



Retirement Plan for Sacramento Regional Transit District Employees IBEW Local 1245

Actuarial Valuation Report as of July 1, 2023

Produced by Cheiron

March 2024

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March 4, 2024

IBEW Retirement Board of Sacramento Regional Transit District 2830 G Street Sacramento, CA 95816

Dear Members of the Board:

At your request, we have conducted an actuarial valuation of the Retirement Plan for Sacramento Regional Transit District Employees (IBEW Plan) (SacRT, the Fund, the Plan) as of July 1, 2023. This report contains information on the Plan's assets and liabilities. This report also discloses employer contribution levels. Your attention is called to the Foreword in which we refer to the general approach employed in the preparation of this report.

The purpose of this report is to present the results of the annual actuarial valuation of the Plan. This report is for the use of the Retirement Board and the auditors in preparing financial reports in accordance with applicable law and accounting requirements.

This report was prepared solely for the Retirement Board for the purposes described herein, and for the use by the plan auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

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

Sincerely, Cheiron

Graham A. Schmidt, FSA, EA, FCA, MAAA

Principal Consulting Actuary

Anne D. Harper, FSA, EA, MAAA Principal Consulting Actuary

FOREWORD

Cheiron has performed the actuarial valuation of the Retirement Plan for Sacramento Regional Transit District Employees (IBEW Plan) as of July 1, 2023. The valuation is organized as follows:

- In Section I, the **Executive Summary**, we describe the purpose of an actuarial valuation, summarize the key results found in this valuation, and disclose important trends.
- In Section II, **Disclosures Related to Risk**, we review the primary risks facing the District, and quantify these using various risk and maturity measures.
- The **Main Body** of the report presents details on the Plan's
 - o Section III Assets
 - Section IV Liabilities
 - Section V Contributions
- In the **Appendices**, we conclude our report with detailed information describing plan membership (Appendix A), actuarial assumptions and methods employed in the valuation (Appendix B), a summary of pertinent plan provisions (Appendix C), and a glossary of key actuarial terms (Appendix D).

Future results may differ significantly from the results of the current valuation presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and, changes in plan provisions or applicable law.

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



SECTION I – EXECUTIVE SUMMARY

The primary purpose of the actuarial valuation and this report is to measure, describe, and identify the following as of the valuation date:

- The financial condition of the Plan,
- Past and expected trends in the financial progress of the Plan,
- Employer and member contribution rates for Plan Year 2024-2025, and
- An assessment and disclosure of key risks.

Prior to July 1, 2016, a combined valuation report was issued for the Retirement Plans for Sacramento Regional Transit District Employees ATU Local 256 and IBEW Local 1245. As per the Board's direction, beginning with the July 1, 2016 valuation, separate reports are issued for the ATU and IBEW plans.

The information required under GASB Statements (Nos. 67 and 68) is included in a separate report, with the report for the Fiscal Year Ending June 30, 2023 provided to the Board in September 2023.

In the balance of this Executive Summary, we present (A) the basis upon which this year's valuation was completed, (B) the key findings of this valuation including a summary of all key financial results, (C) changes in Plan cost, (D) an examination of the historical trends, and (E) the projected financial outlook for the Plan.

A. Valuation Basis

This valuation determines the employer and PEPRA member contributions for the plan year.

The Plan's funding policy is for the District to contribute an amount equal to the sum of:

- The normal cost under the Entry Age Normal Cost Method, net of any contributions by the members,
- Amortization of the Unfunded Actuarial Liability, and
- The Plan's expected administrative expenses.

This valuation was prepared based on the plan provisions shown in Appendix C. There have been no changes in plan provisions since the prior valuation.

A summary of the assumptions and methods used in the current valuation are shown in Appendix B. There have been no changes in assumptions or methods since the prior valuation.



B. Key Findings of this Valuation

The key results of the July 1, 2023 actuarial valuation are as follows:

- The actuarially determined employer contribution rate decreased from 31.16% of payroll last year to 29.67% of payroll for the current valuation. This year's rate decreased primarily due to greater than expected payroll growth.
- The Plan's funded ratio, the ratio of Actuarial Value of Assets over Actuarial Liability, increased from 73.7% as of July 1, 2022 to 74.7% as of July 1, 2023. As a point of comparison, a funding ratio of 65.0% or more is required just to fund the liabilities of the inactive members: retired, disabled, terminated with vested benefits, and their beneficiaries. This ratio is sometimes referred to as the Inactive Funded Ratio.
- The Unfunded Actuarial Liability (UAL) is the excess of the Plan's Actuarial Liability over the Actuarial Value of Assets. The Plan experienced a decrease in the UAL from \$25,761,305 to \$25,688,698 as of July 1, 2023. This decrease in the UAL was primarily due to contributions exceeding the normal cost plus interest on the UAL.
- During the year ended June 30, 2023, the return on Plan assets was 7.58% on a market value basis net of investment expenses, as compared to the 6.75% assumption. This resulted in a market value gain on investments of \$573,506. The Actuarial Value of Assets recognizes 20% of the annual difference between the expected and actual return on the Market Value of Assets (MVA). This method of smoothing the asset gains and losses returned 6.12% on the smoothed value of assets, an actuarial asset loss of \$452,870.
- The Actuarial Value of Assets is currently 102.1% of the market value. Since actuarial assets are above market assets, there are unrecognized investment losses (approximately \$1.6 million, primarily due to the FYE 2022 asset experience) that will be reflected in the smoothed value of assets in future years.
- The Plan experienced a liability loss of \$466,489 primarily due to higher than expected salary increases among active participants. The Plan experienced a \$29,364 gain from expenses being less than expected, and a loss of \$167,114 from contributions being less than the actuarial cost. Combining all sources of actuarial experience, the Plan experienced a total loss of \$1,057,109.
- There were 20 new hires and rehires since July 1, 2022, and the total active population increased by nine. Total projected payroll increased 10.2% from \$15,008,554 to \$16,535,628 for 2023-2024.
- The impact of PEPRA continued to lower the employer cost. As more PEPRA members are hired, the average normal cost rate declines, because PEPRA members have lower benefits than the non-PEPRA members and they contribute approximately 50% of the



SECTION I – EXECUTIVE SUMMARY

PEPRA Normal Cost. As of June 30, 2023, PEPRA members make up more than half of the active workforce.

Table I-1 summarizes the key results of the valuation with respect to membership, assets and liabilities, and contributions. The results are presented and compared for both the current and prior plan year.

	Table	I-1		
Summary o Valuation Date	f Princ	ipal Plan Results July 1, 2022	July 1, 2023	% Change
Participant Counts				
Active Participants		206	215	4.4%
Participants Receiving a Benefit		213	218	2.3%
Terminated Vested Participants		19	19	0.0%
Transferred Participants		37	31	-16.2%
Non-Vested Participants Due Refund	_	4	5	25.0%
Total		479	488	1.9%
Annual Pay of Active Members	\$	15,008,554 \$	16,535,628	10.2%
Assets and Liabilities				
Actuarial Liability (AL)	\$	97,985,595 \$	101,701,322	3.8%
Actuarial Value of Assets (AVA)	_	72,224,290	76,012,624	5.2%
Unfunded Actuarial Liability (UAL)	\$	25,761,305 \$	25,688,698	-0.3%
Funded Ratio (AVA)		73.7%	74.7%	1.0%
Market Value of Assets (MVA)	\$	69,808,432 \$	74,460,071	6.7%
Funded Ratio (MVA)		71.2%	73.2%	2.0%
Inactive Funded Ratio		67.2%	65.0%	-2.2%
Contributions				
Employer Contribution Payable Monthly	\$	\$4,599,990 \$	4,821,336	4.81%
Employer Contribution as a Percentage of Payroll		31.16%	29.67%	-1.49%



C. Changes in Contributions

Table I-2 summarizes the impact of actuarial experience on contributions.

Table I-2 Employer Contribution Reconciliation								
Normal UAL Admin								
Item	Total	Cost	Amortization	Expense				
FYE 2024 Employer Contribution Rate	31.16%	10.98%	18.50%	1.68%				
Change due to asset losses	0.20%	0.00%	0.20%	0.00%				
Change due to PEPRA	-0.40%	-0.40%	0.00%	0.00%				
Change due to demographic changes and liability losses	0.02%	-0.19%	0.21%	0.00%				
Change due to amortization payroll	-1.37%	0.00%	-1.25%	-0.12%				
Change due to contribution shortfall	0.06%	0.00%	0.06%	<u>0.00%</u>				
Total Change	-1.49%	-0.59%	-0.78%	-0.12%				
FYE 2025 Employer Contribution Rate	29.67%	10.39%	17.72%	1.56%				

An analysis of the cost changes from the prior valuation reveals the following:

• Asset experience produced an investment loss on an actuarial basis.

The actuarial return on assets was 6.12%, which is less than the assumed rate of 6.75%. This resulted in an increase in the contribution rate by 0.20% of payroll.

The Market Value of Assets is less than the actuarial value; there are approximately \$1.6 million in net deferred asset losses.

• Liability experience and changes in demographics (including PEPRA new hires) resulted in a net decrease in the contribution rate.

The demographic experience of the Plan – rates of retirement, death, disability, and termination – was close to that predicted by the actuarial assumptions in aggregate, with small losses, primarily because of fewer deaths than expected among inactives, which increased the UAL and associated amortization payment.

This was offset by the fact that the employer portion of the normal cost for the new hires under the PEPRA benefit formula is lower than the normal cost for the non-PEPRA membership. The growth in the PEPRA membership resulted in a decrease in the average employer normal cost rate of 0.40% of payroll. The normal cost rate also decreased slightly as a result of changes in demographics within tiers.

The net impact on the contribution rate from changes in liabilities and demographics was a decrease of 0.38% of payroll.

• Overall payroll growth was significantly greater than expected.



SECTION I – EXECUTIVE SUMMARY

The projected payroll grew by over 10%, considerably more than the assumed rate of 2.75%, which decreased the contribution rate by 1.37% of pay, since it results in the Plan's Unfunded Actuarial Liability and administrative expenses being spread over a larger payroll base than anticipated.

• Contributions fell short of the actuarially determined contribution.

Actual contributions were less than the total actuarially determined contribution (including expenses), which resulted in an increase in the contribution rate by 0.06%. This was primarily due to the 12-month delay in the implementation of the contribution rates.

The total impact on employer Plan contribution from all changes is a decrease of 1.49% of pay.

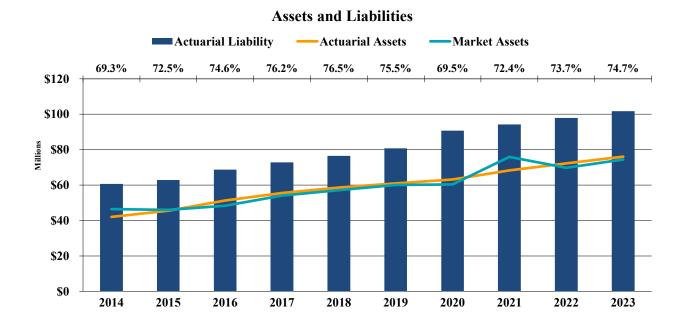


D. Historical Trends

Despite the fact that for most retirement plans the greatest attention is given to the current valuation results and in particular, the size of the current Unfunded Actuarial Liability and the employer contribution, it is important to remember that each valuation is merely a snapshot in the long-term progress of a pension fund. It is also important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future.

Assets and Liabilities

The chart compares the Market Value of Assets (MVA) and Actuarial Value of Assets (AVA) to the Actuarial Liabilities. The percentage shown at the top of the chart is the ratio of the Actuarial Value of Assets to the Actuarial Liability (the funded ratio). The funded ratio has increased from 69.3% in 2014 to 74.7% in 2023, due to net gains on the AVA and contributions made to the Plan, despite decreases in the assumed rate of return from 7.75% to 6.75% over the same time period. The increase in the funded ratio in 2023 is a result of the continuation of those contributions.





Contribution Trends

In the chart below, we present the Plan's historical actuarially determined contribution rates and the employee contribution rates. After a period of steady and declining rates, employer contribution rates increased in 2019 due to investment losses and larger than anticipated salary increases. The rates continued to increase from 2020 through 2022, primarily as a result of the assumption changes adopted as part of the 2020 experience study, which were phased-in over a three-year period. In 2023, the rate decreased due to the payroll increasing by more than expected and thus spreading the UAL payments over a larger payroll base.

PEPRA employees began making contributions during FYE 2016. They have become a larger portion of the population, resulting in an increase in the weighted-average employee contribution rate for the Plan.

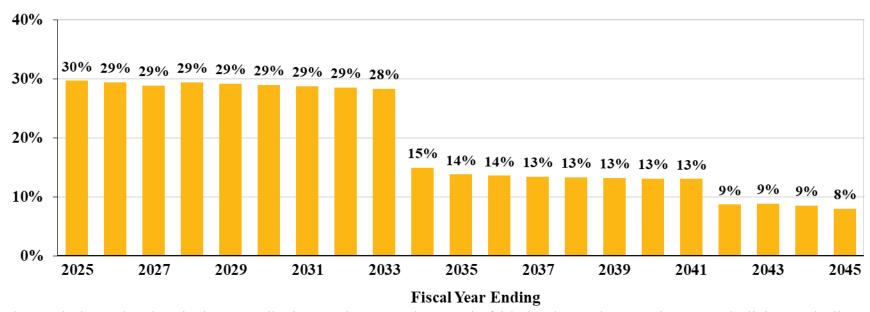
Sacramento Regional Transit District Employees: IBEW --- Computed Employer Rate ---- Employee's Rate 35% 30% Contributions as % of Payroll 25% 20% 15% 10% 5% 0% 2014 2015 2016 2017 2018 2021 2022 2019 2020 2023 Valuation Year



E. Future Expected Financial Trends

The analysis of projected financial trends is perhaps the most important component of this valuation. In this section, we present our assessment of the implications of the July 1, 2023 valuation results in terms of contribution levels and benefit security (assets over liabilities) and contribution levels. All the projections in this section are based on the assumption that the Plan will achieve exactly the 6.75% assumption each year, which is clearly an impossibility. We have also assumed future payroll growth of 2.75% per year and that there are no actuarial gains or losses or changes to the assumptions or funding policy.

Projection of Employer Contributions 6.75% return each year



The graph shows that the District's contribution rate is expected to remain fairly level over the next nine years, declining gradually as the PEPRA membership increases. The employer contribution rate is expected to decline substantially in FYE 2034, once the largest layer of the unfunded liability (the UAL that existed as of June 30, 2019) is fully amortized.

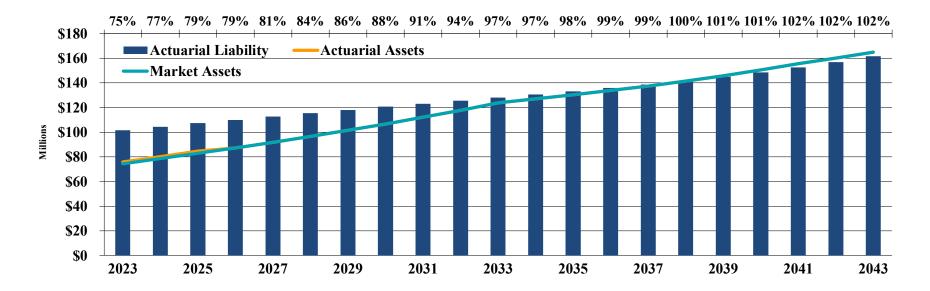


SECTION I – EXECUTIVE SUMMARY

The employer actuarial cost will be approximately \$5.0 million in 2024-2025 and is expected to increase to around \$6.0 million in 2032-2033, then expected to drop significantly between \$2.3 to \$3.4 million in the following years when the bulk of the unfunded liability amortization payment disappears.

The following graph shows the projection of assets and liabilities assuming that assets will earn the 6.75% assumption each year during the projection period and that all other actuarial assumptions are met. The graph shows that the funded status is expected to increase slowly over the next few years as the deferred investment losses are recognized, and then continue to increase steadily as the existing unfunded liability is fully amortized, assuming the actuarial assumptions are achieved. The Plan is expected to be fully funded in 2038, the same year as the projection in the July 1, 2022 valuation. However, it is primarily the actual return on Plan assets that will determine the future funding status and contribution rate to the Plan.

Projection of Assets and Liabilities 6.75% return each year





SECTION II – DISCLOSURES RELATED TO RISK

Actuarial valuations are based on a set of assumptions about future economic and demographic experience. These assumptions represent a reasonable estimate of future experience, but actual future experience will undoubtedly be different and may vary significantly.

Actuarial Standard of Practice (ASOP 51) requires actuaries to identify and assess risks that "may reasonably be anticipated to significantly affect the plan's future financial condition." This section of the report is intended to identify the primary risks to the Plan, provide some background information about those risks, and provide an assessment of those risks.

Identification of Risks

The fundamental risk to a pension plan is that the contributions needed to pay the benefits become unaffordable. Even in the case that the Plan remains affordable, the contributions needed to support the Plan may differ significantly from expectations. While there are a number of factors that could lead to contribution amounts deviating from expectations, we believe the primary risks are:

- Investment risk,
- Assumption change risk,
- Longevity and other demographic risk, and
- Contribution risk.

Other risks that we have not identified may also turn out to be important.

Investment Risk is the potential for investment returns to be different than expected. Lower investment returns than anticipated will increase the Unfunded Actuarial Liability necessitating higher contributions in the future unless there are other gains that offset these investment losses. The potential volatility of future investment returns is determined by the Plan's asset allocation and the affordability of the investment risk is determined by the amount of assets invested relative to the size of the plan sponsor or other contribution base.

Assumption change risk is the potential for the environment to change such that future valuation assumptions are different than the current assumptions. For example, declines in interest rates over the last three decades (which have recently reversed) resulted in higher investment returns for fixed-income investments, but lower expected future returns necessitating either a change in investment policy, a reduction in discount rate, or some combination of the two. Assumption change risk is an extension of the other risks identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in environment when the current assumption is no longer reasonable.

Longevity and other demographic risks are the potential for mortality or other demographic experience to be different than expected. Generally, longevity and other demographic risks emerge slowly over time and are often dwarfed by other changes, particularly those due to investment returns.



Contribution risk is the potential for actual future contributions to deviate from expected future contributions. There are different sources of contribution risk ranging from the sponsor choosing to not make contributions in accordance with the funding policy to material changes in the contribution base (e.g., covered employees, covered payroll, sponsor revenue) that affect the amount of contributions the Plan can collect.

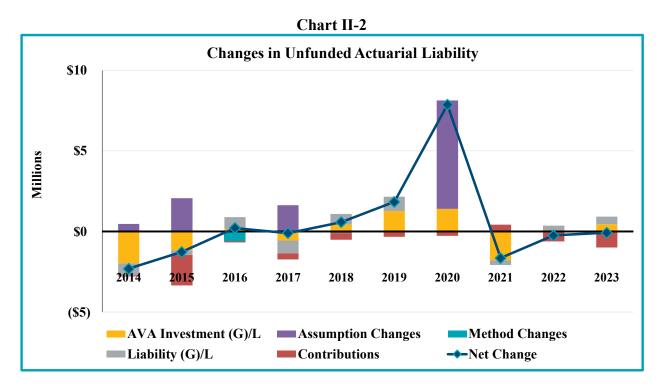
The chart below shows the primary components contributing to the Unfunded Actuarial Liability (UAL) from June 30, 2013 through June 30, 2023. Over the last 10 years, the UAL has increased by approximately \$4.9 million. The assumption changes (purple bar) resulting in a total UAL increase of \$10.8 million is the largest source of UAL growth. The contributions have been above the "tread water" level (described later in this section, shown in the red bar), resulting in a decrease of \$4.5 million in the UAL. Asset gains (\$1.8 million, yellow bar), liability losses (\$1.0 million, gray bar), and method changes (\$0.6 million, teal bar) have had little net impact over the past 10 years.

Chart II-1 Components of the UAL since 06/30/2013 \$15.0 \$12.5 \$1.0 \$10.0 \$7.5 **Fhousands** \$10.8 \$5.0 \$2.5 \$0.0 (\$1.8)(\$0.6)(\$2.5)(\$4.5)(\$5.0)(\$7.5)■ AVA Investment (G)/L ■ Assumption Changes **■ Method Changes** ■ Liability (G)/L **■** Contributions



Each year the UAL is expected to increase for benefits earned in the current year (the normal cost), administrative expenses, and interest on the UAL. This expected increase is referred to as the tread water level. If contributions are greater than the tread water level, the UAL is expected to decrease. Conversely, if contributions are less than the tread water level, the UAL is expected to increase. The amortization policy (as well as the contribution-timing lag) can impact whether or not the contributions exceed the tread water level. Contributions above the "tread-water" level (red bar) have decreased the UAL by \$4.5 million.

Chart II-2 below details the annual sources of the UAL change (colored bars) for each valuation year. The net UAL change for each year is represented by the blue diamonds.



The impact of all assumption changes is represented by the purple bars. In 2015 and 2020, there were experience studies performed, which resulted in significant increases in liabilities, primarily due to changes in the salary merit scale, administrative expense assumption, and reductions in the discount rate. The discount rate was also reduced in 2014 and 2017.

On the liability side (gray bars), the Plan has experienced offsetting gains and losses, increasing the UAL by approximately \$1.0 million over the 10-year period resulting from participants retiring, terminating, becoming disabled and dying at rates different from the actuarial assumptions as well as unexpected changes in salaries. Most of this type of activity is normal in the course of Plan experience. The Plan will experience actuarial gains and losses over time because we cannot predict exactly how people will behave. When a plan experiences alternating gains and losses that are small compared to the total actuarial liability, the Plan's actuarial assumptions are reasonable.



SECTION II – DISCLOSURES RELATED TO RISK

The method change that decreased the UAL by \$0.1 million is a result of the reallocation of assets between ATU and IBEW in 2016, when the plans began reporting on a separate basis.

While the net investment gains and losses have not been the largest driver of UAL changes over the past 10 years, the year-to-year investment volatility can have a large impact on the UAL and is unpredictable. For example, the actuarial investment loss in 2020 was \$1.4 million compared to the \$1.8 million actuarial gain in 2021.

Table II-1 below shows the same information as Chart II-2, but the annual source of the UAL change is shown numerically.

Table II-1 Unfunded Actuarial Liability (UAL) Change by Source							
Valuation Year	Assumption Changes	Method Changes	Contributions	Investment Experience	Liability Experience	Total UAL Change	
2014	468,791	0	(58,467)	(1,972,330)	(751,011)	(2,313,016)	
2015	2,070,326	0	(1,882,740)	(1,162,852)	(294,785)	(1,270,052)	
2016	0	(604,762)	(75,499)	157,348	739,723	216,810	
2017	1,628,239	0	(376,790)	(560,888)	(787,472)	(96,911)	
2018	(103,071)	0	(408,784)	426,841	663,797	578,783	
2019	0	0	(327,030)	1,276,660	889,863	1,839,494	
2020	6,729,821	0	(260,374)	1,405,467	(8,970)	7,865,944	
2021	0	0	422,913	(1,798,290)	(273,574)	(1,648,951)	
2022	0	0	(552,754)	(59,047)	369,135	(242,665)	
2023	0	0	(991,965)	452,870	466,488	(72,606)	
Total	\$ 10,794,106 \$	6 (604,762)	\$ (4,511,490)	\$ (1,834,221)	\$ 1,013,195	\$ 4,856,829	



Plan Maturity Measures

The future financial condition of a mature pension plan is more sensitive to each of the risks identified above than a less mature plan. Before assessing each of these risks, it is important to understand the maturity of the plan compared to other plans and how the maturity has changed over time.

Plan maturity can be measured in a variety of ways, but they all get at one basic dynamic – the larger the plan is compared to the contribution or revenue base that supports it; the more sensitive the plan will be to risk. The measures on the next page have been selected as the most important in understanding the primary risks identified for the plan.

Inactives per Active (Support Ratio)

One simple measure of plan maturity is the ratio of the number of inactive members (those receiving benefits or inactives – those entitled to a deferred benefit) to the number of active members. The Support Ratio is expected to increase gradually as a plan matures. The chart below shows the Support Ratio has gradually grown from 0.77 in 2014 to 1.10 in 2023 as the number of retired members increased at a faster rate than the number of active members. From 2022 to 2023, however, the Support Ratio decreased for the first time since 2018.



Leverage Ratios

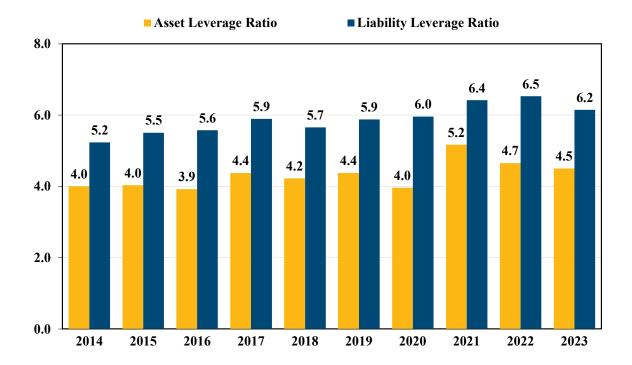
Leverage or volatility ratios measure the size of the plan compared to its revenue base more directly. The asset leverage ratio is simply the market value of assets to active member payroll and indicates the sensitivity of the Plan to investment returns. The liability leverage ratio is the Plan's Actuarial Liability to active member payroll and indicates the sensitivity of the Plan to assumption changes or demographic experience.



The Plan assets are currently about four and a half times covered payroll. As the Plan becomes better funded, the asset leverage ratio will increase, and if it was 100% funded, the asset leverage ratio would be over six and equal the Actuarial Liability (AL) leverage ratio. Although both of these ratios are lower than those of many other public plans, the increase in the asset leverage ratio expected to accompany an improvement in the Plan's funding still represents a substantial increase in the volatility of the contributions.

An asset leverage ratio of 4.5 means that if the Plan's assets lose 10% of their value (a 16.75% actuarial loss compared to the expected return of 6.75%), the loss is about 75% of payroll (4.5 x 16.75%). Based on the current amortization policy, the contribution rate would ultimately increase by approximately 5.5% of payroll if asset smoothing were not applied and the loss were amortized over 20 years. The same investment loss if the Plan were 100% funded would be around 104% of payroll and an ultimate contribution rate increase of about 7.5% of payroll, if amortized over 20 years.

The chart below shows the historical leverage ratios of the Plan. Both leverage ratios have increased since 2014.



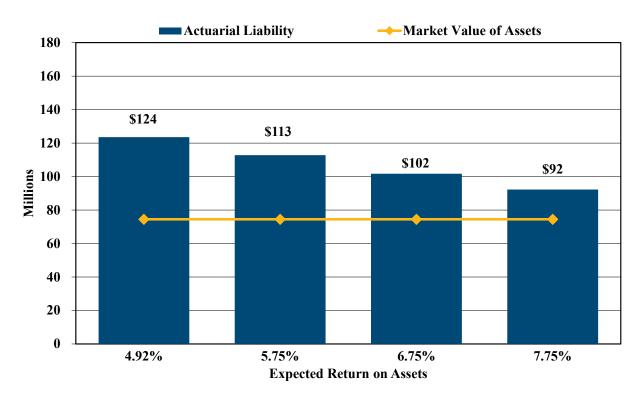


Assessing Costs and Risks

Sensitivity to Investment Returns

The chart below compares the Market Value of Assets (line) to the Actuarial Liabilities (bars) discounted at the current expected rate of return (6.75%) and at discount rates 100 basis points above and below the expected rate of return. In addition, we have added an additional measurement, the Low Default Risk Obligation Measure (LDROM), which is the Actuarial Liability using a discount rate derived from low-default-risk fixed income securities that approximately match the benefit payments of the plan.

Actuarial Liability versus Assets



If investments return 6.75% annually, the Plan would need approximately \$102 million in assets today to pay the benefits associated with service earned to date, compared to current Market Value of Assets of \$74 million. If investment returns are only 5.75%, the Plan would need approximately \$113 million in assets today, and if investment returns are 7.75%, the Plan would need approximately \$92 million in assets today.

IBEW invests in a diversified portfolio to achieve the best possible returns at an acceptable level of risk. IBEW's average geometric return over the last 10 years is 6.7%. Please refer to Table III-5 (page 25) for the asset returns by year since 2010.



SECTION II – DISCLOSURES RELATED TO RISK

The low-risk portfolio for a pension plan would be composed entirely of low-default-risk fixed income securities whose cash flows approximately match the benefit cash flows of the plan. However, such a portfolio would have a lower expected rate of return (4.92% as of June 30, 2023¹) than the diversified portfolio (6.75%). The LDROM represents what the present value of future benefits would be if IBEW's assets were invested in such a portfolio. As of June 30, 2023, the LDROM is \$124 million compared to the Actuarial Liability of \$102 million for IBEW. The \$22 million difference can be viewed as the expected savings from taking on the investment risk of the diversified portfolio. Alternatively, it can be viewed as the potential cost of minimizing the investment risk.

If IBEW were to invest in the LDROM portfolio and not a diversified portfolio, the funded status would be lower, and the expected contribution requirements would increase. The security of IBEW's pension benefits relies on current assets, future investment earnings, and the ability and willingness of the employer to make future contributions. If IBEW were to invest in the LDROM portfolio, it would not change current assets, but it could potentially reduce future investment earnings, potentially changing the level of reliance on future employer contributions. However, investing in an LDROM portfolio would generate more predictable future investment earnings and future contributions.

¹ Assumes a 4.92% discount rate, which is based on the June 30, 2023 FTSE Pension Liability Index and all other assumptions and methods as used to calculate the Actuarial Liability.

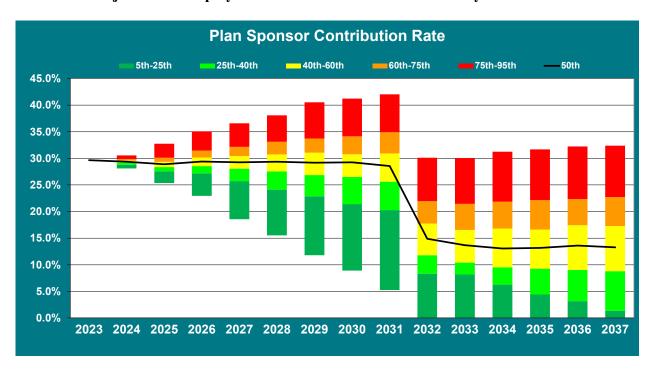


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Stochastic Projections

Stochastic projections serve to show the range of probable outcomes of various measurements. The chart below and on the following page show the projected range of the employer contribution rate and of the funded ratio on an Actuarial Value of Assets basis. The range in both scenarios is driven by the volatility of investment returns (assumed to be based on a 12.4% standard deviation of annual returns, as provided by the Plan's investment consultant and described in the 2020 Experience Study Report). The stochastic projections of investment returns are based on an assumption that each future year's investment return is independent from all other years and is identically distributed according to a lognormal distribution. This assumption may result in an unrealistically wide range of compound investment returns over longer periods.

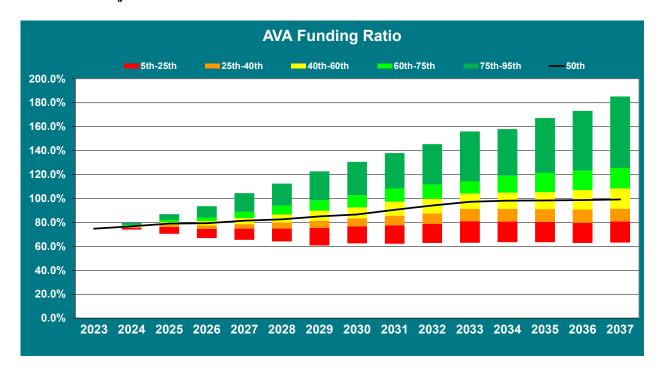
Stochastic Projection of Employer Contributions as a Percent of Pay



The stochastic projection of employer contributions, shown here as of the valuation date and payable the following fiscal year, shows the probable range of future contribution rates as a percentage of pay. The baseline contribution rate (black line), which is based on the median of the simulations using an average return of 6.75%, aligns closely with the projections discussed in subsection D of the Executive Summary of this report. In the most pessimistic scenario shown, the 95th percentile, the projected employer contribution rate is above 40% of pay for the 2031 valuation (FYE 2033). Conversely, the most optimistic scenario shown, the 5th percentile, the projected employer contribution falls below 10% starting with the 2030 valuation (FYE 2032). We note that these projections set the employer contribution to not fall below the normal cost unless the funded ratio exceeds 120%, as required under PEPRA.



Stochastic Projection of Funded Ratio on an Actuarial Value of Assets Basis



The graph above shows the projection of the funded ratio based on the Actuarial Value of Assets. It is based on the Plan's layered amortization policy, where the UAL as of July 1, 2019 is paid off over the next nine years, and all future gains or losses are amortized over new closed 20-year periods. While the baseline-funded ratio (black line) is projected to be nearly 100% at the end of the period shown here, there is a wide range of potential outcomes. Good investment returns have the likelihood of bringing the funded ratio well over 100%.

Under the current funding policy of the Plan, even in scenarios with unfavorable investment returns the Plan is projected to remain above approximately 60% funded on an actuarial value of assets basis, as long as the actuarially determined contributions continue to be made.

Contribution Risk

While investment returns are typically the dominant factor in volatility, contribution rates can also be sensitive to future salary increases and the hiring of new members. When member payroll growth stagnates or even declines, the dollar level of contributions made to the Plan also stagnates or declines since contributions are based on payroll levels, though this will generally only present a funding issue if there is an extended period of payroll reductions.

There is also a risk of the contribution rate increasing even higher when payroll decreases since the Plan's funding policy amortizes the UAL as a level percentage of pay. This means that the UAL payments increase at the assumed payroll growth rate of 2.75%, so that the payment is expected to remain constant as a percentage of payroll. If payroll growth is less than the expected 2.75% or there is a decline in payroll (as was the case this year), the UAL payments are spread



SECTION II – DISCLOSURES RELATED TO RISK

over a smaller payroll base and the contribution rate as a percentage of pay increases, making the Plan less affordable for those sponsors with declining payroll bases.

For example, the UAL Amortization rate as of June 30, 2023 for the FYE 2025 is 17.72%. If the projected payroll for FYE 2025 were 2.75% lower, all else being equal, the UAL Amortization rate would increase to 18.22%.

More Detailed Assessment

While a more detailed assessment is always valuable to enhance the understanding of the risks identified above, we believe the scenarios illustrated above cover the primary risks facing the Plan at this time. We would be happy to provide the Board with a more in-depth analysis at their request.



SECTION III - ASSETS

Pension Plan assets play a key role in the financial operation of the Plan and in the decisions the Board may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact benefit levels, employer contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on Plan assets including:

- **Disclosure** of Plan assets as of June 30, 2022 and June 30, 2023
- Statement of the **changes** in market values during the year
- Development of the Actuarial Value of Assets

Disclosure

There are two types of asset values disclosed in the valuation, the Market Value of Assets and the Actuarial Value of Assets. The market value represents "snapshot" or "cash out" values, which provide the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. As a result, market values are usually not as suitable for long-range planning as are the Actuarial Value of Assets, which reflect smoothing of annual investment returns.

Table III-1 discloses and compares each component of the market asset value as of June 30, 2022 and June 30, 2023.

Statement o	Table III-1 of Assets at Ma	rket Value		
	June 30,			
Investments		2022		2023
Cash and Cash Equivalents	\$	2,439,037	\$	4,035,233
Equity Securities		44,079,624		49,824,454
Fixed Income Securities		19,020,151		17,682,606
Real Estate		8,007,847		7,076,728
Total Investments	\$	73,546,659	\$	78,619,021
Receivables:				
Securities Sold	\$	2,163,946	\$	1,450,253
Interest and Dividends		128,007		130,469
Other Receivable		14,411		13,900
Total Receivables	\$	2,306,364	\$	1,594,622
Payables				
Accounts Payable	\$	(196,447)	\$	(149,937)
Benefits Payable		0		0
Other Payable		(5,848,144)		(5,603,635)
Total Payables	\$	(6,044,591)	\$	(5,753,572)
Market Value of Assets	\$	69,808,432	\$	74,460,071



SECTION III – ASSETS

Changes in Market Value

The components of asset change are:

- Contributions (employer and employee)
- Benefit payments
- Expenses (investment and administrative)
- Investment income (realized and unrealized)

Table III-2 shows the components of a change in the Market Value of Assets during 2022 and 2023.

Table III	-2			
Changes in Mark	ket Valu	ies		
		<u>2022</u>		<u>2023</u>
Contributions				
Employer's Contribution	\$	4,163,949	\$	4,495,272
Members' Contributions		488,243		585,32
Total Contributions	\$	4,652,192	\$	5,080,59
Investment Income				
Interest & Dividends	\$	1,049,036	\$	1,316,610
Realized & Unrealized Gain/(Loss)		(6,117,959)		4,313,999
Other Investment Income		0		(
Investment Expenses		(375,902)		(365,404
Total Investment Income	\$	(5,444,825)	\$	5,265,203
Disbursements				
Benefit Payments	\$	(5,082,251)	\$	(5,470,433
Administrative Expenses		(234,081)		(223,730
Transfer from/(to) Union Plans		0		(
Total Disbursements	\$	(5,316,332)	\$_	(5,694,163
Net increase (Decrease)	\$	(6,108,965)	\$	4,651,639
Net Assets Held in Trust for Benefits:				
Beginning of Year	\$	75,917,397	\$	69,808,432
End of Year	\$	69,808,432	\$	74,460,07
Approximate Return		-7.20%		7.589
Administrative Expenses as a Percentage of Mean Assets		0.34%		0.309



SECTION III – ASSETS

Actuarial Value of Assets (AVA)

The Actuarial Value of Assets represents a "smoothed" value developed by the actuary to reduce the volatile results that could develop due to short-term fluctuations in the Market Value of Assets. For this Plan, the Actuarial Value of Assets is calculated on a modified market-related value. The Market Value of Assets is adjusted to recognize, over a five-year period, investment earnings which are greater than (or less than) the assumed investment return.

Table III-3 Development of Actuarial Value of Assets as of July 1, 2023							
	(a)	(b)	(c)	(d)	(e) = (d) - (c)	(f)	(g) = (e) x (f)
	Total	Total	Expected	Actual	Additional	Not	Unrecognized
Year	Contributions	Disbursements	Return	Return	Earnings	Recognized	Earnings
2018-2019	3,508,544	(4,008,645)	4,126,448	3,482,632	(643,816)	0%	0
2019-2020	3,535,472	(4,388,114)	4,330,443	1,082,659	(3,247,784)	20%	(649,557)
2020-2021	3,921,089	(4,844,065)	4,044,949	16,461,248	12,416,299	40%	4,966,520
2021-2022	4,652,192	(5,316,332)	5,102,376	(5,444,825)	(10,547,201)	60%	(6,328,320)
2022-2023	5,080,597	(5,694,163)	4,691,699	5,265,205	573,506	80%	458,804
1. Total Unreco	gnized Dollars						(1,552,553)
2. Market Value	e of Assets as of	f June 30, 2023					74,460,071
3. Actuarial Val	lue of Assets as	of June 30, 2023:	[(2) - (1)]				76,012,624
4. Ratio of Actuarial Value to Market Value [(3) ÷ (2)]							



SECTION III – ASSETS

Investment Performance

The following table calculates the investment related gain/loss for the plan year on both a market value and an actuarial value basis. The market value gain/loss is an appropriate measure for comparing the actual asset performance to the previous valuation's long-term 6.75% assumption.

Table III-4 Asset Gain/(Loss)						
July 1, 2022 value	\$	Market Value 69,808,432	2	Actuarial Value 72,224,290		
Employer Contributions	Ψ	4,495,272	Ψ	4,495,272		
Employee Contributions		585,325		585,325		
Benefit Payments and Expenses		(5,694,163)		(5,694,163)		
Expected Investment Earnings (6.75%)		4,691,699		4,854,770		
Expected Value June 30, 2023	\$	73,886,565	\$	76,465,494		
Investment Gain / (Loss)		573,506		(452,870)		
July 1, 2023 value	\$	74,460,071	\$	76,012,624		
Return		7.58%		6.12%		



SECTION III – ASSETS

The table below shows the historical annual asset returns on a market value and actuarial value basis.

Table III-5 Historical Return on Assets						
Year Ended June 30	Market Value Return	Actuarial Value Return				
2010	15.61%	1.76%				
2011	19.91%	4.95%				
2012	1.99%	3.32%				
2013	13.92%	6.91%				
2014	15.12%	12.90%				
2015	2.73%	10.44%				
2016	-0.66%	6.26%				
2017	10.92%	8.60%				
2018	6.75%	6.48%				
2019	6.12%	5.06%				
2020	1.81%	4.93%				
2021	27.47%	9.62%				
2022	-7.20%	6.84%				
2023	7.58%	6.12%				



SECTION IV – LIABILITIES

In this section, we present detailed information on Plan liabilities including:

- **Disclosure** of Plan liabilities on July 1, 2022 and July 1, 2023
- Statement of **changes** in these liabilities during the year

Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them. Note that these liabilities are not applicable for settlement purposes, including the purchase of annuities and the payment of lump sums.

- **Present Value of Future Benefits:** Used for measuring all future Plan obligations, represents the amount of money needed today to fully fund all benefits of the Plan both earned as of the valuation date and those to be earned in the future by current plan participants, under the current Plan provisions.
- Actuarial Liability: Used for funding calculations, the normal cost rate is equal to the total projected value of benefits at entry age, divided by present value of future salary at entry age. The dollar amount of the normal cost equal to the normal cost rate multiplied by each member's projected pay. The Actuarial Liability is the portion of the present value of future benefits not covered by future expected normal costs. This method is called **Entry Age to Final Decrement** (EAFD).
- Unfunded Actuarial Liability: The excess of the Actuarial Liability over the Actuarial Value of Assets.

Table IV-1 discloses each of these liabilities for the current and prior valuations.

Table Liabilities/Net (S	e IV-1 urplus)	/Unfunded July 1, 2022	July 1, 2023
Present Value of Future Benefits			
Active Participant Benefits	\$	49,922,135 \$	54,640,703
Retiree and Inactive Benefits		65,865,960	66,154,162
Present Value of Future Benefits (PVB)	\$	115,788,095 \$	120,794,865
Actuarial Liability			
Present Value of Future Benefits (PVB)	\$	115,788,095 \$	120,794,865
Present Value of Future Normal Costs (PVFNC)		17,802,500	19,093,543
Actuarial Liability (AL = PVB – PVFNC)	\$	97,985,595 \$	101,701,322
Actuarial Value of Assets (AVA)		72,224,290	76,012,624
Net (Surplus)/Unfunded (AL – AVA)	\$	25,761,305 \$	25,688,698



SECTION IV – LIABILITIES

Changes in Liabilities

Each of the Liabilities disclosed in the prior table are expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments increasing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial or investment assumptions
- A change in the actuarial funding method or software
- Transfers of liabilities from one plan to another

Unfunded liabilities will change because of all of the above, and also due to changes in Plan assets resulting from:

- Employer contributions different than expected
- Investment earnings different than expected
- A change in the method used to measure plan assets
- Transfer of assets from one plan to another

Table IV-2 Changes in Actuarial Liability					
Actuarial Liability at July 1, 2022	\$	97,985,595			
Actuarial Liability at July 1, 2023	\$	101,701,322			
Liability Increase (Decrease)		3,715,727			
Change due to:					
Actuarial Methods / Software Changes	\$	0			
Plan Changes		0			
Assumption Changes		0			
Accrual of Benefits		2,213,762			
Actual Benefit Payments		(5,470,433)			
Interest		6,505,910			
Actuarial (Gain)/Loss		466,488			



SECTION IV – LIABILITIES

Table IV-3 Development of Actuarial Gain / (Loss)					
Unfunded Actuarial Liability at Start of Year (not less than zero)	\$	25,761,305			
2. Employer Normal Cost at Middle of Year		2,213,762			
3. Interest on 1. and 2. to End of Year		1,812,383			
4. Expected Contributions, Admin Expenses and Transfers in Prior Year		4,990,191			
5. Interest on 4. to End of Year		165,669			
6. Change in Unfunded Actuarial Liability Due to Changes in Actuarial Methods		0			
7. Change in Unfunded Actuarial Liability Due to Changes in Assumptions		0			
8. Change in Unfunded Actuarial Liability Due to Changes in Plan Design		0			
9. Expected Unfunded Actuarial Liability at End of Year [1. + 2. + 3 4 5. + 6. + 7. + 8.]	\$	24,631,589			
10. Actual Unfunded Actuarial Liability at End of Year (not less than zero)		25,688,698			
11. Actuarial Gain / (Loss) [9. – 10.]	\$	(1,057,109)			
Actuarial Gain / (Loss) From Liabilities more than expected Actuarial Gain / (Loss) From Actuarial Asset returns less than expected Actuarial Gain / (Loss) From Expenses less than expected Actuarial Gain / (Loss) From Contributions less than Actuarial Cost		(466,489) (452,870) 29,364 (167,114)			



SECTION V – CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions is needed to properly maintain the funding status of the Plan. Typically, the actuarial process will use a funding technique that will result in a pattern of contributions that are both stable and predictable.

For this Plan, the actuarial funding method used to determine the normal cost and the Unfunded Actuarial Liability is the **Entry Age to Final Decrement (EAFD)** cost method.

The normal cost rate for each member is determined with the normal cost percentage equal to the total projected value of benefits at entry age, divided by present value of future salary at entry age. Normal cost contributions are assumed to be made throughout the year, or on average mid-year.

The Unfunded Actuarial Liability is the difference between the EAFD Actuarial Liability and the Actuarial Value of Assets. The UAL rate is based on a nine year level percentage of payroll amortization of the remainder of the Unfunded Actuarial Liability as of July 1, 2019, again assuming mid-year payment to reflect the fact that employer contributions are made throughout the year. Effective July 1, 2020, unexpected changes in the UAL are amortized over new closed 20-year schedules, known as layered amortization. The payment for the UAL layer associated with the assumption changes adopted as part of the July 1, 2020 actuarial valuation was phased-in over a three-year period.

Beginning with the July 1, 2013 actuarial valuation, an amount equal to the expected administrative expenses for the Plan is added directly to the actuarial cost calculation. Previously, this cost was implicitly included in the calculation of the normal cost and unfunded liability payment, based on the use of a discount rate that was net of anticipated administrative expenses.

IBEW members who were hired on or after January 1, 2015 contributed between 1.5% and 4.5% of Compensation to the Plan through April 1, 2018 and then began contributing half of the PEPRA normal cost of the Plan rounded to the nearest 0.25%. Once established, the contribution rate for new members will be adjusted to reflect a change in the normal cost rate, but only if the normal cost rate changes by more than 1% of payroll. For the Fiscal Year 2022-2023, the contribution rate for PEPRA members was 7.00% of payroll (1/2 of 13.96%, rounded to the nearest quarter). The normal cost rate for PEPRA members as of July 1, 2023 valuation is 14.07%, and since the increase is less than 1%, the rate for the following fiscal year remains at 7.00%. Table V-2 contains the details of this calculation.

The tables on the following pages present the employer contributions for the Plan for the current and prior valuations as well as details on the amortization of the UAL.



SECTION V – CONTRIBUTIONS

Table V-1 Development of Employer Contribution Amount								
Development of Employer Contrib	ution	July 1, 2022		July 1, 2023				
1. Entry Age Normal Cost (Middle of Year)								
a. Termination	\$	193,792	\$	190,513				
b. Retirement	4	1,737,779	4	1,876,771				
c. Disability		93,697		103,444				
d. Death		64,626		67,646				
e. Refunds		21,694		40,895				
f. Total Normal Cost $(a) + (b) + (c) + (d) + (e)$	\$	2,111,588	\$	2,279,269				
2. Entry Age Actuarial Liability								
Active Members								
a. Termination	\$	(180,715)	\$	(95,903)				
b. Retirement		30,685,193		34,012,962				
c. Disability		999,437		1,033,636				
d. Death		722,755		774,616				
e. Refunds	Φ	(107,035)	Φ	(178,151)				
f. Total Active Liability: $(a) + (b) + (c) + (d) + (e)$ Inactive Members	\$	32,119,635	\$	35,547,160				
g. Termination	\$	1,372,113	\$	1,440,147				
h. Retirement		53,480,780		53,298,475				
i. Disability		2,027,525		1,992,715				
j. Death		1,851,908		2,007,997				
k. Non-Vested Due Refund		2,532		20,113				
l. Transfer		7,131,102		7,394,715				
m. Total Inactive Liability: $(g) + (h) + (i) + (j) + (k) + (l)$	\$	65,865,960		66,154,162				
n. Total Entry Age Actuarial Liability: (2f) + (2m)	\$	97,985,595	\$	101,701,322				
3. Actuarial Value of Assets	\$	72,224,290		76,012,624				
4. Unfunded Actuarial Liability: (2n) - (3)	\$	25,761,305						
5. Unfunded Actuarial Liability Amortization at Middle of Year as a Level Percentage of Payroll	\$	2,776,429	\$	2,929,404				
6. Expected Administrative Expenses	\$	252,150	\$	258,454				
7. Expected Member Contributions	\$	(540,177)	\$	(645,791)				
8. Employer Contribution Payable in Monthly	\$	4,599,990		4,821,336				
Installments: $(1f) + (5) + (6) + (7)$	ø	14 210 202	ø	15 700 021				
9. Covered Payroll (Normal Cost) 10. Covered Payroll (UAL Amort and Expenses)	\$ \$	14,318,392 15,008,554		15,722,831 16,535,628				
11. Employer Contribution as a Percent of Covered	Φ	31.16%	Φ	29.67%				
Payroll: $[(1f) + (7)] / (9) + [(5) + (6)] / (10)$		31.10/0		29.07/0				

 $^{^{1}\,}$ The District will begin paying this percentage of payroll July 1, 2024.



SECTION V – CONTRIBUTIONS

Table V-2 Development of Amortization Payment								
Type of Base	Date Established	Initial <u>Amount</u>	Initial Amortization <u>Years</u>		7/1/2023 Outstanding <u>Balance</u>	Remaining Amortization <u>Years</u>		Amortization <u>Amount</u>
Remaining UAL as of 2019	7/1/2019 \$	19,786,976	13	\$	16,448,478	9	\$	2,189,284
7/1/2020 Experience	7/1/2020	1,758,572	20		1,705,683	17		138,276
Assumption changes	7/1/2020	6,729,821	20		7,013,293	17		568,553
7/1/2021 Experience	7/1/2021	(1,118,154)	20		(1,098,767)	18		(85,567)
7/1/2022 Experience	7/1/2022	567,093	20		562,902	19		42,235
7/1/2023 Experience	7/1/2023	1,057,109	20		1,057,109	20	_	76,623
Total Unfunded Actuarial Liab	oility (UAL)			\$	25,688,698		\$	2,929,404



SECTION V – CONTRIBUTIONS

Table V-3 shows the allocation of the cost calculation between PEPRA and Non-PEPRA members.

Table V-3 IBEW PEPRA/Non-PEPRA Summary									
	Non-PEPRA			PEPRA	Total				
 Entry Age Normal Cost (Middle of Year) Covered Payroll (Normal Cost) Normal Cost as a Percent of Covered Payroll: (1) / (2) Expected Employee Contributions as a Percent of Covered Payroll 	\$ \$	981,677 6,497,254 15.11% 0.00%	\$ \$	1,297,592 9,225,577 14.07% (7.00%)	\$ \$	2,279,269 15,722,831 14.50% (4.11%)			
5. Entry Age Actuarial Liability6. Actuarial Value of Assets7. Unfunded Actuarial Liability: (5) - (6)	\$	95,848,337	\$	5,852,985	\$ \$ \$	101,701,322 76,012,624 25,688,698			
8. Unfunded Actuarial Liability Amortization at Middle of Year as a Level Percentage of Payroll	\$	1,238,876	\$	1,690,529	\$	2,929,404			
9. Expected Administrative Expenses	\$	109,303	\$	149,151	\$	258,454			
10. Expected Employee Contributions	\$	0	\$	(645,791)	\$	(645,791)			
11. Employer Contribution Payable in Monthly Installments: $(1) + (8) + (9) + (10)$	\$	2,329,855	\$	2,491,482	\$	4,821,336			
12. Covered Payroll (UAL Amort and Expenses)	\$	6,993,089	\$	9,542,539	\$	16,535,628			
13. Total Contribution as a Percent of Covered Payroll: [(1) + (10)] / (2) + [(8) + (9)] / (12)		34.39%		26.35%		29.67%			

¹ The District will begin paying this percentage of payroll July 1, 2024.



APPENDIX A – MEMBERSHIP INFORMATION

The data for this valuation was provided by the Sacramento Regional District Transit staff as of July 1, 2023.

Active Participants	July 1, 2022	July 1, 2023
Classic	90	85
PEPRA	116	130
Total Number	206	215
Number Vested	123	134
Average Age	48.8	48.6
Average Service	9.5	9.7
Average Pay	\$72,857	\$76,910
Retired		
Number	180	184
Average Age	68.5	69.5
Average Annual Benefit	\$29,593	\$29,456
Beneficiaries		
Number	17	18
Average Age	67.5	68.6
Average Annual Benefit	\$12,015	\$12,482
Disabled		
Number	16	16
Average Age	65.6	66.6
Average Annual Benefit	\$15,082	\$15,082
Term Vested		
Number	19	19
Average Age	48.7	49.7
Average Annual Benefit	\$8,837	\$8,837
Transferred		
Number	37	31
Average Age	50.2	52.6
Average Annual Benefit	\$18,149	\$21,697
Term Non-Vested / Due Refu	nd	
Number	4	5
Average Estimated Refund	\$633	\$4,023



APPENDIX A – MEMBERSHIP INFORMATION

Changes in Plan Membership: IBEW								
	Actives	Actives with Transfer Service	Non-Vested Terms with Funds on Account	Vested Terminations	Disabled	Retired	Beneficiaries ¹	Total
July 1, 2022	206	37	4	19	16	180	17	479
New Entrants	20	0	0	0	0	0	0	20
Rehires	0	0	0	0	0	0	0	0
Disabilities	0	0	0	0	0	0	0	0
Retirements	(4)	0	0	0	0	4	0	0
Vested Terminations	0	0	0	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable, QDRO	0	0	0	0	0	(1)	1	0
Transfers	(2)	1	0	0	0	0	0	(1)
Died, Without Beneficiary, and Other Terminations	(2)	0	2	0	0	0	0	0
Transfer Retirement	0	0	0	0	0	1	0	1
Beneficiary Deaths	0	0	0	0	0	0	0	0
Funds Transferred	0	0	0	0	0	0	0	0
Refund of Contributions, Not entitled to further benefits	(3)	(1)	(1)	0	0	0	0	(5)
Data Corrections	0	(6)	0	0	0	0	0	(6)
July 1, 2023	215	31	5	19	16	184	18	488

Beneficiary counts do not include DROs where benefits are paid over the member's lifetime.



APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution of IBEW Active Participants As of July 1, 2023													
						Serv	ice						
Age	Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	Total
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
21 to 24	1	0	0	0	0	0	0	0	0	0	0	0	1
25 to 29	3	1	0	1	2	2	0	0	0	0	0	0	9
30 to 34	5	2	2	3	3	6	1	0	0	0	0	0	22
35 to 39	5	7	0	6	1	7	4	0	0	0	0	0	30
40 to 44	1	4	0	2	1	9	2	1	0	0	0	0	20
45 to 49	1	2	1	5	3	10	3	6	2	0	0	0	33
50 to 54	0	1	1	1	2	5	2	5	3	2	0	0	22
55 to 59	3	0	2	2	3	6	5	9	1	4	2	0	37
60 to 64	0	0	1	1	0	8	4	5	4	3	1	1	28
65 to 69	0	1	1	0	0	1	0	4	1	1	2	0	11
70 & up	0	0	0	0	0	0	1	0	0	0	0	1	2
Total	19	18	8	21	15	54	22	30	11	10	5	2	215

Average Age = 48.6

Average Service = 9.7



APPENDIX A – MEMBERSHIP INFORMATION

Payroll Distribution of IBEW Active Participants As of July 1, 2023													
						Sei	rvice						
Age	Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	Total
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
21 to 24	42,238	0	0	0	0	0	0	0	0	0	0	0	42,238
25 to 29	69,228	104,508	0	60,406	45,414	77,649	0	0	0	0	0	0	68,747
30 to 34	54,981	73,835	91,263	72,749	65,080	91,587	86,552	0	0	0	0	0	75,212
35 to 39	69,584	69,895	0	74,277	60,299	78,014	84,848	0	0	0	0	0	74,288
40 to 44	46,129	60,653	0	58,886	78,200	83,754	75,822	58,423	0	0	0	0	72,428
45 to 49	81,040	55,635	63,444	78,323	53,856	75,403	65,828	67,182	80,024	0	0	0	70,412
50 to 54	0	109,160	103,047	85,854	65,901	91,500	76,583	66,941	82,808	97,795	0	0	82,693
55 to 59	49,792	0	81,543	78,917	82,980	79,411	79,280	81,557	56,346	100,833	106,001	0	81,022
60 to 64	0	0	92,840	102,319	0	72,691	88,558	84,682	103,457	85,606	80,838	76,908	85,097
65 to 69	0	42,283	59,926	0	0	60,298	0	88,080	96,828	118,017	57,622	0	76,811
70 & up	0	0	0	0	0	0	98,791	0	0	0	0	75,737	87,264
Total	60,489	69,265	83,109	75,224	64,459	80,269	80,803	76,865	88,679	97,376	81,617	76,323	76,910

Average Salary = \$ 76,910



APPENDIX A – MEMBERSHIP INFORMATION

Service Retired Participants and

Beneficiaries

Age	Number	Average Monthly Benefit
30-34	0	\$0
35-39	1	\$401
40-44	1	\$532
45-49	0	\$0
50-54	1	\$1,692
55-59	19	\$2,349
60-64	34	\$2,338
65-69	56	\$2,594
70-74	55	\$2,334
75-79	22	\$2,170
80-84	8	\$1,252
85-89	4	\$2,585
90-94	1	\$1,879
95+	0	\$0
Total	202	\$2,329

Disabled Participants

Age	Number	Average Monthly Benefit
30-34	0	\$0
35-39	1	\$908
40-44	0	\$0
45-49	1	\$841
50-54	0	\$0
55-59	1	\$1,107
60-64	2	\$1,817
65-69	5	\$1,158
70-74	2	\$1,653
75-79	4	\$1,131
80-84	0	\$0
85-89	0	\$0
90+	0	\$0
All Ages	16	\$1,257

Terminated Vested Participants

Age	Number	Average Monthly Benefit
25-29	0	\$0
30-34	0	\$0
35-39	0	\$0
40-44	6	\$641
45-49	5	\$730
50-54	4	\$886
55-59	2	\$749
60-64	1	\$307
65-69	1	\$1,146
70-74	0	\$0
75-79	0	\$0
80-84	0	\$0
85-89	0	\$0
90+	0	\$0
All Ages	19	\$736

Tranferred Participants

Age	Number	Average Monthly Benefit
25-29	0	\$0
30-34	0	\$0
35-39	2	\$1,718
40-44	2	\$928
45-49	5	\$1,136
50-54	9	\$1,909
55-59	10	\$1,915
60-64	3	\$2,917
65-69	0	\$0
70-74	0	\$0
75-79	0	\$0
80-84	0	\$0
85-89	0	\$0
90+	0	\$0
All Ages	31	\$1,808



APPENDIX B - STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the actuarial valuation reflect the results of an experience study performed by Cheiron covering the period from July 1, 2015 through June 30, 2020 presented to the Board at their May 5th, 2021 meeting. More details on the rationale for the demographic and economic assumptions can be found in the experience study report presented at that meeting and subsequently adopted by the Board at their May 10th meeting. The combined effect of the assumptions is expected to have no significant bias for the purpose of this measurement.

A. Contribution Allocation Procedure

The contribution allocation procedure primarily consists of an actuarial cost method, an asset valuation method, and an amortization method as described below. This contribution allocation procedure, combined with reasonable assumptions, produces a Reasonable Actuarially Determined Contribution as defined in Actuarial Standard of Practice No. 4. The contribution allocation procedure was selected to balance benefit security, intergenerational equity, and the stability of actuarially determined contributions. The selection also considered the demographics of plan members, the funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due. There were no changes to the contribution allocation procedures from the prior valuation.

1. Actuarial Cost Method

The Entry Age Normal actuarial funding method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the retirement benefits between each Member's date of hire and assumed retirement. The Actuarial Liability is the difference between the Present Value of Future Benefits and the Present Value of Future Normal Cost. The Unfunded Actuarial Liability (UAL) is the difference between the Actuarial Liability and the Actuarial Value of Assets.

2. Amortization Method

The UAL is amortized as a percentage of projected payroll.

- The amortization period as of July 1, 2023 is 9 years for the UAL determined as of July 1, 2019 with 20-year layered amortization for UAL changes after 2019.
- Effective July 1, 2020, unexpected changes in the UAL are amortized over new closed 20-year amortization layers.
- The payment for the UAL layer associated with the assumption changes adopted as part of the July 1, 2020 actuarial valuation was phased-in over a three-year period.



APPENDIX B – STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

3. Actuarial Value of Plan Assets

The actuarial value of Plan assets is calculated on a modified market-related value. The Market Value of Assets is adjusted to recognize, over a five-year period, investment earnings which are greater than (or less than) the assumed investment return on the Market Value of Assets.

B. Modeling

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

Deterministic and stochastic projections in this valuation report were developed using R-scan, a proprietary tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the Plan. R-scan uses standard roll-forward techniques that implicitly assume a stable active population. Because R-scan does not automatically capture how changes in one variable affect all other variables, some scenarios may not be consistent. We have relied on Cheiron colleagues who developed the tool, and we have used the tool in accordance with its purpose.



APPENDIX B – STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

C. Actuarial Assumptions

The actuarial assumptions were developed based on an experience study covering the period from July 1, 2015 through June 30, 2021.

1. Rate of Return

The annual rate of return on all Plan assets is assumed to be 6.75% for the current valuation net of investment, but not administrative, expenses.

2. Low-Default-Risk Obligation Measure Discount Rate (effective June 30, 2023)

The discount rate used to calculate the Low-Default-Risk Obligation Measure (LDROM) is the FTSE Pension Liability Index as of the valuation date. This index was selected because it reflects the types of fixed-income securities the Plan would likely invest in if the Trustees wanted to match cash flows. The rate for this valuation is 4.92%.

3. Cost of Living

The cost of living as measured by the Consumer Price Index (CPI) is assumed to increase at the rate of 2.50% per year.

4. Increases in Pensionable Payroll / Amortization Payments

Overall pensionable compensation (used in the calculation of amortization payments) is expected to grow by 2.75% per year. The PEPRA Compensation Limit is assumed to increase by 2.50% per year (in line with the increase in the CPI).

5. Plan Expenses

Administrative expenses are assumed to be \$258,454 for Fiscal Year 2023-24 and are added directly to the actuarial cost calculation. The expenses are assumed to increase with CPI in future years.

6. Increases in Pay

Assumed pay increases for active Participants consist of increases due to wage inflation and those due to longevity and promotion.

Based on an analysis of pay levels and service for the IBEW Plan Participants, we assume that pay increases due to longevity and promotion will occur in accordance with the following table:



APPENDIX B - STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

	Salary Increases					
Service	Base	Longevity & Promotion	Total (Compound)			
0	2.75%	13.00%	16.11%			
1	2.75%	11.00%	14.05%			
2	2.75%	5.00%	7.89%			
3	2.75%	2.50%	5.32%			
4-6	2.75%	1.50%	4.29%			
7+	2.75%	0.75%	3.52%			

7. Family Composition

85% of participants are assumed to be married. Males are assumed to be three years older than their spouses, and females are assumed to be three years younger than their spouses. This assumption is applied to active members, as well as retired members with a joint and survivor benefit where the data is missing the beneficiary date of birth.

8. Terminal Payments

Retirement benefits are assumed to be increased by 7% due to the application of payments for unused vacation and sick leave to Average Final Monthly Earnings.

No liability adjustment for retirement is used for members who joined the plan on or after January 1, 2015.

9. Missed Pay Periods

A 2.62% load is applied to the normal cost for IBEW PEPRA members to adjust for the missed pay periods in which service is credited yet no contributions are made by the member.

10. Employment Status

No Plan Participants are assumed to transfer between the IBEW Plan and the Salaried Plan.

11. Rates of Termination

Rates of termination for all Participants from causes other than death, disability, and service retirement are based on the Participant's age, service, and sex.

Representative rates are shown in the following table:



APPENDIX B – STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

Termination Rates ¹				
Years of				
Service	Rate			
0-4	8.00%			
5-9	5.00%			
10-14	3.00%			
15-19	2.00%			
20+	0.50%			

¹ No terminations are assumed after eligibility for normal retirement or after 25 years of service for non-PEPRA members. PEPRA members terminating with at least five years of service are expected to receive a deferred annuity benefit; those terminating with less than five years of service are expected to receive a refund of contributions (with interest).

12. Rates of Disability

Rates of disability are based on the age and sex of the Participant. Representative rates are as follows:

Rates of Disability					
Age	Male	Female			
22	0.15%	0.00%			
27	0.20%	0.15%			
32	0.25%	0.20%			
37	0.30%	0.28%			
42	0.35%	0.43%			
47	0.40%	0.67%			
52	0.45%	1.18%			
57	0.50%	2.04%			
62	0.55%	2.87%			



APPENDIX B - STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

13. Rates of Mortality for Active Healthy Lives

Pri-2012 Blue Collar Healthy Employee Headcount-weighted mortality rates for male ATU and IBEW members, and the Cheiron ATU Employee mortality rates adjusted by 105% for female ATU and IBEW members, with generational improvements using MP-2021 from the base year of the tables (2012 and 2016, respectively).

Age	Male	Female
25	0.000709	0.000348
30	0.000755	0.000399
35	0.000858	0.000539
40	0.000970	0.000759
45	0.001177	0.001058
50	0.001712	0.001590
55	0.002789	0.002506
60	0.004543	0.003827
65	0.006927	0.005505

Rates shown are base rates, prior to generational improvements.

14. Rates of Mortality for Disabled Retirees

Cheiron ATU Disabled Annuitant mortality for ATU and IBEW members, with no adjustment, with generational improvements using Scale MP-2020 from 2016.

Age	Male	Female
25	0.009707	0.001858
30	0.009632	0.003098
35	0.011224	0.004766
40	0.012844	0.006769
45	0.018315	0.009686
50	0.021187	0.014759
55	0.024130	0.018518
60	0.027997	0.020617
65	0.033476	0.022110
70	0.041983	0.027203
75	0.057023	0.038567

Rates shown are base rates, prior to generational improvements.



APPENDIX B - STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

15. Retired Member and Beneficiary Mortality

Cheiron ATU Healthy Annuitant mortality for ATU and IBEW members, adjusted by 95% for males and 105% for females, with generational improvements using Scale MP-2020 from 2016.

Age	Male	Female
55	0.008528	0.005455
60	0.010669	0.007998
65	0.012434	0.011577
70	0.018838	0.017144
75	0.031080	0.027626
80	0.053155	0.046543
85	0.091646	0.080753

Rates shown are base rates, prior to generational improvements.

16. Rates of Retirement

Rates of service retirement among all Participants eligible to retire are given by the following table:

Rates of Retirement ¹						
	Years of Service					
Age	5-9	10-24	25-29	30+		
Under 55	0.00%	0.00%	2.00%	2.00%		
55-59	2.30%	2.30%	2.30%	10.00%		
60-64	4.00%	11.70%	11.70%	20.00%		
65	4.00%	32.00%	32.00%	32.00%		
66-69	4.00%	25.00%	25.00%	32.00%		
70+	100.00%	100.00%	100.00%	100.00%		

¹ PEPRA members are assumed to begin retiring at age 52, with at least five years of service.

17. Changes Since Last Valuation

The LDROM discount rate assumption was added.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

1. Definitions

Average Final Monthly Earnings:

A Participant's Average Final Monthly Earnings is the highest average consecutive 48 months' compensation paid. Payments for accumulated vacation or sick leave not actually taken prior to retirement are included in computing Average Final Monthly Earnings if last 48 months of compensation are used in the calculation.

Compensation:

A Participant's Compensation is the earnings paid in cash to the participant during the applicable period of employment with the District.

PEPRA member's Compensation is computed using base salary, without overtime or other special compensation such as terminal payments. Pensionable compensation for PEPRA members is limited to the PEPRA Compensation Limit (for 2024, \$151,446 for those participating in Social Security; increased by the CPI-U in subsequent

years).

Service: Service is computed from the date in which the Participant becomes a

full or part-time employee and remains in continuous employment to

the date employment ceases.

For IBEW members, service includes time with the District or predecessor companies immediately prior to September 16, 1974 and subsequent to hire. Service is measured in completed quarters.

2. Participation

Eligibility: Any person employed by the District who is a member IBEW Local

1245 is eligible to participate in the Plan.

Any member joining the Plan for the first time on or after January 1, 2015 is a New Member and will follow PEPRA provisions. Employees who transfer from and are eligible for reciprocity with another public employer will not be New Members if the service in the reciprocal system was under a pre-PEPRA plan.

3. Retirement Benefit

Eligibility: Prior to November 1, 2005, an IBEW Participant is eligible for normal

service retirement upon attaining age 55 and completing 10 or more years of service. Effective November 1, 2005, IBEW members are eligible to retire upon reaching 25 years of service. Effective November 1, 2006, an IBEW Participant is eligible for normal service



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APPENDIX C – SUMMARY OF PLAN PROVISIONS

or disability retirement upon attaining age 55 and completing five or more years of service.

PEPRA members are eligible upon attaining age 52 and completing five or more years of service.

Benefit Amount:

The normal service retirement benefit is the greater of the benefit accrued under the plan provisions in effect on February 28, 1993 or the Participant's benefit under the current plan provisions. Under the current plan provision, the member would receive a percentage of the Participant's Average Final Monthly Earnings multiplied by the Participant's service at retirement.

For retirements and terminations on and after July 1, 2008, the percentage is equal to:

- 2.0%, if the member retires after age 55 and prior to age 60 and prior to 30 years of service,
- 2.5%, if the member retires at age 60 or later or with 30 or more years of service.

For PEPRA members, the benefit multiplier will be 1% at age 52, increasing by 0.1% for each year of age to 2.5% at 67. In between exact ages, the multiplier will increase by 0.025% for each quarter year increase in age.

Form of Benefit:

The benefit begins at retirement and continues for the Participant's life with no cost of living adjustments. A Participant may elect to receive reduced benefits in the form of a contingent annuity with 50% or 100% continuing to a beneficiary after death, or in the form of an increased benefit prior to receiving Social Security benefits, and a reduced benefit thereafter.

4. Disability Benefit

Eligibility:

A Participant is eligible for a disability benefit, if the Participant is unable to perform the duties of his or her job with the District, cannot be transferred to another job with the District, and has submitted satisfactory medical evidence of permanent disqualification from his or her job. 10 years of service is required to qualify for disability. For IBEW members with active service on or after November 1, 2006 (including PEPRA members), only five years of service is needed.

Benefit Amount: For IBEW members, the disability benefit is equal to the Normal Retirement Benefit, using the Participant's Average Final Monthly Earnings and service accrued through the date of



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APPENDIX C – SUMMARY OF PLAN PROVISIONS

disability. The disability benefit cannot exceed the Retirement Benefit the member would be entitled to on the basis of Average Final Monthly Earnings determined at the date of disability multiplied by the service the member would have attained had employment continued until age 62, excluding PEPRA members.

Form of Benefit:

The benefit begins at disability and continues until recovery or for the Participant's life with no cost of living adjustments. A Participant may elect to receive reduced benefits in the form of a contingent annuity with 50% or 100% continuing to a beneficiary after death, or in the form of an increased benefit prior to receiving Social Security benefits, and a reduced benefit thereafter.

5. Pre-Retirement Death Benefit

Eligibility: A Participant's surviving spouse or Domestic Partner is eligible for a

pre-retirement death benefit, if the Participant has completed 10 years of service with the District. Effective November 1, 2006, an IBEW Participant's surviving spouse or Domestic Partner is eligible for a pre-retirement death benefit if the Participant has completed five years

of service with the District, including PEPRA members.

Benefit Amount: The pre-retirement death benefit is the actuarial equivalent of the Normal Retirement Benefit, as if the member retired on the day before his/her death. If the member is not eligible to retire on the day before his/her death, but is vested in his/her benefit, the benefit shall be calculated using a 1% multiplier for PEPRA members

and a 2% for all other members.

Form of Benefit: The death benefit begins when the Participant dies and continues for

the life of the surviving spouse or Domestic Partner. No optional form of benefit may be elected. No cost of living increases are payable.

6. Termination Benefit

Eligibility: An IBEW Participant is eligible for a termination benefit after earning

five years of service. The terminated Participant will be eligible to

commence benefits at age 62 (or as early as age 55 if eligible).

PEPRA members are eligible for a termination benefit after earning

five years of service, commencing as early as age 52.

Benefit Amount: The benefit payable to a vested terminated Participant is equal to the

Normal Retirement Benefit, based on the provisions of the Plan in

effect on the date the Participant terminated employment.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

PEPRA members are eligible after earning five years of service for the full Normal Retirement Benefit earned on the date of termination, based on the service and Average Final Monthly Earnings accrued by the Participant at that point, and using the factor based on the age at which the benefit commences.

Form of Benefit:

The termination benefit begins at retirement and continues for the Participant's life with no cost of living adjustments. A Participant may elect to receive reduced benefits in the form of a contingent annuity with 50% or 100% continuing to a beneficiary after death, or in the form of an increased benefit prior to receiving Social Security benefits, and a reduced benefit thereafter.

7. Withdrawal Benefit

Eligibility: PEPRA members who are not eligible for a termination benefit upon

termination.

Benefit Amount: The withdrawal benefit is a refund of the Participant's accumulated

contributions with interest.

Form of Benefit: The withdrawal benefit is paid in a lump sum upon election by the

Participant.

8. Reciprocity Benefit

Eligibility: A Participant who transfers from this Plan to the RT Salaried Plan, and

who is vested under this Plan, is eligible for a retirement benefit from

this Plan.

Benefit Amount: The benefit payable to a vested transferred Participant is equal to the

Normal Retirement Benefit based on service earned under this Plan to the date of transfer and based on Average Final Earnings computed under this Plan and the Salaried Plan together, as if the plans were a

single plan.

Form of Benefit: The reciprocity benefit begins at retirement and continues for the

Participant's life with no cost of living adjustments. A Participant may elect to receive reduced benefits in the form of a contingent annuity with 50% or 100% continuing to a beneficiary after death, or in the form of an increased benefit prior to receiving Social Security benefits,

and a reduced benefit thereafter.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

9. Funding

Effective April 1, 2018, IBEW members hired or rehired by the District on or after January 1, 2015 contribute half of the normal cost of the PEPRA Plan rounded to the nearest 0.25%. Once established, the contribution rate for New Members will be adjusted to reflect a change in the normal cost rate, but only if the normal cost rate changes by more than 1% of payroll. For the Fiscal Year 2023-2024, the contribution rate for PEPRA members was 7.00% (based on 1/2 of 13.96%, rounded to the nearest quarter) of payroll. The normal cost rate for the PEPRA members as of the July 1, 2023 valuation is 14.07%, and since the change is less than 1%, the rate for the following fiscal year remains the same at 7.00%.

The remaining cost of the Plan is paid by the District.

10. Changes in Plan Provisions

None.



APPENDIX D – GLOSSARY

1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs such as mortality, withdrawal, disability, retirement, changes in compensation, and rates of investment return.

2. Actuarial Cost Method

A procedure for determining the actuarial present value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an Actuarial Liability.

3. Actuarial Gain (Loss)

The difference between actual experience and that expected based upon a set of actuarial Assumptions during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

4. Actuarial Liability

The portion of the actuarial present value of projected benefits that will not be paid by future normal costs. It represents the value of the past normal costs with interest to the valuation date.

5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made.

6. Actuarial Valuation

The determination, as of a specified date, of the normal cost, Actuarial Liability, Actuarial Value of Assets, and related actuarial present values for a pension plan.

7. Actuarial Value of Assets

The value of cash, investments, and other property belonging to a pension plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values.

8. Actuarially Equivalent

Of equal actuarial present value, determined as of a given date, with each value based on the same set of actuarial assumptions.



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APPENDIX D – GLOSSARY

9. Amortization Payment

The portion of the pension plan contribution, which is designed to pay interest and principal on the Unfunded Actuarial Liability in order to pay for that liability in a given number of years.

10. Entry Age Normal Actuarial Cost Method

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages.

11. Funded Ratio

The ratio of the Actuarial Value of Assets to the Actuarial Liabilities.

12. Normal Cost

That portion of the actuarial present value of pension plan benefits and expenses that is allocated to a valuation year by the actuarial cost method.

13. Projected Benefits

Those pension plan benefit amounts which are expected to be paid in the future under a particular set of actuarial assumptions, taking into account such items as increases in future compensation and service credits.

14. Unfunded Actuarial Liability

The excess of the Actuarial Liability over the Actuarial Value of Assets. The Unfunded Actuarial Liability is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligation in the event of a plan termination or other similar action. However, it is an appropriate measure for assessing the need for or the amount of future contributions.



