SEIU Affiliates Officers and Employees Pension Plan

Actuarial Valuation and Review as of January 1, 2023

This report has been prepared at the request of the Board of Trustees to assist in administering the Fund and meeting filing requirements of federal government agencies. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

Segal

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February 2, 2024

Board of Trustees
SEIU Affiliates Officers and Employees Pension Plan
1800 Massachusetts Ave NW, Suite 301
Washington, DC 20036

Dear Trustees:

We are pleased to submit the Actuarial Valuation and Review as of January 1, 2023. It establishes the funding requirements for 2023 and analyzes the preceding year’s experience. It also summarizes the actuarial data and includes the actuarial information that is required to be filed with Form 5500 to federal government agencies.

The actuarial valuation results are dependent on a single set of assumptions; however, there is a risk that emerging results may differ significantly as actual experience proves to be different from the current assumptions. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan’s future financial condition but have included a brief discussion of some risks that may affect the Plan.

The census information upon which our calculations were based was prepared by the Benefit Funds Office, under the direction of Eunice Washington. That assistance is gratefully acknowledged. The actuarial calculations were completed by Andrew Dweck and Steven Loomis, ASA, FCA, MAAA, Enrolled Actuary under the supervision of Deborah J. Marcotte, FCA, MAAA, Enrolled Actuary.

We look forward to reviewing this report with you at your next meeting and to answering any questions you may have.

Sincerely,

Segal

Stacey Hostetler Carter	Alex Giordano, ASA, FCA, MAAA, EA
Senior Vice President and Benefits Consultant	Vice President and Consulting Actuary

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Introduction

There are several ways of evaluating funding adequacy for a pension plan. In monitoring the Plan's financial position, the Trustees should keep in mind all of these concepts.

Concept	Description
Funding Standard Account	The ERISA Funding Standard Account (FSA) measures the cumulative difference between actual contributions and the minimum required contributions. If actual contributions exceed the minimum required contributions, the excess is called the credit balance. If actual contributions fall short of the minimum required contributions, a funding deficiency occurs.
Zone Information	The Pension Protection Act of 2006 (PPA'06) called on plan sponsors to actively monitor the projected FSA credit balance, the funded percentage (the ratio of the actuarial value of assets to the present value of benefits earned to date) and cash flow sufficiency. Based on these measures, plans are then categorized as critical (*Red Zone*), endangered (*Yellow Zone*), or neither (*Green Zone*). The Multiemployer Pension Reform Act of 2014 (MPRA), among other things, made the zone provisions permanent.
Solvency Projections	Pension plan funding anticipates that, over the long term, both contributions and investment earnings will be needed to cover benefit payments and expenses. To the extent that contributions are less than benefit payments, investment earnings and fund assets will be needed to cover the shortfall. In some situations, a plan may be faced with insufficient assets to cover its current obligations and may need assistance from the Pension Benefit Guaranty Corporation (PBGC). MPRA and the Special Financial Assistance (SFA) program under the American Rescue Plan Act of 2021 (ARPA) provide options for some plans facing insolvency.
Scheduled Cost	The Scheduled Cost is an annual amount based on benefit levels and assets that allows a comparison to current contribution levels, given the expectation of a continuing plan.
Withdrawal Liability	ERISA provides for assessment of withdrawal liability to employers who withdraw from a multiemployer plan based on unfunded vested benefit liabilities.

Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future uncertain obligations of a pension plan. As such, it will never forecast the precise future contribution requirements or the precise future stream of benefit payments. However, the valuation does provide the actuary's best estimate of plan liabilities based on current assumptions, participant population, and plan provisions. Since future experience will not exactly match expectations, the actual cost of the plan will be determined by the benefits and expenses paid, not by the actuarial valuation. In order to prepare a valuation, Segal relies on a number of input items. These include:

Item	Description
Plan Provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important for the Trustees to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Participant Information	An actuarial valuation for a plan is based on data provided to the actuary by the plan. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. For most plans, it is not possible nor desirable to take a snapshot of the actual workforce on the valuation date. It is not necessary to have perfect data for an actuarial valuation. The uncertainties in other factors are such that even perfect data does not produce a "perfect" result. Notwithstanding the above, it is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial Information	Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the auditor. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
Actuarial Assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan's benefits for each of those events. The present value is determined by applying a discount rate to the forecasted benefits All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions the actuary selects within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

Given the above, the user of Segal's actuarial valuation (or other actuarial calculations) needs to keep the following in mind:

The actuarial valuation is prepared for use by the Trustees. It includes information for compliance with federal filing requirements and for the Plan's auditor. Segal is not responsible for the use or misuse of its report, particularly by any other party.

An actuarial valuation is a measurement at a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.

Critical events for a plan include, but are not limited to, decisions about changes in benefits and contributions. The basis for such decisions needs to consider many factors such as the risk of changes in employment levels and investment losses, not just the current valuation results.

ERISA requires a plan's enrolled actuary to provide a statement in the plan's annual report disclosing any event or trend that the actuary has not taken into account, if, to the best of the actuary's knowledge, such an event or trend may require a material increase in plan costs or required contribution rates. If the Trustees are aware of any event that was not considered in this valuation and that may materially increase the cost of the Plan, they must advise Segal, so that an appropriate statement can be included.

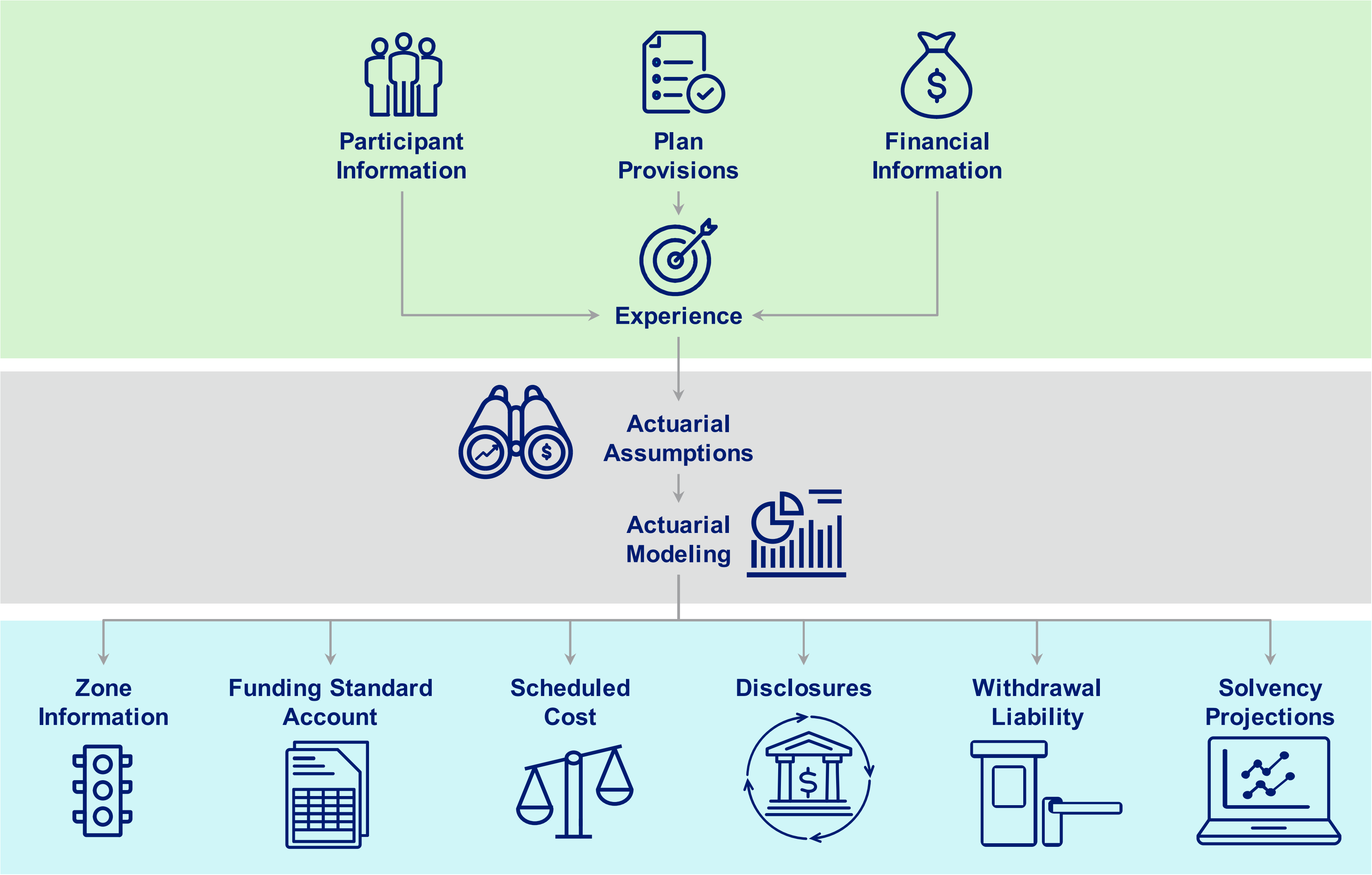
Segal does not provide investment, legal, accounting, or tax advice. This valuation is based on Segal's understanding of applicable guidance in these areas and of the Plan's provisions, but they may be subject to alternative interpretations. The Trustees should look to their other advisors for expertise in these areas.

While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.

Segal's report shall be deemed to be final and accepted by the Trustees upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

As Segal has no discretionary authority with respect to the management of assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

Actuarial valuation overview



Participant Information

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Section 1: Trustee Summary

Summary of key valuation results

Plan Year Beginning		**January 1, 2022**	**January 1, 2023**
Certified Zone Status		*"Green"*	*"Green"*
Demographic Data:	Number of active participants	3,836	3,988
	Number of inactive participants with vested rights	5,096	5,211
	Number of retired participants and beneficiaries	2,939	3,037
	Total number of participants	11,871	12,236
	Participant ratio: non-active to actives	2.09	2.07
	Average projected annual compensation per active participant	$83,982	$86,276
Assets for valuation purposes:	Market value of assets (MVA)	$1,493,167,950	$1,304,785,243
	Actuarial value of assets (AVA)	1,493,167,950[1]	1,532,744,022
	Market value net investment return, prior year	15.38%	-12.13%
	Actuarial value net investment return, prior year	21.84%[2]	3.17%
Cash Flow:		**Actual 2021**	**Actual 2022**
	Contributions	$64,858,163	$68,652,078
	Withdrawal liability payments	58,335	30,050
	Benefit payments	-65,953,381	-74,547,482
	Administrative expenses	-1,732,563	-1,843,316
	Net cash flow	-$2,769,446	-$7,708,670
	Cash flow as a percentage of MVA	-0.2%	-0.6%

[1] Reflects a change in the asset valuation method to a smooth market value with phase-in of gains and losses over five years (actuarial value of assets equal to the market value of assets as of January 1, 2022).

[2] Includes impact of write-up of actuarial value to market value on January 1, 2022. The actuarial value net investment return prior to this change was 10.41%.

Summary of key valuation results

Plan Year Beginning		**January 1, 2022**		**January 1, 2023**	
Actuarial Liabilities based on Funding Method[1]:	• Valuation interest rate	7.00%		7.00%	
	• Normal cost, including administrative expenses	$38,592,124		$50,326,229	
	• Actuarial accrued liability	1,623,592,159		1,588,638,036	
	• Unfunded actuarial accrued liability	130,424,209		55,894,014	
Funded Percentages:	• Actuarial accrued liabilities under unit credit method	$1,358,551,128		$1,440,688,081	
	• MVA funded percentage	109.9%		90.6%	
	• AVA funded percentage (PPA basis)	109.9%		106.4%	
Statutory Funding Information:	• Credit balance at the end of prior Plan Year	$92,372,519		$95,930,880	
	• Minimum required contribution	0		0	
	• Maximum deductible contribution	2,635,261,859		2,582,378,410	
Scheduled Cost:	• Interest rate	7.00%		7.00%	
		Amount	**Percent of Payroll**	**Amount**	**Percent of Payroll**
	• Projected contributions	$67,652,243	21.0%	$72,254,817	21.0%
	• Scheduled Cost	64,654,209	20.1%	63,236,231	18.4%
	• Margin	2,998,034	0.9%	9,018,586	2.6%
	• Actual contributions	68,652,078		--	

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[1] The Trustees approved a change in the Plan's funding method from Entry Age Normal to Projected Unit Credit effective January 1, 2023.

This January 1, 2023 actuarial valuation report is based on financial and demographic information as of that date. The Plan's actuarial status does not reflect short-term fluctuations of the financial markets or employment levels, but rather is based on the market value of assets on the last day of the preceding Plan Year. Future changes in economic conditions are uncertain, and Segal is available to prepare projections of potential outcomes upon request.

A. Developments since last valuation

The following are developments since the last valuation, from January 1, 2022, to January 1, 2023.

1. *Participant demographics:* The number of active participants increased 4.0% from 3,836 to 3,988. The ratio of non-active to active participants, which is one measure of plan maturity, decreased from 2.09 to 2.07.
2. *Investment returns:* The net investment return on the market value of assets was -12.13%. For comparison, the assumed rate of return on plan assets over the long term is 7.00%. The net investment return on the actuarial value of assets, which reflects smoothing of prior year gains and losses, was 3.17%. The calculation of the actuarial value of assets for the current Plan Year can be found in Section 2 and the change in the market value of assets over the last two Plan Years can be found in Section 3.
3. *Cash flows:* Cash inflow includes contributions and withdrawal liability payments, and cash outflow includes benefits paid to participants and administrative expenses. In the Plan Year ending December 31, 2022, the Plan had a net cash outflow of $7,708,670, or about 0.6% of assets on a market value basis.
4. *Assumption changes:* Since the last valuation, we changed actuarial assumptions related to mortality, retirement rates from active status, maximum age for inclusion of inactive vested participants in the valuation, percentage of pensioners electing a partial lump sum, and administrative expenses. We selected the new assumptions based on a review of recent plan experience, and they represent our best estimate of anticipated experience under the Plan. In total, the new actuarial assumptions increased the actuarial accrued liability by 0.5% and the normal cost by 0.3% and are also effective for purposes of withdrawal liability calculated as of December 31, 2022.
5. *Method change:* At the September 27, 2023, Board of Trustees meeting, the Trustees approved a change to the funding method from Entry Age Normal to Projected Unit Credit effective January 1, 2023. The funding method change decreased the actuarial accrued liability by 8.0% and increased the normal cost by 21.0%.

B. Actuarial valuation results

The following commentary applies to various funding measures for 2023.

1. *Zone status:* The Plan was certified to be neither in endangered status nor in critical status under the Pension Protection Act of 2006 (PPA) for the current Plan Year. In other words, the Plan is in the “Green Zone” because the funded percentage for the current Plan Year is at least 80%, and the Plan has no projected deficiency in its funding standard account for the current or next six Plan Years. Please refer to the actuarial certification dated March 30, 2023, for more information.
2. *Funded percentages:* During 2022, the funded percentage that will be reported on the Plan’s annual funding notice decreased from 109.9% to 106.4% due primarily to plan assets that fell short of the actuarial assumed rate of return and changes in actuarial assumptions that increased plan liabilities. Please note that there are different measurements of funded percentage for different purposes. More information can be found in Section 2.
3. *Funding Standard Account:* During 2022, the credit balance increased from $92.4 million to $95.9 million because contributions exceeded the net charges in the Funding Standard Account (FSA) for the Plan Year. For the current Plan Year, the minimum required contribution is $75.9 million without regard to the credit balance ($0 with regard to the credit balance), compared to $72.3 million in expected contributions. The credit balance is expected to temporarily increase to $101.3 million by the end of 2023 due to interest applied to the credit balance in the Plan’s Funding Standard Account. However, the credit balance is ultimately projected to decline in the future.
4. *Scheduled Cost:* Scheduled Cost for the plan year is the sum of normal cost (the cost of benefit accruals plus administrative expenses) and an amortization of the unfunded liability. For the current Plan Year, there is a $9,018,586 margin between expected contributions and Scheduled Cost, or about 2.6% of projected covered payroll. The increase in margin for the current plan year was driven primarily by the funding method change. The increase in margin for the prior plan year was due primarily to resetting the Actuarial Value of Assets (AVA) equal to the Market Value of Assets (MVA). For the current plan year and using the MVA, there is a Scheduled Cost deficit of $27,984,480, which may indicate future funding challenges.
5. *Funding concerns:* The projected decline in the credit balance should continue to be monitored. We will continue to work with the Board to model and review funding projections, including potential risk factors.

C. Withdrawal liability

On July 8, 2022, the federal District of Columbia Circuit Court reversed the District Court’s ruling in *United Mine Workers of American 1974 Pension Plan v. Energy West Mining Company* ruling that, absent regulations from the PBGC, the interest rate assumption used for determining withdrawal liability must be “similar” to the assumption used for minimum funding purposes, because both represent the actuary’s best estimate of anticipated experience under the plan. While the case involved the use of solely risk-free rates to determine withdrawal liability (not the Segal Blend), the decision calls into question any withdrawal liability assumptions that are not “similar to” those used for minimum funding for plans based in the District of Columbia.

Subsequent to the “Energy West” ruling, the PBGC published its proposed rule on withdrawal liability assumptions on October 13, 2022. The proposed rule provides a range of acceptable interest rates that may be used to determine a multiemployer plan’s unfunded vested benefits for purposes of withdrawal liability. Under the proposed rule, the acceptable rates range from the PBGC’s annuity rates (the rates set forth in the PBGC’s existing regulations, reflecting the market price of purchasing annuities from private insurers) to the rate used for ERISA minimum funding purposes. Any approach that blends the PBGC’s annuity rates and the minimum funding rate, such as the Segal Blend, is acceptable.

Due to the current uncertainty regarding the interest rate assumption for withdrawal liability purposes, we have removed withdrawal liability results from this year’s actuarial valuation report as we await further guidance from the PBGC.

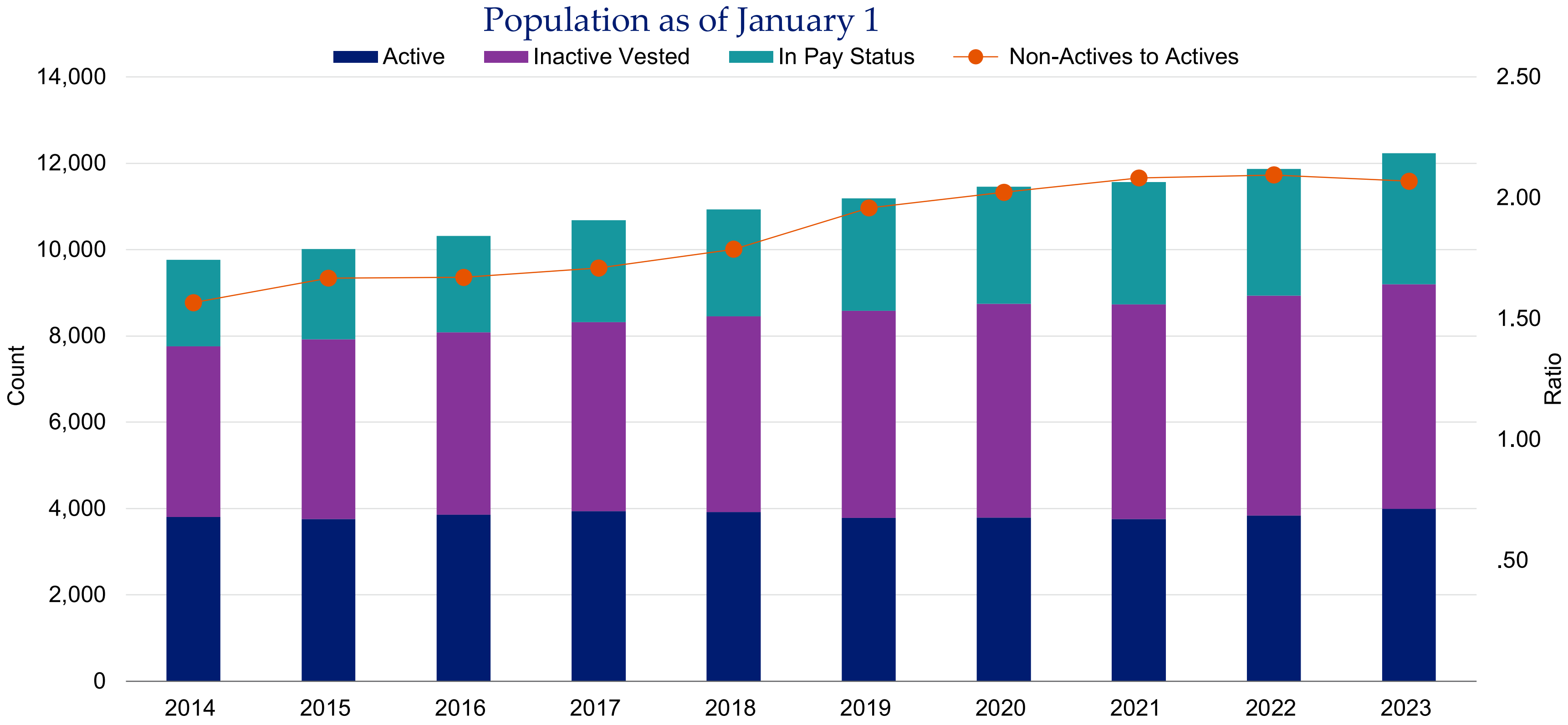
D. Projections and risk

1. *Importance of projections:* Most of the results included in this valuation report are snapshot measurements, showing the Plan’s status as of the valuation date. In addition to understanding the Plan’s current status, it is also important to understand where the Plan is headed through actuarial projections. Projections may evaluate various metrics, such as funded percentage, the Funding Standard Account credit balance, zone status, cash flows and solvency.
2. *Understanding risk:* Projections can also help the Trustees understand the sensitivity of future results to various risk factors, such as investment volatility or changes in future contributions. For example, if future investment returns are less than the actuarial assumption, or future contributions are less than projected, the Plan may not meet its funding objectives or may face eventual insolvency. See Section 2 for a general discussion on the risks facing the Plan, and how they might be better evaluated, understood and addressed. We regularly review funding projections with the Board that demonstrate the effect of primary risk factors, such as actual investment returns that are different than assumed. A more detailed assessment of the potential range of future measurements and risks would provide the Trustees with a better understanding of the risks inherent in the Plan.

Section 2: Actuarial Valuation Results

Participant information

- There were 3,988 active participants this year, an increase of 4.0% compared to 3,836 in the prior year.
- The ratio of non-actives to actives has remained level for the past three years.

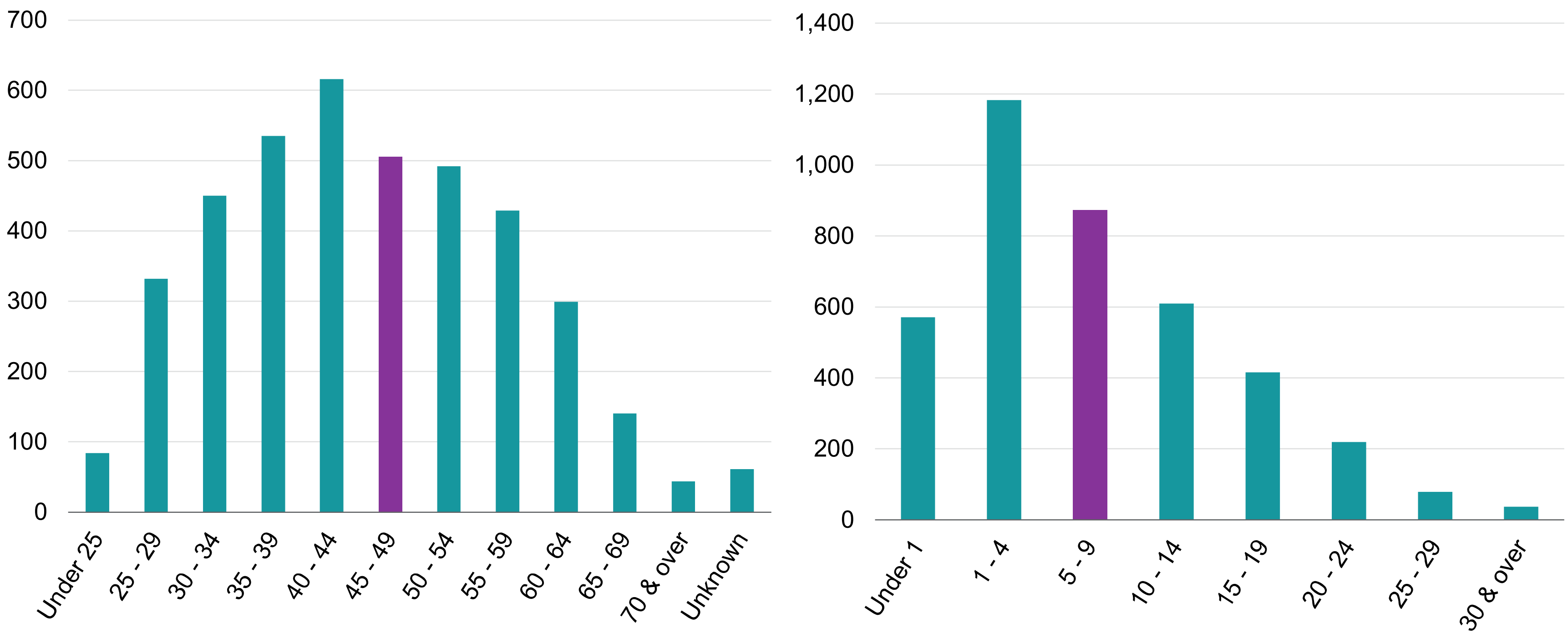


Population as of January 1

	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
In Pay Status	2,007	2,094	2,231	2,363	2,486	2,607	2,708	2,831	2,939	3,037
Inactive Vested	3,953	4,165	4,219	4,376	4,526	4,799	4,956	4,979	5,096	5,211
Active	3,807	3,755	3,860	3,942	3,923	3,783	3,788	3,752	3,836	3,988
Ratio	1.57	1.67	1.67	1.71	1.79	1.96	2.02	2.08	2.09	2.07

Active participants

As of January 1,	2022	2023	Change
Active participants	3,836	3,988	4.0%
Average age	45.2	45.1	-0.1
Average years of benefit service	8.4	8.2	-0.2



Distribution of Active Participants as of January 1, 2023

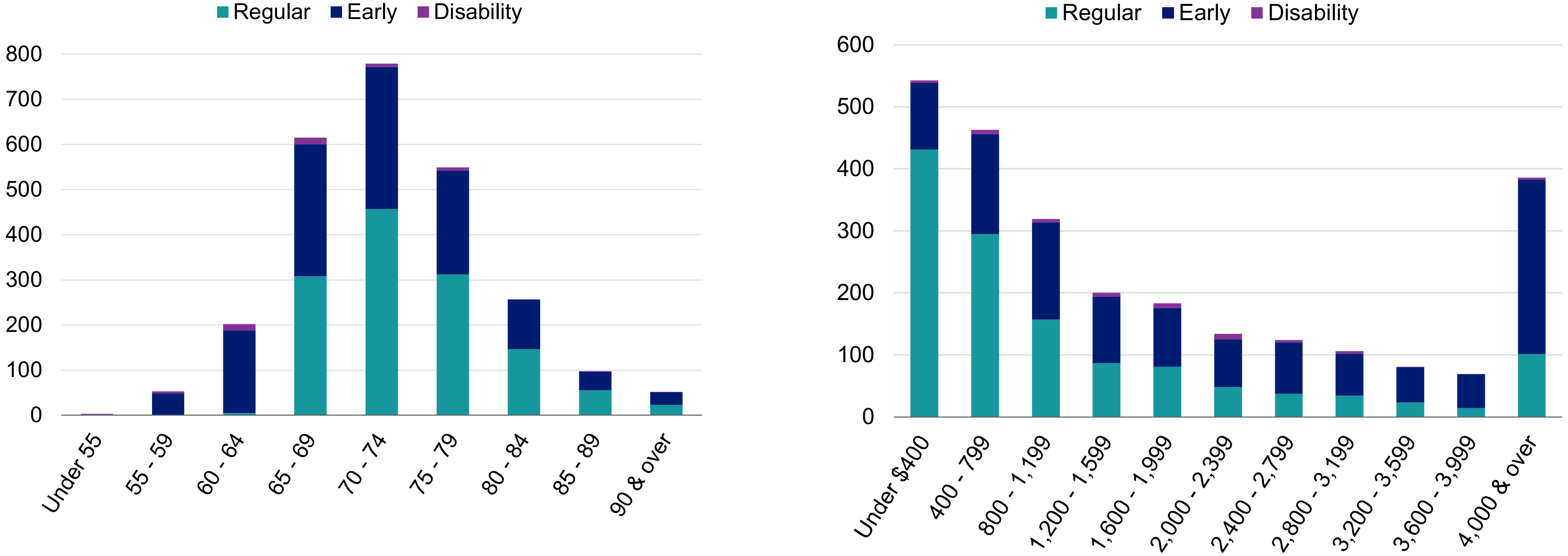
by Age

by Years of Benefit Service

Pay status information

As of January 1,	2022	2023	Change
Pensioners	2,544	2,608	2.5%
Average age	72.5	72.8	0.3
Average amount	$1,908	$1,933	1.3%
Beneficiaries	362	391	8.0%
Total monthly amount	$5,325,880	$5,540,385	4.0%

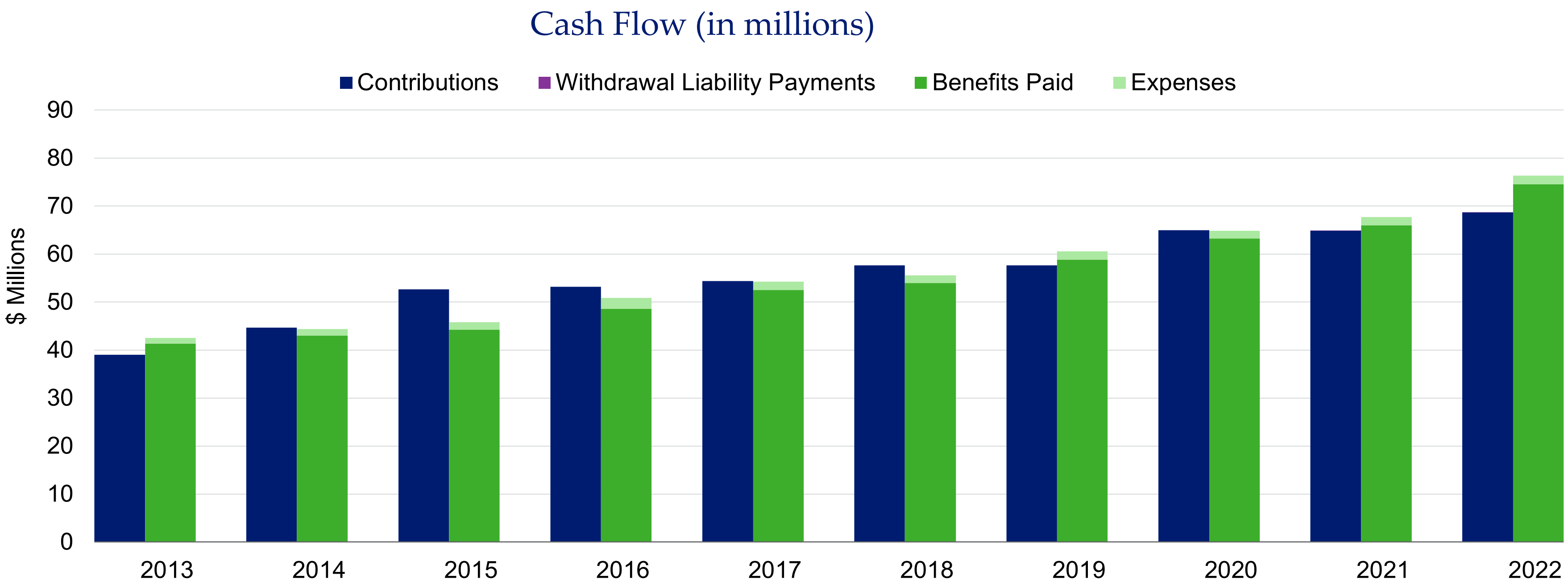
Distribution of Pensioners as of January 1, 2023



by Type and Age

by Type and Monthly Amount

Financial information



	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
🟦 Contributions	$39.06	$44.68	$52.68	$53.21	$54.41	$57.67	$57.65	$64.98	$64.86	$68.65
🟪 W/L Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.03
🟩 Benefits Paid	41.33	43.00	44.25	48.58	52.58	54.02	58.88	63.22	65.95	74.55
🟩 Expenses	1.17	1.39	1.56	2.25	1.70	1.58	1.72	1.65	1.73	1.84

Determination of Actuarial Value of Assets

1	Market value of assets, December 31, 2022					$1,304,785,243[1]
2	Calculation of unrecognized return		**MVA Rate of Return**	**Original Amount[2]**	**Unrecognized Return[3]**	
	(a)	Year ended December 31, 2022	-12.13%	-$284,948,474	-$227,958,779	
	(b)	Total unrecognized return				-227,958,779
3	Preliminary actuarial value: **1 - 2a**					$1,532,744,022
4	Adjustment to be within 20% corridor					0
5	Final actuarial value of assets as of December 31, 2022: **3 + 4**					$1,532,744,022
6	Actuarial value as a percentage of market value: **5 ÷ 1**					117.5%
7	Amount deferred for future recognition: **1 - 5**					-$227,958,779

[1] Excludes $184,217 of long-term receivable contributions shown in the audit report.

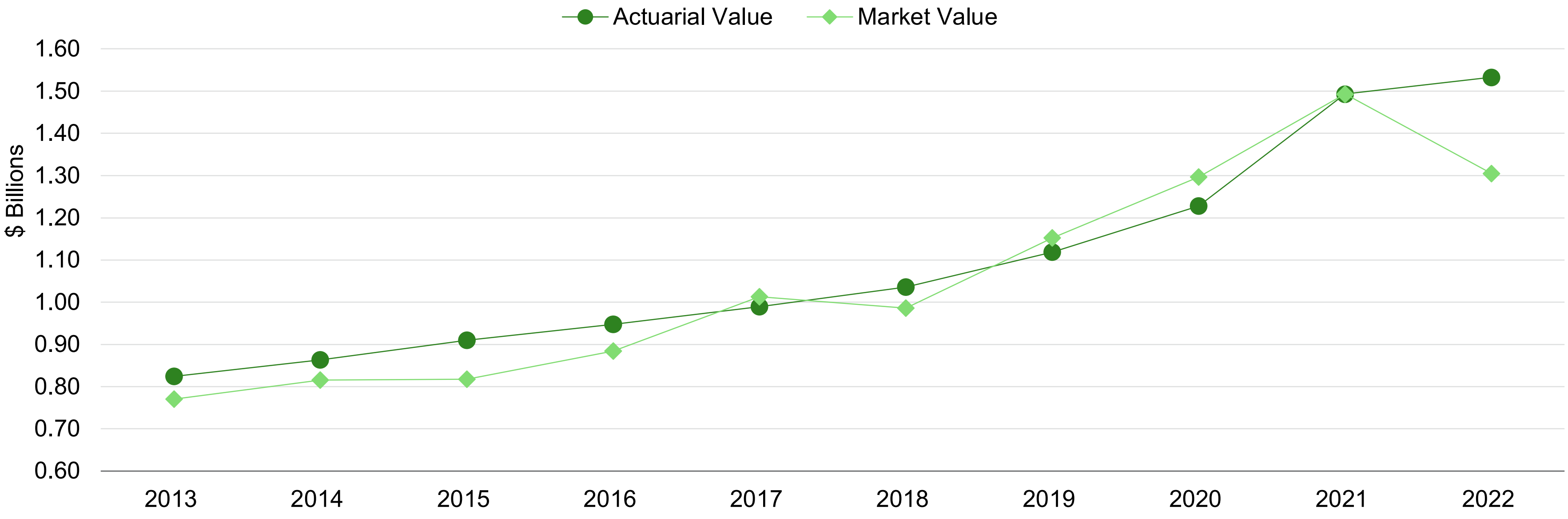
[2] Total return minus expected return on a market value basis

[3] Recognition at 20% per year over five years with phase-in beginning January 1, 2022.

Asset history for years ended December 31

- Both the actuarial value and the market value of assets are representations of the Plan's financial status.
- The actuarial value is significant because it is subtracted from the Plan's total actuarial accrued liability to determine the portion that is not funded and is used to determine the PPA'06 funded percentage.
- As a result of resetting actuarial value of assets (AVA) equal to the market value of assets (MVA) on January 1, 2022, the AVA only reflects the prior year's investment return, which explains the sharp departure of AVA from MVA on December 31, 2022.

Actuarial Value of Assets (AVA) vs. Market Value of Assets (MVA)



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
🟩 Actuarial Value[1]	$0.82	$0.86	$0.91	$0.95	$0.99	$1.04	$1.12	$1.23	$1.49	$1.53
🟩 Market Value[1]	0.77	0.82	0.82	0.88	1.01	0.99	1.15	1.30	1.49	1.30
Ratio	107.0%	105.9%	111.3%	107.2%	97.7%	105.1%	97.1%	94.7%	100.0%	117.5%

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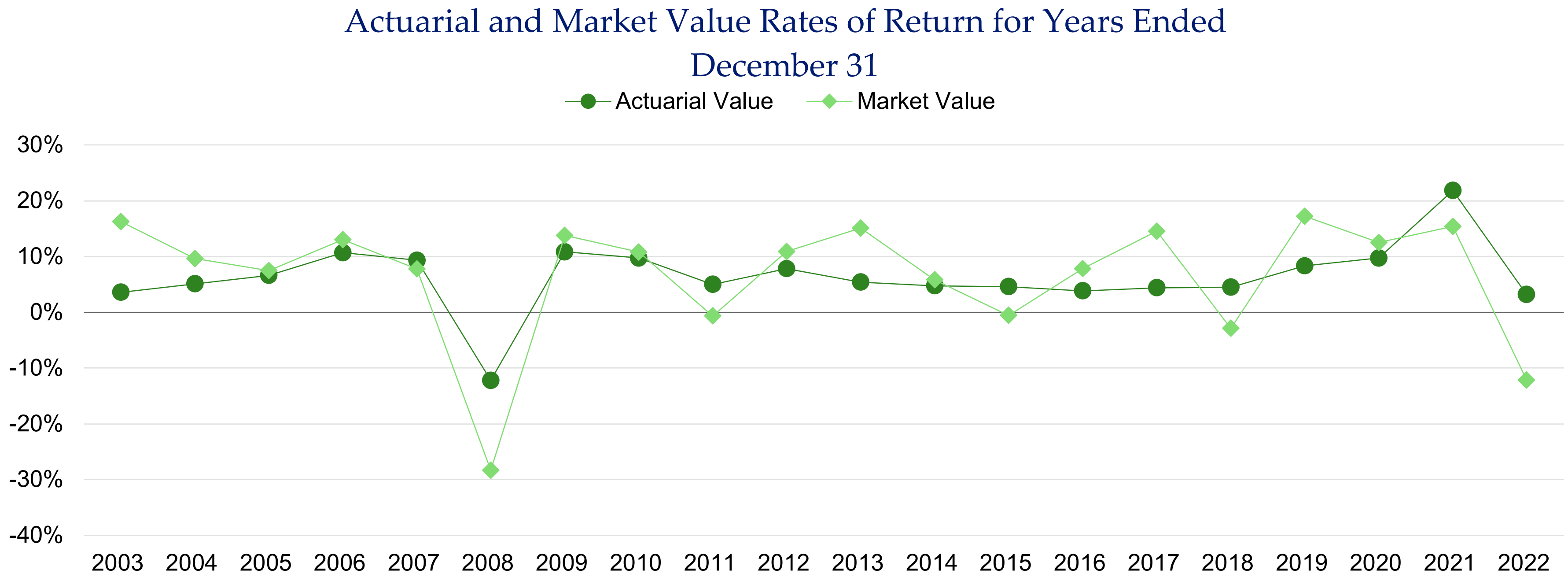
[1] In billions

Historical investment returns



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
🟩 AVA	3.6%	5.1%	6.6%	10.7%	9.3%	-12.2%	10.8%	9.7%	5.0%	7.8%	5.4%	4.8%	4.6%	3.9%	4.4%	4.5%	8.3%	9.7%	21.8%	3.2%
🟩 MVA	16.3%	9.7%	7.5%	13.0%	7.8%	-28.4%	13.8%	10.8%	-0.6%	10.9%	15.1%	5.8%	-0.5%	7.8%	14.5%	-2.9%	17.2%	12.5%	15.4%	-12.1%

Average Rates of Return	Actuarial Value	Market Value
Most recent five-year average return:	9.46%	5.11%
Most recent ten-year average return:	7.38%	6.44%
20-year average return:	6.77%	5.91%

Actuarial experience

- Assumptions should consider experience and should be based on reasonable expectations for the future.
- Each year actual experience is compared to that projected by the assumptions. Differences are reflected in the actuarial valuation.
- Assumptions are not changed if experience that is different than expected is believed to be a short-term development only. On the other hand, if experience is expected to continue over the long term, assumptions are changed.

Experience for the Year Ended December 31, 2022

1	Loss from investments	-$56,989,695
2	Gain from administrative expenses	40,317
3	Net loss from other experience (0.9% of projected accrued liability)	-15,020,072
4	**Net experience loss: 1 + 2 + 3**	**-$71,969,450**

Investment experience

- Actuarial planning is long term. The obligations of a pension plan are expected to continue for the lifetime of all its participants.
- The assumed long-term rate of return of 7.00% considers past experience, the Trustees' asset allocation policy and future expectations.

Loss from Investments

1	Average actuarial value of assets	$1,489,634,810
2	Assumed rate of return	7.00%
3	Expected net investment income: **1 x 2**	$104,274,437
4	Net investment income (3.17% actual rate of return)	47,284,742
5	**Actuarial loss from investments: 4 – 3**	**-$56,989,695**

Administrative expenses

- Administrative expenses for the year ended December 31, 2022, totaled $1,843,316, compared to the assumption of $1,815,000.

Other experience

- The net loss from other experience is not considered significant and is mainly due to turnover patterns different than expected and previously terminated participants returning to work. Some other differences between projected and actual experience include:
  - Mortality experience
  - Salary increases more or less than projected
  - Retirement experience (earlier or later than projected and the number of retirements)
  - Number of disability retirements

Actuarial assumptions and methods

- The following assumptions were changed with this valuation for minimum funding and Scheduled Cost purposes:
  - Administrative expenses were increased to $1,995,000 for the year beginning January 1, 2023.
  - The mortality table adjustment factor was lowered to 91.5%.
  - The mortality projection scale was updated to MP-2021.
  - The assumed retirement rates from active status were lowered at most ages.
  - The assumed exclusion age for inactive vested participants was increased to age 85.
  - The assumed percentage of pensioners electing a 25% partial lump sum was increased to 16%.
- The above assumption changes increased the actuarial accrued liability by 0.5% and the normal cost by 0.3%.
- At the September 27, 2023 Board of Trustees meeting, the Trustees approved changing the funding method from Entry Age Normal to Projected Unit Credit effective January 1, 2023.
- The funding method change decreased the actuarial accrued liability by 8.0% and increased the normal cost by 21.0%.
- Details on actuarial assumptions and methods are in Section 3.

Plan provisions

- There were no changes in plan provisions since the prior valuation.
- The IRC Section 415(b) maximum benefit limit increased from $245,000 in 2022 to $265,000 in 2023.
- The IRC Section 401(a)(17) compensation limit increased from $305,000 in 2022 to $330,000 in 2023.
- The change in the mandated limits increased the actuarial accrued liability by 0.2% and the normal cost by 0.6%.
- A summary of plan provisions is in Section 3.

Contribution rate

- The contribution rate remains 21% of covered payroll.

Plan funding

Comparison of Funded Percentages

Plan Year Beginning	January 1, 2022		January 1, 2023	
Market Value of Assets	**$1,493,247,300**		**$1,304,969,460**	
	Amount	**Funded %**	**Amount**	**Funded %**
• Funding interest rate	7.00%		7.00%	
• Present value (PV) of future benefits	$1,903,311,244	78.5%	$2,033,322,293	64.2%
• Actuarial accrued liability[1]	1,647,253,752	90.7%	1,595,713,782	81.8%
• PV of accumulated plan benefits (PVAB)	1,358,551,128	109.9%	1,440,688,081	90.6%
• Current liability interest rate	2.22%		2.55%	
• Current liability	$2,830,681,331	52.7%	$2,817,130,192	46.3%
Actuarial Value of Assets	**$1,493,247,300**		**$1,532,928,239**	
	Amount	**Funded %**	**Amount**	**Funded %**
• Funding interest rate	7.00%		7.00%	
• PV of future benefits	$1,903,311,244	78.5%	$2,033,322,293	75.4%
• Actuarial accrued liability[1]	1,647,253,752	90.7%	1,595,713,782	96.1%
• PPA’06 liability and annual funding notice	1,358,551,128	109.9%	1,440,688,081	106.4%

These measurements are not necessarily appropriate for assessing the sufficiency of the Plan’s assets to cover the estimated cost of settling the Plan’s benefit obligations or the need for or the amount of future contributions.

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[1] Based on the Entry Age actuarial cost method for 2022 and the Projected Unit Credit method for 2023 and on a Scheduled Cost basis. As such, the assets are adjusted to include the value of long-term contribution receivables excluded for minimum funding purposes.

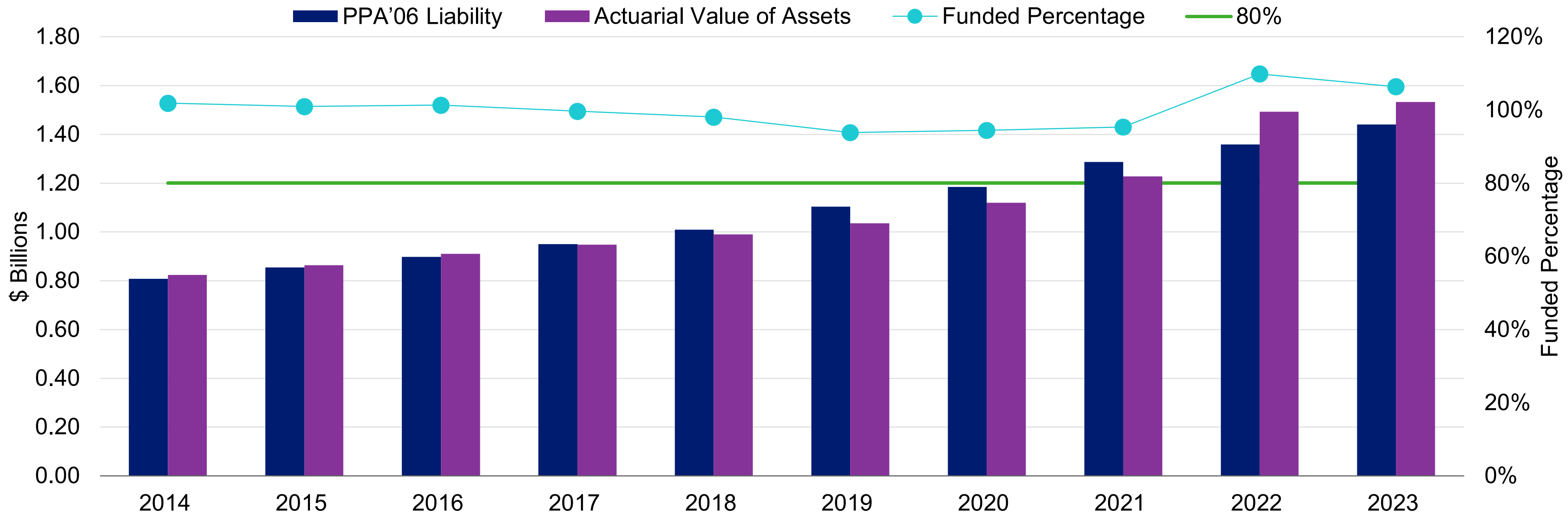
Pension Protection Act of 2006

2023 Actuarial status certification

- PPA’06 requires trustees to actively monitor their plans’ financial prospects to identify emerging funding challenges so they can be addressed effectively.
- As reported in the 2023 certification, the Plan was classified as neither endangered nor critical (that is, in the Green Zone) because the funded percentage was more than 80% and the credit balance in the Funding Standard Account was projected to be positive for at least seven years.
- The Plan was certified in the Green Zone in 2008, the first year “zone” certifications were required, and in every year since.

Pension Protection Act of 2006 historical information

Funded Percentage and Zone



Plan Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Zone Status	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Valuation rate	7.50%	7.50%	7.50%	7.50%	7.50%	7.25%	7.25%	7.00%	7.00%	7.00%
■ PPA'06 liability[1]	$0.81	$0.86	$0.90	$0.95	$1.01	$1.10	$1.18	$1.29	$1.36	$1.44
■ AVA[1]	0.82	0.86	0.91	0.95	0.99	1.04	1.12	1.23	1.49	1.53
■ Funded %	101.9%	101.0%	101.3%	99.7%	98.1%	93.8%	94.4%	95.4%	109.9%	106.4%

[1] In billions

Scheduled Cost

- The Scheduled Cost is an annual contribution objective, reflecting benefit levels and current assets, that is compared to projected contributions to assess the Plan's long-term financial position. Simply avoiding a funding deficiency in the Funding Standard Account is not a stable basis for funding the Plan. The Scheduled Cost uses a single amortization schedule for the total unfunded actuarial accrued liability, rather than the ERISA minimum funding approach.
- The Scheduled Cost amount, if contributed, would result in a predictable level that amortizes any unfunded actuarial accrued liability over eight years, providing benefit security to plan participants while balancing the needs of current and future participants.
- The actuarial assumptions used for the January 1, 2023; Scheduled Cost that differ from those used for minimum funding are:
  - The annual mandated benefit and compensation limits are assumed to increase 2.5% per year
  - Scheduled Cost assets include the long-term receivable contribution of $184,217.

Scheduled Cost

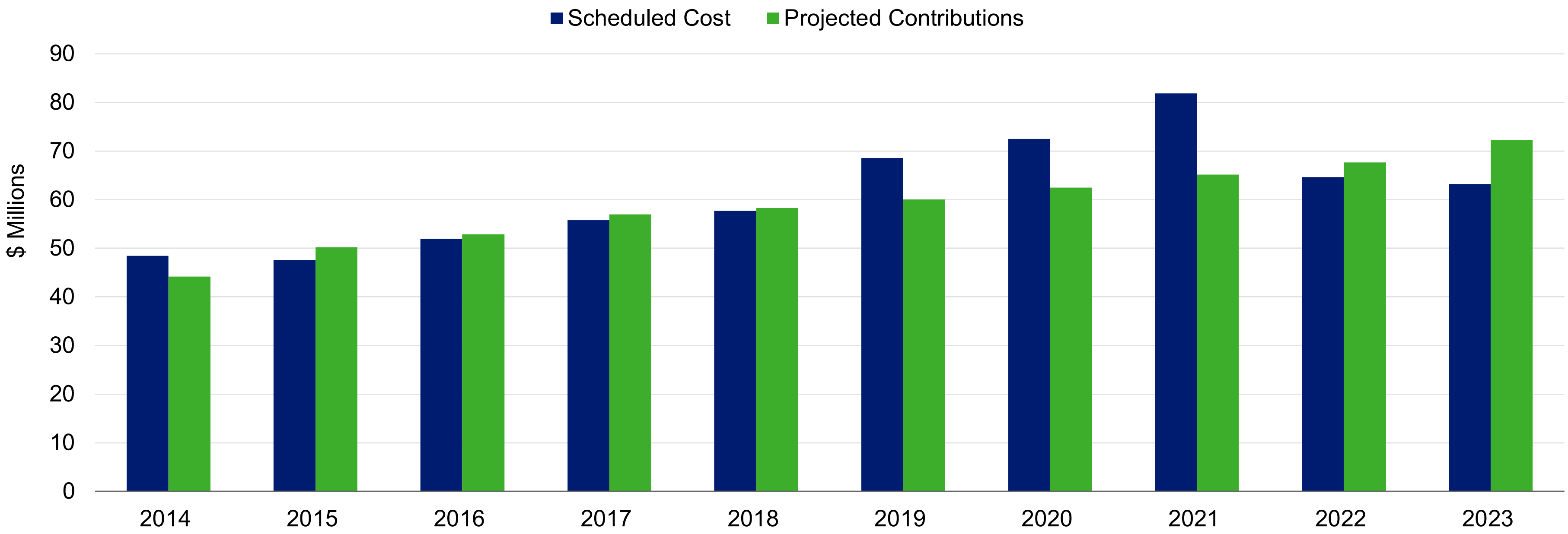
	Year Beginning January 1	
Cost Element	**2022**	**2023**
Normal cost[1]	$39,860,016	$50,975,584
Administrative expenses[1]	1,882,394	2,069,078
Amortization of the unfunded actuarial accrued liability[1]	22,911,799	10,191,569
• Actuarial accrued liability	1,647,253,752	1,595,713,782
• Actuarial value of assets	1,493,247,300	1,532,928,239
• Unfunded actuarial accrued liability	154,006,452	62,785,543
• Amortization period	9	8
Annual Scheduled Cost, payable monthly	**$64,654,209**	**$63,236,231**
Projected contributions (21% of covered payroll)	67,652,243	72,254,817
Margin/(deficit)	**$2,998,034**	**$9,018,586**
Margin/(deficit) as a % of projected contributions	0.9%	2.6%

[1] Includes adjustment for monthly payments

Scheduled Cost reconciliation

Scheduled Cost as of January 1, 2022		$64,654,209
• Effect of increases in mandated benefit and compensation limits	$273,243	
• Effect of change in administrative expense assumption	186,684	
• Effect of change in other actuarial assumptions	1,704,908	
• Effect of funding method change	-17,525,090	
• Effect of contributions more than Scheduled Cost	-678,916	
• Effect of investment loss	9,250,767	
• Effect of other gains and losses on accrued liability	2,337,387	
• Effect of net other changes, including composition and number of participants	3,033,039	
Net change		-$1,417,978
Scheduled Cost as of January 1, 2023		$63,236,231

Scheduled Cost vs. projected contributions — Historical information



Risk

- The actuarial valuation results are dependent on a single set of assumptions; however, there is a risk that emerging results may differ significantly as actual experience proves to be different from the current assumptions.
- We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition but have included a brief discussion of some risks that may affect the Plan.
- Economic Shock Risk. Potential implications for the Plan that were not reflected as of the valuation date include:
  - Volatile financial markets and investment returns lower than assumed
  - Short-term or long-term employment levels far different than past experience, including a projected rate of change and possible "new normal" long-term state
  - Changes in future demographic experience, such as retirement, disability, turnover, and mortality patterns
- Investment Risk (the risk that returns will be different than expected)

  Since the Plan's assets are much larger than contributions, investment performance will create volatility in contribution requirements.

  Based on current capital market expectations (developed by Segal Marco) and the Plan's current target asset allocation, we estimate that there is a 16.7% likelihood that the Plans' annual return will be less than -5.50% in any given year.

  As shown earlier in this Section, the market value rate of return over the last 20 years ended December 31, 2022, has ranged from a low of -28.35% to a high of 17.21%.
- Contribution/Employment Risk (the risk that actual contributions will be different from projected contributions)

  The Plan relies on contributions to pay benefits and expenses. To the extent contributions do not cover those costs, investment income is needed. As such, there is risk associated with changes in the number and composition of active participants to the extent such changes cause a decrease in contributions to the Plan. A significant decrease in the number of active participants may require increased funding to the Plan that is not sustainable solely through investment earnings.

  We are prepared to model the effect of decreases in the number of actives (and projected contributions) on the projected funded percentage and credit balance.
- Longevity Risk (the risk that mortality experience will be different than expected)

The actuarial valuation includes an expectation of future improvement in life expectancy. Emerging plan experience that does not match these expectations will result in either an increase or decrease in the required contribution.

- Other Demographic Risk (the risk that participant experience will be different than assumed)

  Examples of this risk include:

  - Actual retirements occurring earlier or later than assumed. The value of retirement plan benefits is sensitive to the rate of benefit accruals and any early retirement subsidies that apply. While it is difficult to quantify the impact of potential experience, earlier retirements would generally result in higher costs for the Plan.
  - More or less active participant turnover than assumed. Lower turnover would generally result in higher costs for the Plan.
  - Return to covered employment of previously inactive participants. More rehires would generally result in higher costs for the Plan.

- Actual Experience over the Last Ten Years

  Past experience can help demonstrate the sensitivity of key results to the Plan's risk profile. Over the past ten years ended December 31, 2022:

  - The investment gain (loss) on market value for a year has ranged from a loss of $284,948,474 to a gain of $108,528,528.
  - The non-investment gain (loss) for a year has ranged from a loss of $21,185,307 to a gain of $2,739,345.

- Maturity Measures

  The risk associated with a pension plan increases as it becomes more mature, meaning that the actives represent a smaller portion of the liabilities of a plan. When this happens, there is a greater risk that fluctuations in the experience of the non-active participants or of the assets of a plan can result in large swings in the contribution requirements.

  - As of January 1, 2023, the actuarial accrued liability for retired participants represents 44% of the total actuarial accrued liability. In addition, the actuarial accrued liability for inactive vested participants represents 17% of the total for a total non-active liability of 61%. The higher the non-active actuarial accrued liability is as a percent of the total liability, the greater the danger of volatility in results.
  - Over the past ten years ended December 31, 2022, the ratio of non-active participants to active participants has increased from a low of 1.57 in 2014 to a high of 2.09 in 2022. The ratio is currently 2.07. The ratio of benefit payments to contributions has remained fairly level around 1.1 over the last few years. As these ratios increase, the Plan becomes more dependent on investment returns to pay benefits.

- There are external factors including legislative, regulatory, or financial reporting changes that could impact the Plan's funding and disclosure requirements. While we do not assume any changes in such external factors, it is important to understand that they could have significant consequences for the Plan. Prior legislative proposals considered possible changes to funding requirements (such as changes to the zone rules) and increases in PBGC premiums for multiemployer plans.
- A detailed risk assessment could be important for the Plan because:
  - The outlook for financial markets and future industry activity is uncertain due to economic volatility.
  - The Plan may enter endangered or critical status in the near future depending on experience.
  - Relatively small changes in investment performance can produce large swings in the unfunded liabilities because the assets and liabilities are of similar size.
  - The Plan's asset allocation has potential for a significant amount of investment return volatility.
  - Potential changes in the covered population or plan industry may result in participant choices that vary from those assumed.

Summary of PPA'06 zone status rules

- Based on projections of the credit balance in the FSA, the funded percentage, and cash flow sufficiency tests, plans are categorized in one of the "zones" described below.
- The funded percentage is determined using the actuarial value of assets and the present value of benefits earned to date, based on the actuary's best estimate assumptions.

Critical Status (*Red Zone*)	A plan is classified as being in critical status (the Red Zone) if: • The funded percentage is less than 65%, and either there is a projected FSA deficiency within five years or the plan is projected to be unable to pay benefits within seven years, or • There is a projected FSA deficiency within four years, or • There is a projected inability to pay benefits within five years, or • The present value of vested benefits for inactive participants exceeds that for actives, contributions are less than the value of the current year's benefit accruals plus interest on existing unfunded accrued benefit liabilities, and there is a projected FSA deficiency within five years, or • As permitted by the Multiemployer Pension Reform Act of 2014, the plan is projected to be in the *Red Zone* within the next five years and the plan sponsor elects to be in critical status. A plan is deemed in crtical status (The Red Zone) if as permitted by the American Rescue Plan Act, the plan applied for and accept receipt of Special Financial Assistance from the PBGC. A critical status plan is further classified as being in critical and declining status if: • The ratio of inactive participants to active participants is at least 2 to 1, and there is an inability to pay benefits projected within 20 years, or • The funded percentage is less than 80%, and there is an inability to pay benefits projected within 20 years, or • There is an inability to pay benefits projected within 15 years. Any amortization extensions are ignored for testing initial entry into the *Red Zone*. The Trustees are required to adopt a formal Rehabilitation Plan, designed to allow the plan to emerge from critical status by the end of the rehabilitation period. If they determine that such emergence is not reasonable, the Rehabilitation Plan must be designed to emerge as of a later time or to forestall possible insolvency. Trustees of *Red Zone* plans have tools, such as the ability to reduce or eliminate early retirement subsidies, to remedy the situation. Accelerated forms of benefit payment (such as lump sums) are prohibited. However, unless the plan is critical and declining, Trustees may not reduce benefits of participants who retired before being notified of the plan's critical status (other than rolling back recent benefit increases) or alter core retirement benefits payable at normal retirement age.

Endangered Status (*Yellow Zone*)	A plan not in critical status (*Red Zone*) is classified as being in endangered status (the *Yellow Zone*) if: • The funded percentage is less than 80%, or • There is a projected FSA deficiency within seven years. A plan that has both of the endangered conditions present is classified as seriously endangered. Trustees of a plan that was in the *Green Zone* in the prior year can elect not to enter the *Yellow Zone* in the current year (although otherwise required to do so) if the plan's current provisions would be sufficient (with no further action) to allow the plan to emerge from the *Yellow Zone* within ten years. The Trustees are required to adopt a formal Funding Improvement Plan, designed to improve the current funded percentage, and avoid a funding deficiency as of the emergence date.

Green Zone	A plan not in critical status (the *Red Zone*) nor in endangered status (the *Yellow Zone*) is classified as being in the *Green Zone.*

Early Election of Critical Status	Trustees of a *Green* or *Yellow Zone* plan that is projected to enter the *Red Zone* within the next five years may elect whether or not to enter the *Red Zone* for the current year.

Section 3: Certificate of Actuarial Valuation

February 2, 2024

Certificate of Actuarial Valuation

This is to certify that Segal has prepared an actuarial valuation of the SEIU Affiliates Officers and Employees Pension Plan as of January 1, 2023, in accordance with generally accepted actuarial principles and practices. It has been prepared at the request of the Board of Trustees to assist in administering the Plan and meeting filing requirements of federal government agencies. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law.

The valuation is based on the assumption that the Plan is qualified as a multiemployer plan for the year and on information supplied by the auditor with respect to contributions and assets and reliance on the Benefit Funds Office with respect to the participant data. Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results. Adjustments for incomplete or apparently inconsistent data were made as described in the attached Exhibit I.

I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in this actuarial valuation is complete and accurate, except as noted in Exhibit A. Each prescribed assumption for the determination of Current Liability was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the Plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the Plan. In addition, in my opinion, the combined effect of these assumptions is expected to have no significant bias.

Deborah J. Marcotte

Deborah J. Marcotte, FCA, MAAA
Senior Vice President and Actuary
Enrolled Actuary No. 23-5560

Exhibit A: Table of Plan Coverage

The valuation was made with respect to the following data supplied to us by the Benefit Funds Office.

Category	Year Ended December 31 2021	Year Ended December 31 2022	Change from Prior Year
Active participants in valuation:			
• Number	3,836	3,988	4.0%
• Average age	45.2	45.1	-0.1
• Average years of benefit service	8.4	8.2	-0.2
• Average compensation	$83,982	$86,276	2.7%
• Number with unknown age	9	61	577.8%
• Total active vested participants	2,930	2,915	-0.5%
• Number of Common Service employees	180	174	-3.3%
Inactive participants with rights to a pension:			
• Number	5,096	5,211	2.3%
• Average age	50.6	50.8	0.2
• Average estimated monthly benefit	$659	$680	3.3%
Pensioners:			
• Number in pay status	2,544	2,608	2.5%
• Average age	72.5	72.8	0.3
• Average monthly benefit	$1,908	$1,933	1.3%
• Number in suspended status	33	38	15.2%
Beneficiaries:			
• Number in pay status	362	391	8.0%
• Average age	74.2	74.1	-0.1
• Average monthly benefit	$1,304	$1,279	-1.9%
Total participants	**11,871**	**12,236**	**3.1%**

Exhibit B: Supporting Information for Minimum Funding Calculations

	Year Beginning January 1			
	2022		2023	
Interest rate assumption		7.00%		7.00%
Normal cost, including administrative expenses		$38,592,124		$50,326,229
Actuarial present value of projected benefits		1,867,035,179		1,998,934,151
Present value of future normal costs		243,443,020		410,296,115
Market value as reported by Calibre CPA Group (MVA)[1]		1,493,167,950		1,304,785,243
Actuarial value of assets (AVA)		1,493,167,950		1,532,744,022
Actuarial accrued liability		**$1,623,592,159**		**$1,588,638,036**
• Pensioners and beneficiaries	$672,677,707		$705,512,563	
• Inactive participants with vested rights	253,361,751		274,987,518	
• Active participants	697,552,701		608,137,955	
Unfunded actuarial accrued liability based on AVA		$130,424,209		$55,894,014

[1] Reported market value reduced by long-term receivable contributions.

Exhibit C: Summary Statement of Income and Expenses

	Year Ended December 31, 2021		Year Ended December 31, 2022	
Market value of assets, beginning of the year		$1,296,726,842		$1,493,167,950
Contribution income:				
• Employer contributions	$64,858,163		$68,652,078	
• Withdrawal Liability Payments	58,335		30,050	
Contribution income		*64,916,498*		*68,682,128*
Investment income:				
• Interest and dividends:	4,815		12,558	
• Capital appreciation/(depreciation)	199,205,739		-180,686,595	
• Less investment fees[1]	0		0	
Net investment income		*199,210,554*		*-180,674,037*
Total income available for benefits		**$264,127,052**		**-$111,991,909**
Less benefit payments and expenses:				
• Pension benefits	-65,953,381		-74,547,482	
• Administrative expenses	-1,732,563		-1,843,316	
Total benefit payments and expenses		*-67,685,944*		*-76,390,798*
Market value of assets, end of the year		**$1,493,167,950**		**$1,304,785,243**

[1] Not reported in financials as of December 31, 2021, and December 31, 2022.

Exhibit D: Information on Plan Status as of January 1, 2023

Plan status (as certified on March 30, 2023, for the 2023 zone certification)	***"Green"***
Actuarial value of assets for FSA	$1,532,744,022
Accrued liability under unit credit cost method	1,440,688,081
Funded percentage for monitoring plan status	106.4%

Annual Funding Notice for Plan Year Beginning January 1, 2023, and Ending December 31, 2023

	2023 Plan Year	**2022 Plan Year**	**2021 Plan Year**
Actuarial valuation date	January 1, 2023	January 1, 2022	January 1, 2021
Funded percentage	106.4%	109.9%	95.4%
Value of assets	$1,532,744,022	$1,493,167,950	$1,228,060,317
Value of liabilities	1,440,688,081	1,358,551,128	1,287,414,996
Market value of assets as of Plan Year end	Not available	1,304,785,243	1,493,167,950

Exhibit E: Schedule of Active Participant Data

(Schedule MB, Line 8b(2))

The participant data is as of January 1, 2023

			Pension Credits									
Age		**Total**	**Under 1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30 - 34**	**35 - 39**	**40 & over**
Under 25	**Count**	**84**	58	26	-	-	-	-	-	-	-	-
	Average Compensation	**59,349**	58,597	61,026	-	-	-	-	-	-	-	-
	Average Monthly Benefit	**$91**	$53	$176	-	-	-	-	-	-	-	-
25 - 29	**Count**	**332**	105	191	36	-	-	-	-	-	-	-
	Average Compensation	**$71,196**	$61,049	$73,208	90,120	-	-	-	-	-	-	-
	Average Monthly Benefit	**$314**	$63	$332	$950	-	-	-	-	-	-	-
30 - 34	**Count**	**450**	94	218	121	16	1	-	-	-	-	-
	Average Compensation	**$79,475**	$64,099	$78,691	$89,179	-	-	-	-	-	-	-
	Average Monthly Benefit	**$571**	$66	$392	$1,056	-	-	-	-	-	-	-
35 - 39	**Count**	**535**	89	157	173	96	20	-	-	-	-	-
	Average Compensation	**$87,536**	$69,497	$75,654	$95,579	$106,326	$101,307	-	-	-	-	-
	Average Monthly Benefit	**$1,093**	$61	$405	$1,253	$2,484	$3,021	-	-	-	-	-
40 - 44	**Count**	**616**	67	175	135	138	89	12	-	-	-	-
	Average Compensation	**$91,429**	$68,119	$79,905	$91,598	$104,704	$109,874	-	-	-	-	-
	Average Monthly Benefit	**$1,492**	$68	$426	$1,249	$2,406	$3,306	-	-	-	-	-
45 - 49	**Count**	**506**	33	124	121	102	75	47	4	-	-	-
	Average Compensation	**$93,480**	$68,142	$73,638	$90,465	$103,401	$113,253	$116,247	-	-	-	-
	Average Monthly Benefit	**$1,860**	$77	$393	$1,272	$2,383	$3,533	$4,443	-	-	-	-
50 - 54	**Count**	**492**	44	120	96	85	71	49	24	3	-	-
	Average Compensation	**$90,538**	$62,518	$74,732	$90,642	$93,415	$107,809	$106,526	$125,070	-	-	-
	Average Monthly Benefit	**$1,983**	$62	$412	$1,266	$2,197	$3,540	$4,191	$5,906	-	-	-
55 - 59	**Count**	**429**	27	75	90	77	70	53	22	12	3	-
	Average Compensation	**$90,728**	$48,514	$72,008	$88,761	$90,576	$104,166	$110,127	$111,175	-	-	-
	Average Monthly Benefit	**$2,363**	$58	$424	$1,251	$2,225	$3,423	$4,472	$5,478	-	-	-

60 - 64	**Count**	**299**	11	55	58	61	50	35	19	7	3	-
	Average Compensation	**$87,529**	-	$73,733	$87,506	$90,416	$88,377	$98,713	-	-	-	-
	Average Monthly Benefit	**$2,252**	-	$384	$1,225	$2,230	$2,866	$4,088	-	-	-	-
65 - 69	**Count**	**140**	2	17	32	28	30	18	7	3	2	1
	Average Compensation	**$89,208**	-	-	$84,521	$100,761	$94,586	-	-	-	-	-
	Average Monthly Benefit	**$2,564**	-	-	$1,218	$2,497	$3,017	-	-	-	-	-
70 & over	**Count**	**44**	1	5	10	7	10	5	3	1	2	-
	Average Compensation	**$76,411**	-	-	-	-	-	-	-	-	-	-
	Average Monthly Benefit	**$2,528**	-	-	-	-	-	-	-	-	-	-
Unknown	**Count**	**61**	40	20	1	-	-	-	-	-	-	-
	Average Compensation	**$61,355**	$70,997	$40,402	-	-	-	-	-	-	-	-
	Average Monthly Benefit	**$91**	$69	$98	-	-	-	-	-	-	-	-
Total	**Count**	**3,988**	**571**	**1,183**	**873**	**610**	**416**	**219**	**79**	**26**	**10**	**1**
	Average Compensation	**$86,276**	**$64,113**	**$74,436**	**$90,442**	**$99,534**	**$104,445**	**$106,178**	**$113,808**	**$109,267**	**-**	**-**
	Average Monthly Benefit	**$1,493**	**$64**	**$382**	**$1,208**	**$2,335**	**$3,305**	**$4,239**	**$5,537**	**$6,540**	**-**	**-**

Exhibit F: Funding Standard Account

- ERISA imposes a minimum funding standard that requires the Plan to maintain a Funding Standard Account (FSA). The accumulation of contributions in excess of the minimum required contributions is called the FSA credit balance. If actual contributions fall short on a cumulative basis, a funding deficiency has occurred.
- The FSA is charged with the normal cost and the amortization of increases or decreases in the unfunded actuarial accrued liability due to plan amendments, experience gains or losses, and changes in actuarial assumptions and funding methods. The FSA is credited with employer contributions and withdrawal liability payments. Changes in funding method are amortized over 10 years.
- Increases or decreases in the unfunded actuarial accrued liability are amortized over 15 years except that short-term benefits, such as 13th checks, are amortized over the scheduled payout period.

		December 31, 2022	**December 31, 2023**
1	Prior year funding deficiency	$0	$0
2	Normal costs, including administrative expenses	38,592,124	50,326,229
3	Amortization charges	64,642,781	73,273,766
4	Interest on **1, 2 and 3**	7,226,443	8,652,000
5	Total charges	$110,461,348	$132,251,995
6	Prior year credit balance	$92,372,519	$95,930,880
7	Employer contributions	68,682,128	TBD
8	Amortization credits	34,269,115	52,655,872
9	Interest on **6, 7 and 8**	11,068,466	10,401,073
10	Full funding limitation credits	0	0
11	Total credits	$206,392,228	$158,987,825
12	Credit balance/(Funding deficiency): **11 - 5**	$95,930,880	TBD
13	Minimum contribution with interest required to avoid a funding deficiency: **5 -11** not less than zero	N/A	$0

Full Funding Limitation (FFL) and Credits for Plan Year January 1, 2023

ERISA FFL (accrued liability FFL)	$460,217,595
RPA’94 override (90% current liability FFL)	1,107,142,746
FFL credit	0

Schedule of FSA Bases (Charges) (Schedule MB, Line 9c)

Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Change in Actuarial Assumptions	01/01/2009	$7,248	1	$7,248
Plan Amendment	01/01/2009	259,902	1	259,902
Experience Loss	01/01/2009	12,094,865	1	12,094,865
Investment Loss Subject to Relief	01/01/2009	91,429,485	15	9,381,744
Investment Loss Subject to Relief	01/01/2010	12,004,721	15	1,231,826
Merger	06/01/2010	4,247,491	2.42	1,842,164
Investment Loss Subject to Relief	01/01/2011	8,285,718	15	850,212
Plan Amendment	01/01/2012	439,318	4	121,214
Experience Loss	01/01/2012	883,730	4	243,834
Investment Loss Subject to Relief	01/01/2012	10,341,519	15	1,061,162
Change in Actuarial Assumptions	01/01/2012	15,889,573	4	4,384,158
Plan Amendment	01/01/2013	397,887	5	90,692
Investment Loss Subject to Relief	01/01/2013	11,727,602	15	1,203,390
Plan Amendment	01/01/2014	433,659	6	85,028
Investment Loss Subject to Relief	01/01/2014	28,268,967	15	2,900,730
Plan Amendment	01/01/2015	42,271	7	7,330
Experience Loss	01/01/2015	13,266,734	7	2,300,640
Change in Actuarial Assumptions	01/01/2016	561,348	8	87,858
Experience Loss	01/01/2016	14,850,521	8	2,324,284
Plan Amendment	01/01/2017	872,125	9	125,102
Experience Loss	01/01/2017	25,324,242	9	3,632,643
Plan Amendment	01/01/2018	901,270	10	119,926
Experience Loss	01/01/2018	39,183,846	10	5,213,923
Plan Amendment	01/01/2019	1,108,577	11	138,165

Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Change in Actuarial Assumptions	01/01/2019	32,279,947	11	4,023,134
Experience Loss	01/01/2019	34,160,795	11	4,257,549
Experience Loss	01/01/2020	871,916	12	102,594
Plan Amendment	01/01/2020	1,251,805	12	147,294
Change in Actuarial Assumptions	01/01/2020	5,102,243	12	600,358
Plan Amendment	01/01/2021	95,695	13	10,701
Change in Actuarial Assumptions	01/01/2021	46,469,493	13	5,196,368
Plan Amendment	01/01/2022	5,584,120	14	596,744
Plan Amendment	01/01/2023	3,047,758	15	312,736
Change in Actuarial Assumptions	01/01/2023	9,095,764	15	933,333
Experience Loss	01/01/2023	71,969,450	15	7,384,915
Total		**$502,751,605**		**$73,273,766**

Schedule of FSA Bases (Credits) (Schedule MB, Line 9h)

Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Combined Base	01/01/2022	$212,745,957	7.7	$34,269,114
Change in Funding Method	01/01/2023	138,180,754	10	18,386,758
Total		**$350,926,711**		**$52,655,872**

Exhibit G: Current Liability

The table below presents the current liability for the Plan Year beginning January 1, 2023.

Item[1]	Number of Participants	Current Liability
Interest rate assumption		2.55%
Retired participants and beneficiaries receiving payments	3,037	$1,074,513,668
Inactive vested participants	5,211	647,526,452
Active participants		
• Non-vested benefits		157,303,203
• Vested benefits		937,786,869
• Total active	3,988	$1,095,090,072
Total	**12,236**	**$2,817,130,192**

Expected increase in current liability due to benefits accruing during the Plan Year	$145,336,929
Expected release from current liability for the Plan Year	86,346,049
Expected plan disbursements for the Plan Year, including administrative expenses of $1,995,000	88,341,049

Current value of asset	$1,304,785,243
Percentage funded for Schedule MB	46.31%

[1] The actuarial assumptions used to calculate these values are shown in Exhibit I.

Exhibit H: Actuarial Present Value of Accumulated Plan Benefits

The actuarial present value of accumulated plan benefits calculated in accordance with FASB ASC 960 is shown below as of January 1, 2022, and as of January 1, 2023. In addition, a reconciliation between the two dates follows.

	Benefit Information Date	
	January 1, 2022	**January 1, 2023**
Actuarial present value of vested accumulated plan benefits:		
• Participants currently receiving payments	$672,677,707	$705,512,563
• Other vested benefits	613,799,771	654,998,624
• Total vested benefits	$1,286,477,478	$1,360,511,187
Actuarial present value of non-vested accumulated plan benefits	72,073,650	80,176,894
Total actuarial present value of accumulated plan benefits	**$1,358,551,128**	**$1,440,688,081**

Factors	**Change in Actuarial Present Value of Accumulated Plan Benefits**
Plan amendments	$1,074,152
Benefits accumulated, net experience gain or loss, changes in data	56,348,556
Benefits paid	-74,547,482
Changes in actuarial assumptions	6,989,740
Interest	92,271,987
Total	**$82,136,953**

Exhibit I: Statement of Actuarial Assumptions, Methods and Models

(Schedule MB, Line 6)

Mortality Rates	*Healthy*: 91.5% of the Pri-2012 Blue Collar Amount Weighted Mortality Table (separate employee and annuitant tables) projected generationally with MP-2021 scale *Disabled:* Healthy life (annuitant) mortality, with ages set forward 10 years The Pri-2012 Blue Collar amount weighted tables (with ages set forward for disabled lives and the 91.5% factor) and generational projection to the valuation date reasonably reflect the mortality experience of the Plan as of the measurement date. These mortality tables were then adjusted to future years using a generational projection to reflect future mortality improvement between the measurement date and those years. The mortality rates were based on historical and current demographic data, adjusted to reflect health characteristics of the industry, and estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of deaths by age and the projected number based on the prior years' assumption over the most recent ten years, taking into consideration the results of Segal's 2020 industry mortality study.

Termination Rates

	Rate (%)	
Age	**Disability**	**Withdrawal**
20	0.02	20.00
25	0.02	20.00
30	0.03	18.22
35	0.04	12.60
40	0.06	10.26
45	0.09	8.62
50	0.15	7.18
55	0.25	6.27
60	0.41	5.36

The assumed rates of withdrawal shown above apply to employees with three or more years of service. For employees with less than three years of service, the assumed withdrawal rates are as follows:

Years of Service	Rate (%)
Less than 1	30
Between 1 and 2	23
Between 2 and 3	20

The termination rates and disability rates were based on historical and current demographic data, estimated future experience, and professional judgment. As part of the analysis, a comparison was made between the actual number of terminations and disability retirements by age and the projected number based on the prior years' assumption over the most recent five years.

Retirement Rates for Active Participants

Age	Eligible for Unreduced Benefit	Eligible for Reduced Benefit
50 – 54	12.0%	N/A
55	15.0	2.0%
56 – 59	9.0	2.0
60 – 61	13.0	5.0
62	17.0	12.0
63 – 64	17.0	10.0
65	20.0	20.0
66 – 69	18.0	18.0
70	100.0	100.0

The retirement rates were based on historical and current demographic data, estimated future experience, and professional judgment. As part of the analysis, a comparison was made between the actual number of retirements by age and the projected number based on the prior years' assumption over the most recent five years.

Description of Weighted Average Retirement Age

Age 63, determined as follows: The weighted average retirement age for each participant is calculated as the sum of the product of each potential current or future retirement age times the probability of surviving from current age to that age and then retiring at that age, assuming no other decrements. The overall weighted retirement age is the average of the individual retirement ages based on all the active participants included in this valuation.

Retirement Rates for Inactive Vested Participants

5.5% at the age when first eligible to retire, 5.5% each year thereafter, and 100% at age when first eligible for an unreduced benefit.

The retirement rates for inactive vested participants were based on historical and current demographic data, estimated future experience, and professional judgment. As part of the analysis, a comparison was made between the actual number of retirements by age and the projected number based on the prior years' assumption over the most recent five years.

Retirement Age for CSEA Inactive Vested Participants (at merger)

Age 63

<table>
<tr><td>Salary Scale</td><td>Annual increases of 2.75% plus an additional amount varying by age. Sample rates of increase are as follows:
<table>
<tr><th>Age</th><th>Annual Increase</th></tr>
<tr><td>20</td><td>12.7%</td></tr>
<tr><td>25</td><td>10.6</td></tr>
<tr><td>30</td><td>8.6</td></tr>
<tr><td>35</td><td>7.4</td></tr>
<tr><td>40</td><td>6.3</td></tr>
<tr><td>45</td><td>5.8</td></tr>
<tr><td>50</td><td>5.7</td></tr>
<tr><td>55</td><td>5.0</td></tr>
<tr><td>60</td><td>3.3</td></tr>
<tr><td>65+</td><td>2.8</td></tr>
</table>
The salary scale rates were based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the assumed and the actual increase in salary by age over the most recent five years.</td></tr>
<tr><td>Assumed Cost of Living Increase for CSEA Retirement Benefits</td><td>2.5% per year (for CSEA retirees receiving a CSEA benefit and for terminated vested participants who’s accrued CSEA Plan benefit is greater than their accrued Affiliates Plan benefit)</td></tr>
<tr><td>Future Benefit Accruals</td><td>One service credit per year per active employee included in the valuation</td></tr>
<tr><td>Unknown Data for Participants</td><td>Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be female.</td></tr>
<tr><td>Definition of Active Participants</td><td>All active employees as of the valuation date</td></tr>
<tr><td>Exclusion of Inactive Vested Participants</td><td>Inactive participants over age 85 are excluded from the valuation. In addition, records identified as unconfirmed deaths or deaths with survivor benefits payable, but on hold who are over age 85 are also excluded from the valuation. The exclusion of these participants over age 85 is based on historical and current demographic data, estimated future experience, and professional judgement. As part of the analysis, the ages of new retirees from inactive vested status were reviewed.</td></tr>
<tr><td>Percent Married</td><td>62% of males and 35% of females</td></tr>
</table>

Age of Spouse	Females 3 years younger than males
Benefit Election	Non-married participants are assumed to elect the single life annuity with three years certain form of payment. Married participants are assumed to elect the 50% Spousal Pension with three years certain form of payment. Additionally, 16% of future retirees are assumed to receive 25% of the value of their benefit as a lump sum payable at retirement. Lump sums are determined using an interest rate of 4.0% and the mortality table mandated by PPA'06. The benefit elections were based on historical and current demographic data, adjusted to reflect the plan design, estimated future experience and professional judgment. As part of the analysis, a comparison was made between the assumed and the actual option election patterns over the most recent five years.
Eligibility for Delayed Retirement Factors	Inactive vested participants after attaining age 65
Net Investment Return	7.00% The net investment return assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes, as well as the Plan's target asset allocation.
Annual Administrative Expenses	$1,995,000, payable as of the beginning of the year, for the year beginning January 1, 2023 The annual administrative expenses were based on historical and current data, adjusted to reflect estimated future experience and professional judgment.
Actuarial Value of Assets	IRS Method 16 (Rev. Proc. 2000-40). The market value of assets less unrecognized returns in each of the last five years, where the five-year period is phased-in and actuarial value equals market value in the first year (January 1, 2022). Unrecognized return is equal to the difference between the actual market return and the projected market return (at the assumed rate of return) 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 Trustees adopted this method effective January 1, 2022. Therefore, the asset method cannot be changed again until the January 1, 2028, actuarial valuation.
Actuarial Cost Method	Projected Unit Credit. IRS Approval 1 from Revenue Procedure 2000-40, where the projected benefit is calculated using projected compensation.
Benefits Valued	Unless otherwise indicated, includes all benefits summarized in Exhibit J.
Current Liability Assumptions	*Interest:* 2.55%, within the permissible range prescribed under IRC Section 431(c)(6)(E) *Mortality:* Mortality prescribed under IRS Regulations 1.431(c)(6)-1 and 1.430(h)(3)-1(a)(2): RP-2014 employee and annuitant mortality tables, adjusted backward to the base year (2006) using scale MP-2014, projected forward generationally using scale MP-2021 (previously, the MP-2020 scale was used).
Estimated Rate of Investment Return	*On actuarial value of assets (Schedule MB, line 6g):* 3.2%, for the Plan Year ending December 31, 2022 *On current (market) value of assets (Schedule MB, line 6h):* -12.1%, for the Plan Year ending December 31, 2022

FSA Contribution Timing (Schedule MB, line 3a)	Unless otherwise noted, contributions are paid periodically throughout the year. The interest credited in the FSA is therefore assumed to be equivalent to a July 15 contribution date.
Actuarial Models	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are prepared to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility, and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible Enrolled Actuary.

Justification for Change in Actuarial Assumptions

(Schedule MB, line 11)

For purposes of determining current liability, the current liability interest rate was changed from 2.22% to 2.55% due to a change in the permissible range and recognizing that any rate within the permissible range satisfies the requirements of IRC Section 431(c)(6)(E) and the mortality tables and mortality improvement scales were changed in accordance with IRS Regulations 1.431(c)(6)-1 and 1.430(h)(3)-1.

Based on past experience and future expectations, the following actuarial assumptions were changed:

Annual administrative expenses, payable as of the beginning of the year, previously $1,815,000.

PRI-2012 Blue Collar amount-weighted mortality table adjustment factor, previously 93.7%.

Mortality projection scale, previously MP-2019.

Assumed maximum age for inactive vested participants, previously 80.

Assumed percentage of pensioners electing a 25% partial lump sum, previously 12%.

Retirement rates from active status, previously the rates shown below.

Age	Eligible for Unreduced Benefit	Eligible for Reduced Benefit
50 – 54	12.0%	N/A
55	15.0	2.0%
56 – 59	9.0	2.0
60 – 61	17.0	5.0
62	17.0	12.0
63 – 64	17.0	10.0
65 – 67	20.0	20.0
68	18.0	18.0
69	23.0	23.0
70	100.0	100.0

Method Change

The funding method was changed from Entry Age Normal to Projected Unit Credit per IRS Revenue Procedure 2000-40 Approval 1 (using projected compensation).

Exhibit J: Summary of Plan Provisions

(Schedule MB, Line 6)

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year	January 1 through December 31
Pension Credit Year	January 1 through December 31
Plan Status	Ongoing plan
Normal Pension	• *Age Requirement:* 65 • *Service Requirement:* 15 years of Service Credit with at least one year of Current Service; or three years of Current Service or Vesting Service; or the fifth anniversary of Plan participation. • *Amount:* 2.5% of Final Average Compensation times years of service*. Former participants of the California State Employees Association Retirement Plan will receive their accrued benefit in that Plan as of June 1, 2010, if it has a greater present value. • *Final Average Compensation:* Highest average using 36 consecutive months of compensation. Maximum annual compensation is $330,000 for 2023 ($305,000 for 2022). • *Maximum Annual Benefit:* $265,000 for 2023 ($245,000 for 2022). Actuarially reduced for retirement before age 62. • *Delayed Retirement Amount:* Actuarial increases in accordance with Plan provisions.
Early Retirement	• *Age Requirement:* 55 (or 50 provided age plus service total 80 or more) • *Service Requirement:* 15 years of Service Credit with at least one year of Current Service; or 10 years of Current Service or Vesting Service. • *Amount:* Normal Pension accrued reduced by 5% for each year of age less than 65. There is no reduction if age plus service total 80 or more.

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* Employees with common service under the SEIU Affiliates' Officers and Employees Pension Plan and the Pension Plan for Employees of the Service Employees International Union will have their respective benefits based on the percentage of their career spent in each Plan.

Disability	- *Age Requirement:* None - *Service Requirement:* 15 years of Service Credit with at least one year of Current Service; or 10 years of Current Service or Vesting Service. - *Amount:* (1) Normal pension based on service accrued and final compensation at disability, payable immediately, or (2) for local unions with Long Term Disability Income Plan Benefits only - the Pension Plan will continue to credit service while the employee is disabled. When insurance payments cease, the employee will be entitled to a pension based on the total of actual service plus service credited during the period of disability and annual compensation at the time of disability increased by the percentage increase in the Consumer Price Index per year from the time of disability until the Disability Pension commences.
Vesting	- *Age Requirement:* None - *Service Requirement:* Three years of Vesting Service. - *Amount:* Normal Pension accrued payable at age 65. - *Normal Retirement Age:* 65
Spouse's Pre-Retirement Death Benefit	- *Age and Service Requirement:* Eligible for an immediate or deferred vested pension. - *Amount:* 100% of the benefit the employee would have received had he or she retired the day before death and elected the joint and survivor option. - *Benefit Commencement:* First of the month following the death of the employee if the employee dies while eligible for an immediate pension. If the employee dies while eligible for a deferred pension, benefits commence on the first of the month the employee would have been eligible for a pension had he or she lived but earned no additional service, but no later than age 55. However, in all circumstances, the monthly benefit is payable to the surviving spouse for the first 24 months following the death of the employee, and for as long as any dependent children of the employee are under age 18.
Pre-Retirement Lump-sum Death Benefit (if not eligible for spouse's benefit)	- *Age Requirement:* None - *Service Requirement:* One year of Service Credit or Vesting Service - *Amount:* $5,000 for less than five years of service; $10,000 for five years of service or more; or 60 times monthly Normal Pension accrued, if greater.

Post-Retirement Death Benefits	• *Benefit:* Benefits are payable for life with a guarantee that total benefits paid will equal 36 times the original Normal Pension accrued including early retirement reductions. All optional forms of payment include this guarantee. • *Joint and Survivor:* For married participants, pension benefits are paid in the form of a joint and survivor annuity unless this form is rejected by the participant and spouse. If this form is not rejected, the benefit amount otherwise payable is reduced to reflect the joint and survivor coverage. If this form is rejected, or if the participant is not married, benefits are payable for the life of the participant, or in any other available optional form elected by the participant in an actuarially equivalent amount. No death benefits shall be payable other than those provided under the optional methods elected.
Optional Forms of Benefits	• Single Life Annuity with 5 or 10 years certain • Joint and 50% Survivor Annuity • Joint and 75% Survivor Annuity • Joint and 100% Survivor Annuity • Level Income Annuity A participant can elect to receive between 5% and 30% of their benefit as a lump sum
Cost-of-Living Adjustments	Monthly payments to all pensioners and beneficiaries are increased 1.5% each January for all pensions in payment status for at least six months. Participants who retired under the provisions of the CSEA Retirement Plan receive an increase each April equal to California CPI, up to a maximum of 2.5% per year. The California CPI is equal to the average of the annual CPI for the Los Angeles-Long Beach area and the annual CPI for the San Francisco-Oakland area published by the Bureau of Labor Statistics of the United States Department of Labor.
Participation	On the first day of the month after 12 consecutive months of employment during which at least $4,000 in compensation was earned
Years of Service	One month of service credit granted for each month employee earned any compensation
Past Service	Continuous service from date of hire to October 1, 1964 (if employer entered on that date), or prior service granted by the Trustees
Current Service	Years of Service for which contributions are received or for which an employer is obligated to contribute
Vesting Service	One year of Vesting Service granted for any calendar year in which the participant earns compensation during any five months
Service Credit	Sum of Current Service and Past Service
Employer Contributions	21% of covered payroll

Changes in Plan Provisions	There were no changes in plan provisions reflected in this actuarial valuation

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