CHEIRON *Classic Values, Innovative Advice*

Retirement Plan for Sacramento Regional Transit District Employees IBEW Local 1245

Actuarial Valuation Report as of July 1, 2017

Produced by Cheiron

March 2018

TABLE OF CONTENTS

March 14, 2018

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, 2017. 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. Any other user of this report is not an intended user and is considered a third party.

This report was prepared 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 of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. 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

David Holland, FSA, FCA, EA, MAAA
Consulting Actuary

Graham A. Schmidt, ASA, FCA, EA, MAAA
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, 2017. 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;

- The **Main Body** of the report presents details on the Plan's

    - Section II - Assets
    - Section III - Liabilities
    - Section IV - 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, and
- Employer contribution rates for Plan Year 2018-2019.

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, 2017 provided to the Board in September 2017.

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) an examination of the historical trends, and (D) the projected financial outlook for the Plan.

A. Valuation Basis

This valuation determines the employer contributions for the plan year.

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

- The normal cost under the Entry Age Normal Cost Method,
- 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 were no changes to plan provisions since the prior valuation.

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

B. Key Findings of this Valuation

The key results of the July 1, 2017 actuarial valuation are as follows:

- The actuarially determined employer contribution rate decreased from 25.31% of payroll last year to 25.03% of payroll for the current valuation, reflecting a three-year phase-in of the impact of changes to the economic assumptions adopted for the July 1, 2017 valuation. Without the phase-in, the employer contribution rate would have increased to 26.09% of payroll.

- The Plan's funded ratio, the ratio of actuarial assets over actuarial liability, increased from 74.6% last year to 76.2% as of July 1, 2017. This increase was primarily due to contributions made to the Plan, as well as favorable investment returns and demographic experience over the prior year. The funded ratio prior to the assumption change was 77.9%.

  As a point of comparison, a funding ratio of 60.2% or more is required just to fund the liabilities of the inactive members: retired, disabled, terminated with vested benefits, and their beneficiaries. This 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 $17,465,609 to $17,368,699 as of July 1, 2017. This decrease in UAL was primarily due to the liability gain on experience and the rate of return on the Actuarial Value of Assets being better than expected.

- During the year ending June 30, 2017, the return on assets was 10.92% on a market value basis net of all expenses, as compared to the 7.50% assumption. This resulted in a market value gain on investments of $1,669,739. The Actuarial Value of Assets recognizes 20% of the difference between the expected and actual return on the Market Value of Assets (MVA). This method of smoothing the asset gains and losses returned 8.60% on the smoothed value of assets, an actuarial asset gain of $560,888.

  The Actuarial Value of Assets is currently 102.7% of the market value. Since actuarial assets are above market assets, there are unrecognized investment losses (approximately $1.4 million) that will be reflected in the smoothed value in future years.

- The Plan experienced a liability gain of $787,472, due primarily to less than anticipated salary increases as well as higher mortality rates on inactive members. Combining the liability and asset gains, the Plan experienced a total gain of $1,348,360.

- There were 17 new hires and rehires since July 1, 2016 but the total active population decreased. Total projected payroll increased 0.25% from $12,333,541 for 2016-2017 to $12,364,134 for 2017-2018.

SECTION I – EXECUTIVE SUMMARY

- The assumed rate of return and inflation assumption were changed by the Boards from 7.50% and 3.15%, respectively, to 7.25% and 3.00%.

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. For the current year, we also have presented under both the current and prior assumptions. Finally, we have presented the employer contribution rate both before and after the phase in of the effect of assumption changes adopted as of July 1, 2015 and the adopted three-year phase-in for the changes adopted as of July 1, 2017.

Table I-1
IBEW Summary of Principal Plan Results

	Prior Results	Prior Assumptions		Current Assumptions	
Valuation Date	**July 1, 2016**	**July 1, 2017**	**% Change**	**July 1, 2017**	**% Change**
Participant Counts					
Active Participants	206	197	-4.37%		
Participants Receiving a Benefit	145	157	8.28%		
Terminated Vested Participants	19	22	15.79%		
Transferred Participants	37	35	-5.41%		
Total	**407**	**411**	**0.98%**		
Annual Pay of Active Members	$ 12,333,541	$ 12,382,140	0.39%	$ 12,364,134	0.25%
Assets and Liabilities					
Actuarial Liability (AL)	$ 68,753,422	$ 71,263,657	3.65%	$ 72,891,895	6.02%
Actuarial Value of Assets (AVA)	51,287,813	55,523,196	8.26%	55,523,196	8.26%
Unfunded Actuarial Liability (UAL)	$ 17,465,609	$ 15,740,461	-9.88%	$ 17,368,699	-0.55%
Funded Ratio (AVA)	74.6%	77.9%	3.32%	76.2%	1.58%
Market Value of Assets (MVA)	$ 48,384,520	$ 54,085,119	11.78%	$ 54,085,119	11.78%
Funded Ratio (MVA)	70.4%	75.9%	5.52%	74.2%	3.83%
Inactive Funded Ratio	59.4%	60.3%	0.93%	60.2%	0.82%
Contributions					
Total Contribution (Beginning of Year)	$ 3,015,555	$ 2,858,452	-5.21%	$ 3,047,138	1.05%
Total Contribution Payable Monthly	$ 3,126,594	$ 2,963,706	-5.21%	$ 3,155,664	0.93%
Total Contribution as a Percentage of Payroll (before phase-in)	26.01%	24.50%	-1.51%	26.09%	0.08%
Total Contribution as a Percentage of Payroll (after phase-in)	25.31%			25.03%	-0.28%

C. Changes in Plan Cost

Table I-2 summarizes the impact of actuarial experience and changes in benefits on Plan cost prior to the reduction for phasing in the new assumption changes over three years.

Table I-2
IBEW Employer Contribution Reconciliation

Item	Total	Normal Cost	UAL Amortization	Admin Expense
FYE 2018 Total Employer Contribution Rate	25.31%			
Change due to phase-in	0.70%			
FYE 2018 Actuarial Contribution Rate	26.01%	12.74%	12.29%	0.98%
Change due to asset gain	-0.40%	0.00%	-0.40%	0.00%
Change due to PEPRA New Entrants	-0.83%	-0.83%	0.00%	0.00%
Change due to demographic changes	-0.55%	0.03%	-0.57%	-0.01%
Change due to amortization payroll	0.39%	0.00%	0.36%	0.03%
Change due to contribution excess	-0.13%	0.00%	-0.13%	0.00%
Change due to assumption changes	1.60%	0.47%	1.13%	0.00%
FYE 2019 Net Employer Contribution Rate	26.09%	12.41%	12.68%	1.00%

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

- Asset experience produced an investment gain on an actuarial basis.

  The assets of the IBEW Plan returned 10.92% (net of investment expenses) on a market basis, greater than the assumed rate of 7.50%. The actuarial return on assets was 8.60%, higher than the assumed rate of 7.50%. This resulted in a decrease in the contribution rate by 0.40% of payroll.

  The Market Value of Assets is lower than the actuarial value; there are approximately $1.4 million in deferred asset losses for the Plan.

- Demographic experience resulted in a net decrease in cost.

  The demographic experience of the Plan - rates of retirement, death, disability, and termination - was somewhat different than predicted by the actuarial assumptions in aggregate, causing an actuarial gain which decreased the contribution rate by 0.55% of payroll. In particular, there were gains caused by higher mortality rates than expected among retirees, and smaller salary increases than expected for returning members.

  In addition, the employer portion of the normal cost for the members hired on or after January 1, 2015 under the PEPRA benefit formula is lower than the normal cost for the non-PEPRA membership, which contributed to an overall decrease in the employer normal cost rate of 0.83% of payroll.

SECTION I – EXECUTIVE SUMMARY

The net impact on the contribution rate from changes in demographics was a decrease of 1.38% of payroll.

- Overall payroll growth was less than expected.

  Lower than expected growth in the projected payroll increased the contribution rate by 0.39% of pay, since it results in the Plan's Unfunded Actuarial Liability and administrative expenses being spread over a smaller payroll base.

- Contributions exceeded expectations.

  Actual contributions were greater than expected employer and member contributions, which resulted in a decrease in the contribution rate by 0.13%.

- Assumptions were changed.

  The assumed rate of return and inflation assumption were changed by the Boards from 7.50% and 3.15%, respectively, to 7.25% and 3.00%, causing an increase in cost of 1.60% of payroll.

  However, the Board elected to phase-in the impact of the assumption change over a three-year period – therefore only 0.53% of the increase was included in the phase-in contribution rate FYE 2019.

The Total impact on employer Plan cost is an increase of 0.08%, prior to the phase-in.

Table I-3 summarizes the impact on Plan cost incorporating of phasing in the 2017 assumption changes over three years.

Table I-3
IBEW Employer Contribution Reconciliation - Projected 3-Year Phase In

Item	Full Contribution	Phased Contribution
FYE 2019 Total Employer Contribution Rate	26.09%	25.03%
FYE 2020 Total Employer Contribution Rate	25.97%	25.44%
FYE 2021 Total Employer Contribution Rate	26.26%	26.37%
FYE 2022 Total Employer Contribution Rate	26.14%	26.32%

The net impact on the contribution rate due to assumption changes adopted by the Board, effective July 1, 2017, was an increase of 1.60%. The Board chose to phase in this increase over three years, or approximately 0.53% annually. This results in a FYE 2019 Net Employer Contribution Rate of 25.03%, based on an original rate of 26.09% minus the 1.06% phase-in.

SECTION I – EXECUTIVE SUMMARY

Table I-4 shows the ratio of assets to active member payroll for the Plan.

Table I-4
IBEW Asset to Payroll Ratio as of June 30, 2017

Active Member Payroll	12,364,134
Assets (Market Value)	54,085,119
Ratio of Assets to Payroll	4.37
Ratio with 100% Funding	5.90

One of the most important measures of a plan's risk is the ratio of plan assets to payroll. The table above shows the Plan's assets as a percentage of active member payroll.

This ratio indicates the sensitivity of the plan to the returns earned on plan assets. We note in the table that plan assets currently are over four times covered payroll for the Plan; as funding improves and the Plan reaches 100% funding, the ratio of asset to payroll will increase to nearly six times payroll, perhaps higher depending on the Plan's future demographic makeup. Although, both of these ratios are lower than those of many other public plans, the increase in the asset to payroll ratio expected to accompany an improvement in the Plan's funding still represents an increase in the volatility of the contributions.

To appreciate the impact of the ratio of assets to payroll on plan cost, consider the situation for a new plan with almost no assets. Even if the assets suffer a bad year of investment returns, the impact on the plan cost is nil, because the assets are so small.

On the other hand, consider the situation for the Plan. Suppose the Plan's assets lose 10% of their value in a year. Since they were assumed to earn 7.25%, there is an actuarial loss of 17.25% of plan assets. Based on the current ratio of asset to payroll (437%), that means the loss in assets is about 75% of active payroll (437% of the 17.25% loss). There is only one source of funding to make up for this loss: contributions. Consequently, barring future offsetting investment gains, the employer has to make up the asset loss in future contributions. In this example of a one-year loss of 10%, this shortfall would eventually require an additional amortization payment in the vicinity of 6.8% of payroll, amortized over 15 years.

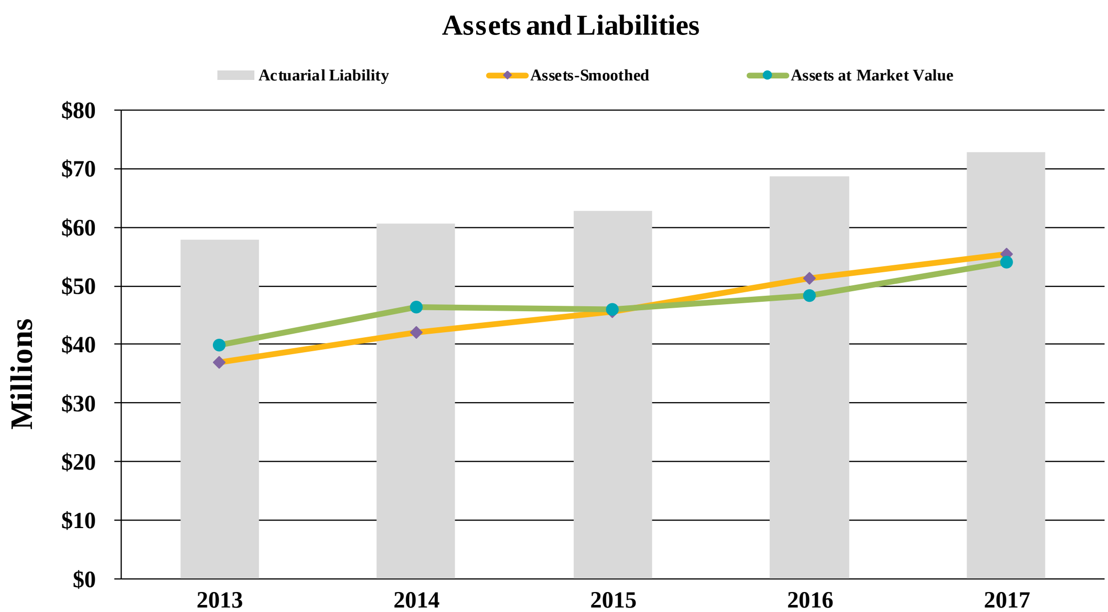
Furthermore, consider the impact of a one-year loss of 10% if the plan is 100% funded. Based on the ratio of asset to payroll at 100% funding (590%), the asset loss would be about 102% of active payroll (590% of the 17.25% loss). In this example, the shortfall could require an additional amortization payment of approximately 9.2% of payroll, amortized over 15 years.

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 more 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 in the chart is the ratio of the Actuarial Value of Assets to the Actuarial Liability (the funded ratio). The funded ratio has increased from 63.9% in 2013 to 76.2% in 2017, primarily as a result of the recovery in the investment markets and contributions made to the plan. Prior to 2013, the valuation reports did not report a separate funded ratio or unfunded liability for the ATU/IBEW plans.

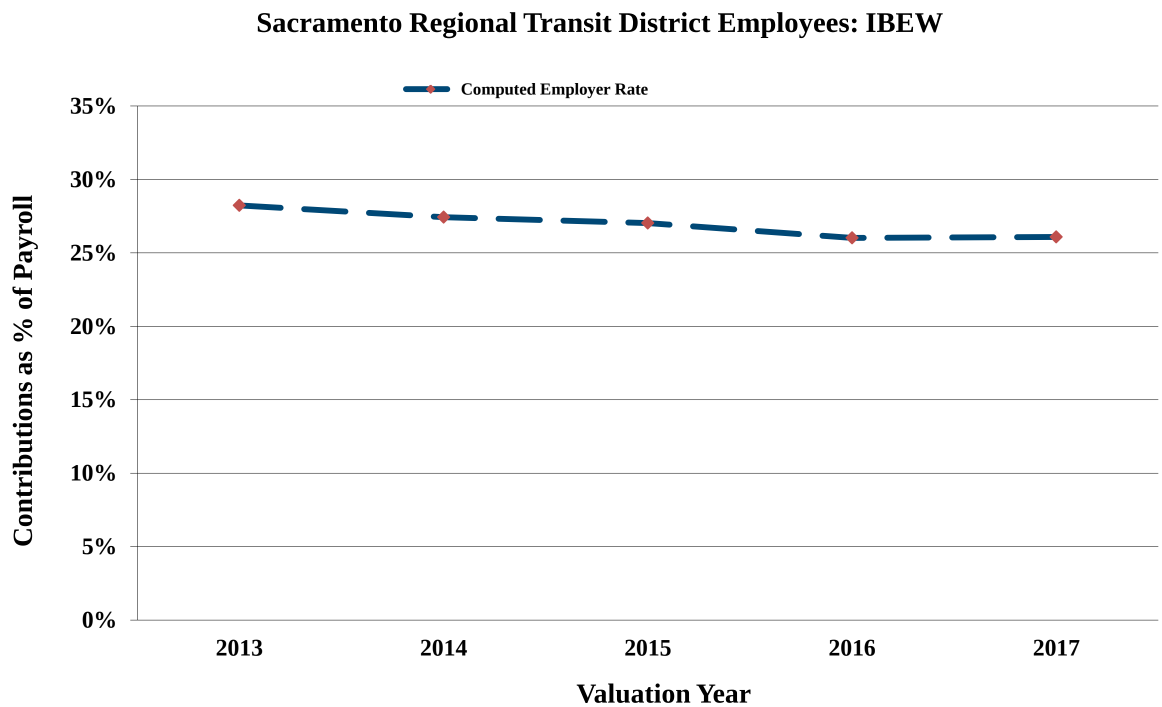


Valuation Year	2013	2014	2015	2016	2017
AVA Funded Ratio	63.9%	69.3%	72.5%	74.6%	76.2%
UAL (Millions)	$ 20.9	$ 18.6	$ 17.3	$ 17.5	$ 17.4

SECTION I – EXECUTIVE SUMMARY

Contribution Trends

In the chart, we present the historical trends for the Plan's actuarially determined contribution rates (excluding the impact of any phase-in of assumption changes.) Contribution rates have declined slightly over the past few years, as investment gains have been partially offset by subsequent losses and changes to the assumptions. Contribution rates slightly increased this year due to the assumption change but this was largely offset by the members hired on or after January 1, 2015 continuing to make contributions and receiving lower benefits. Prior to 2013, the valuation reports did not include a separate contribution rate for the ATU/IBEW plans.



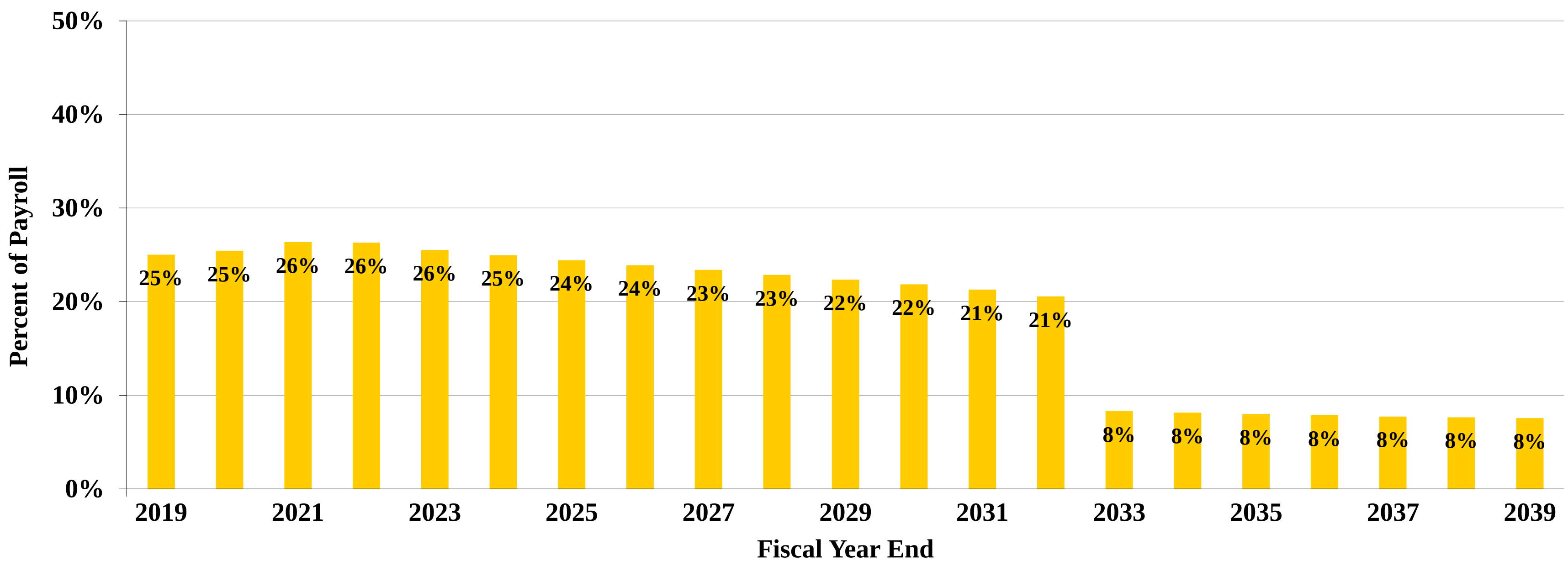
Gains and Losses

Future valuation reports will include a historical analysis of the experience gains and losses applicable to the IBEW Plan, but as the current valuation is the first to break down the asset and liability gains and losses between the ATU and IBEW members, that analysis is not included in this report. See Table II-4 and III-2 for a discussion of the asset and liability changes for the current 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, 2017 valuation results in terms of benefit security (assets over liabilities) and contribution levels. All the projections in this section are based on the assumption that the Plan will exactly achieve the 7.25% assumption each year, which is clearly an impossibility. We have also assumed future salary increases of 3.00% per year.

Projection of Employer Contributions, 7.25% return each year



The contribution rate graph shows that the District's contributions are expected to remain relatively flat over the next few years. Costs are expected to increase slightly as the deferred asset losses are recognized and the assumption changes are phased in, but these increases will be offset by a decline in the employer-paid portion of the normal cost as the PEPRA membership increases. The employer contribution rate is expected to decline substantially in FYE 2032 once the current unfunded liability is fully amortized.

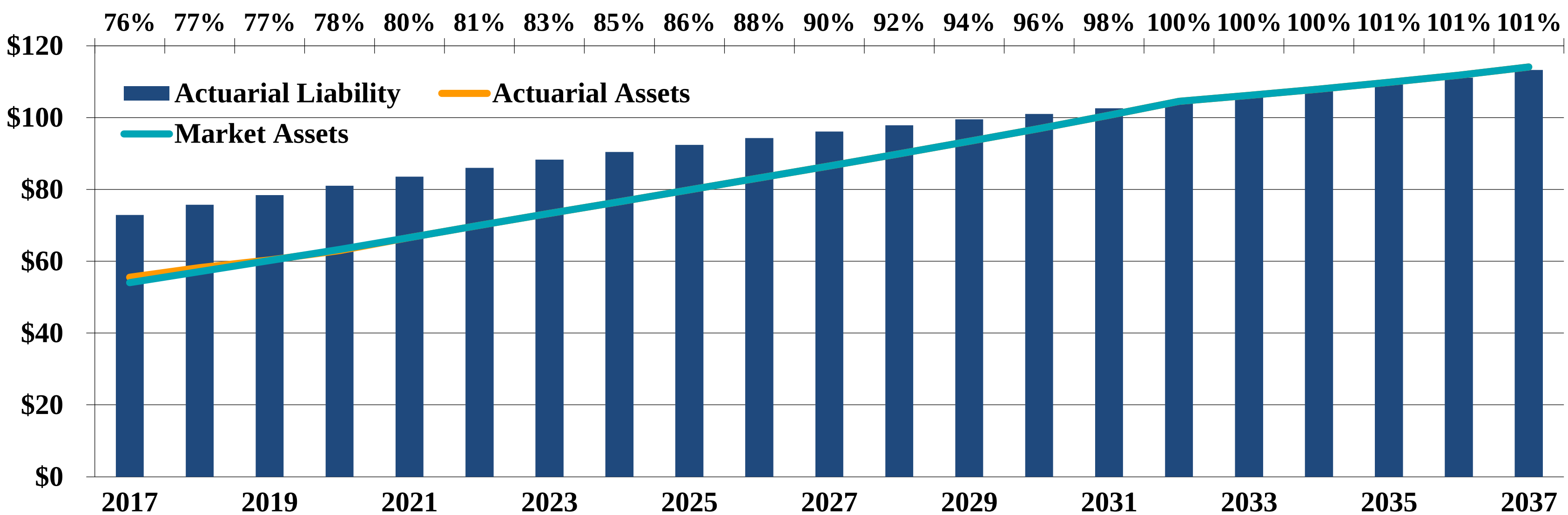
SECTION I – EXECUTIVE SUMMARY

The dollar actuarial cost will be approximately $3.2 million in 2018-2019, growing as pay increases to around $3.8 million in 2032-2033, then dropping significantly the following years as the unfunded liability amortization payment disappears, at which point the cost will be equal to the employer's share of the normal cost and administrative expenses.

Note that the graph on the previous page does not forecast any actuarial gains or losses or changes to the assumptions or funding policy. Even relatively modest losses relative to the 7.25% assumed return could push the employer contribution rate up to 30% of pay or higher over the next few years.

The following graph shows the projection of assets and liabilities assuming that assets will earn the 7.25% assumption each year during the projection period.

Projection of Assets and Liabilities, 7.25% return each year



The graph shows that the funded status is expected to increase over the next 15 years as the current unfunded liability is fully amortized, assuming the actuarial assumption is achieved. However, as above, it is the actual return on Plan assets that will determine the future funding status and contribution rate to the Plan.

SECTION II – 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, 2016 and June 30, 2017
- Statement of the **changes** in market values during the year
- Development of the **Actuarial Value of Assets**

SECTION II – 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 "snap-shot" 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.

ATU vs. IBEW Asset Split

Historical financial statements provided asset information based on a single combined trust for ATU and IBEW. This is the second year separate reports are being issued to ATU and IBEW.

The assets schedule shown in this valuation report only includes information for IBEW, however the calculation of the Actuarial Value of Assets relies on prior unrecognized gains and losses from FYE 2013 through 2016 for both ATU and IBEW combined. Therefore, prior unrecognized dollars are allocated as a pro-rata share to IBEW based on the Market Value of Assets as of July 1, 2017. Unrecognized dollars for the 2016-2017 year are based on IBEW Plan performance during the prior year.

SECTION II – ASSETS

Table II-1 discloses and compares each component of the market asset value as of June 30, 2017.

Table II-1
IBEW Statement of Assets at Market Value
June 30,

Investments		**2017**
Cash and Cash Equivalents	$	978,186
Equity Securities		35,645,247
Fixed Income Securities		19,661,325
Total Investments		56,284,758
Receivables		
Securities Sold	$	833,196
Interest and Dividends		87,591
Other Receivable		11,512
Total Receivables		932,299
Payables		
Accounts Payable	$	(139,592)
Benefits Payable		0
Other Payable		(2,992,346)
Total Payables		(3,131,938)
Market Value of Assets	**$**	**54,085,119**

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 II-2 shows the components of a change in the Market Value of Assets during 2017.

Table II-2
IBEW Changes in Market Values

		2017
Contributions		
Employer's Contribution	$	3,315,379
Members' Contributions		39,287
Total Contributions		3,354,666
Investment Income		
Interest & Dividends	$	707,950
Realized & Unrealized Gain/(Loss)		4,831,699
Other Investment Income		0
Investment Expenses		(207,237)
Total Investment Income		5,332,412
Disbursments		
Benefit Payments	$	(3,281,167)
Expenses		(239,370)
Transfer from (to) Salaried Plan		0
Adjustment to prior year expense		0
Total Disbursments		(3,520,537)
Net increase (Decrease)	$	5,166,541
Net Assets Held in Trust for Benefits		
Beginning of Year	$	48,918,578
End of Year	$	54,085,119
Approximate Return		10.92%
Administrative Expenses as a Percentage of Mean Assets		0.44%

Actuarial Value of Assets (AVA)

The Actuarial Value of Assets represents a "smoothed" value developed by the actuary to reduce the volatile results which 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. Prior unrecognized combined ATU and IBEW gains and losses are allocated as a pro-rata share to IBEW based on the Market Value of Assets as of July 1, 2017. Unrecognized dollars for the 2016-2017 year are based on IBEW Plan performance during the prior year.

Table II-3
Development of Actuarial Value of Assets
as of June 30, 2017

Year	(a) Total Contributions	(b) Total Disbursements	(c) Expected Return	(d) Actual Return	(e) = (d) – (c) Additional Earnings	(f) Not Recognized	(g) = (e) x (f) Unrecognized Earnings
2012-2013	8,706,914	(12,070,149)	10,425,285	18,575,841	8,150,556	0%	0
2013-2014	9,733,532	(13,281,708)	11,597,096	22,631,819	11,034,723	20%	2,206,945
2014-2015	10,347,302	(13,348,427)	12,928,279	4,609,506	(8,318,773)	40%	(3,327,509)
2015-2016	10,501,904	(13,471,521)	12,796,593	(1,121,417)	(13,918,010)	60%	(8,350,806)

1. Total Prior Unrecognized Dollars	(9,471,370)
2. Market Value of Assets as of June 30, 2017	
a) ATU Market Value	130,588,455
b) IBEW Market Value	54,085,119
3. Allocation of Prior Unrecognized Dollars	
a) ATU Portion: [(1) x (2a)/((2a) + (2b))]	(6,697,502)
b) IBEW Portion: [(1) x (2b)/((2a) + (2b))]	(2,773,868)

ATU Calculation of Actuarial Value of Assets

Year	(a) Total Contributions	(b) Total Disbursements	(c) Expected Return	(d) Actual Return	(e) = (d) – (c) Additional Earnings	(f) Not Recognized	(g) = (e) x (f) Unrecognized Earnings
2016-2017	8,155,830	(11,083,804)	8,822,434	14,419,987	5,597,553	80%	4,478,042

4. ATU Unrecognized Dollars	4,478,042
5. ATU Actuarial Value of Assets as of June 30, 2017: [(2a) - (3a) - (4)]	132,807,915
6. Ratio of Actuarial Value to Market Value: [(5) ÷ (2a)]	101.7%

IBEW Calculation of Actuarial Value of Assets

Year	(a) Total Contributions	(b) Total Disbursements	(c) Expected Return	(d) Actual Return	(e) = (d) – (c) Additional Earnings	(f) Not Recognized	(g) = (e) x (f) Unrecognized Earnings
2016-2017	3,354,666	(3,520,537)	3,662,673	5,332,412	1,669,739	80%	1,335,791

7. IBEW Unrecognized Dollars	1,335,791
8. IBEW Actuarial Value of Assets as of June 30, 2017: [(2b) - (3b) - (7)]	55,523,196
9. Ratio of Actuarial Value to Market Value: [(8) ÷ (2b)]	102.7%

SECTION II – 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 7.50% assumption.

Table II-4
IBEW Asset Gain/(Loss)

	Market Value	Actuarial Value
July 1, 2016 value	**$ 48,918,578**	**$ 51,287,813**
Employer Contributions	3,315,379	3,315,379
Employee Contributions	39,287	39,287
Benefit Payments and Expenses	(3,520,537)	(3,520,537)
Expected Investment Earnings (7.50%)	3,662,673	3,840,366
Expected Value June 30, 2017	**$ 52,415,380**	**$ 54,962,308**
Investment Gain / (Loss)	1,669,739	560,888
July 1, 2017 value	**54,085,119**	**$ 55,523,196**
Return	10.92%	8.60%

SECTION III – LIABILITIES

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

- **Disclosure** of Plan liabilities at July 1, 2016 and July 1, 2017
- 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 III-1 below discloses each of these liabilities for the current and prior valuations.

Table III-1
IBEW Liabilities/Net (Surplus)/Unfunded

		July 1, 2016		July 1, 2017
Present Value of Future Benefits				
Active Participant Benefits	$	39,390,133	$	40,867,615
Retiree and Inactive Benefits		40,838,535		43,894,100
Present Value of Future Benefits (PVB)	**$**	**80,228,668**	**$**	**84,761,715**
Actuarial Liability				
Present Value of Future Benefits (PVB)	$	80,228,668	$	84,761,715
Present Value of Future Normal Costs (PVFNC)		11,475,246		11,869,820
Actuarial Liability (AL = PVB – PVFNC)	**$**	**68,753,422**	**$**	**72,891,895**
Actuarial Value of Assets (AVA)		51,287,813		55,523,196
Net (Surplus)/Unfunded (AL – AVA)	**$**	**17,465,609**	**$**	**17,368,699**

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

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

Table III-2
IBEW Changes in Actuarial Liability

Actuarial Liability at July 1, 2016	$	68,753,422
Actuarial Liability at July 1, 2017	$	72,891,895
Liability Increase (Decrease)		4,138,473
Change due to:		
Actuarial Methods / Software Changes	$	0
Assumption Change		1,628,239
Plan Change		0
Accrual of Benefits		1,490,526
Actual Benefit Payments		(3,281,167)
Interest		5,088,347
Actuarial (Gain)/Loss		(787,472)

SECTION III – LIABILITIES

Table III-3
IBEW Development of Actuarial Gain / (Loss)

1. Unfunded Actuarial Liability at Start of Year (not less than zero)	$	17,465,609
2. Employer Normal Cost at Middle of Year		1,490,526
3. Interest on 1. and 2. to End of Year		1,364,805
4. Contributions and Administrative Expenses in Prior Year		3,115,296
5. Interest on 4. to End of Year		116,824
6. Change in Unfunded Actuarial Liability Due to Changes in Actuarial Methods		0
7. Change in Unfunded Actuarial Liability Due to Changes in Assumptions		1,628,239
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.]	$	18,717,059
10. Actual Unfunded Actuarial Liability at End of Year (not less than zero)		17,368,699
11. Actuarial Gain / (Loss) [9. – 10.]	$	1,348,360

SECTION IV – 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 as a percentage of pay and the Unfunded Actuarial Liability is the **Entry Age to Final Decrement (EAFD)** cost method.

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. Normal cost contributions are assumed to be made throughout the year, or on average mid-year, with the dollar amount of the normal cost equal to the normal cost rate multiplied by the projected payroll. The actuarial liability is the portion of the present value of all future benefits for each member not expected to be covered by the future normal cost payments.

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 15-year amortization of the remainder of the Unfunded Actuarial Liability as of July 1, 2017, again assuming mid-year payment to reflect the fact that employer contributions are made throughout the year.

Beginning with the June 30, 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 hired on or after January 1, 2015 will contribute between 1.5% and 4.5% of Compensation to the Plan through April 1, 2018 and then will contribute 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 changed by more than 1% of payroll. For the current year, the contribution rate for PEPRA members was 5.25% of payroll (1/2 of 10.47%, rounded to the nearest quarter). The normal cost rate for PEPRA members as of July 1, 2017 valuation is 11.20%, and since the increase is less than 1%, the rate for the following fiscal year remains at 5.25%. Table IV-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. Tables IV-1 and IV-2 also present the current employer contribution before and after the phase in of the assumption changes adopted by the Board.

SECTION IV – CONTRIBUTIONS

Table IV-I
IBEW Development of Employer Contribution Amount

Valuation Date		July 1, 2016		July 1, 2017
1. Entry Age Normal Cost (Middle of Year)				
a. Termination	$	158,630	$	166,582
b. Retirement		1,153,723		1,191,369
c. Disability		136,073		141,355
d. Death		72,076		73,816
e. Refunds		3,128		4,962
f. Total Normal Cost (a) + (b) + (c) + (d) + (e)	$	1,523,630	$	1,578,084
2. Entry Age Actuarial Liability				
Active Members				
a. Termination	$	(253,663)	$	(280,779)
b. Retirement		25,368,554		26,416,429
c. Disability		1,803,587		1,848,797
d. Death		995,822		1,012,927
e. Refunds		588		421
f. Total Active Liability: (a) + (b) + (c) + (d) + (e)	$	27,914,888	$	28,997,795
Inactive Members				
g. Termination	$	1,017,145	$	1,357,587
h. Retirement		30,523,564		33,390,814
i. Disability		2,022,592		2,015,244
j. Death		1,231,962		1,236,660
k. Transfer†		6,043,272		5,893,796
l. Total Inactive Liability: (g) + (h) + (i)+ (j) + (k)	$	40,838,535	$	43,894,101
m. Total Entry Age Actuarial Liability: (2f) + (2l)	$	68,753,423	$	72,891,896
3. Actuarial Value of Assets	$	51,287,813	$	55,523,196
4. Unfunded Actuarial Liability: (2m) - (3)	$	17,465,610	$	17,368,700
5. Unfunded Actuarial Liability Amortization at Middle of Year as a Level Percentage of Payroll (16/15 Years Remaining)	$	1,515,192	$	1,567,432
6. Expected Administrative Expenses	$	120,876	$	123,426
7. Expected Member Contributions	$	(33,103)	$	(113,276)
8. Employer Contribution Payable in Monthly Installments: (1f) + (5) + (6) + (7)	$	3,126,595	$	3,155,666
9. Covered Payroll (Normal Cost)	$	11,696,166	$	11,798,693
10. Covered Payroll (UAL Amort and Expenses)		12,333,541		12,364,134
11. Employer Contribution as a Percent of Covered Payroll: [(1) + (7)] / (9) + [(5) + (6)] / (10)		26.02%		26.09%
12. Employer Phased-in Contribution as a Percent of Covered Payroll		25.31%		25.03% *

†Current non-IBEW active members with prior IBEW service; previously allocated in active liability.

* The District will begin paying this percentage of payroll July 1, 2018.

SECTION IV – CONTRIBUTIONS

Table IV-2
IBEW PEPRA / Non-PEPRA Summary

		Non-PEPRA		PEPRA		Total
1. Entry Age Normal Cost (Middle of Year)	$	1,344,553	$	233,531	$	1,578,084
2. Covered Payroll (Normal Cost)	$	9,641,052	$	2,157,641	$	11,798,693
3. Normal Cost as a Percent of Covered Payroll: (1) / (2)		13.95%		10.82%		13.38%
4. Expected Employee Contributions as a Percent of Covered Payroll		0.00%		(5.25%)		(0.96%)
5. Entry Age Actuarial Liability	$	72,617,748	$	274,148	$	72,891,896
6. Actuarial Value of Assets					$	55,523,196
7. Unfunded Actuarial Liability: (5) - (6)					$	17,368,700
8. Unfunded Actuarial Liability Amortization at Middle of Year as a Level Percentage of Payroll (15 Years Remaining)	$	1,279,219	$	288,213	$	1,567,432
9. Expected Administrative Expenses	$	100,696	$	22,730	$	123,426
10. Expected Employee Contributions	$	-	$	(113,276)	$	(113,276)
11. Total Contribution Payable in Monthly Installments: (1) + (8) + (9) + (10)	$	2,724,467	$	431,199	$	3,155,666
12. Covered Payroll (UAL Amort and Expenses)	$	10,091,159	$	2,272,975	$	12,364,134
13. Total Contribution as a Percent of Covered Payroll: [(1) + (10)] / (2) + [(8) + (9)] / (12)		27.63%		19.25%		26.09%

* The District will begin paying this percentage of payroll July 1, 2018.

APPENDIX A - MEMBERSHIP INFORMATION

The data for this valuation was provided by the Sacramento Regional District Transit staff as of July 1, 2017.

Summary of IBEW Participant Data as of

Active Participants	July 1, 2016	July 1, 2017
Number	206	197
Number Vested	137	127
Average Age	49.6	49.5
Average Service	11.0	11.0
Average Pay	$57,084	$59,811
Retired		
Number	117	129
Average Age	66.5	67.0
Average Annual Benefit	$26,632	$26,261
Beneficiaries		
Number	17	17
Average Age	67.6	70.0
Average Annual Benefit	$10,216	$9,866
Disabled		
Number	15	14
Average Age	64.2	64.1
Average Annual Benefit	$16,053	$16,912
Term Vested		
Number	19	22
Average Age	47.2	46.5
Average Annual Benefit	$7,107	$8,864
Transferred		
Number	37	35
Average Age	52.1	53.0
Average Annual Benefit	$18,520	$18,592
Term Non-Vested / Due Refund		
Number	0	5
Average Age	0.0	34.9
Average Balance	$0	$1,174

Data pertaining to active and inactive Members and their beneficiaries as of the valuation date was supplied by the Plan Administrator on electronic media.

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*	Total
July 1, 2016	206	37	0	19	15	117	13	407
New Entrants	17	0	0	0	0	0	0	17
Rehires	0	0	0	0	0	0	0	0
Disabilities	0	0	0	0	0	0	0	0
Retirements	(12)	(3)	0	(1)	0	16	0	0
Vested Terminations	(3)	(1)	0	4	0	0	0	0
Died, With Beneficiaries' Benefit Payable,	0	0	0	0	0	(1)	1	0
Transfers	(2)	2	0	0	0	0	0	0
Died, Without Beneficiary, and Other	(5)	0	5	0	(1)	(3)	0	(4)
Transfer Retirement	0	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	0
Funds Transferred	0	0	0	0	0	0	0	0
Refund of Contributions	(4)	0	0	0	0	0	0	(4)
Data Corrections	0	0	0	0	0	0	0	0
July 1, 2017	**197**	**35**	**5**	**22**	**14**	**129**	**14**	**416**

APPENDIX A - MEMBERSHIP INFORMATION

Age / Service Distribution Of IBEW Active Participants
As of July 1, 2017

	Service												
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	3	0	0	0	0	0	0	0	0	0	0	0	3
25 to 29	4	4	0	0	1	1	0	0	0	0	0	0	10
30 to 34	2	1	2	1	2	5	0	0	0	0	0	0	13
35 to 39	3	7	0	4	2	0	3	0	0	0	0	0	19
40 to 44	1	2	1	0	3	4	6	1	0	0	0	0	18
45 to 49	2	1	1	4	3	3	8	3	0	1	0	0	26
50 to 54	5	0	2	0	1	6	12	5	4	4	2	0	41
55 to 59	2	0	2	0	2	1	10	9	3	4	1	1	35
60 to 64	0	0	0	2	0	0	8	6	1	5	0	0	22
65 to 69	0	0	0	0	0	2	3	2	0	0	1	1	9
70 & up	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	22	15	8	11	14	22	50	27	8	14	4	2	197

Average Age = 49.5 Average Service = 11.0

APPENDIX A - MEMBERSHIP INFORMATION

Payroll Distribution Of IBEW Active Participants
As of July 1, 2017

	Service												
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	37,333	0	0	0	0	0	0	0	0	0	0	0	37,333
25 to 29	56,526	54,275	0	0	21,281	50,331	0	0	0	0	0	0	51,482
30 to 34	38,180	42,330	63,367	65,848	44,803	59,909	0	0	0	0	0	0	53,879
35 to 39	56,488	45,678	0	46,939	41,087	0	51,855	0	0	0	0	0	48,142
40 to 44	43,999	43,016	66,894	0	51,206	64,432	50,361	64,333	0	0	0	0	54,154
45 to 49	54,602	64,456	63,430	52,085	44,335	76,843	58,012	70,260	0	57,933	0	0	59,299
50 to 54	52,495	0	43,409	0	49,210	62,531	62,188	72,533	68,683	66,816	65,942	0	62,354
55 to 59	39,687	0	56,401	0	65,835	61,766	60,428	71,705	56,763	68,175	65,580	68,081	63,197
60 to 64	0	0	0	53,634	0	0	71,862	66,800	69,758	80,823	0	0	70,765
65 to 69	0	0	0	0	0	88,358	50,460	85,309	0	0	49,545	72,194	68,939
70 & up	0	0	0	0	0	0	0	78,630	0	0	0	0	78,630
Total	49,044	48,644	57,085	51,747	47,183	65,991	59,973	71,599	64,348	71,572	61,752	70,137	59,811

Average Salary = $ 59,811

APPENDIX A - MEMBERSHIP INFORMATION

Service Retired Participants and Beneficiaries

Age	Number	Average Monthly Benefit
35-39	0	$0
40-44	0	$0
45-49	0	$0
50-54	2	$1,474
55-59	12	$1,293
60-64	48	$2,135
65-69	39	$2,675
70-74	26	$1,827
75-79	5	$1,045
80-84	5	$2,415
85-89	2	$1,668
90-94	4	$385
95+	0	$0
Total	143	$2,062

Disabled Participants

Age	Number	Average Monthly Benefit
30-34	0	$0
35-39	0	$0
40-44	0	$0
45-49	0	$0
50-54	1	$1,107
55-59	2	$1,817
60-64	5	$1,432
65-69	2	$1,653
70-74	4	$1,131
75-79	0	$0
80-84	0	$0
85-89	0	$0
90+	0	$0
All Ages	14	$1,409

Terminated Vested Participants

Age	Number	Average Monthly Benefit
25-29	0	$0
30-34	1	$301
35-39	4	$589
40-44	5	$1,012
45-49	3	$681
50-54	8	$755
55-59	1	$454
60-64	0	$0
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	22	$739

Tranferred Participants

Age	Number	Average Monthly Benefit
25-29	0	$0
30-34	0	$0
35-39	0	$0
40-44	4	$689
45-49	8	$1,141
50-54	11	$1,294
55-59	6	$1,863
60-64	5	$2,925
65-69	1	$2,304
70-74	0	$0
75-79	0	$0
80-84	0	$0
85-89	0	$0
90+	0	$0
All Ages	35	$1,549

APPENDIX B – STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the actuarial valuation as of July 1, 2017 are:

Actuarial Method

As of July 1, 2012, the Normal Cost as a percentage of pay (and resulting Actuarial Liability) is determined as a single result for each individual: with the Normal Cost percentage of pay equal to the total Projected Value of Benefits at Entry Age, divided by the Present Value of Future Salary at Entry Age. This method is known as the Entry Age to Final Decrement.

The excess of the Actuarial Liability over Plan assets is the Unfunded Actuarial Liability. Prior to July 1, 2007, this liability was amortized as a level percentage of payroll over the remainder of a 30-year period beginning January 1, 1997. As of July 1, 2007, the amortization period has been reset to a new 30-year period, decreasing two years with each valuation until a 20-year amortization period has been achieved. The amortization period as of July 1, 2017 is 15 years. Amounts may be added to or subtracted from the Unfunded Actuarial Liability due to Plan amendments, changes in actuarial assumptions, and actuarial gains and losses.

The total Plan cost is the sum of the Normal Cost, the amortization of the Unfunded Actuarial Liability, and the expected Administrative Expenses. The Board chose to phase in the increase in the contribution rate due to the assumption changes effective July 1, 2017 over three years, or approximately 0.53% annually.

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.

Actuarial Assumptions

The actuarial assumptions were developed based on an Experience Study covering the period from July 1, 2011 through June 30, 2015, except for the economic assumptions, which were updated by the Board for the current valuation as a result of an analysis completed in 2018.

1. **Rate of Return**

   The annual rate of return on all Plan assets is assumed to be 7.25% for the current valuation net of investment, but not administrative, expenses. For the prior valuation, this was assumed to be 7.50% net of investment, but not administrative, expenses.

2. **Cost of Living**

   The cost of living as measured by the Consumer Price Index (CPI) is assumed to increase at the rate of 3.00% per year. This assumption was 3.15% in the prior valuation.

APPENDIX B – STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

3. Plan Expenses

Administrative expenses are assumed to be $123,426 for Fiscal Year 2018-19, and are added directly to the actuarial cost calculation. The expenses are assumed to increase with CPI in future years.

4. Increases in Pay

Assumed pay increases for active Participants consist of increases due to inflation (cost of living adjustments) and those due to longevity and promotion.

IBEW participants, the assumed rates are 5.0% for the first six years, and 0.25% thereafter.

In addition, annual adjustments in pay due to inflation will equal the CPI, for an additional annual increase of 3.00% for the current valuation.

5. Family Composition

85% of participants are assumed to be married. Male spouses of active employees are assumed to be three years older than their wives. This assumption is also applied to retired members with a joint and survivor benefit where the data is missing the beneficiary date of birth.

6. Terminal Pay Load

A load of 5.0% is applied to the retirement benefits to account for conversions of unused sick leave and other terminal pay increases.

7. Employment Status

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

APPENDIX B – STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

8. Rates of Termination

Rates of termination for all Participants from causes other than death, disability, and service retirement are based on the Participant's years of service. Representative rates are shown in the following table:

Rates of Termination*	
Years of Service	IBEW Rates
< 1	8.00%
1-3	8.00%
4	8.00%
5-9	5.00%
10-14	2.75%
15-19	0.50%
20-24	0.50%
25+	0.00%

* No terminations are assumed to occur after eligibility for retirement.

9. 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	0.30%	0.00%
27	0.40%	0.30%
32	0.50%	0.39%
37	0.60%	0.56%
42	0.70%	0.86%
47	0.80%	1.34%
52	0.90%	2.35%
57	1.00%	4.09%
62	1.10%	5.75%

Rates are applied after the Participant becomes eligible to receive a disability benefit. Disabled Participants are assumed not to return to active service.

APPENDIX B – STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

10. Rates of Mortality for Healthy Lives

Rates of mortality for active Participants are given by the Retired Pensioners (RP) 2014 Male and Female Employee Mortality Tables projected with Scale MP-2015 published by the Society of Actuaries, with the base tables adjusted 115% for males and 130% for females.

11. Rates of Mortality for Disabled Retirees

Rates of mortality for all disabled Participants are given by Retired Pensioners (RP) 2014 Male and Female Disabled Retiree Mortality Tables projected with Scale MP-2015 published by the Society of Actuaries, with the base tables adjusted 120% for males.

12. Retired Member and Beneficiary Mortality

Rates of mortality for retired Participants and their beneficiaries are given by the Retired Pensioners (RP) 2014 Combined Healthy Blue Collar Male and Female Tables projected with Scale MP-2015 published by the Society of Actuaries, with the base tables adjusted 115% for males and 130% for females.

13. Rates of Retirement

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

Rates of Retirement				
IBEW				
	Years of Service			
Age	5-9	10-24	25-29	30+
50-54	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%

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

14. Changes Since Last Valuation

The assumed rates of return and inflation assumption were changed from 7.50% and 3.15%, respectively, to 7.25% and 3.00%.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

A. 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 is limited to an amount not to exceed a specific capped amount, originally tied to the Social Security Taxable Wage Base in 2013, and subsequently adjusted annually by the increase in the CPI-U.

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.

B. 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 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.

C. 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

APPENDIX C – SUMMARY OF PLAN PROVISIONS

IBEW Participant is eligible for normal service 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.

D. 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

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Earnings and service accrued through the date of 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.

E. 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.

F. 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.

G. 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. For ATU members who transfer on or after August 30, 2011, the multiplier payable by the ATU Plan will be limited to the multiplier applicable at the date of transfer.

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.

H. Funding

IBEW members hired or rehired by the District on or after January 1, 2015 will contribute 1.5% of pay after one year of service, 3.0% of pay after two years of service, 4.5% of pay after three years of service, and 50% of normal cost up to 5% of pay after four years of service. Effective April 1, 2018, IBEW members hired or rehired by the District on or after January 1, 2015 will contribute half of the normal cost of the PEPRA Plan rounded to the nearest 0.25%. Once established, contribution rate for New Members will be adjusted to reflect a change in the normal cost rate, but only if the normal cost rate changed by more than

APPENDIX C – SUMMARY OF PLAN PROVISIONS

1% of payroll. For the July 1, 2017 valuation, the initial contribution rate for PEPRA members is 5.25% of payroll.

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

I. 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 which 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.

APPENDIX D – GLOSSARY

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.

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 which 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.

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