during 2022 – Assets (\$ in Millions)

1. Actuarial value of assets 1/1/2022	\$ 943.2
2. Contributions (Total)	63.8
3. Benefit payments	(114.6)
4. Expense	(1.3)
5. Interest on (1), (2), and (3) at 7.00%	<u>64.2</u>
6. Expected actuarial value of assets as 1/1/2023	\$ 955.4
7. Change in AVA due to Change in Expense and Contingency Reserve	19.1
8. Expected Actuarial Vale of Assets as 1/1/2023	974.5
8. Actual actuarial value of assets as of 1/1/2023	940.7
9. Gain (loss) due to assets: (9) - (8)	\$ (33.8)

* Totals may differ from summation due to rounding

Gain/loss during 2022 – Liability (\$ in Millions)

1. Actuarial liability as of 1/1/2022	\$ 1,279.8
2. Normal cost as of 1/1/2022	21.6
3. Benefit payments	(114.6)
4. Interest on (1), (2), and (3) at 7.00%	<u>87.2</u>
5. Expected actuarial liability as of 1/1/2023 Before Changes	\$ 1,274.0
6. Change in Actuarial Accrued Liability due to Change in Assumptions	<u>(0.7)</u>
7. Expected actuarial liability as of 1/1/2023	\$ 1,273.3
8. Actual actuarial liability as of 1/1/2023	1,284.0
9. Gain (loss) due to liabilities: (7) - (8)	\$ (10.7)

The Plan experienced higher than expected salary during 2022 as a result of many new entrants into the Plan, which was the main source of the loss.

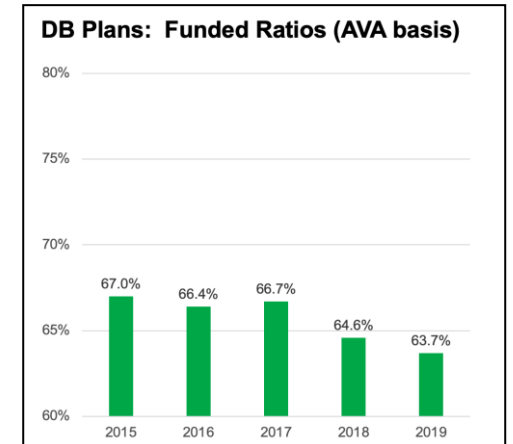
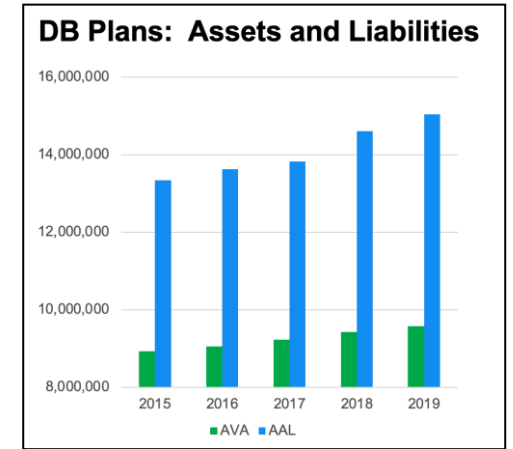
However, the Plan's total liability loss was mitigated by actuarial gains resulting from higher-than-expected deaths during 2022.

*Totals may differ from summation due to rounding

Valuation Results

Unfunded Liability & Funded Status

- Unfunded liability = Liability – Assets
- Funded status = Assets / Liability, AKA:
 - Funded percent
 - Funded ratio
- A “fully funded plan” means zero unfunded liability and 100% funded status
- Various measures for different purposes
 - Funding uses funding liability and actuarial value of assets
 - Accounting requires a method called Entry Age Normal liability with market value of assets



Valuation results

	January 1, 2023	January 1, 2022
System Assets		
Expense and Contingency Reserve ¹	\$ 12,582,184	\$ 29,625,803
Market Value, Excluding Expense & Contingency Reserve	\$ 805,285,795	\$ 943,201,853
Actuarial Value	\$ 940,664,216	\$ 943,201,853
System Liabilities		
Unfunded Actuarial Accrued Liability (UAAL)	\$ 343,375,959	\$ 336,645,221
Entry Age Normal (EAN) Actuarial Accrued Liability	\$ 1,284,040,175	\$ 1,279,847,074
EAN Funding Ratio		
Actuarial Value Funding Ratio	73.3%	73.7%
Market Value Funding Ratio	62.7%	73.7%

¹Effective January 1, 2023, expense & contingency reserve is calculated based on cost information and participant enrollment provided from the Plan including renegotiated rates under Medical Advantage. See section 3.8 for full details. For January 1, 2022, the expense & contingency reserve was calculated on the assumption that 80% of population eligible enrolls in medical, vision, and dental.



Funding

Gain
Loss

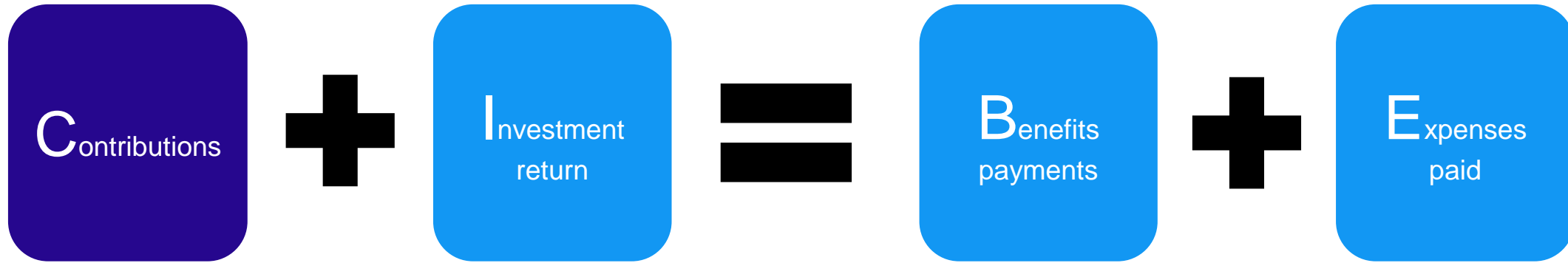
How on earth do
we figure this out?

Contribution Requirements

Smoothing

Amortization

Funding a Defined Benefit Pension Plan



Over the lifetime of the pension plan, the contributions made into the plan along with the investment returns will equal the benefit payments and expense paid out of the trust.

Actuary's role is to help allocate the contributions over time, but the ultimate cost of the plan is driven by the plan provisions.

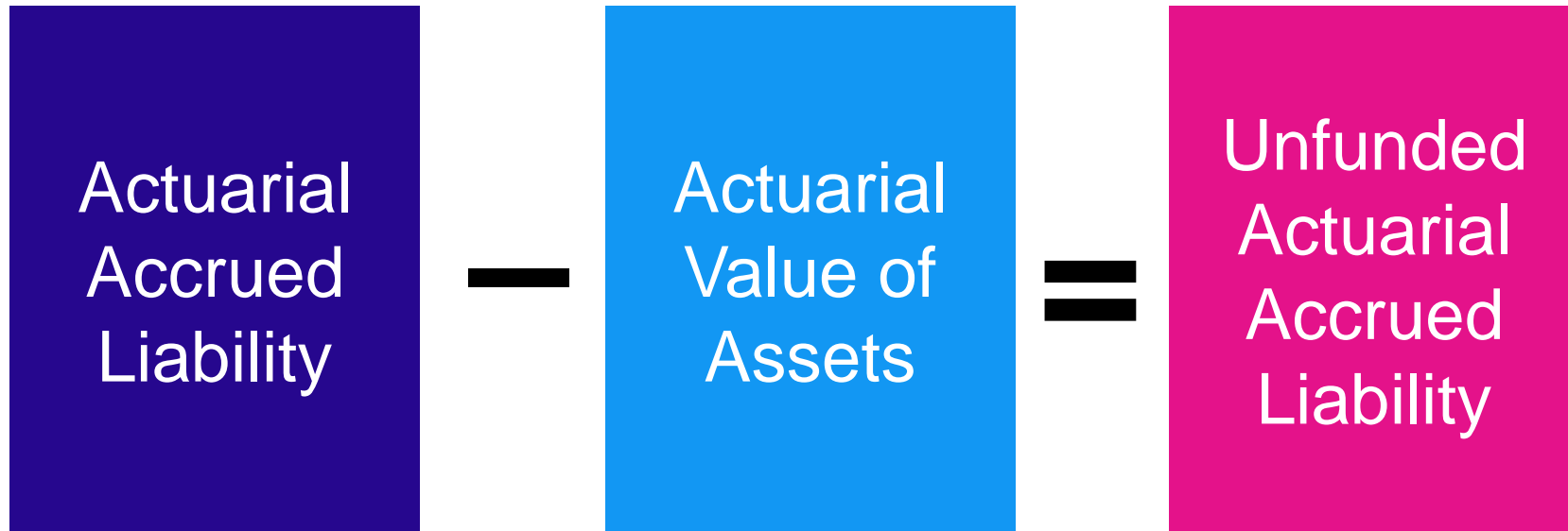
Actuarially Determined Contribution (ADC) and Actuarially Determined Employer Contribution (ADEC)

- Paid as a dollar amount or percent of pay
- Percent of pay ADEC = dollar amount divided by projected pay

Plan's calculation of ADEC:

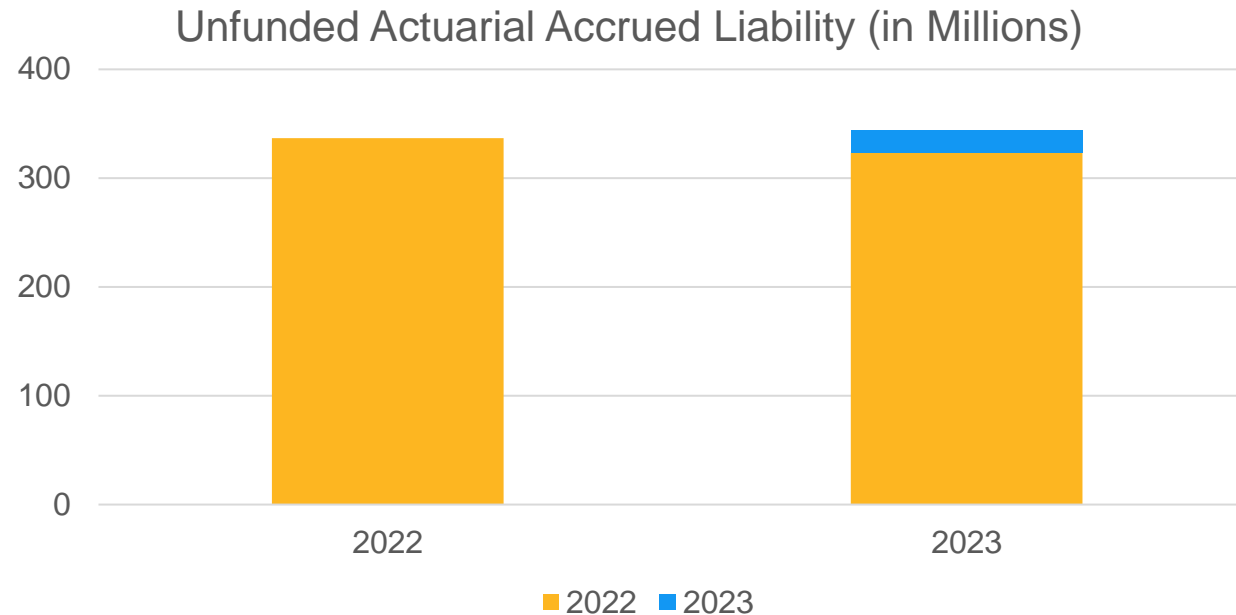
$$\begin{array}{r} \text{Normal Cost} \\ \text{Amortization payment} \\ + \text{Interest adjustment} \\ \hline \text{ADC} \\ - \text{Employee Contributions} \\ \hline = \text{ADEC} \end{array}$$

15-year Layered Amortization



15-year Layered Amortization

Date Established	Original Balance	Outstanding Balance as of 1/1/2022	Amortization (Gain)/Loss at 1/1/2022	Outstanding Balance as of 1/1/2023	Amortization (Gain)/Loss 1/1/2023	Remaining Years at 1/1/2023
January 1, 2022	\$ 336,645,221	\$ 336,645,221	\$ 34,543,772	\$ 323,248,550	\$ 34,543,772	14
January 1, 2023	20,127,409	0	0	20,127,409	2,065,310	15
Total				\$ 343,375,959	\$ 36,609,082	



Determination of Actuarially Determined Employer Contributions

	<u>2023</u>	<u>2022</u>
A. Number of Participants		
Active	4,940	4,594
Tier 1 Active	2,137	2,446
Tier 2 Active	2,803	2,148
In Pay Status	4,310	4,363
Retirees	3,846	3,879
Beneficiaries	260	265
Disabled	204	219
Deferred Vested	1,002	940
Nonvested with Balance	<u>3,566</u>	<u>3,316</u>
TOTAL	13,818	13,213
B. Covered Payroll	\$ 285,949,641	\$ 259,440,417
i. Tier 1: Members original Date of Hire prior to January 1, 2018	144,687,034	155,711,403
ii. Tier 2: Members original Date of Hire on or after January 1, 2018	141,262,607	103,729,014
C. Annual Benefits Payable to Retired Participants and Beneficiaries	\$ 104,746,239	\$ 105,401,769
D. Actuarial Liability (Entry Age Normal)		
Active	\$ 351,990,366	\$ 339,125,635
In Pay Status	867,806,864	882,739,730
Retirees	818,478,133	831,441,843
Beneficiaries	22,010,643	21,830,812
Disabled	27,318,088	29,467,075
Deferred Vested	46,306,207	42,230,323
Nonvested with Balance	<u>17,936,738</u>	<u>15,751,386</u>
TOTAL	\$ 1,284,040,175	\$ 1,279,847,074
E. Plan Assets - Actuarial Value	\$ 940,664,216	\$ 943,201,853
F. Unfunded Actuarial Accrued Liability (UAAL) (D. - E.)	\$ 343,375,959	\$ 336,645,221
G. Funded Ratio (D. / E.)	73.3%	73.7%



Determination of Actuarially Determined Employer Contributions (continued)

H.	Total Normal Cost	\$ 23,932,967	\$ 21,576,380
I.	Total Normal Cost with Interest Adjustment As a Percentage of Covered Payroll	\$ 24,756,454 8.66%	\$ 22,318,781 8.60%
J.	Amortization Payment of UAAL (See Table 1.3)	\$ 36,609,082	\$ 34,543,772
K.	Amortization Payment with Interest Adjustment As a Percentage of Covered Payroll	37,868,729 13.24%	35,732,356 13.77%
L.	Actuarially Determined Contribution (I. + K.)	\$ 62,625,183	\$ 58,051,137
M.	Expected Member Contributions ² As a Percent of Covered Payroll (M. / B.)	\$ 24,288,598 8.49%	\$ 21,013,966 8.10%
N.	Actuarially Determined Employer Contribution (L. - M.) As a Percentage of Covered Payroll	\$ 38,336,585 13.41%	\$ 37,037,171 14.28%

²Tier 1 Expected Member Contributions are 8.0% in 2023 and 7.5% in 2022. Tier 2 Contributions are 9.0% in 2022 and 2023.



Valuation results – Required Annual Contributions

Actuarially Determined Employer Contribution (ADEC):

	Board of Education	Retirement System	Charter Schools	Total
Normal Cost Contribution	\$ 16,026,862	\$ 53,182	\$ 8,676,410	\$ 24,756,454
Actuarial Accrued Liability Contribution	24,515,502	81,350	13,271,877	37,868,729
Member Contributions	<u>(15,723,981)</u>	<u>(52,177)</u>	<u>(8,512,440)</u>	<u>(24,288,598)</u>
Actuarially Determined Employer Contribution (ADEC)	\$ 24,818,383	\$ 82,355	\$ 13,435,847	\$ 38,336,585
Covered Payroll	185,118,414	614,280	100,216,947	285,949,641
ADEC as % of Covered Payroll	13.41%	13.41%	13.41%	13.41%

Statutory Annual Required Contribution (ARC):

	Board of Education	Retirement System	Charter Schools	Total
Covered Payroll	\$ 185,118,414	\$ 614,280	\$ 100,216,947	\$ 285,949,641
ARC as % of Covered Payroll	13.50%	13.50%	13.50%	13.50%
Statutory Annual Required Contribution (ARC)	\$ 24,990,986	\$ 82,928	\$ 13,529,288	\$ 38,603,202

*Snapshot of key components in section 1.2 of the report



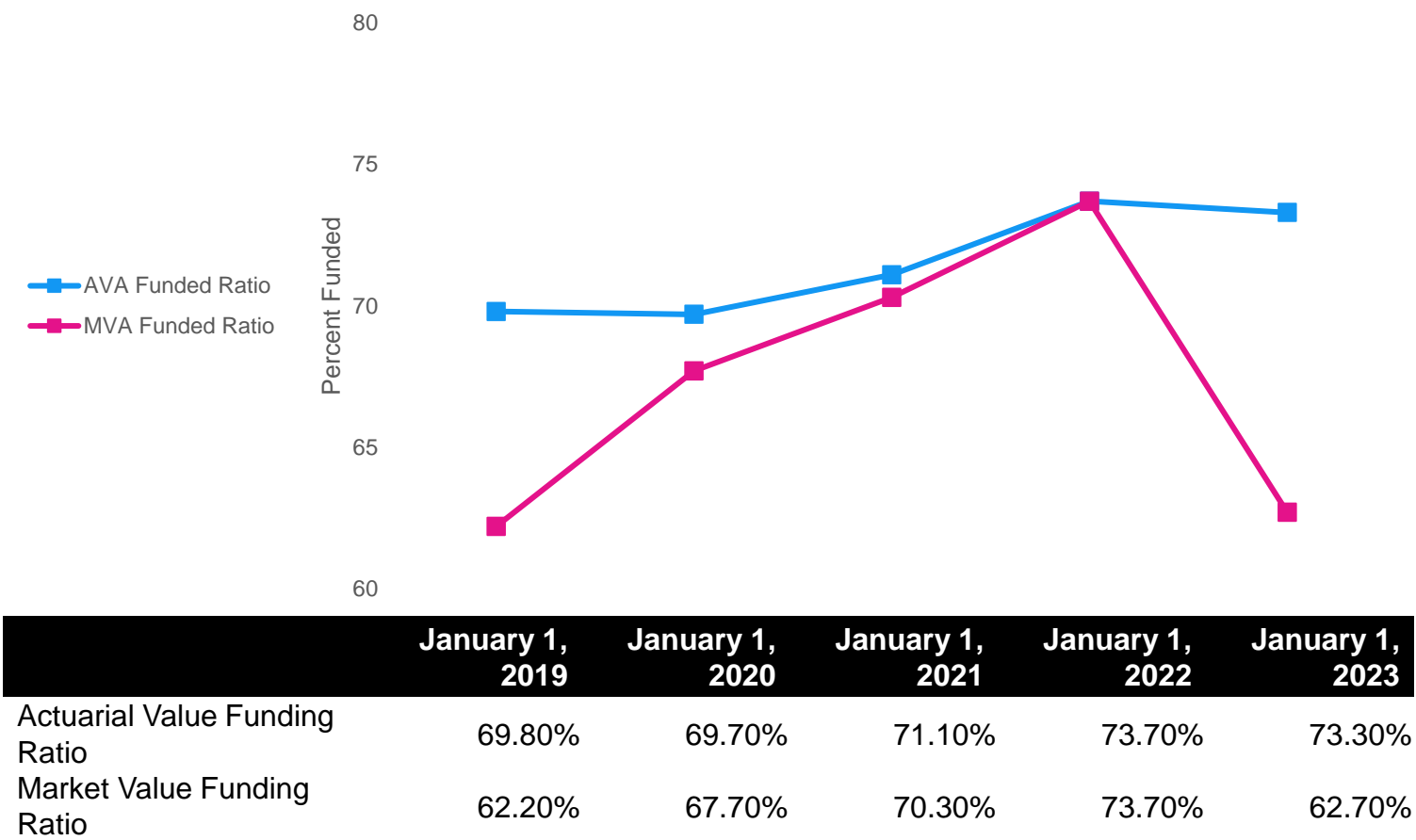
Valuation results

	Board of Education	Retirement System	Charter Schools	Total
2023				
Normal Cost Contribution	\$ 16,026,862	\$ 53,182	\$ 8,676,410	\$ 24,756,454
Actuarial Accrued Liability Contribution	24,515,502	81,350	13,271,877	37,868,729
Member Contributions	<u>(15,723,981)</u>	<u>(52,177)</u>	<u>(8,512,440)</u>	<u>(24,288,598)</u>
Actuarially Determined Employer Contribution (ADEC)	\$ 24,818,383	\$ 82,355	\$ 13,435,847	\$ 38,336,585
Covered Payroll	185,118,414	614,280	100,216,947	285,949,641
ADEC as % of Covered Payroll	13.41%	13.41%	13.41%	13.41%
Statutory Required Contribution Rate	13.50%	13.50%	13.50%	13.50%
Statutory Annual Required Contribution (ARC)	\$ 24,990,986	\$ 82,928	\$ 13,529,288	\$ 38,603,202
2022				
Normal Cost Contribution	\$ 14,525,814	\$ 50,353	\$ 7,742,614	\$ 22,318,781
Actuarial Accrued Liability Contribution	23,255,821	80,615	12,395,920	35,732,356
Member Contributions	<u>(13,676,596)</u>	<u>(47,410)</u>	<u>(7,289,960)</u>	<u>(21,013,966)</u>
Actuarially Determined Employer Contribution (ADEC)	\$ 24,105,039	\$ 83,558	\$ 12,848,574	\$ 37,037,171
Covered Payroll	168,852,563	585,315	90,002,539	259,440,417
ADEC as % of Covered Payroll	14.28%	14.28%	14.28%	14.28%
Statutory Required Contribution Rate	14.00%	14.00%	14.00%	14.00%
Statutory Annual Required Contribution (ARC)	\$ 23,639,359	\$ 81,944	\$ 12,600,355	\$ 36,321,658



Funded Ratio History

(Actuarial Value of Assets divided by Entry Age Normal Accrued Liability)



The Plan experienced a large loss due to unfavorable asset returns. However, the Plan was able to limit the volatility of the ADEC and funded status with the Plan's actuarial value of assets. 80% of the loss will be deferred until later years.

Unless favorable asset returns occur during in the upcoming year, the Plan should anticipate the ADEC to increase and funded status to decrease as the deferred loss from the 2022 asset experience will continue to be smoothed into the actuarial value of assets.

Potential risks to Plan's future financial condition

- Deviations between actual future experience and actuarial assumed future experience may cause the plan to become less funded over time increasing the required contributions.
- A few areas where deviations may arise:

Investment risk:

Plan does not achieve the 7.00% expected return on assets over time.

Use of Actuarial Value of Assets helps smooths gains and losses to help control volatility in contributions due to investment risk.

Longevity risk:

Participants live longer than expected based on valuation mortality assumptions.

Contribution risk:

Actual contribution amounts less than the actuarially determined contribution.

Statutory contributions being lower than the actuarially determined contributions will significantly increase the risk.

Long term return on investment assumption risk:

Potential that future capital market assumptions will produce a need to decrease the current long term investment return assumption

Actuarial Standards of Practice (ASOP) No. 4

Measuring Pension Obligations and Determining Pension Plan Costs or Contributions

- The Actuarial Standards Board issued a revision to the ASOP 4 effective for valuations with a measurement date on or after February 15, 2023
 - The Plan has a valuation date of January 1st so changes will be implemented in the January 1, 2024 valuation
- An additional requirement was added to ASOP 4 requiring valuation reports to disclose the liabilities valued with a Low-Default-Risk Obligation Measure (LDROM)
 - Provides insight to the Plan where cost could be if the Plan did not invest in risky assets
 - We will provide updates and work with the PSRS staff as more details around the ASOP are finalized

Any questions?

Request board approval of report

Appendix

Certification

The results in this presentation were developed for the Public School Retirement System of the City of St. Louis by Buck using generally accepted actuarial principles and techniques in accordance with all applicable Actuarial Standards of Practice (ASOPs). The purpose of this presentation is to provide to the board a summary of the 2023 valuation results for discussion during the board meeting attended by the actuaries. Use of this presentation for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, you should ask Buck to review any statement you wish to make on the results contained in this presentation. Buck will not accept any liability for any such statement made without prior review. No third-party recipient of Buck's work product should rely upon Buck's work product absent involvement of Buck or without our approval.

Interested parties may refer to the full January 1, 2023, actuarial valuation report for a detailed explanation regarding data, assumptions, methods, and plan provisions that underlie the valuation results. The valuation report also provides the risk disclosures required under ASOP 51 and the use of model disclosures under ASOP 56.

Where presented, references to "funded ratio" and "unfunded accrued liability" typically are measured on an actuarial value of assets basis. It should be noted that the same measurements using market value of assets would result in different funded ratios and unfunded accrued liabilities. Moreover, the funded ratio presented is appropriate for evaluating the need and level of future contributions but makes no assessment regarding the funded status of the plan if the plan were to settle (i.e., purchase annuities) for a portion or all of its liabilities.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as: plan experience different from that anticipated by the economic and demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

Michael A. Ribble and Matthew Staback meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this presentation. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

Summary of Methods and Assumptions

Assumptions and Methods	
Interest Rate	7.0% (net of investment expenses)
Interest Crediting Rate	2.0%
Salary Increase	5.0% per year for first 5 years of employment and 3.50% thereafter
Mortality	PubG-2010 (Below Median) Mortality Table, amount weighted, projected fully generationally using projection scale MP-2021. The mortality assumption for retired participants receiving benefits is increased by 2% for males and 10% for females
Actuarial Cost Method	Entry Age Normal
Valuation of Assets	<p>The actuarial value of assets is based upon a smoothed market value method. Under this method, asset returns in excess of or less than the expected investment return on market value of assets will be reflected in the actuarial value of assets over a five-year period. The plan's actuarial value of assets will be set equal to the plan's market value of assets less the expense and contingency reserve as of January 1, 2022. The calculation of the Actuarial Value of Assets is based on the following formula:</p> $MV - 80\% \times G/(L)_1 - 60\% \times G/(L)_2 - 40\% \times G/(L)_3 - 20\% \times G/(L)_4 - \text{Expense and Contingency Reserve}$ <p>MV = the market value of assets as of the valuation date</p> <p>$G/(L)_i$ = the asset gain or (loss) for the i-th year preceding the valuation date</p>

*Full Summary of Methods and Assumptions can be found in Section 3.8 of the Actuarial Valuation Report

Change in Methods and Assumptions from Prior Valuation

Assumptions

- Lowered interest crediting rate from 5.0% to 2.0% per annum.
- Updated Expense and Contingency Reserve to be based on actual premiums provided by the Plan.

Methods

- None.

*Full Summary of Methods and Assumptions can be found in Section 3.8 of the Actuarial Valuation Report

