SEIU National Industry Pension Fund (U.S. Participants)

Actuarial Valuation and Review as of January 1, 2022

Segal

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August 7, 2023

Board of Trustees
SEIU National Industry Pension Fund (U.S. Participants)
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, 2022. It establishes the funding requirements for 2022 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 census information upon which our calculations were based was prepared by the Fund Office, under the direction of Eunice Washington. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Eli Greenblum, FCA, FSA, 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

By:

Stacey Hostetler Carter
Senior Vice President and Benefits Consultant

Alex Giordano, FCA, ASA, MAAA, EA
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.

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 provides 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. A separate report will be available.

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. In any event, the actual cost of a 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:

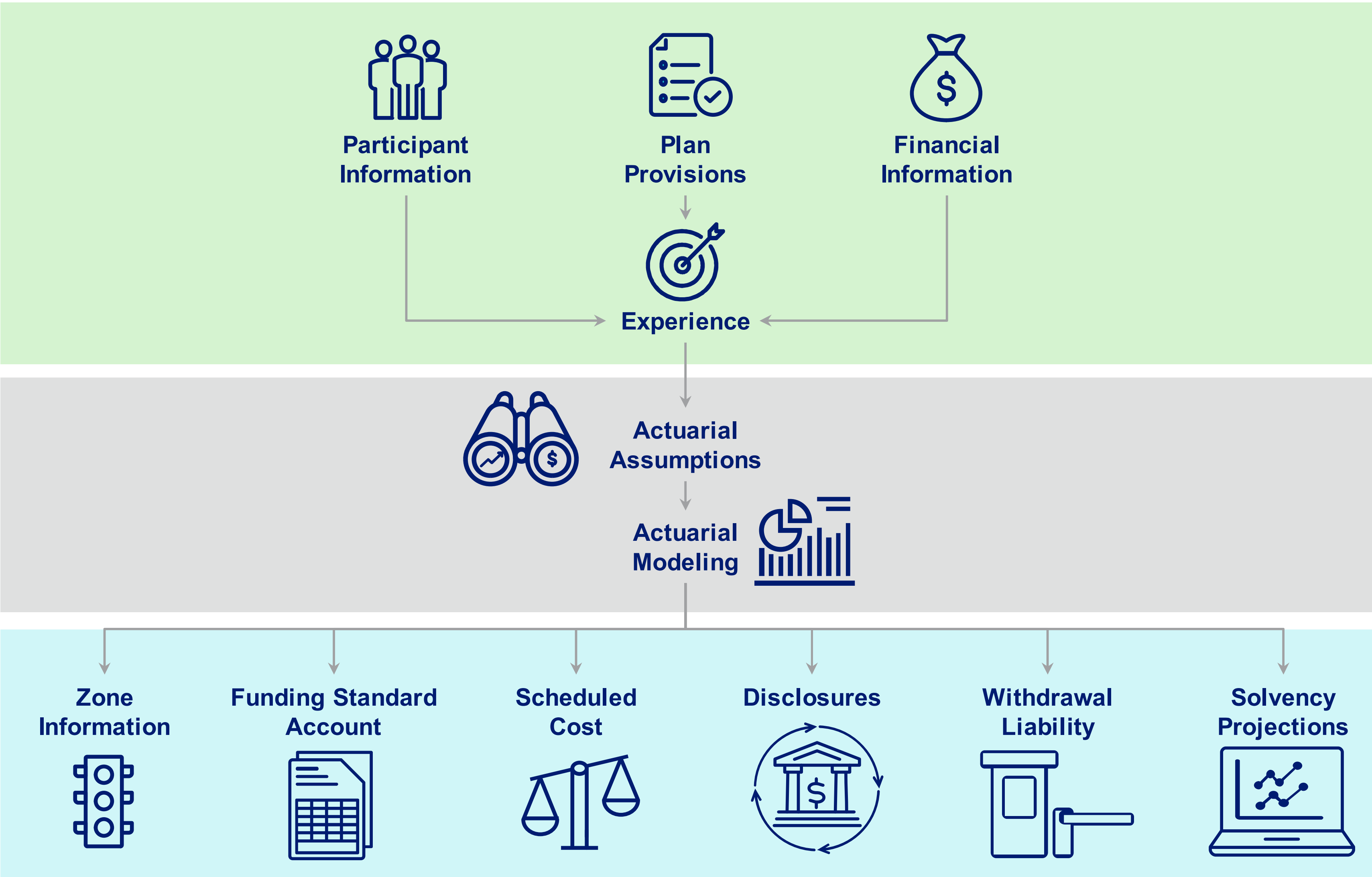
	Plan Provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important for the Trustees to keep Segal informed 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 forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan’s assets. 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



Section 1: Trustee Summary

Summary of key valuation results

Plan Year Beginning		January 1, 2021	January 1, 2022
Certified Zone Status		***Critical***	***Critical***
Demographic Data:	• Number of active participants	38,632	36,669
	• Number of inactive participants with vested rights	46,122	48,993
	• Number of retired participants and beneficiaries	22,362	23,269
	• Total number of participants	107,116	108,931
	• Participant ratio: non-active to actives	1.77	1.97
Assets[1]:	• Market value of assets (MVA)	$1,464,424,121	$1,642,320,795
	• Actuarial value of assets (AVA)	1,386,658,936	1,485,622,591
	• Market value net investment return, prior year	12.34%	15.37%
	• Actuarial value net investment return, prior year	9.90%	10.44%
Cash Flow:		**Actual 2021**	**Projected 2022**
	• Contributions[2]	$81,274,255	$82,766,517
	• Benefit payments	-113,853,637	-123,910,983
	• Administrative expenses	-10,153,157	-11,000,000
	• Net cash flow	-$42,732,539	-$52,144,466
	• Cash flow as a percentage of MVA	-2.9%	-3.2%

[1] Excludes $7,173,500 and $5,894,778 in withdrawal liability contributions receivable in 2021 and 2022, respectively, for minimum funding and withdrawal liability purposes. These amounts are included for Scheduled Cost purposes.
[2] Actual 2021 figure includes $4.6 million in withdrawal liability payments.

Summary of key valuation results

Plan Year Beginning		January 1, 2021		January 1, 2022	
Actuarial Liabilities based on Entry Age:	• Valuation interest rate	7.00%		7.00%	
	• Normal cost, including administrative expenses	$20,548,289		$20,522,517	
	• Actuarial accrued liability	1,837,973,159		1,847,542,171	
	• Unfunded actuarial accrued liability	451,314,223		361,919,580	
Funded Percentages:	• Actuarial accrued liabilities under unit credit method	$1,738,568,419		$1,765,267,195	
	• MVA funded percentage	84.2%		93.0%	
	• AVA funded percentage (PPA basis)	79.8%		84.2%	
Statutory Funding Information:	• Funding deficiency at the end of prior Plan Year	-$27,210,451		-$39,724,498	
	• Minimum required contribution	123,606,302		134,605,110	
	• Maximum deductible contribution	3,151,177,708		3,255,358,426	
Scheduled Cost:	• Interest rate	7.00%		7.00%	
		Amount	**Per Hour**	**Amount**	**Per Hour**
	• Projected contributions[1]	$85,494,741	$1.1349	$85,390,734	$1.1942
	• Scheduled Cost [2]	101,191,507	1.3433	93,682,663	1.3102
	• Deficit	-15,696,766	-0.2084	-8,291,929	-0.1160
	• Projected contributions for the upcoming year[3]	80,394,737	1.0672	82,766,517	1.1575
Plan Year Ending		**December 31, 2020**		**December 31, 2021**	
Withdrawal Liability:[4]	• Funding interest rate	7.00%		7.00%	
	• PBGC interest rates				
	Initial period	1.62%		2.40%	
	Thereafter	1.40%		2.11%	
	• Present value of vested benefits	$2,536,977,897		$2,522,890,454	
	• MVA	1,464,424,121		1,642,320,795	
	• Unfunded present value of vested benefits	1,072,553,776		880,569,659	

[1] Contributions are based on January 1, 2021 and January 1, 2022 contribution rates, respectively, projected to the following valuation date, and 1,950 hours per active participant.
[2] Based on Entry Age actuarial cost method.
[3] Based on contribution rate as of the valuation date.
[4] Using the assumptions described in Section 2: Withdrawal Liability Assumptions, and including the unamortized value of Affected Benefits pools.

This January 1, 2022 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.

This report reflects the 5-year extension of the Rehabilitation Period that the Trustees elected under the American Rescue Plan Act of 2021 (ARPA), which became law on March 11, 2021.

A. Developments since last valuation

The following are developments since the last valuation, from January 1, 2021, to January 1, 2022.

1. *Participant demographics:* The number of active participants decreased 5.1% from 38,632 to 36,669. The ratio of non-active to active participants, which is one measure of plan maturity, increased from 1.77 to 1.97.
2. *Plan assets:* The net investment return on the market value of assets was 15.37%. For comparison, the assumed rate of return on plan assets over the long term was 7.00% for the 2021 Plan Year. The net investment return on the actuarial value of assets, which reflects smoothing of prior year gains and losses, was 10.44%. 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. *Assumption changes:* The actuarial assumption changes made effective with this valuation were:
   – Healthy mortality was changed, from 104% of the RP-2006 Blue Collar Mortality Table projected forward generationally with MP-2019 scale, to the PRI-2012 Blue Collar Mortality Table projected forward generationally with 80% of the MP-2021 scale.
   – Disabled mortality was changed, from 110% of the RP-2016 Disabled Retiree Mortality Table projected forward generationally with MP-2019 scale, to 110% of the PRI-2012 Disabled Retiree Mortality Table projected forward generationally with 80% of the MP-2021 scale.
   – Turnover rates were increased by 5 percentage points, after the 7^{th} year of employment.
   – Retirement rates were decreased for ages 68 and 69, from 15% to 10%, and for ages 70 through 74, from 20% to 15%.
   – Assumed administrative expenses were raised, from $10.4 million in 2021 to $11.0 million in 2022.
   – These changes decreased the actuarial accrued liability by 0.08% and the normal cost by 3.68%.
4. Under the Rehabilitation Plan, as of the valuation date, 83.2% of active participants are covered by the Preferred schedule and 16.8% are covered by the Default schedule. This is a slight change from 82.4% and 17.6% of the participants on those schedules, respectively, in the last valuation. The Plan is currently making scheduled progress under the terms of the Rehabilitation Plan.

B. Actuarial valuation results

The following commentary applies to various funding measures for the 2022 Plan Year.

1. *Zone status:* The Plan was certified to be in critical (but not critical and declining) status under the Pension Protection Act of 2006 (PPA) for 2022. In other words, the Plan is in the "Red Zone." This certification result is due to a continuing deficiency in the FSA. Please refer to the actuarial certification dated March 31, 2022, for more information.
2. *Funded percentages:* During the last Plan Year, the funded percentage that will be reported on the Plan's annual funding notice increased from 79.8% to 84.2%. The primary reason for the change in funded percentage was that the investment return on plan assets exceeded the actuarial assumed rate of return. 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 (FSA):* During the last Plan Year, the funding deficiency increased from $27.2 million to $39.7 million. The increase in the funding deficiency was due to contributions that fell short of the net charges in the FSA for the Plan Year. For the current Plan Year, the minimum required contribution is $134,605,110, compared with $82,766,517 in expected contributions.
4. *Scheduled Cost:* Scheduled Cost for the plan year is the sum of normal cost (the cost of annual benefit accruals plus administrative expenses) and amortization of the unfunded liability. For the current Plan Year, there is a $8.3 million deficit between expected contributions and Scheduled Cost, or about 10% of contributions. The change in the Scheduled Cost deficit (from $15.7 million in the prior year) is primarily due to investment return exceeding the assumed rate of return and changes in actuarial assumptions.

   The current Scheduled Cost amortization period is 6 years. As the Plan approaches emergence from critical status, the amortization period should be revised to provide an appropriate benchmark for Trustees to evaluate Plan funding and benefit levels. If the Scheduled Cost amortization period was 10 years as of January 1, 2022, the deficit of $8.3 million would become a margin of $15.0 million, or 17.5% of contributions.
5. *Funding concerns:* The imbalance between the benefit levels in the Plan and the resources available to pay for them is the reason the Plan is in critical status with a funding deficiency. The actions already taken to address this issue include the adoption of Rehabilitation Plan schedules by the bargaining parties that include substantial annual contribution increases that generally extend through 2022.

C. Withdrawal liability

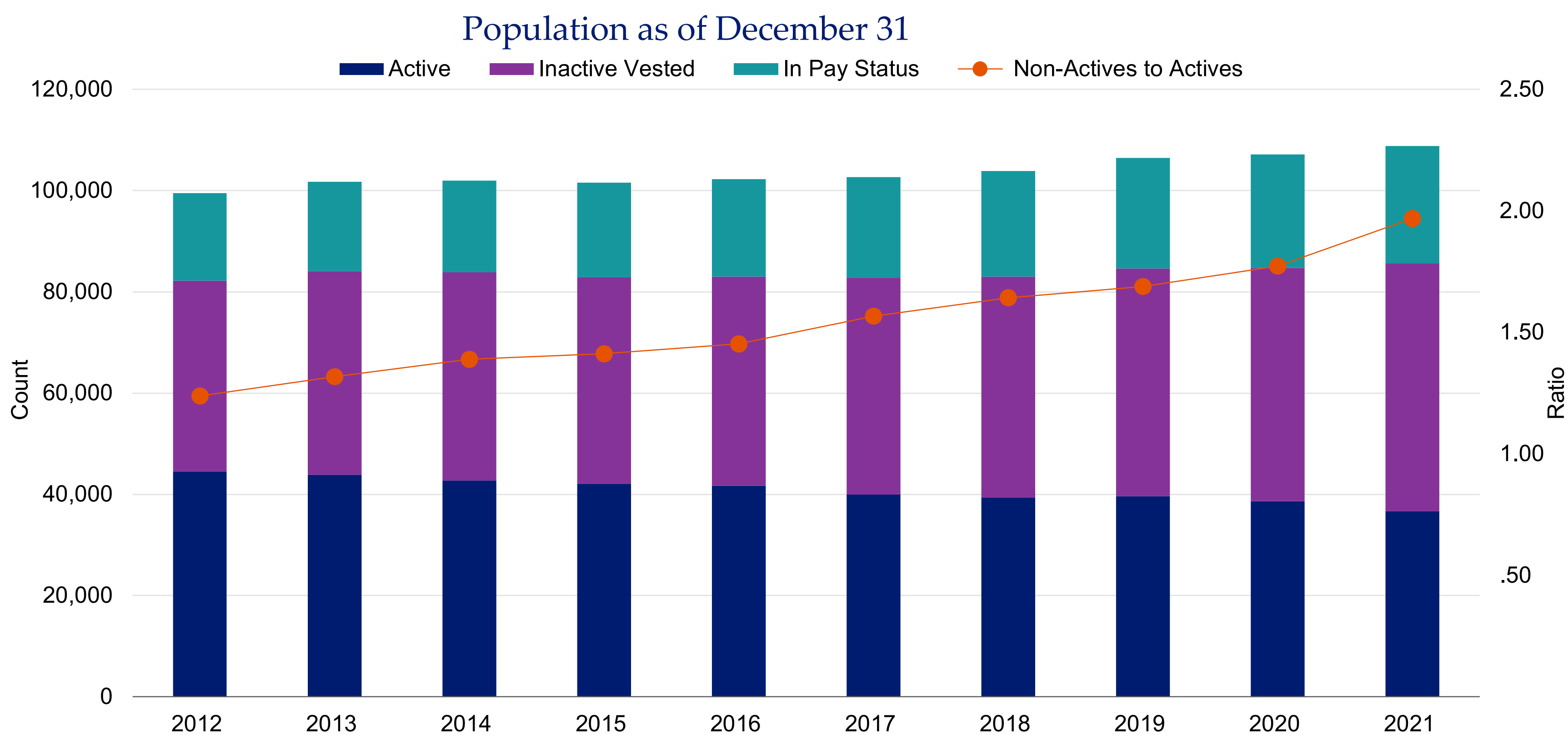
The unfunded present value of vested benefits is $880.6 million as of December 31, 2021. This is used for determining employer withdrawal liability for the Plan Year beginning January 1, 2022. The unfunded present value of vested benefits decreased from $1,072.6 million for the prior year, due mainly to positive investment performance and an increase in interest rates that are a proxy for those used by insurers that offer annuity purchases to settle pension obligations.

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, Funding Standard Account, zone status, cash flows and solvency. Projections beyond those included in this report were provided to the Trustees as part of their annual review of the Rehabilitation Plan.
2. *Baseline projections:* Based on the actuarial assumptions included in this report, including an investment return assumption of 7.00% per year and level future covered employment, the funding deficiency is projected to increase from $39.7 million to $49.2 million during 2022, then gradually decrease and eventually become a positive credit balance.
3. *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. An analysis of the potential range of the impact of investment and contribution risk relative to the Plan's future financial condition is provided to the Trustees on a regular basis.

Section 2: Actuarial Valuation Results

Participant information



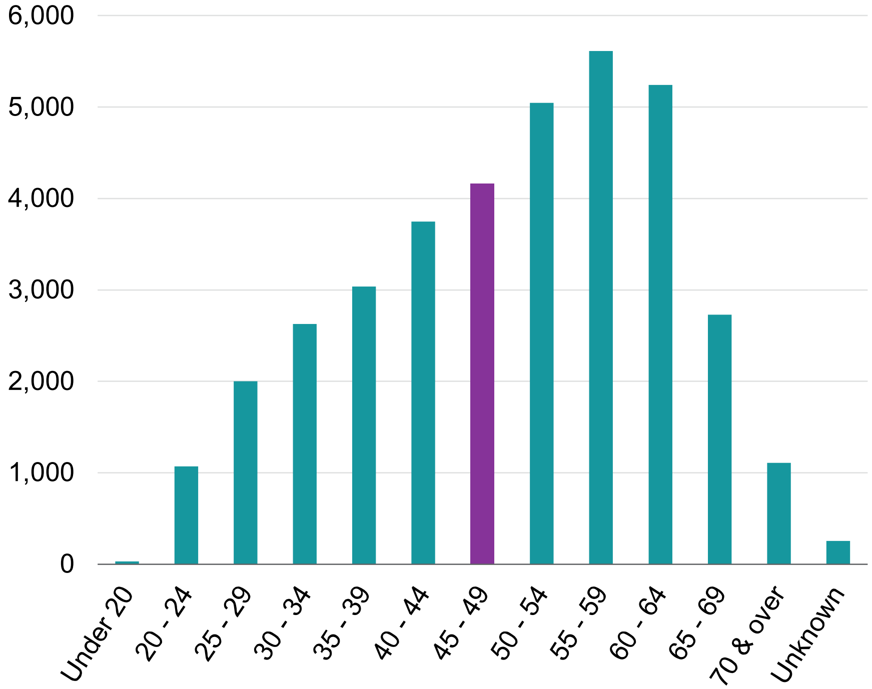
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
In Pay Status	17,275	17,652	18,088	18,677	19,275	19,893	20,849	21,836	22,362	23,189
Inactive Vested	37,772	40,210	41,192	40,777	41,303	42,785	43,711	45,025	46,122	48,993
Active	44,448	43,917	42,690	42,115	41,698	40,014	39,316	39,584	38,632	36,669
Ratio	1.24	1.32	1.39	1.41	1.45	1.57	1.64	1.69	1.77	1.97

Active participants

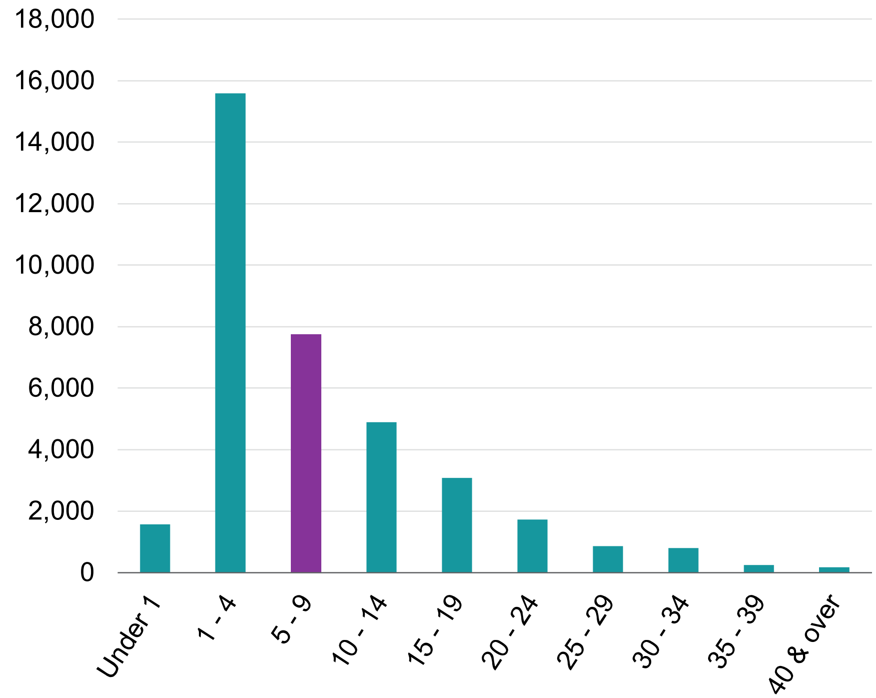
As of December 31,	2020	2021	Change
Active participants	38,632	36,669	-5.1%
Average age	49.2	49.8	0.6
Average pension credits	8.5	8.6	0.1

Distribution of Active Participants as of December 31, 2021

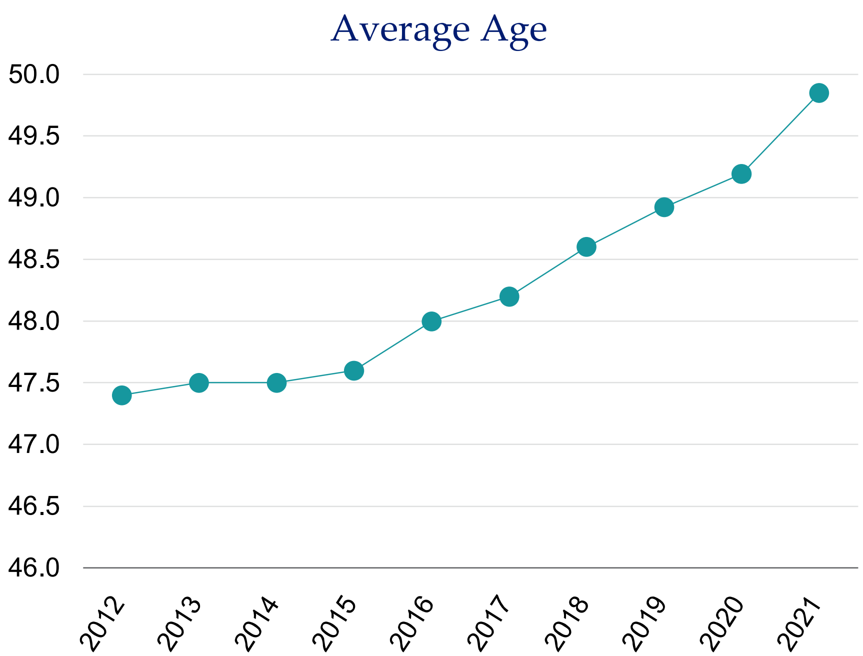
by Age

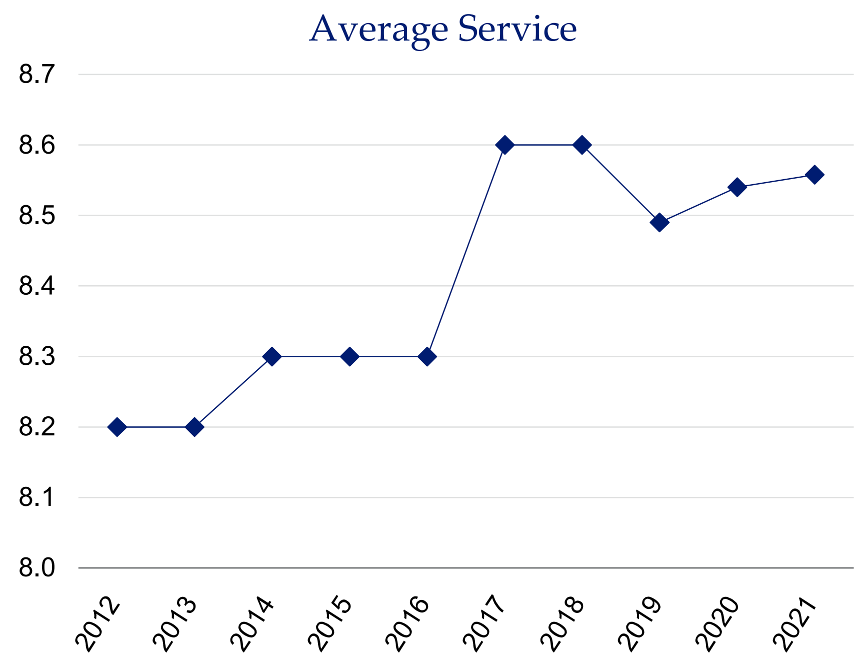


by Pension Credits



Progress of active participants

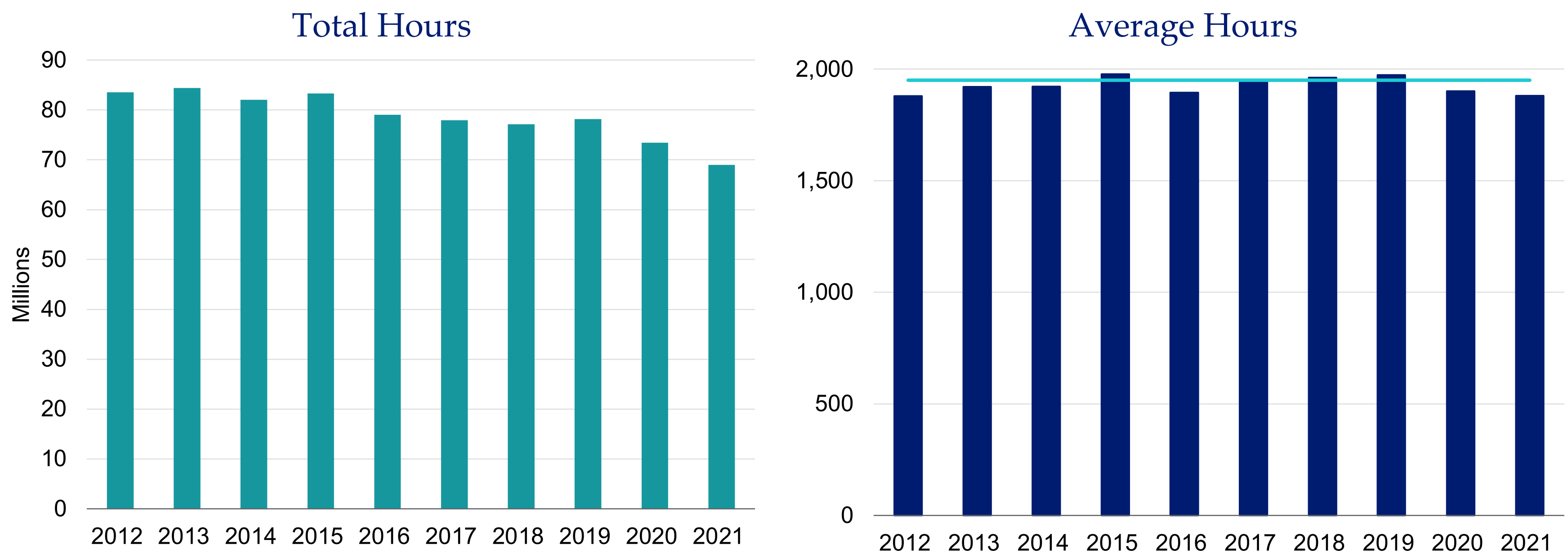




	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Avg. Age	47.4	47.5	47.5	47.6	48.0	48.2	48.6	48.9	49.2	49.8
Avg. Svc	8.2	8.2	8.3	8.3	8.3	8.6	8.6	8.5	8.5	8.6

Historical employment

- The 2022 zone certification was based on an industry activity assumption that the number of active participants would recover to the 2019 level by 2023 and, on average, contributions would be made for each active for 1,950 hours each year.
- The valuation is based on 36,669 actives and a long-term employment projection of 1,950 hours.



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	5-year average	10-year average
Total Hours[1]	83.54	84.36	82.06	83.32	79.00	77.97	77.11	78.15	73.44	68.98	75.13	78.79
Average Hours	1,880	1,921	1,922	1,978	1,894	1,949	1,961	1,974	1,901	1,881	1,933	1,926

Note: The total hours of contributions are based on total contributions divided by the average contribution rate for the year, which may differ from the hours reported to the Fund Office

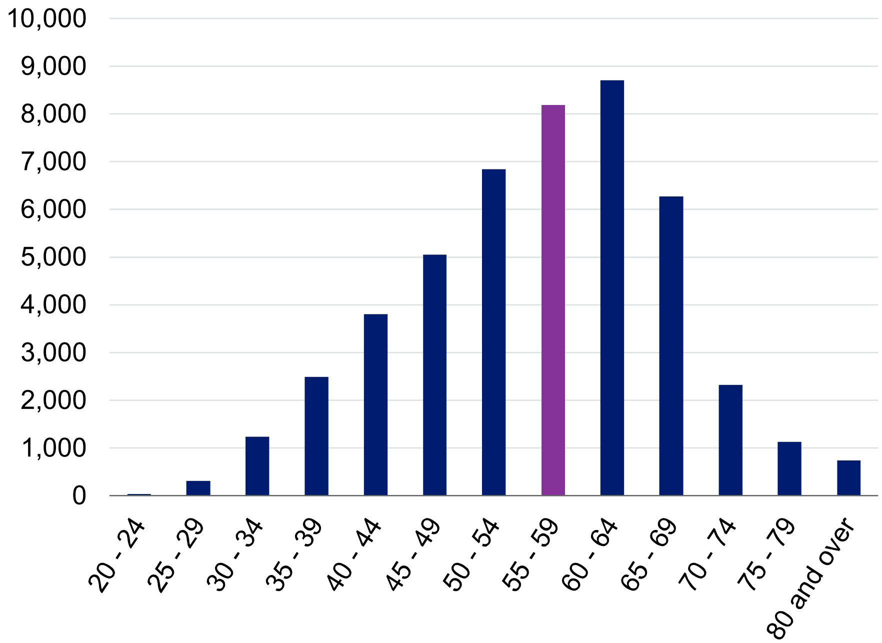
[1] In millions

Inactive vested participants

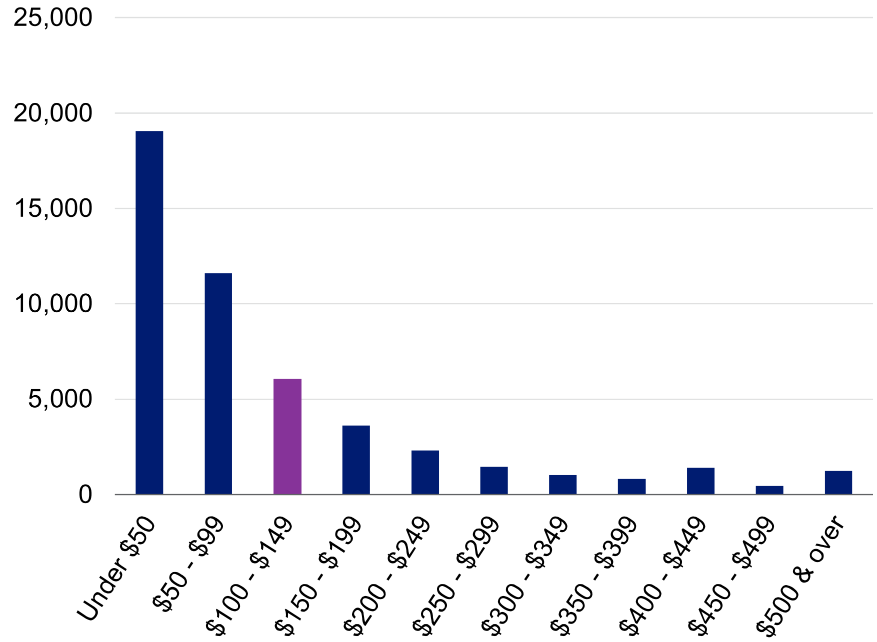
As of December 31,	2020	2021	Change
Inactive vested participants[1]	46,122	48,993	6.2%
Average age	55.7	56.1	0.4
Average amount	$138	$134	-2.9%

Distribution of Inactive Vested Participants as of December 31, 2021

by Age



by Monthly Amount



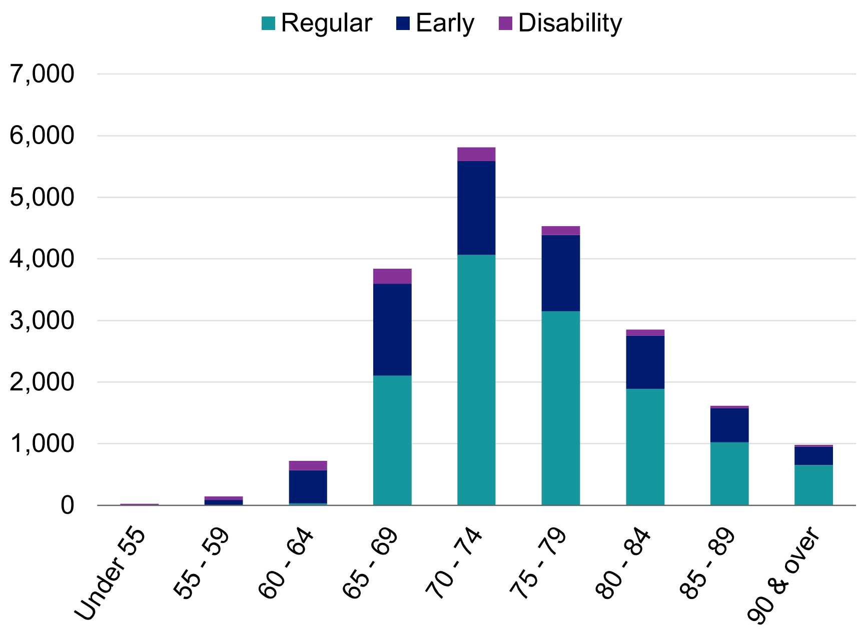
[1] A participant who is not currently active and has satisfied the requirements for, but has not yet commenced, a pension is considered an "inactive vested" participant. 1,443 inactive vested participants over age 85 are excluded from the valuation.

Pay status information

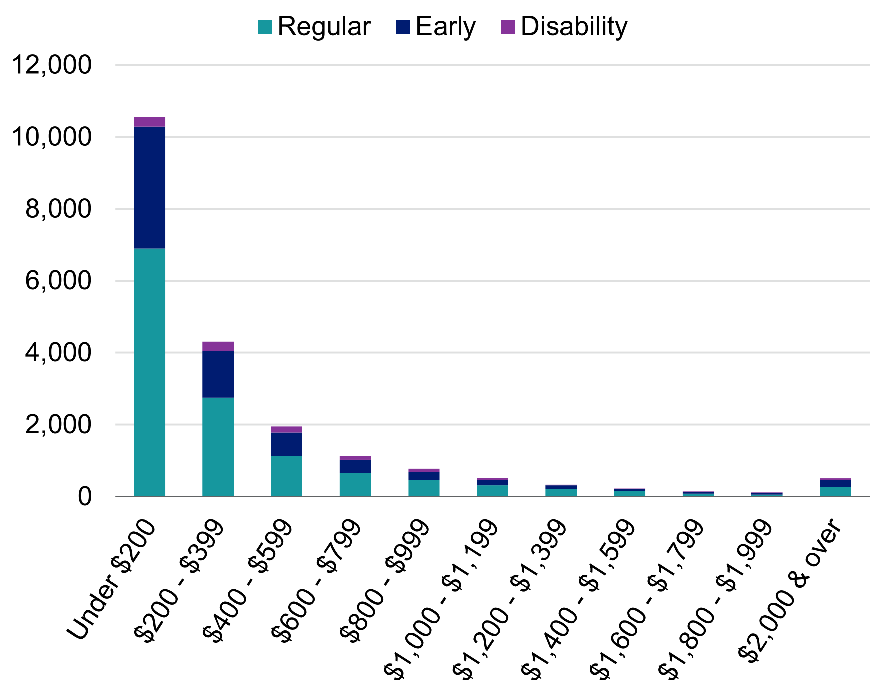
As of December 31,	2020	2021	Change
Pensioners	19,702	20,517	4.1%
Average age	75.2	75.3	0.1
Average amount	$396	$387	-2.3%
Beneficiaries	2,660	2,752	3.5%
Total monthly amount	$8,612,753	$8,752,198	1.6%

Distribution of Pensioners as of December 31, 2021

by Type and Age



by Type and Monthly Amount



Progress of pension rolls

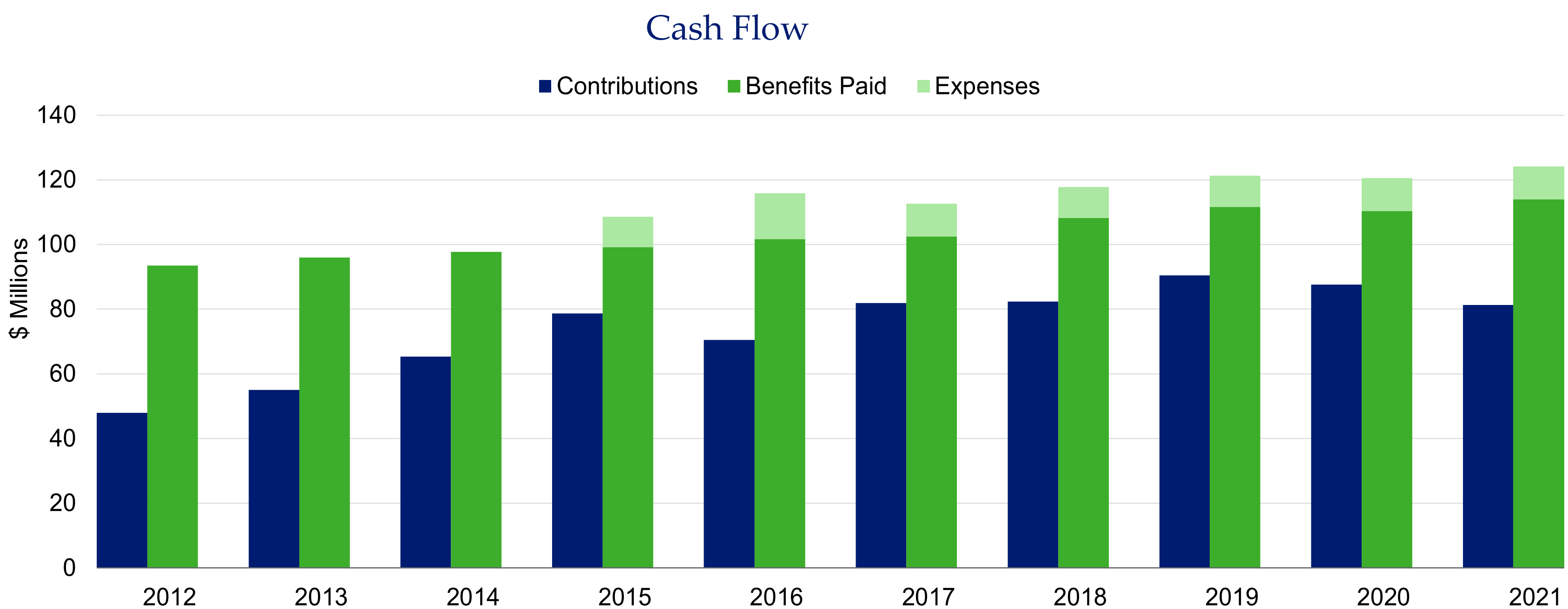
	Total In Pay Status			New Awards	
Year	Number	Average Age	Average Amount	Number	Average Amount
2012	14,952	74.2	$438	1,098	$330
2013	15,304	74.4	434	1,044	329
2014	15,829	74.3	428	1,301	333
2015	16,379	74.4	424	1,307	344
2016	16,865	74.6	418	1,211	313
2017	17,432	74.8	410	1,337	317
2018	18,347	74.8	404	1,676	337
2019	19,272	75.0	400	1,702	350
2020	19,702	75.2	396	1,302	317
2021	20,517	75.3	387	1,745	296

New pension awards

Year Ended Dec 31	Total		Normal		Early		Disability	
	Number	Average Monthly Amount	Number	Average Monthly Amount	Number	Average Monthly Amount	Number	Average Monthly Amount
2012	1,098	$330	691	$325	349	$290	58	$592
2013	1,044	329	663	346	332	246	49	655
2014	1,301	333	869	330	371	276	61	731
2015	1,307	344	883	349	353	264	71	679
2016	1,211	313	879	319	295	275	37	500
2017	1,337	317	1,015	324	285	264	37	554
2018	1,676	337	1,290	341	349	308	37	473
2019	1,702	350	1,321	346	334	339	47	563
2020	1,302	317	1,024	307	250	306	28	784
2021	1,745	296	1,547	282	182	376	16	777

Financial information

- Benefits and expenses are funded solely from contributions and investment earnings.



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Contributions[1]	$47.94	$55.06	$65.36	$78.66	$70.48	$81.87	$82.29	$90.46	$87.60	$81.27
Benefits Paid[1]	93.51	96.01	97.71	99.22	101.71	102.50	108.19	111.60	110.32	113.85
Expenses[1]				9.33	14.08	10.07	9.60	9.65	10.18	10.15

Note for years prior to 2015, employer contributions are net of expenses. Contributions include withdrawal liability income.

[1] In millions

Determination of Actuarial Value of Assets

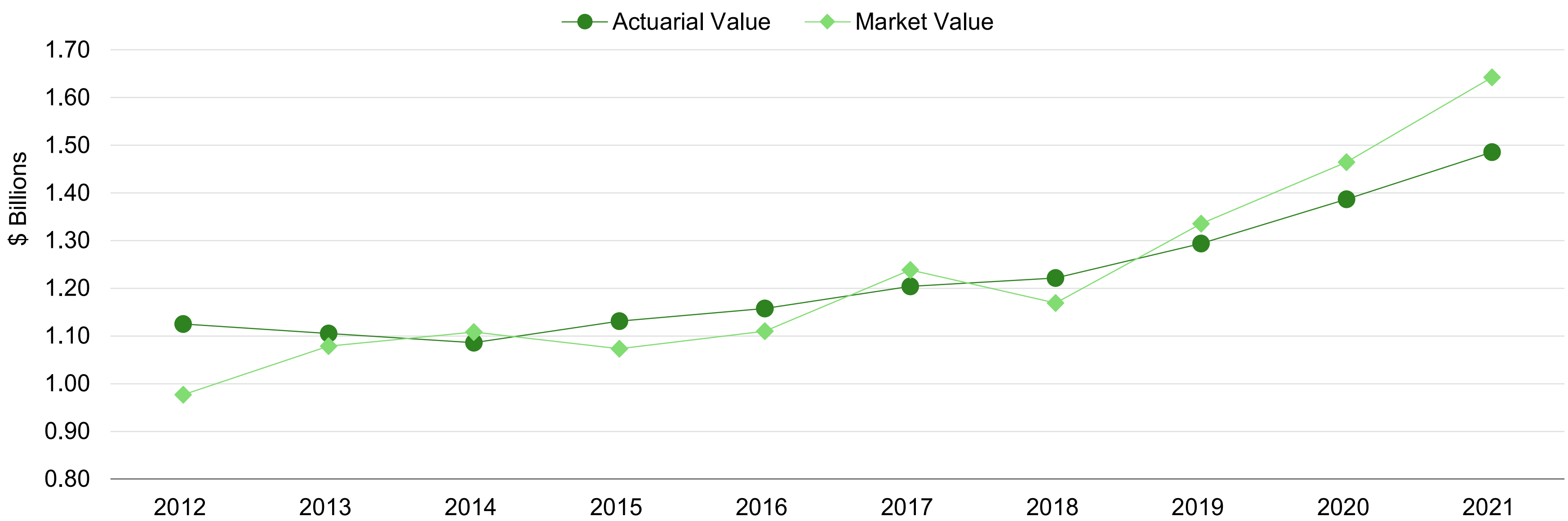
1	Market value of assets, December 31, 2021			$1,642,320,795
2	Calculation of unrecognized return	**Original Amount[1]**	**Unrecognized Return[2]**	
	(a) Year ended December 31, 2021	$125,598,236	$94,198,677	
	(b) Year ended December 31, 2020	69,710,692	34,855,346	
	(c) Year ended December 31, 2019	110,576,723	27,644,181	
	(d) Year ended December 31, 2018	-119,224,781	0	
	(e) Total unrecognized return			156,698,204
3	Preliminary actuarial value: **1 – 2e**			$1,485,622,591
4	Adjustment to be within 20% corridor			0
5	**Final actuarial value of assets as of December 31, 2021:** **3 + 4**			$1,485,622,591
6	Actuarial value as a percentage of market value: **5 ÷ 1**			90.5%
7	Amount deferred for future recognition: **1 - 5**			$156,698,204

[1] Total return on market value basis minus expected return on actuarial basis using the net investment return. Values exclude withdrawal liability receivables.

[2] Recognition at 25% per year over four years

Asset history for years ended December 31

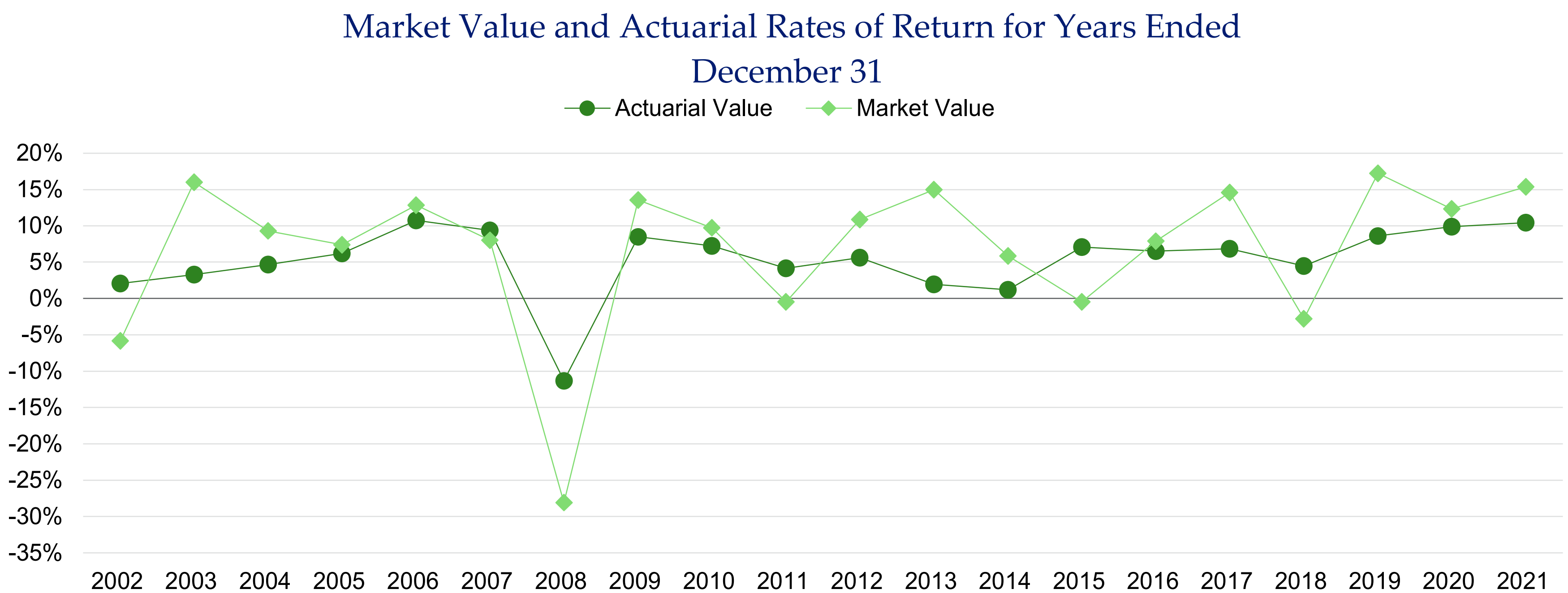
Actuarial Value of Assets vs. Market Value of Assets



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Actuarial Value[1]	$1.12	$1.11	$1.09	$1.13	$1.16	$1.20	$1.22	$1.29	$1.39	$1.49
Market Value[1]	0.98	1.08	1.11	1.07	1.11	1.24	1.17	1.34	1.46	1.64
Ratio	115.1%	102.5%	98.0%	105.4%	104.3%	97.3%	104.5%	96.9%	94.7%	90.5%

[1] In billions

Historical investment returns



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
AVA	2.0%	3.3%	4.6%	6.2%	10.8%	9.4%	-11.3%	8.5%	7.2%	4.1%	5.6%	1.9%	1.2%	7.1%	6.5%	6.8%	4.5%	8.6%	9.9%	10.4%
MVA	-5.8%	16.0%	9.3%	7.4%	12.9%	8.0%	-28.1%	13.6%	9.8%	-0.5%	10.9%	15.0%	5.8%	-0.5%	7.9%	14.6%	-2.8%	17.2%	12.3%	15.4%

Average Rates of Return	Actuarial Value	Market Value
Most recent five-year average return:	8.15%	11.38%
Most recent ten-year average return:	6.42%	9.66%
20-year average return:	5.39%	6.66%

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 is believed to be a short-term development that will not continue over the long term. On the other hand, if experience is expected to continue, assumptions are changed.

Experience for the Year Ended December 31, 2021

1	Gain from investments	$46,665,217
2	Gain from administrative expenses	254,666
3	Net gain from other experience (0.6% of projected accrued liability)	11,279,954
4	**Net experience gain: 1 + 2 + 3**	**$58,199,837**

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.

Gain from Investments

1	Average actuarial value of assets	$1,357,585,386
2	Assumed rate of return	7.00%
3	Expected net investment income: **1 x 2**	$95,030,977
4	Net investment income (10.44% actual rate of return)	141,696,194
5	**Actuarial gain from investments: 4 – 3**	**$46,665,217**

Administrative expenses

- Administrative expenses for the year ended December 31, 2021 totaled $10,153,157, as compared to the assumption of $10,400,000.

Other experience

- The net gain from other experience is not considered significant. Some differences between projected and actual experience include:
  - Mortality experience
  - Extent of turnover among the participants
  - Salary increases more or less than projected
  - Retirement experience (earlier or later than projected)
  - Number of disability retirements

Actuarial assumptions

- There were changes in assumptions for FSA and Scheduled Cost purposes since the prior valuation. These assumption changes are effective December 31, 2021, for withdrawal liability purposes
- The following assumptions were changed with this valuation:
  - The healthy mortality assumption was changed from 104% of the RP-2006 Blue Collar Mortality Table, projected forward generationally with MP-2019 scale, to the PRI-2012 Blue Collar Mortality Table, projected forward generationally with 80% of the MP-2021 scale.
  - The disabled mortality assumption was changed from 110% of the RP-2016 Disabled Retiree Mortality Table, projected forward generationally with MP-2019 scale, to 110% of the PRI-2012 Disabled Retiree Mortality Table, projected forward generationally with 80% of the MP-2021 scale.
  - Turnover rates were increased by 5 percentage points, after the 7th year of employment.
  - Retirement rates were decreased for ages 68 and 69, from 15% to 10%, and for ages 70 through 74, from 20% to 15%.
  - Assumed administrative expenses were raised, from $10.4 million annually to $11.0 million annually.
- These changes decreased the actuarial accrued liability by 0.1% and decreased the normal cost by 3.7%.
- Details on actuarial assumptions and methods are in Section 3.

Plan provisions

- There were no changes in plan provisions since the prior valuation.
- The average benefit-bearing contribution rate increased by 1.9% from $0.4934 per hour to $0.5027 per hour. This was the net result of a small decrease in the non-seasonal contribution rate and a large increase in the seasonal contribution rate.
- As a result of collective bargaining, 83.2% of active participants are covered by the Preferred Schedule and 16.8% are now covered by the Default Schedule as of the valuation date. Last year, there were 82.4% and 17.6%, respectively, covered by those Schedules
- The total average contribution rate increased by 8.5%, from $1.0672 as of January 1, 2021, to $1.1575 as of January 1, 2022.
- A summary of plan provisions is in Section 3.

Plan funding

Comparison of Funded Percentages

Plan Year Beginning	January 1, 2021		January 1, 2022	
Market Value of Assets	**$1,464,424,121**		**$1,642,320,795**	
	Amount	**Funded %**	**Amount**	**Funded %**
• Funding interest rate	7.00%		7.00%	
• Present value (PV) of future benefits	$1,897,886,834	77.2%	$1,897,751,371	86.5%
• Actuarial accrued liability[1]	1,837,973,159	79.7%	1,847,542,171	88.9%
• PV of accumulated plan benefits (PVAB)	1,738,568,419	84.2%	1,765,267,195	93.0%
• PBGC interest rates	1.62% for 20 years, 1.40% thereafter		2.40% for 20 years, 2.11% thereafter	
• PV of vested benefits for withdrawal liability[2]	$2,536,977,897	57.7%	$2,522,890,454	65.1%
• Current liability interest rate	2.43%		2.22%	
• Current liability[3]	$3,210,144,358	45.8%	$3,363,217,199	49.0%
Actuarial Value of Assets	**$1,386,658,936**		**$1,485,622,591**	
	Amount	**Funded %**	**Amount**	**Funded %**
• Funding interest rate	7.00%		7.00%	
• PV of future benefits	$1,897,886,834	73.1%	$1,897,751,371	78.3%
• Actuarial accrued liability[1]	1,837,973,159	75.4%	1,847,542,171	80.4%
• PPA'06 liability and annual funding notice	1,738,568,419	79.8%	1,765,267,195	84.2%

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.

[1] Based on Entry Age actuarial cost method.
[2] The present value of vested benefits (PVVB) for withdrawal liability purposes is determined based on a blend of the PVVB at both the funding interest rate and PBGC interest rates (a proxy for settlement rates), and other assumptions described later in this section. It also includes the unamortized value of affected benefit pools.
[3] Assets for current liability funded percentage include withdrawal liability receivables.

Pension Protection Act of 2006

2022 Actuarial status certification

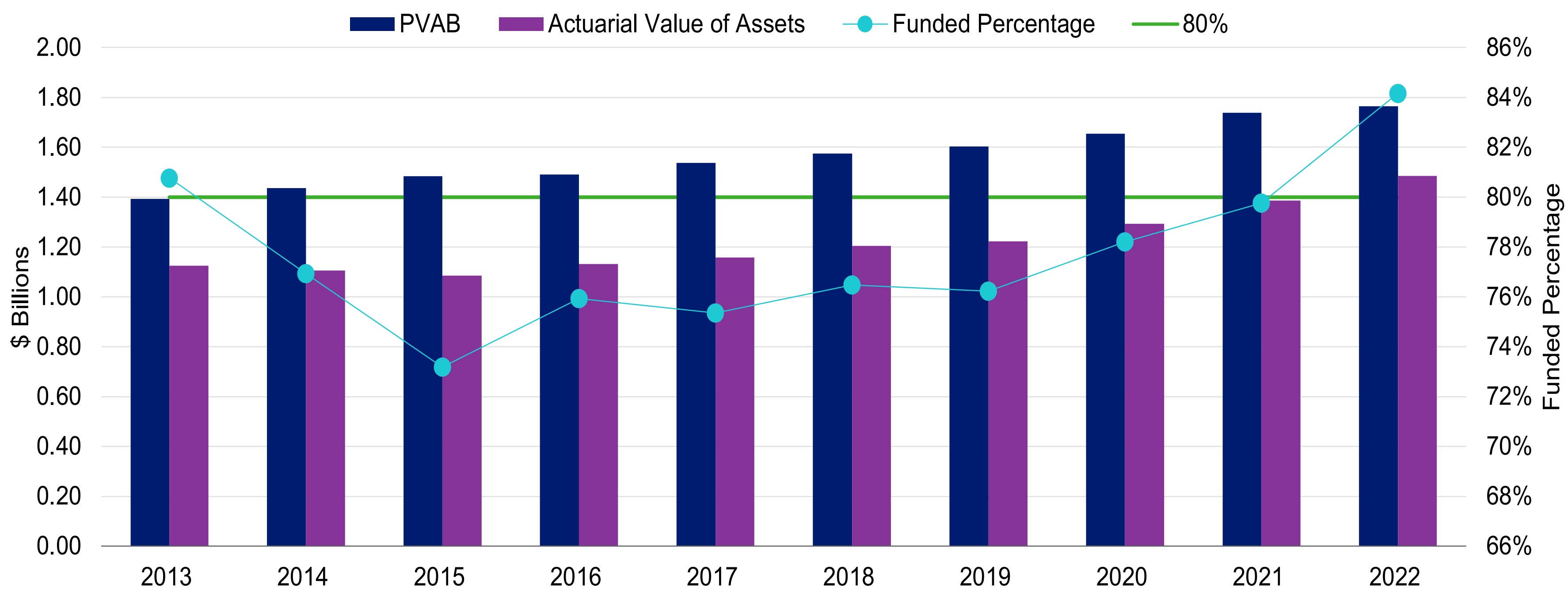
- PPA'06 requires trustees to actively monitor their plans' financial prospects to identify emerging funding challenges so they can be addressed effectively.
- As reported in the 2022 certification, the Plan was classified as critical (in the Red Zone), but not "critical and declining", because of the continuing deficiency in the FSA.
- In addition, the Plan is making the scheduled progress in meeting the requirements of its rehabilitation plan.

Rehabilitation Plan

- The Plan's Rehabilitation period began January 1, 2011 and ends December 31, 2028, as the result of a Trustee election under a provision in the American Rescue Plan Act (ARPA) that permits plans to extend that Period by 5 years..
- Annual contribution increases of 7.75% for employers under the Preferred Schedule are required through 2022.
- New groups joining the Plan are required to make five annual contribution increases of 7.75%.
- Various changes to benefit accrual rates and other features were implemented in conjunction with initial adoption of Preferred and Default Schedules by the bargaining parties.
- Section 432(e)(3)(B) requires that the Trustees annually update the Rehabilitation Plan and Schedules. Segal will continue to assist the Trustees to evaluate and update the Rehabilitation Plan and to prepare the required assessment of Scheduled Progress.

Pension Protection Act of 2006 historical information

Funded Percentage and Zone



Plan Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Zone Status	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
PVAB[1]	$1.39	$1.44	$1.48	$1.49	$1.54	$1.57	$1.60	$1.65	$1.74	$1.77
AVA[1]	1.12	1.11	1.09	1.13	1.16	1.20	1.22	1.29	1.39	1.49
Funded %	80.8%	76.9%	73.2%	75.9%	75.4%	76.5%	76.2%	78.2%	79.8%	84.2%

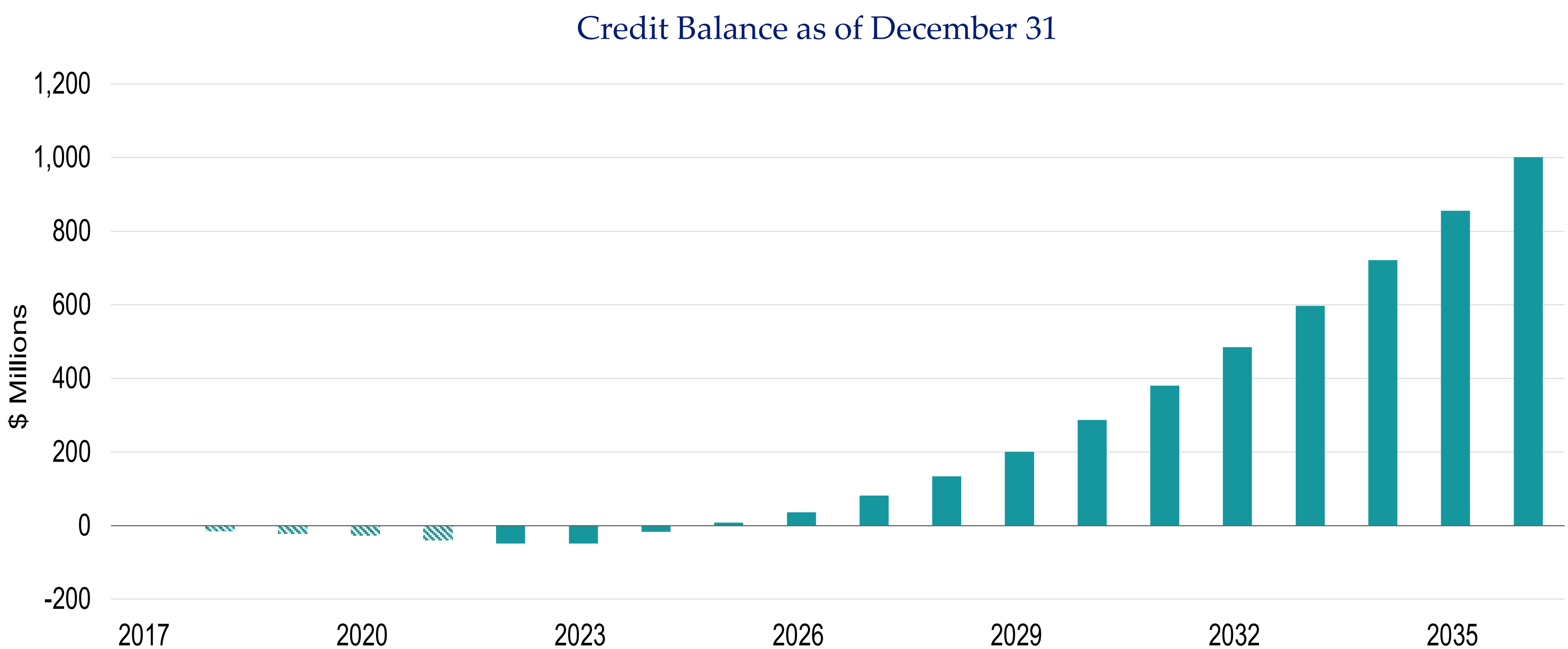
[1] In billions

Projections

- The projection on the following page assumes the following, unless otherwise noted:
  - The Plan will earn a market rate of return equal to 7.00% each year.
  - Industry activity is based on a level number of active employees and 1,950 hours per capita.
  - Administrative expenses are projected to increase 2.50% per year.
  - There are no plan amendments or changes in law/regulation.
  - The normal cost in future years is increased by 0.2% per year to reflect future mortality improvement.
  - The contribution rate includes no increases after 2022.
  - All other experience emerges as assumed, and no assumption changes are made.
- The projections in this valuation illustrate the potential future impact of one given set of assumptions. Additional scenarios would demonstrate sensitivity to risk from investment return, employment and other factors.

Funding Standard Account (FSA)

- The minimum funding requirement for the year beginning January 1, 2022 is $134,605,110.
- Based on the assumption that 36,669 participants will work an average of 1,950 hours at a $1.1575 average contribution rate, the contributions projected for the year beginning January 1, 2022 are $82,766,517. The funding deficiency is projected to increase by approximately $9.5 million, to $49.2 million as of December 31, 2022.
- A 15-year projection indicates the funding deficiency will remain through 2024, before a rapidly growing credit balance is anticipated to appear in 2025 (which would trigger emergence from critical status), based on the assumptions detailed on the prior page.



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 an FSA funding deficiency 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.
- While the short-term funding issues are being resolved through the Rehabilitation Plan, the Trustees should review the Scheduled Cost to assess the long-term adequacy of contribution rates.
- If the amortization period were reset to 10 years, instead of 6, the Scheduled Cost would decrease from $93,682,663 to $70,417,387 and the $8,291,929 deficit would become a $14,973,347 margin, equal to 17.5% of projected contributions.

Scheduled Cost

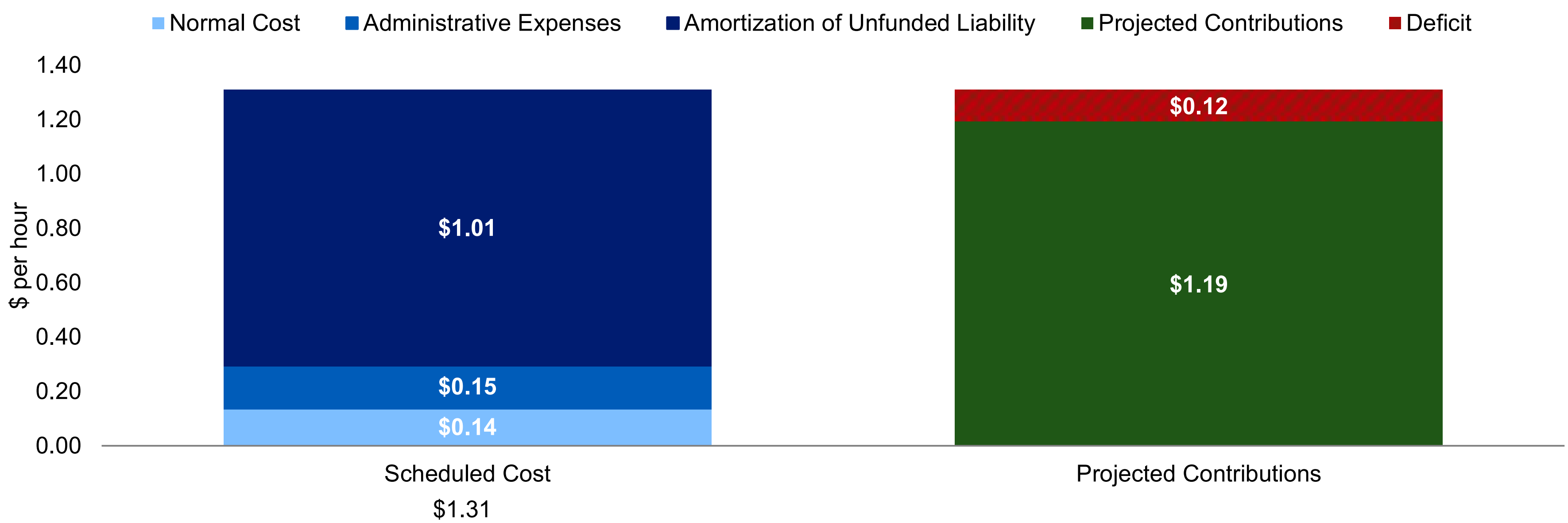
	Year Beginning January 1	
Cost Element	**2021**	**2022**
Normal cost[1]	$10,911,284	$10,284,555
Administrative expenses[1]	10,400,000	11,000,000
Amortization of the unfunded actuarial accrued liability[1]	79,880,223	72,398,108
• Actuarial accrued liability	1,837,973,159	1,847,542,171
• Actuarial value of assets[2]	1,393,832,436	1,491,517,369
• Unfunded actuarial accrued liability	444,140,723	356,024,802
• Amortization period	7	6
Annual Scheduled Cost, payable monthly	**$101,191,507**	**$93,682,663**
Projected contributions	85,494,741	85,390,734
• Number of active participants	38,632	36,669
• Hours assumption	1,950	1,950
• Projected contribution rate (as of subsequent year)	$1.1339	$1.1942
Margin/(deficit)	**-$15,696,766**	**-$8,291,929**
Margin/(deficit) as a % of projected contributions	-18.4%	-9.7%

[1] Includes adjustment for monthly payments

[2] Includes $7,173,500 and $5,894,778 in withdrawal liability contributions receivable for 2021 and 2022, respectively. These amounts are excluded for minimum funding and withdrawal liability purposes.

Scheduled Cost margin/deficit

- The margin or deficit is represented by the difference between projected contributions at the average projected negotiated contribution rate and the Scheduled Cost.

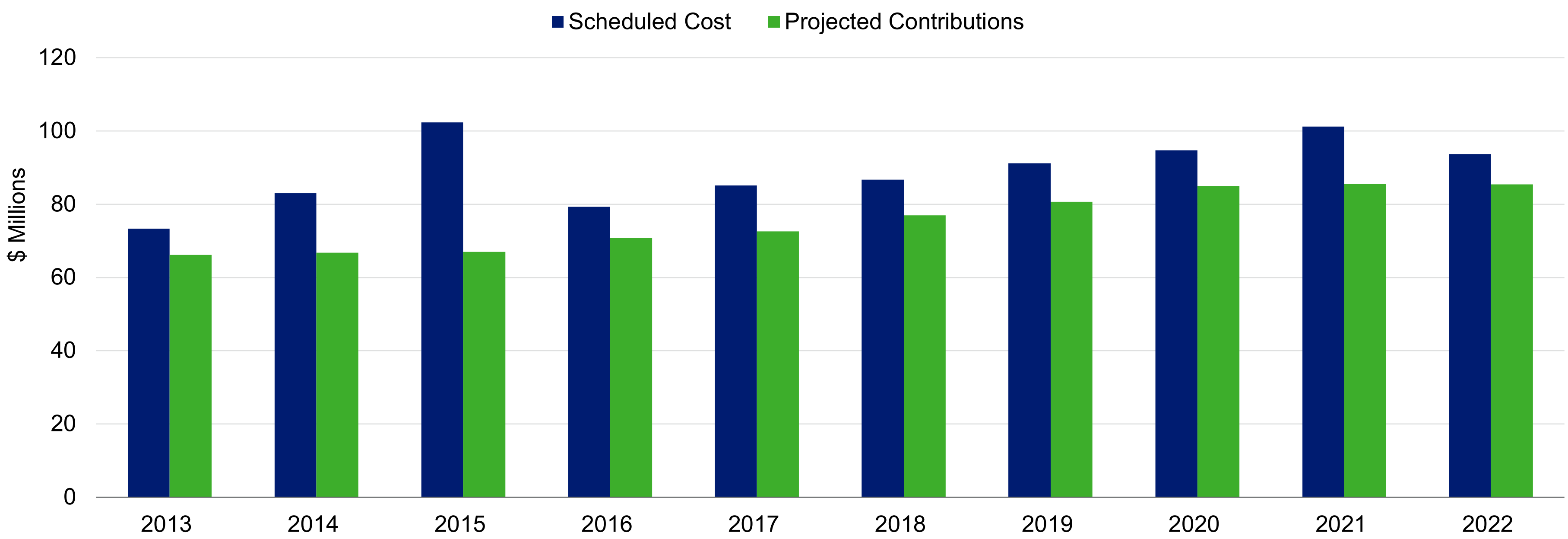


- Prior net investment gains are not fully recognized in the actuarial value of assets. Using the current market value of assets, the MARGIN of contributions over Scheduled Cost would be $23,572,855 ($0.33 per hour, or 27.6% of projected contributions).

Scheduled Cost reconciliation

Scheduled Cost as of January 1, 2021		$101,191,507
• Effect of change in benefit-bearing contribution rates	$205,492	
• Effect of change in administrative expense assumption	600,000	
• Effect of change in actuarial assumptions	-701,145	
• Effect of contributions less than Scheduled Cost	4,172,079	
• Effect of investment gain	-9,489,433	
• Effect of other gains and losses on accrued liability	-1,983,438	
• Effect of net other changes, including composition and number of participants	-312,399	
Total change		-$7,508,844
Scheduled Cost as of January 1, 2022		$93,682,663

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 recently performed a detailed analysis of the potential range of the impact of investment and contribution risk relative to the Plan's future financial condition. We include here a brief discussion of some risks that may affect the Plan.
- Economic Shock Risk. Potential implications for the Plan due to continuing effects of the COVID-19 pandemic (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 far different than past experience, including a 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)

  Each 1% asset gain or loss (relative to the assumed investment return) translates to about 20% of one year's contributions.

  As shown earlier in this Section, the market value rate of return over the last 20 years has ranged from a low of -28.1% to a high of 17.2%, while averaging 6.7%.
- Contribution and Employment Risk (the risk that actual contributions will be different from projected contributions)
  - If the number of active participants continues to decline by 2% per year, the projected emergence date is one year later than currently projected.
- 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.
  - 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 Plan costs.

- 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.

  – Over the past ten years, the ratio of non-active participants to active participants has increased from a low of 1.24 in 2012 to a high of 1.97 in 2021.
  – As of December 31, 2021, the retired life actuarial accrued liability represents 45% of the total actuarial accrued liability. In addition, the actuarial accrued liability for inactive vested participants represents 30% of the total. The higher the non-active actuarial accrued liability is as a percent of the total liability, the greater the danger of volatility in results.
  – Benefits and administrative expenses less contributions totaled $42.7 million in 2021, 3% of the market value of assets. The Plan is dependent upon investment returns in order to pay benefits.

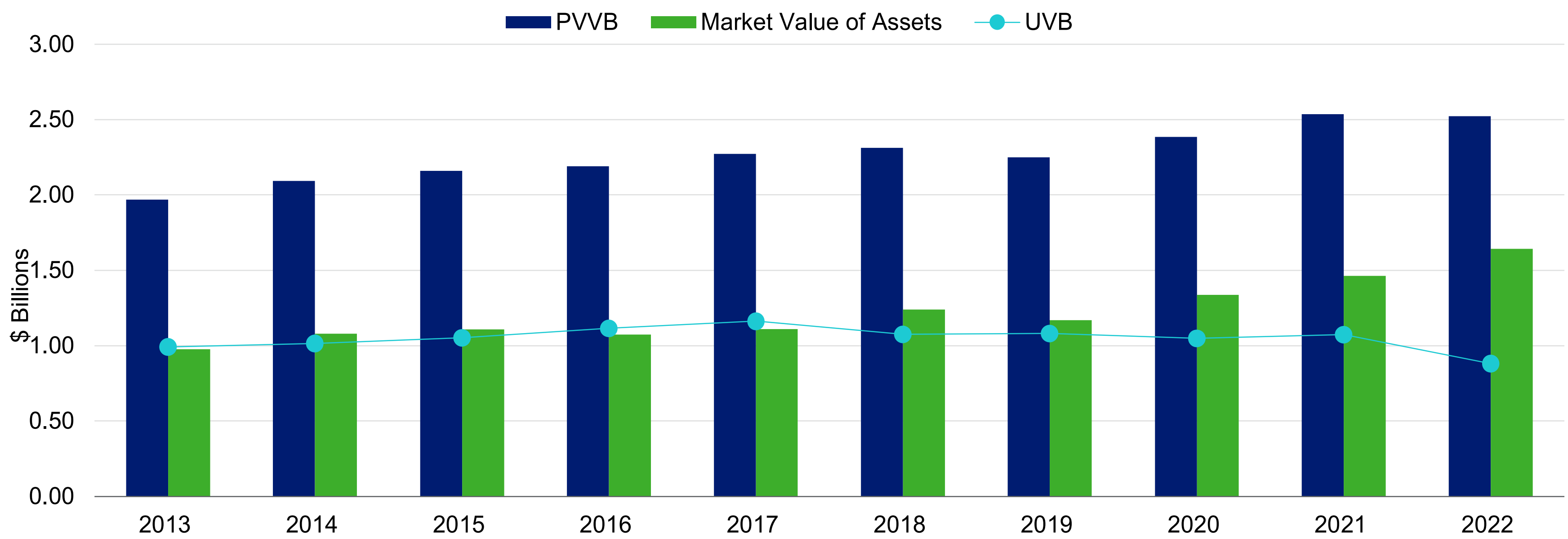
- There are external factors including legislative, regulatory or financial reporting changes that could impact the Plan’s funding and disclosure requirements. While we do not assume any changes in such external factors, it is important to understand that they could have significant consequences for the Plan. For example, recent legislative proposals showed that Congress has considered possible changes to funding requirements for multiemployer plans (such as changes to the zone rules) and increases in PBGC premiums.

Withdrawal liability

- The present value of vested benefits for withdrawal liability purposes reflects the plan changes adopted through the Rehabilitation Plan and its adopted schedules. For purposes of determining the present value of vested benefits, we excluded all benefits that are not protected by IRC Section 411(d)(6), including lump death benefits. Qualified pre-retirement survivor annuities (QPSAs) are included.
- Reductions in accrued benefits or contribution surcharges for a plan in critical status (Red Zone) are disregarded in determining an employer's allocation of the UVB. The Trustees adopted a method for calculating the UVB based on the PBGC's Technical Update 10-3, to account for the effect of benefit reductions ("Affected Benefits"). The unamortized value of all Affected Benefits pools (as shown in the chart below) is also included in the total present value of vested benefits of $2.52 billion as of December 31, 2021.
- The $192 million decrease in the unfunded present value of vested benefits from the prior year is primarily due to an increase in PBGC interest rates and the investment gains during 2021.

		December 31	
		2020	2021
	Present value of vested benefits (PVVB) on funding basis	$1,722,128,819	$1,736,411,566
	Present value of vested benefits on settlement basis (PBGC interest rates)	3,529,109,756	3,125,661,180
1	PVVB measured for withdrawal purposes	$2,471,945,813	$2,466,367,054
2	Unamortized value of Affected Benefits Pools	65,032,084	56,523,400
3	Total present value of vested benefits: **1 + 2**	$2,536,977,897	$2,522,890,454
4	Market value of assets	1,464,424,121	1,642,320,795
5	Unfunded present value of vested benefits (UVB): **3 - 4**, not less than $0	$1,072,553,776	$880,569,659

Withdrawal liability vs. market value of assets — Historical information



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PVVB[1]	$1.97	$2.09	$2.16	$2.19	$2.27	$2.31	$2.25	$2.38	$2.54	$2.52
MVA[1]	0.98	1.08	1.11	1.07	1.11	1.24	1.17	1.34	1.46	1.64
UVB[1]	0.99	1.01	1.05	1.12	1.16	1.08	1.08	1.05	1.07	0.88
PBGC rates										
Initial period	3.07%	3.00%	3.10%	2.46%	1.98%	2.34%	2.84%	2.53%	1.62%	2.40%
Thereafter	3.00%	3.31%	3.29%	2.98%	2.67%	2.63%	2.76%	2.53%	1.40%	2.11%
Funding Rates	7.50%	7.50%	7.50%	7.50%	7.50%	7.25%	7.25%	7.25%	7.00%	7.00%

[1] In billions

Withdrawal liability assumptions

- The actuarial assumptions and methods are reasonable (taking into account the experience of the Plan and reasonable expectations) and, in combination, represent the actuary's best estimate of anticipated experience under the Plan to determine the unfunded vested benefits for withdrawal liability purposes.
- The present value of vested benefits is based on a blend of two liability calculations. The first calculation uses discount rates selected based on estimated annuity purchase rates available for benefits being settled, because withdrawal liability is a final settlement of an employer's obligation to the Plan. The second calculation uses the interest rate determined by the plan actuary for minimum funding, based on the expected return on current and future assets. For benefits that could be settled immediately, because assets on hand are sufficient, the first calculation is used: annuity purchase rates promulgated by PBGC under ERISA Sec. 4044 for multiemployer plans terminating by mass withdrawal on the measurement date. For benefits that cannot be settled immediately because they are not currently funded, the calculation uses the second calculation: the interest rate used for plan funding calculations.

Interest	For liabilities up to market value of assets, 2.40% for 20 years and 2.11% beyond (1.62% for 20 years and 1.40% beyond, in the prior year valuation). For liabilities in excess of market value of assets, same as used for plan funding as of January 1, 2022 (the corresponding interest rate as of a year earlier was used for the prior year's value)
Administrative Expenses	Calculated as prescribed by PBGC formula (29 CFR Part 4044, Appendix C); not applicable to those liabilities determined using funding interest rates.
Mortality	Same as used for plan funding as of January 1, 2022
Retirement Rates	Same as used for plan funding as of January 1, 2022

- A detailed report on withdrawal liability is available.

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.

<table>
<tr>
<td>Critical Status (Red Zone)</td>
<td>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 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.</td>
</tr>
</table>

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

August 7, 2023

Certificate of Actuarial Valuation

This is to certify that Segal has prepared an actuarial valuation of the SEIU National Industry Pension Fund (U.S. Participants) as of January 1, 2022 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 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. 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 Plan Administrator 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 J.

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.

Eli Greenblum, FSA, MAAA
Senior Vice President and Actuary
Enrolled Actuary No. 20-3636

Exhibit A: Table of Plan Coverage

Category	Year Ended December 31 2020	Year Ended December 31 2021	Change from Prior Year
Participants in Fund Office tabulation	43,817	41,531	-5.2%
Less: Participants with less than one pension credit	5,185	4,862	N/A
Active participants in valuation:			
• Number[1]	38,632	36,669	-5.1%
– Non-seasonal	37,790	35,068	-7.2%
– Seasonal	842	1,601	90.1%
• Average age	49.2	49.8	0.6
• Average pension credits	8.5	8.6	0.1
• Average total contribution rate as of the valuation date	$1.0672	$1.1575	8.5%
• Average benefit-bearing contribution rate as of the valuation date	0.4934	0.5027	1.9%
– Non-seasonal	0.4837	0.4789	-1.0%
– Seasonal	0.9268	1.0250	10.6%
• Number with unknown age and/or service information	256	254	-0.8%
• Total active vested participants	24,161	23,369	-3.3%
Inactive participants with rights to a pension:			
• Number[2]	46,122	48,993	6.2%
• Average age	55.7	56.1	0.4
• Average monthly benefit	$138	$134	-2.9%
• Number with unknown age and/or service information	487	1,402	187.9%
Pensioners:			
• Number in pay status[3]	19,702	20,517	4.1%
• Average age	75.2	75.3	0.1
• Average monthly benefit	$396	$387	-2.3%
Beneficiaries:			
• Number in pay status	2,660	2,752	3.5%
• Average age	78.1	78.9	0.8
• Average monthly benefit	$306	$303	-1.0%
Total participants	**107,116**	**108,931**	**1.7%**

[1] 82.4% covered by the Preferred Schedule of the Rehabilitation Plan and 17.6% covered by the Default Schedule in 2020; 83.2% covered by the Preferred Schedule of the Rehabilitation Plan and 16.8% covered by the Default Schedule in 2021.
[2] Excludes 1,148 and 1,443 participants over age 85, in 2020 and 2021, respectively.
[3] Includes 2,834 and 51 retirees with missing payment form in 2020 and 2021, respectively.

Exhibit B: Actuarial Factors for Minimum Funding

	2021		2022
Interest rate assumption		7.00%	7.00%
Normal cost, including administrative expenses		$20,548,289	$20,522,517
Actuarial present value of projected benefits		1,897,886,834	1,897,751,371
Present value of future normal costs		59,913,675	50,209,200
Market value as reported by Calibre CPA Group (MVA)[1]		1,464,424,121	1,642,320,795
Actuarial value of assets (AVA)[1]		1,386,658,936	1,485,622,591
Actuarial accrued liability		**$1,837,973,159**	**$1,847,542,171**
• Pensioners and beneficiaries	$855,929,954	$839,335,756	
• Inactive participants with vested rights	519,955,160	546,803,956	
• Active participants	462,088,045	461,402,459	
Unfunded actuarial accrued liability based on AVA		$451,314,223	$361,919,580

[1] Excludes $7,173,500 and $5,894,778 in withdrawal liability contributions receivable in 2020 and 2021, respectively.

Exhibit C: Summary Statement of Income and Expenses on a Market Value Basis

	Year Ended December 31, 2020		Year Ended December 31, 2021	
Contribution income:				
• Employer contributions	$76,511,673		$76,626,244	
• Withdrawal liability payments received	11,085,051		4,471,910	
Contribution income		*$87,596,724*		*$81,098,154*
Investment income		161,757,378		220,629,213
Total income available for benefits		**$249,354,102**		**$301,903,468**
Less benefit payments and expenses:				
• Pension benefits	-$110,319,396		-$113,853,637	
• Administrative expenses	-10,181,014		-10,153,157	
Total benefit payments and expenses		*-120,500,410*		*-124,006,794*
Market value of assets		**$1,464,424,121**		**$1,642,320,795**

Exhibit D: Information on Plan Status as of January 1, 2022

Plan status (as certified on March 31, 2022, for the 2022 zone certification)	***Critical***
Scheduled progress (as certified on March 31, 2022, for the 2022 zone certification)	Yes
Actuarial value of assets for FSA	$1,485,622,591
Accrued liability under unit credit cost method	1,765,267,195
Funded percentage for monitoring plan status	84.2%
Year plan projected to emerge from critical status (based on terms of the Rehabilitation Plan)	2029

Annual Funding Notice for Plan Year Beginning January 1, 2022, and Ending December 31, 2022

	2022 Plan Year	2021 Plan Year	2020 Plan Year
Actuarial valuation date	January 1, 2022	January 1, 2021	January 1, 2020
Funded percentage	84.2%	79.8%	78.2%
Value of assets	$1,485,622,591	$1,386,658,936	$1,293,883,604
Value of liabilities	1,765,267,195	1,738,568,419	1,654,442,943
Market value of assets as of Plan Year end	Not available	1,642,320,795	1,464,424,121

Critical or Endangered Status

The Plan was in critical (but not “critical and declining”) status in the Plan Year because there was a funding deficiency in the Funding Standard Account but no insolvency was projected within twenty years. In an effort to improve the Plan’s funding situation, the Trustees adopted a Rehabilitation Plan that decreased benefits and requires annually increasing contribution rates.

Exhibit E: Schedule of Projection of Expected Benefit Payments

(Schedule MB, Line 8b(1))

Plan Year	Expected Annual Benefit Payments
2022	$116,085,671
2023	127,659,259
2024	131,293,416
2025	126,521,581
2026	129,933,623
2027	132,834,749
2028	135,850,002
2029	138,575,680
2030	141,281,084
2031	143,396,668

This assumes the following:

- No additional benefits will be accrued.
- Experience is in line with valuation assumptions.
- No new entrants are covered by the Plan.

Exhibit F: Schedule of Active Participant Data

(Schedule MB, Line 8b(2))

The participant data is for the year ended December 31, 2021.

		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	1,098	197	887	14	–	–	–	–	–	–	–
25 - 29	1,998	168	1,508	318	4	–	–	–	–	–	–
30 - 34	2,628	166	1,632	690	137	3	–	–	–	–	–
35 - 39	3,037	161	1,681	717	367	104	7	–	–	–	–
40 - 44	3,747	145	1,770	924	540	281	85	2	–	–	–
45 - 49	4,164	157	1,737	1,008	659	381	168	51	3	–	–
50 - 54	5,047	160	1,852	1,097	822	559	321	134	97	5	–
55 - 59	5,615	156	1,788	1,187	926	625	417	221	233	51	11
60 - 64	5,244	128	1,402	999	837	656	438	278	294	133	79
65 - 69	2,728	61	790	536	435	324	212	137	138	43	52
70 & over	1,109	40	439	220	138	121	67	31	26	13	14
Unknown	254	26	106	38	26	22	9	6	5	4	12
Total	**36,669**	**1,565**	**15,592**	**7,748**	**4,891**	**3,076**	**1,724**	**860**	**796**	**249**	**168**

Note: Excludes 4,862 participants with less than 0.75 pension credits (0.5 pension credits for seasonal employees).

Exhibit G: Funding Standard Account

- ERISA imposes a minimum funding standard that requires the Plan to maintain an 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.
- 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.

		Year Ending December 31, 2021	Year Ending December 31, 2022
1	Prior year funding deficiency	$27,210,451	$39,724,498
2	Normal cost, including administrative expenses	20,548,289	20,522,517
3	Amortization charges	110,051,414	110,116,878
4	Interest on **1, 2 and 3**	11,046,711	11,925,473
5	Total charges	$168,856,865	$182,289,366
6	Prior year credit balance	$0	$0
7	Employer contributions	81,274,255	TBD
8	Amortization credits	42,290,246	44,564,725
9	Interest on **6, 7 and 8**	5,567,866	3,119,531
10	Full funding limitation credits	0	0
11	Total credits	$129,132,367	$47,684,256
12	Credit balance/(Funding deficiency): **11 - 5**	-$39,724,498	TBD
13	Minimum contribution with interest required to avoid a funding deficiency: **5 -11** not less than zero	N/A	$134,605,110

Full Funding Limitation (FFL) and Credits for Plan Year January 1, 2022

ERISA FFL (accrued liability FFL)	$409,213,044
RPA'94 override (90% current liability FFL)	1,582,561,482
FFL credit	0

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

Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Benefit Level Changes*	01/01/1996	$528,133	4	$145,719
Benefit Level Changes*	01/01/1997	789,039	5	179,850
Plan Amendment	01/01/1997	23,433,689	5	5,341,363
Benefit Level Changes*	01/01/1998	784,249	6	153,768
Plan Amendment	01/01/1998	20,048,883	6	3,931,001
Benefit Level Changes*	01/01/1999	1,917,309	7	332,489
Plan Amendment	01/01/1999	39,770,867	7	6,896,834
Changes in Assumptions	01/01/2000	1,789,188	8	280,029
Benefit Level Changes*	01/01/2000	2,035,736	8	318,617
Plan Amendment	01/01/2000	25,822,406	8	4,041,515
Plan Amendment	11/01/2000	1,606,177	8.83	233,557
Benefit Level Changes*	01/01/2001	4,522,402	9	648,717
Plan Amendment	01/01/2001	8,585,863	9	1,231,602
Changes in Assumptions	01/01/2002	2,327,330	10	309,682
Benefit Level Changes*	01/01/2002	5,873,705	10	781,573
Benefit Level Changes*	01/01/2003	7,465,793	11	930,481
Benefit Level Changes*	01/01/2004	7,654,822	12	900,708
Changes in Assumptions	01/01/2005	5,091,641	13	569,364
Benefit Level Changes*	01/01/2005	6,090,108	13	681,016
Benefit Level Changes*	01/01/2006	5,286,031	14	564,889
Benefit Level Changes*	01/01/2007	4,944,924	15	507,408
Benefit Level Changes*	01/01/2008	982,285	1	982,285
Benefit Level Changes*	01/01/2009	1,033,504	2	534,227
Experience Loss	01/01/2009	46,109,132	2	23,834,189

Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Benefit Level Changes*	01/01/2010	1,286,475	3	458,143
Changes in Assumptions	01/01/2011	52,434	4	14,467
Benefit Level Changes*	01/01/2011	983,530	4	271,370
Experience Loss	01/01/2011	13,443,891	4	3,709,359
Benefit Level Changes*	01/01/2012	1,579,475	5	360,018
Experience Loss	01/01/2012	23,988,984	5	5,467,935
Changes in Assumptions	01/01/2012	24,409,100	5	5,563,694
Benefit Level Changes*	01/01/2013	1,084,112	6	212,563
Experience Loss	01/01/2013	14,885,555	6	2,918,623
Benefit Level Changes*	01/01/2014	624,161	7	108,238
Experience Loss	01/01/2014	57,722,504	7	10,009,903
Benefit Level Changes*	01/01/2015	675,313	8	105,695
Change in Assumptions	01/01/2015	21,414,887	8	3,351,685
Experience Loss	01/01/2015	40,448,506	8	6,330,674
Plan Amendment	01/01/2016	46,021	9	6,601
Change in Assumptions	01/01/2016	351,761	9	50,458
Benefit Level Changes*	01/01/2016	397,318	9	56,993
Plan Amendment	01/01/2017	570,995	10	75,978
Experience Loss	01/01/2017	10,094,904	10	1,343,259
Change in Assumptions	01/01/2017	18,039,589	10	2,400,403
Benefit Level Changes*	01/01/2018	449,123	11	55,975
Change in Assumptions	01/01/2018	2,389,582	11	297,820
Benefit Level Changes*	01/01/2019	391,211	12	46,032
Experience Loss	01/01/2019	31,900,365	12	3,753,570
Benefit Level Changes*	01/01/2020	492,580	13	55,082

Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Experience Loss	01/01/2020	25,303,726	13	2,829,544
Benefit Level Changes*	01/01/2021	474,072	14	50,661
Change in Assumptions	01/01/2021	54,422,110	14	5,815,788
Benefit Level Changes*	01/01/2022	637,980	15	65,464
Total		**$573,053,480**		**$110,116,878**

**Due to changes in average negotiated benefit-bearing contribution rate*

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

Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Change in Assumptions	01/01/1997	$7,674,969	5	$1,749,396
Changes in Assumptions	01/01/1999	4,510,980	7	782,268
Changes in Assumptions	01/01/2004	3,831,799	12	450,870
Plan Amendment	01/01/2005	16,908,884	13	1,890,806
Changes in Assumptions	01/01/2006	6,933,591	14	740,954
Changes in Assumptions	01/01/2008	45,087	1	45,087
Plan Amendment	01/01/2008	519,284	1	519,284
Experience Gain	01/01/2008	723,889	1	723,889
Changes in Assumptions	01/01/2009	1,023,057	2	528,827
Experience Gain	01/01/2010	52,065	3	18,542
Plan Amendment	01/01/2010	35,321,787	3	12,578,903
Plan Amendment	01/01/2011	7,853,537	4	2,166,902
Plan Amendment	01/01/2012	5,631,384	5	1,283,591
Changes in Assumptions	01/01/2013	917,503	6	179,896
Plan Amendment	01/01/2013	17,104,764	6	3,353,745
Plan Amendment	01/01/2014	13,126,076	7	2,276,248
Changes in Assumptions	01/01/2014	17,756,072	7	3,079,155
Plan Amendment	01/01/2015	2,452,560	8	383,855
Experience Gain	01/01/2016	11,992,879	9	1,720,322
Experience Gain	01/01/2018	35,756	11	4,456
Change in Assumptions	01/01/2020	7,152,301	13	799,793
Experience Gain	01/01/2021	29,560,690	14	3,158,986
Change in Assumptions	01/01/2022	1,529,647	15	156,960
Actuarial Gain	01/01/2022	58,199,837	15	5,971,990

Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Total		**$250,858,398**		**$44,564,725**

Exhibit H: Current Liability

The table below presents the current liability for the Plan Year beginning January 1, 2022.

Item[1]	Number of Participants	Current Liability
Interest rate assumption		2.22%[2]
Retired participants and beneficiaries receiving payments	23,269	$1,267,285,696
Inactive vested participants	48,993	1,198,525,040
Active participants		
• Non-vested benefits		$93,341,714
• Vested benefits		804,064,748
• Total active	36,669	$897,406,462
Total	**108,931**	**$3,363,217,198**

Expected increase in current liability due to benefits accruing during the Plan Year	$53,159,736
Expected release from current liability for the Plan Year	140,294,371
Expected plan disbursements for the Plan Year, including administrative expenses of $11,000,000	151,294,371

Current value of assets[3]	$1,648,215,573
Percentage funded for Schedule MB	49.01%

1 The actuarial assumptions used to calculate these values are shown in Exhibit J.
2 Per IRC Section 431(c)(6)(E), any rate within a permissible range satisfies the requirements for determining current liability. The permissible range of interest rates for the current plan year was 1.91% to 2.22%.
3 Includes withdrawal liability receivables.

Exhibit I: 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, 2021, and as of January 1, 2022. In addition, a reconciliation between the two dates follows.

	Benefit Information Date	
	January 1, 2021	**January 1, 2022**
Actuarial present value of vested accumulated plan benefits:		
• Participants currently receiving payments	$855,929,954	$839,335,756
• Other vested benefits	866,317,450	897,098,493
• Total vested benefits	$1,722,247,404	$1,736,434,249
Actuarial present value of non-vested accumulated plan benefits	16,321,015	28,832,946
Total actuarial present value of accumulated plan benefits	**$1,738,568,419**	**$1,765,267,195**

Factors	**Change in Actuarial Present Value of Accumulated Plan Benefits**
Benefits accumulated, net experience gain or loss, changes in data	$ 11,484,200
Benefits paid	-113,853,637
Changes in actuarial assumptions	11,685,374
Interest	117,382,839
Total	**$26,698,776**

Note: Does not include the accumulated present value of expenses, which is estimated to be $160 million as of January 1, 2021, and $157 million as of January 1, 2022.

Exhibit J: Statement of Actuarial Assumptions, Methods, and Models

(Schedule MB, Line 6)

Rationale for Demographic and Noneconomic Assumptions	The information and analysis used in selecting each demographic assumption that has a significant effect on this actuarial valuation has been accumulated over the past valuations. Current and past data is reviewed in conjunction with each annual valuation. Based on professional judgment, the following assumptions were used for this valuation; changes were made as described later in this Exhibit J.
Mortality Rates	Healthy Life: PRI-2012 Blue Collar Mortality Table (employee/annuitant-distinct and sex-distinct) projected forward generationally with 80% of MP-2021 scale. Disabled Life: 110% of the PRI-2012 Disabled Retiree Mortality Table projected forward generationally with 80% of MP-2021 scale. The underlying tables with the generational projection to the ages of participants as of the measurement date reasonably reflect the mortality experience of the Plan as of the measurement date. These mortality tables were then adjusted to future years using the 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 estimated future experience, industry studies, 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 assumptions over the most recent ten years.

Termination Rates before Retirement

Rate (%)

Age	Disability	Withdrawal[1]
20	0.02	11.94
25	0.03	11.62
30	0.04	11.21
35	0.06	10.55
40	0.09	9.40
45	0.14	7.54
50	0.24	4.83
55	0.40	1.73
60	0.65	0.16

[1] *An additional 20 percentage points are added to the withdrawal rates for the first two years of employment, 15 percentage points are added to the third and fourth years, 10 percentage points are added to the fifth and sixth years, and 5 percentage points are added to every year thereafter.*

The termination rates and disability 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 actual number of terminations and disability retirements by age and the projected number based on the prior year's assumption over the most recent ten years.

Retirement Rates

Actives Age	Actives Rate	Inactive Vesteds Age	Inactive Vesteds Rate
55 – 59	1%	55 – 61	0%
60 – 61	2	62 – 64	4%
62 – 64	5	65 – 69	20%
65	20	70 and over	100%
66 – 67	15		
68 – 69	10		
70 – 74	15		
75 and over	100		

The retirement rates were based on historical and current demographic data, adjusted to reflect estimated future experience under the rehabilitation plan and professional judgment. As part of the analysis, a comparison was made between the actual number of and liability change due to retirements by age and the projected number and liability change based on the prior year's assumption over the most recent nine years.

Description of Weighted Average Retirement Age (Schedule MB, line 6b)

Age 68.3, 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 the January 1, 2022 actuarial valuation.

Future Benefit Accruals

0.90 benefit credit and 1,750 hours per future year of service per active employee included in the valuation (0.60 benefit credit and 1,100 hours per future year of service for seasonal employees.)

The future benefit accrual assumption is based on historical and current demographic data, adjusted to reflect economic conditions of the industry and estimated future experience and professional judgment. As part of the analysis, a comparison was made between the assumed and the actual benefit accruals over the most recent nine years.

Unknown Data for Participants

- In general, same as those exhibited by employees with similar known characteristics. If not specified, participants are assumed to be male.
- 5 years eligibility service assumed for employees as of new employer's date of entry under the past service rules effective January 1, 2005.
- If no optional form is indicated: retirees with a beneficiary birth date are assumed to elect the 50% form of payment at a 70% rate, while participants with no beneficiary birth date are assumed to elect a single life annuity.

Definition of Active Participants

Active participants are defined as those with at least 350 hours (180 hours if a seasonal employee) in the most recent plan year and who have accumulated at least ¾ of one pension credit (one-half pension credit if a seasonal employee), excluding those who have retired as of the valuation date.

Exclusion of Inactive Vested Participants	Inactive vested employees over age 85 excluded from the actuarial valuation (1,443 were excluded from this valuation). Liabilities for inactive vested participants over age 75 are reduced by a linearly increasing percentage, starting at 50% at age 76 and ending with 95% at age 85. The exclusion of inactive vested participants over age 85 was based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, the ages of new retirees from inactive vested status were reviewed.
Percent Married	Males: 65% Females: 50%
Age and Sex of Spouse	Where spouse information is not available, participants are assumed to have opposite-gender spouses, with the female spouse three years younger than the male.
Benefit Election	Married participants are assumed to receive the 50% Joint & Survivor form of payment and non-married participants are assumed to receive the single life annuity form. Participants missing benefit form in the data with a beneficiary birth date are assumed to elect a 50% form of payment at a 70% rate.
Net Investment Return	7.00% per year, net of investment expenses. 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 provided by Segal Marco Advisors, based on the Plan's target asset allocation.
Annual Administrative Expenses	$11,000,000 for the year beginning January 1, 2022 (equivalent to $10,606,174 payable at the beginning of the year). The annual administrative expenses were based on historical and current data, adjusted to reflect the budget for the upcoming year, PBGC premium increases, estimated future experience, and professional judgment.
Actuarial Value of Assets	Four-year assumed yield asset valuation method, in which net investment return greater or less than the actuarially assumed level (based on the actuarial value for the prior year) is recognized at the rate of 25% per year. Asset values are then determined as market value less the unrecognized net returns from prior years, but not less than 80% nor more than 120% of market value.
Actuarial Cost Method	Entry Age Normal Actuarial Cost Method. Entry Age is the current age minus pension credits. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.
Benefits Valued	Unless otherwise indicated, includes all benefits summarized in Exhibit K.

Section 3: Certificate of Actuarial Valuation

Current Liability Assumptions	*Interest:* 2.22% per year (for maximum deductible limitations) 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-2006 employee and annuitant mortality tables, projected forward generationally using scale MP-2020 (previously, the MP-2019 scale was used).
Estimated Rate of Investment Return	*On actuarial value of assets (Schedule MB, line 6g):* 10.4%, for the Plan Year ending December 31, 2021 *On current (market) value of assets (Schedule MB, line 6h):* 15.3%, for the Plan Year ending December 31, 2021
FSA Contribution Timing (Schedule MB, line 3a)	Unless otherwise noted, contributions are paid periodically throughout the year pursuant to collective bargaining agreements. The interest credited in the FSA is therefore assumed to be equivalent to a July 15 contribution date.
Justification for Change in Actuarial Assumptions **(Schedule MB, line 11)**	Based on past experience, industry studies, and future expectations, the following actuarial assumptions used in the prior actuarial valuations were changed: • The healthy mortality assumption was changed, from: 104% of the RP-2006 Blue Collar Mortality Table, projected forward generationally with MP-2019 scale; to: the PRI-2012 Blue Collar Mortality Table, projected forward generationally with 80% of MP-2021 scale. • The disabled mortality assumption was changed, from: 110% of the RP-2006 Disabled Retiree Mortality Table, projected forward generationally with MP-2019 scale; to: 110% of the PRI-2012 Disabled Retiree Mortality Table, projected forward generationally with 80% of MP-2021 scale. • An additional load on turnover rates of 5 percentage points for year eight of employment and thereafter was added. • Certain retirement rates were decreased: for ages 68 and 69, from 15% to 10%; and for ages 70 through 74, from 20% to 15%. • Assumed administrative expenses were increased, from $10.4 million in 2021 to $11.0 million in 2022. For purposes of determining current liability, the current liability interest rate was changed due to a change in the permissible range, recognizing that any rate within the permissible range satisfies the requirements of IRC Section 431(c)(6)(E), and the mortality tables were changed in accordance with IRS Regulations 1.431(c)(6)-1 and 1.430(h)(3)-1.

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 presented 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 actuarial team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Exhibit K: 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:	• 5 years Vesting Credit or 5 Pension Credits, including 3 years Future Service. For seasonal employees, 3 Pension Credits, including 3 years of Future Service.
Amount for benefit accruals on or after January 1, 2010:	• 1.75% of contributions (1.0% for participants under the Default Schedule of the Rehabilitation Plan)
Amount for benefit accruals on or after January 1, 2008 through December 31, 2009:	• 2.50% of contributions for those whose first contribution date is prior to January 1, 2008, and 2.25% of contributions for those whose first (or first following a permanent break in service) contribution date is on or after January 1, 2008.

Amount for Benefit accruals through December 31, 2007:	Greater of a) 3.00% of contributions for hours worked through December 31, 2004, and 2.70% of contributions for hours worked on or after January 1, 2005 through December 31, 2007, made on the employee's behalf (the Contributions Formula), or b) amount based on the "Benefit Table Formula" in Section 7.04 of the Plan for pension credit earned through December 31, 2004, plus 90% of the scheduled amount for pension credit earned after December 31, 2004 through December 31, 2007. In addition, a 7.35% increase is applied to future service benefits accrued through December 31, 2003, if service is earned on or after January 1, 2001. For former participants in the Pittsburgh Building Employees' Pension Fund, the benefit amount will not be less than: a) Accrued benefit as of merger date (1/1/91) plus SEIU future accrual rate per the Benefit Table Formula for up to 25 total years of service; b) If over age 50, or more than 25 years of credited service, as of January 1, 1991: accrued benefit as of merger date plus 2% of employer contributions thereafter. For former participants in the Building Service Employees Pension Plan (BSEPP), the benefit amount through December 31, 2007 is the greater of the following: a) The accrued benefit as of the merger date (5/1/94) plus 40.8% of the accrued benefit at merger, all multiplied by an index factor (as defined below), plus the SEIU future accrual rate per the Benefit Table Formula for up to 24 total years of service following merger (90% of the scheduled accrued rate for service after December 31, 2004). The index factor is determined by dividing the Hourly Contribution rate at retirement by the BSEPP Contribution Rate as of May 1, 1994, subtracting 1.0, then multiplying the result by 72.5% and adding back 100%. The index factor cannot exceed 200% nor be less than 100%. b) 2.25% of total contributions plus the Past Service benefit before merger, increased by 40.8%, plus 3.00% of total contributions after merger through December 31, 2004, plus 2.70% of total contributions after December 31, 2004, through December 31, 2007 In addition, a 7.35% increase is applied to future service benefits accrued through December 31, 2003. For former participants in the Service Employees of Michigan Race Tracks Pension Fund (MIRT), the benefit amount is the accrued benefit as of the merger date (4/1/2000), plus the SEIU future accrual rate per the Benefit Table Formula for up to 25 years of service following merger (90% of the scheduled accrued rate for service after December 31, 2004). In addition, a 7.35% increase is applied to future service benefits accrued from January 1, 2000 through December 31, 2003. For former participants in the SEIU Local 49 Pension Plan (Local 49), the benefit amount is the accrued benefit as of the merger date (6/1/2003), plus the SEIU future accrual rate per the Benefit Table Formula for up to 25 years of service following merger (90% of the scheduled accrued rate for service after December 31, 2004). In addition, a 7.35% increase is applied to future service benefits accrued from June 1, 2003 through December 31, 2003. • Past Service benefit levels may be lower than those shown above for certain employers. Pre-participation credit is assigned at employer entry based on policies set by Trustees. Current policy (effective January 1, 2008) is to grant up to 7 years for vesting status, and up to 2 years of full pension credit (at 50% of the contribution rate), multiplied by 1,800 hours (or other appropriate basis for contributions not made on an hourly basis), for new groups that constitute less than 1% of the Plan's current active participants.

Section 3: Certificate of Actuarial Valuation

Early Pension	• *Age Requirement:* 55 • *Service Requirement:* Vested Status. For seasonal employees, 3 Pension Credits including 1 year of Future Service required. • *Amount:* Normal Pension accrued through December 31, 2009, reduced by 6% for each year of age less than 65. If participant's age plus pension credit total at least 80, the first contribution date is before January 1, 2008, and no schedule has been adopted, the reduction is 3% per year of age less than 62 (6% if no pension credit earned in year of retirement or prior year, plus Normal pension accrued on or after January 1, 2010, actuarially reduced from age 65 For participants covered by a Rehabilitation Plan schedule, the entire benefit is actuarially reduced from age 65.
Contributions Considered	Contributions used for benefit calculation purposes exclude any surcharges or non-benefit bearing contribution rate increases prescribed by the Rehabilitation Plan.
Disability Pension	• *Age Requirement:* None • *Service Requirement:* 10 years vesting Credit *Amount:* Normal Pension accrued, payable immediately (actuarially reduced from age 65 for participants under the Default Schedule)
Vesting	• *Age Requirement:* None • *Service Requirement:* (a) 5 years of Vesting Credit or (b) 5 years Pension Credit with at least 1 year (3 years if not yet a participant at 12/31/2004) of Future Service. For seasonal employees, 3 Pension Credits including 1 year of Future Service required. • *Amount:* Same as Normal Pension; if payable before age 65, benefit is actuarially reduced *Normal Retirement Age:* 65 or age on the fifth anniversary of participation, if later
Medicare Supplement (*for covered BSEPP participants in pay status as of January 1, 2010 only*)	• *Age Requirement:* None • *Service Requirement:* Vested status *Amount:* $54.00 per month commencing at age 65 for employees vested prior to merger or with at least 10 vesting credits earned prior to January 1, 2005. For others, benefit is multiplied by 50%, plus 5% for each 1/2 Vesting Credit earned prior to January 1, 2005 in excess of 5 (but not greater than 100%).
Spouse's Pre-Retirement Death Benefit	• *Age Requirement:* None • *Service Requirement:* Vested Status • *Amount:* 50% of the benefit employee would have received upon retirement, having elected the Husband and Wife option. The amount is payable immediately if the employee's death occurred after age 55. If employee died before age 55, the spouse's benefit is deferred to the month after the employee would have attained age 55 *Charge for Coverage:* None

Post-Retirement Death Benefit	*Husband and Wife*: If married, pension benefits are paid in the form of a 50% joint and survivor annuity unless this form is properly rejected. If not rejected, the benefit amount otherwise payable is reduced to reflect the joint and survivor coverage. Benefits accrued prior to January 1, 2005 for participants not under Default or Preferred Schedules are restored to the unreduced amount if the beneficiary dies before the employee. If rejected, or if not married, benefits are payable for the life of the employee (with 5 years of payment guaranteed on all benefits accrued prior to January 1, 2010) without reduction, or in any other available optional form (including the 50% joint and survivor annuity described above) elected by the employee in an actuarially equivalent amount. Benefits are payable without the guarantee described above for participants under a Rehabilitation Plan schedule.
Optional Forms of Payment	50% Joint and Survivor Annuity both with and without pop-up, 75% Joint and Survivor Annuity without pop-up, 100% Joint and Survivor Annuity both with and without pop-up
Past and Future Service	Past Service refers to hours worked for an employer prior to the employer joining the Plan. Future Service refers to hours worked for an employer after the employer has joined the Plan.
Participation	On the earliest January 1 or July 1 after completion of 350 hours of service in Covered Employment during a twelve month period.
Pension Credit	(see table below)

Pension Credit

Contributions in Calendar Year for Hours	Years of Credit
1,800 or more	1.00
1,600 to 1,799	0.90
1,400 to 1,599	0.80
1,200 to 1,399	0.70
1,000 to 999	0.60
800 to 799	0.50
600 to 699	0.40
500 to 599	0.30
400 to 499	0.25
300 to 399	0.20
200 to 299	0.15
180 to 199	0.10

Vesting Credit	One credit for 700 or more hours of Covered Employment in a Calendar Year; one-half credit for 350 or more hours. For seasonal employees, one credit for 120 or more hours of Covered Employment in a Calendar Year.

Section 3: Certificate of Actuarial Valuation

Estimated Average Hourly Contribution Rate (for benefit purposes)		**For Active Employees**	
		on 1/1/2021	**on 1/1/2022**
	Seasonal Employees	$0.9268	$1.0250
	Other Employees	0.4837	0.4789
Progress of Rehabilitation Plan **Schedule Adoption**	As of January 1, 2022, 17% of active participants are under the Default Schedule and 83% are under the Preferred Schedule.		
Changes in Plan Provisions	None, other than the effect of contribution increases bargained beyond those mandated by the Rehabilitation Plan schedules.		