



# **Retirement Plan for Sacramento Regional Transit District Employees ATU Local 256 and IBEW Local 1245**

## **Actuarial Valuation Report as of July 1, 2015**

**Produced by Cheiron**

**April 2016**

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April 15, 2016

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

Dear Members of the Boards:

At your request, we have conducted an actuarial valuation of the Retirement Plan for Sacramento Regional Transit District Employees (ATU/IBEW Plan) (SacRT, the Fund, the Plan) as of July 1, 2015. 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 Boards 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 Boards 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, EA, MAAA  
Consulting Actuary

## FOREWORD

Cheiron has performed the actuarial valuation of the Retirement Plan for Sacramento Regional Transit District Employees (ATU/IBEW Plan) as of July 1, 2015. 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 2016-2017.

In prior years, the valuation report included information required by the Governmental Accounting Standards Board (GASB). The information required under the new GASB Statements (Nos. 67 and 68) is now included in a separate report, with the report for the Fiscal Year Ending June 30, 2015 provided to the Boards in September, 2015.

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 have been a number of changes in plan provisions for participants hired on or after January 1, 2015.

A summary of the assumptions and methods used in the current valuation is shown in Appendix B. There have been changes in assumptions based on the experience study completed March 2016. There have been no changes in methods since the prior valuation.

## SECTION I – EXECUTIVE SUMMARY

### B. Key Findings of this Valuation

The key results of the July 1, 2015 actuarial valuation are as follows:

- The actuarially determined employer contribution rate increased from 26.51% of payroll last year to 27.10% of payroll for 2015, reflecting a three-year phase-in of the impact of changes to the economic and demographic assumptions. Without the phase-in, the employer contribution rate would have increased to 28.59% of payroll.
- The Plan's funded ratio, the ratio of actuarial assets over actuarial liability, increased from 73.5% last year to 74.5% as of July 1, 2015. This increase was partly due to a small gain on the liabilities due to demographic changes (primarily pay increases lower than expected among returning members) and due to the rate of return on the actuarial value of assets being higher than the assumed return of 7.65%.

As a point of comparison, a funding ratio of 55.8% 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 an increase in the UAL from \$56,740,580 to \$58,381,669 as of July 1, 2015. This increase in UAL was primarily due to changes in the mortality assumptions adopted as of the most recent experience study and reduction in the discount rate from 7.65% to 7.50%.

During the year ending June 30, 2015, the return on Plan assets was 2.73% on a market value basis net of all expenses, as compared to the 7.65% assumption. This resulted in a market value loss on investments of \$8,318,773. 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 10.44% on the smoothed value of assets, an actuarial asset gain of \$4,344,643. The gain in the Actuarial Value of Assets reflected the continued recognition of past investment gains which offset the lower market return this year.

- The Plan experienced a gain on the actuarial liability of \$1,072,636, due primarily to lower than expected salary increases. Combining the liability and asset gains, the Plan experienced a total gain of \$5,417,279.
- The Plan experienced an increase in the liabilities of \$7,533,304 as a result of assumption changes adopted as part of the experience study. The changes with the biggest impact were those affecting the discount rate (lowering it from 7.65% to 7.50%) and the Plan's mortality assumptions.

**SECTION I – EXECUTIVE SUMMARY**

There were 43 new hires and rehires since July 1, 2014 but the total active population decreased. Total projected payroll decreased 0.09% from \$39,895,284 for 2014-2015 to \$39,858,375 for 2015-2016.

Below we present Table I-1 which summarizes all 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 have also presented the employer contribution rate both before and after the phase in of the effect of assumption changes (except for the change in administrative expenses, which was fully recognized).

<b>TABLE I-1</b>				
<b>Summary of Preliminary Principal Plan Results</b>				
<b>Valuation Date</b>	<b>July 1, 2014</b>	<b>July 1, 2015</b>	<b>% Change</b>	
<b><u>Participant Counts</u></b>				
Active Participants	708	692	-2.26%	
Participants Receiving a Benefit	549	572	4.19%	
Terminated Vested Participants	46	49	6.52%	
Transferred Participants	93	96	3.23%	
<b>Total</b>	<b>1,396</b>	<b>1,409</b>	<b>0.93%</b>	
Annual Pay of Active Members	\$ 39,895,284	\$ 39,858,375	-0.09%	
<b><u>Assets and Liabilities</u></b>				
Actuarial Liability (AL)	\$ 213,970,149	\$ 228,868,025	6.96%	
Actuarial Value of Assets (AVA)	157,229,569	170,486,356	8.43%	
Unfunded Actuarial Liability (UAL)	\$ 56,740,580	\$ 58,381,669	2.89%	
Funded Ratio (AVA)	73.5%	74.5%	1.37%	
Funded Ratio (MVA)	79.7%	75.2%	-5.63%	
Inactive Funded Ratio	55.8%	55.8%	0.05%	
<b><u>Contributions</u></b>				
Total Contribution (Beginning of Year)	\$ 9,946,763	\$ 10,701,210	7.58%	
Total Contribution Payable Monthly	\$ 10,320,216	\$ 11,095,251	7.51%	
Total Contribution as a Percentage of Payroll (before phase-in)	26.51%	28.59%	2.08%	
Total Contribution as a Percentage of Payroll (after phase-in)	N/A	27.10%		

**SECTION I – EXECUTIVE SUMMARY**

**C. Changes in Plan Cost**

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

Table I-2 Employer Contribution Reconciliation				
Item	Total	Normal Cost	UAL Amortization	Admin Expense
FYE 2016 Net Employer Contribution Rate	26.51%	14.54%	11.50%	0.47%
Change due to asset gain	-0.91%	0.00%	-0.91%	0.00%
Change due to demographic gains	-0.27%	-0.04%	-0.21%	-0.02%
Change due to amortization payroll	0.41%	0.00%	0.38%	0.03%
Change due to plan amendments	-0.09%	-0.08%	-0.01%	0.00%
Change due to new assumptions	<u>2.94%</u>	<u>0.98%</u>	<u>1.43%</u>	<u>0.53%</u>
FYE 2017 Net Employer Contribution Rate	28.59%	15.40%	12.18%	1.01%

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

- Asset experience produced an investment loss on a market basis and a gain on an actuarial basis.

The assets of the Plan returned 2.73% (net of investment expenses) on a market basis, lower than the assumed rate of 7.65%. The actuarial return on assets was 10.44%, higher than the assumed rate of 7.65%. This resulted in a decrease in the contribution rate by 0.91% of payroll.

The market value of assets is now higher than the actuarial value; there are approximately \$1.6 million in deferred asset gains.

- Demographic experience resulted in a gain in liabilities. Assumption changes adopted with the most recent experience study are expected to align demographic experience with actual experience.

The demographic experience of the Plan - rates of retirement, death, disability, and termination - caused a small reduction in cost which decreased the contribution rate by 0.27% of payroll. Although pay increases were lower than expected - which resulted in a gain on the liabilities - the unfunded liability is being amortized over a smaller payroll base, which offsets the impact on the cost as a percentage of payroll.



**SECTION I – EXECUTIVE SUMMARY**

- Assumptions were changed.

Demographic assumptions – rates of retirement, death, disability, and termination – as well as economic assumptions were updated to reflect the most recent experience study. The assumed rate of return was changed by the Boards from 7.65% to 7.50%. The changes to assumptions and discount rate resulted in an increase in cost of 2.94% of payroll.

However, the Board elected not to phase-in the impact of the changes in administrative expenses – since those expenses were previously paid directly by the District – therefore only 2.41% of the increase in contribution rate was included in the phase-in.

More details on the impact of each assumption change can be found in the materials related to the presentation at the January and March, 2016 meetings of the Boards.

The Total impact on employer Plan cost is an increase of 2.08%, prior to the phase-in.

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

Table I-3 Employer Contribution Reconciliation - Projected Phase In				
Item	Full Contribution	Phased Contribution	Interest	Total
FYE 2017 Net Employer Contribution Rate	28.59%	26.98%	0.12%	27.10%
FYE 2018 Net Employer Contribution Rate	28.43%	27.63%	0.06%	27.69%
FYE 2019 Net Employer Contribution Rate	27.78%	27.92%	0.00%	27.92%
FYE 2020 Net Employer Contribution Rate	27.47%	27.69%	0.00%	27.69%

The net impact on the contribution rate due to assumption changes adopted by the Boards, excluding the expense assumption is an increase of 2.41%. The Boards chose to phase in this increase over three years, or approximately 0.80% annually. This results in a FYE 2016 Net Employer Contribution Rate of 27.10, based on an original rate of 28.59% minus 1.61% phase-in, and then adjusted for interest on the contribution shortfall of 0.12% of pay.

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

TABLE I-4 Asset to Payroll Ratio as of June 30, 2015	
Active Member Payroll	39,858,375
Assets (Market Value)	172,106,054
Ratio of Assets to Payroll	4.32
Ratio with 100% Funding	5.74

## SECTION I – EXECUTIVE SUMMARY

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 over five 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 7.50%, there is an actuarial loss of 17.50% of plan assets. Based on the current ratio of asset to payroll (432%), that means the loss in assets is about 76% of active payroll (432% of the 17.50% 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 6.3% of payroll, amortized over 17 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 (574%), the asset loss would be about 100% of active payroll (574% of the 17.50% loss). In this example, the shortfall could require an additional amortization payment of approximately 8.4% of payroll, amortized over 17 years.

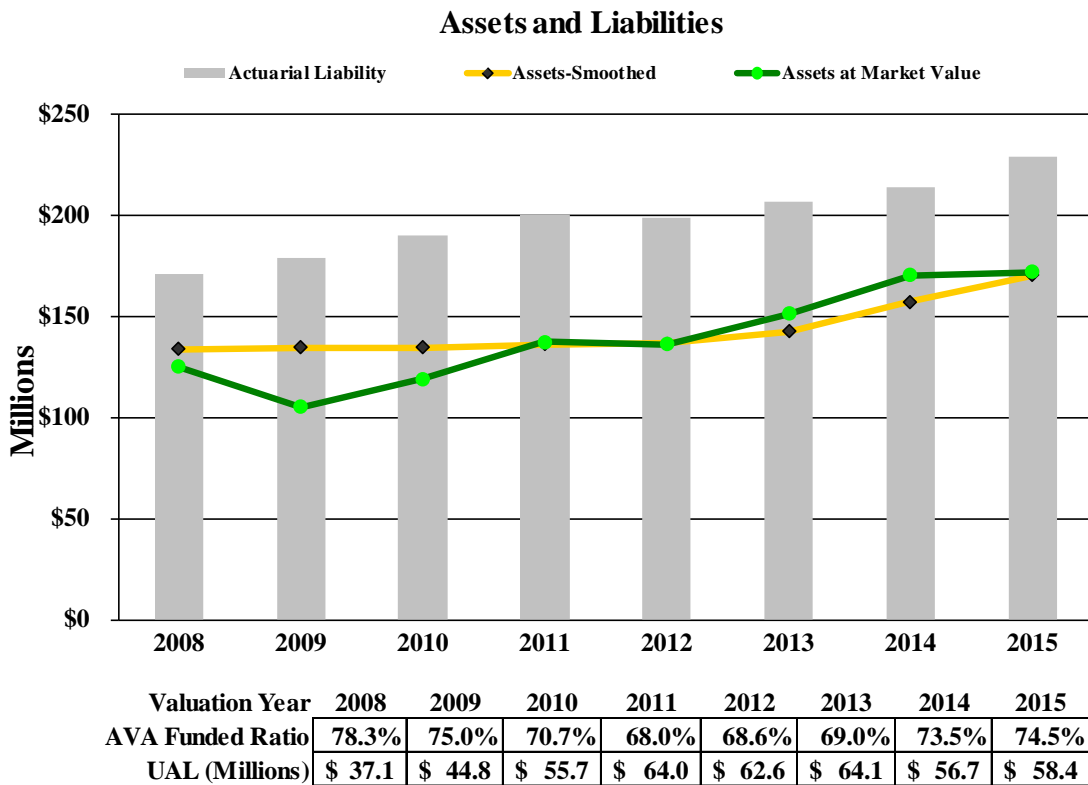
**SECTION I – EXECUTIVE SUMMARY**

**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**

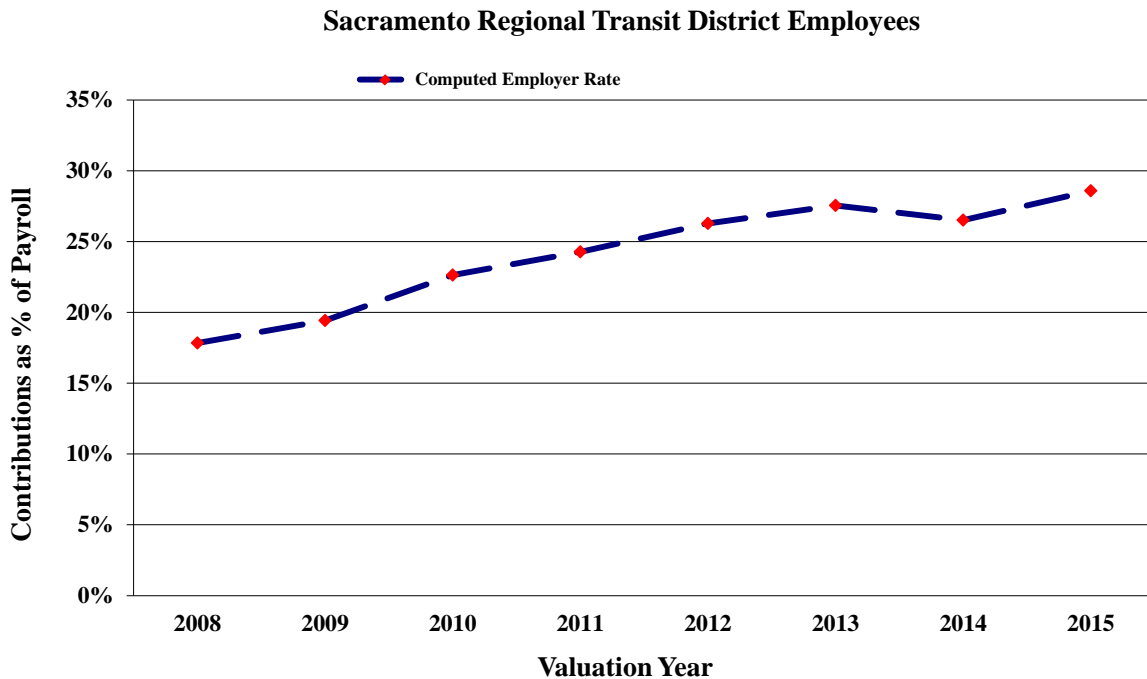
The chart below compares the Market Value of Assets (MVA) and Actuarial Value of Assets (AVA) to the Actuarial Liabilities. The percentage shown in the chart below is the ratio of the Actuarial Value of Assets to the Actuarial Liability (the funded ratio). The funded ratio has decreased from 78.3% in 2008 to 68.0% in 2011, and has increased since to 74.5% as of July 1, 2015, primarily as a result of the recovery in the investment markets.



## SECTION I – EXECUTIVE SUMMARY

### Contribution Trends

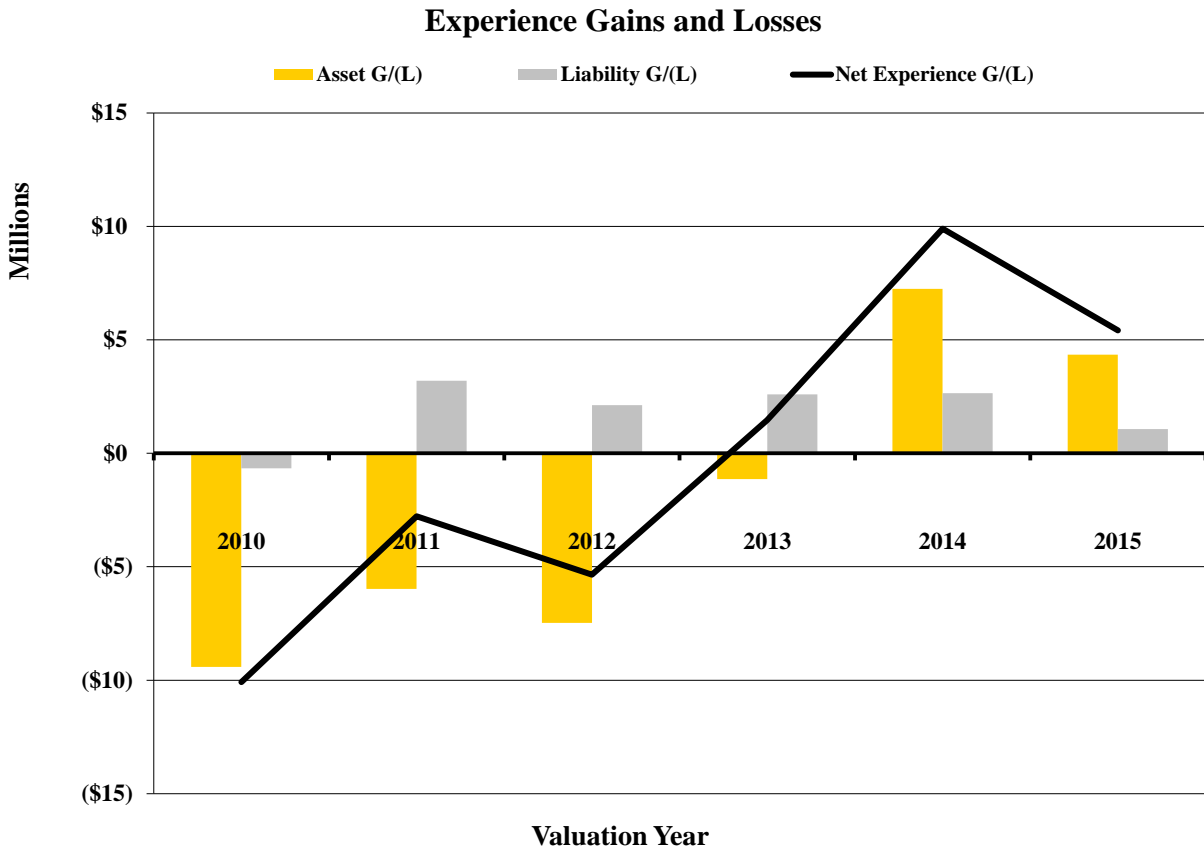
In the chart below, we present the historical trends for the Plan’s contribution rates. Contribution rates increased from 2008 through 2013 as losses from the 2009 Fiscal Year were recognized and assumptions were changed. Contribution rates increased again in 2015, as demographic and economic assumptions were changed as part of the most recent experience study. The rate shown for 2015 does not include the impact of the three-year phase-in of the impact from assumption changes.



**SECTION I – EXECUTIVE SUMMARY**

**Gains and Losses**

The following chart for the Plan presents the pattern of annual gains and losses for the overall Plan, broken into the investment and liability components. The investment gains and losses represent the changes on a smoothed basis (i.e., based on the Actuarial Value of Assets). The chart does not include any changes in the Plan’s assets and liabilities attributable to changes to actuarial methods, assumptions or plan benefit changes.

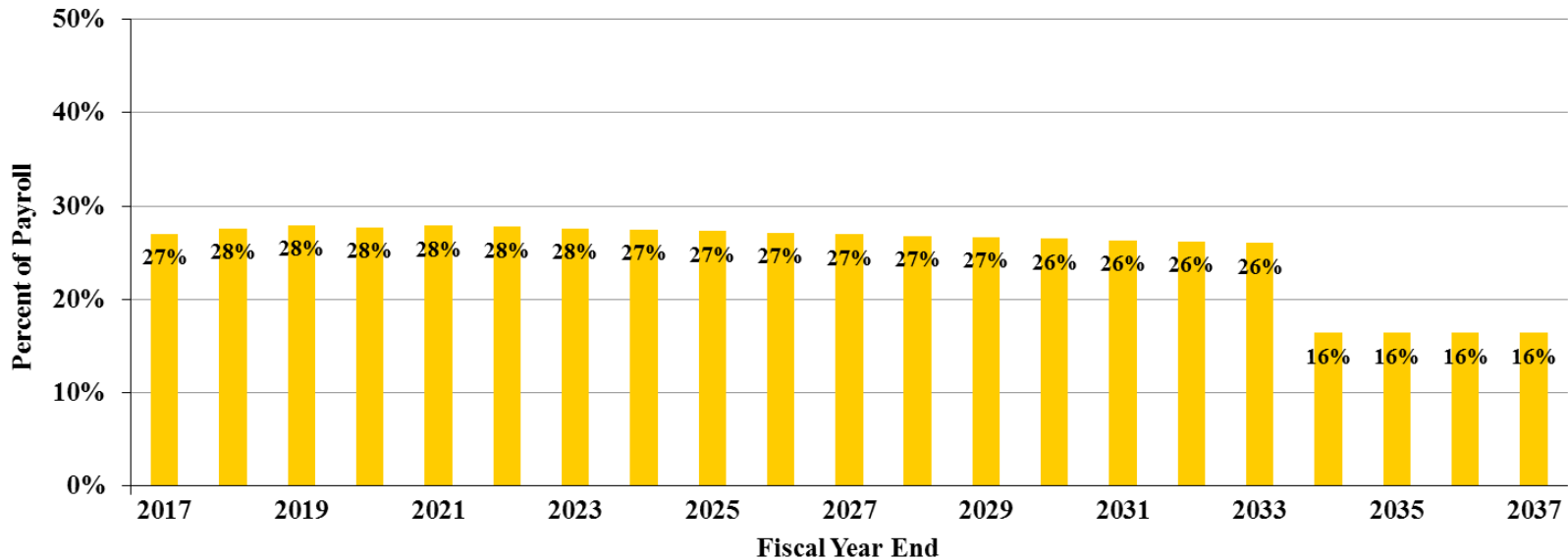


**SECTION I – EXECUTIVE SUMMARY**

**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, 2015 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 7.50% assumption each year, which is clearly an impossibility. We have also assumed future salary increases of 3.15% per year.

**Projection of Employer Contributions, 7.50% return each year**



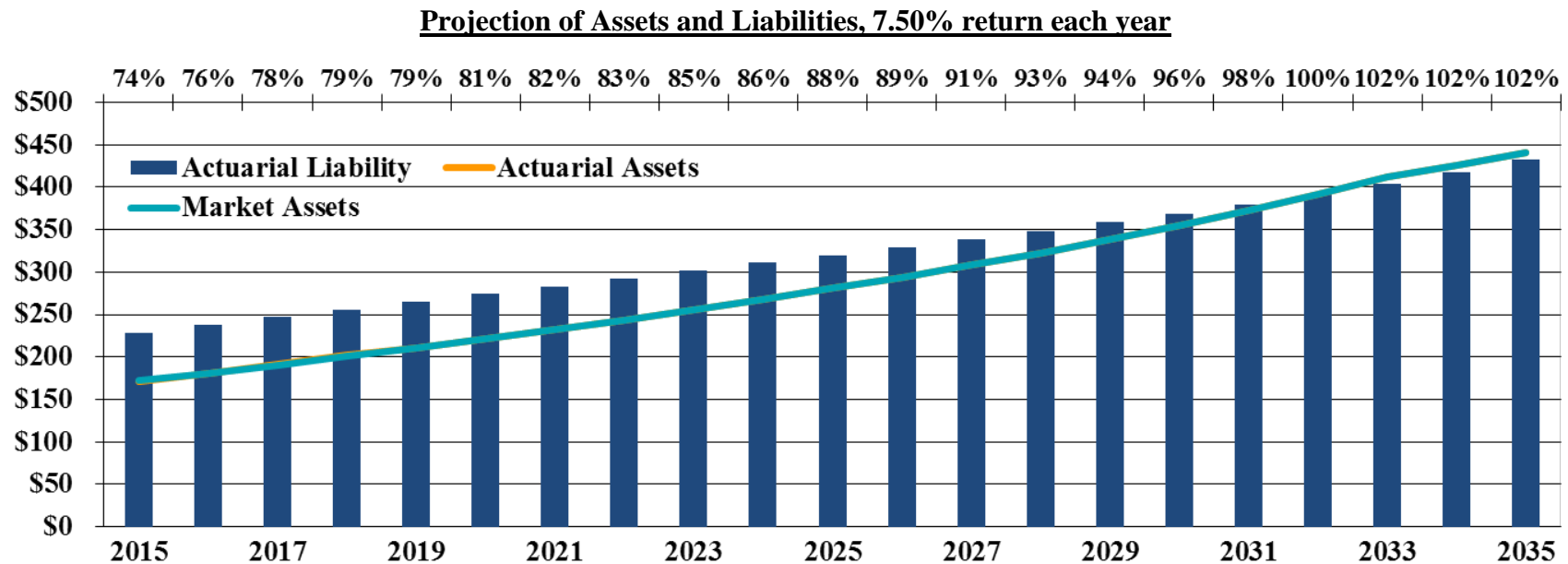
The contribution rate graph shows that the District’s contributions are expected remain roughly at this level for 17 years, and then decline as the current unfunded liability is fully amortized. The slow decline in rates is partly due to the changes in provisions for new hires, including reduced benefits for IBEW members, and additional employee contributions from ATU new hires.

**SECTION I – EXECUTIVE SUMMARY**

The dollar actuarial cost will be approximately \$11.1 million in 2016-2017, growing as pay increases to around \$17.6 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 7.50% assumed return could push the employer contribution rate over 30% in the next few years.

The following graph shows the projection of assets and liabilities assuming that assets will earn the 7.50% assumption each year during the projection period.



The graph shows that the projected funded status increases over the next 17 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, 2014 and June 30, 2015
- 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.

Table II-1 discloses and compares each component of the market asset value as of June 30, 2014 and June 30, 2015.

<b>TABLE II-1</b>		
<b>Statement of Assets at Market Value</b>		
<b>June 30, 2015</b>		
<b>Investments</b>	<b>2014</b>	<b>2015</b>
Cash and Cash Equivalents	\$ 9,766,996	\$ 2,888,256
Equity Securities	102,436,610	\$ 110,296,011
Fixed Income Securities	<u>67,330,781</u>	<u>\$ 67,050,762</u>
Total Investments	179,534,387	180,235,029
<b>Receivables:</b>		
Securities Sold	1,412,085	447,809
Interest and Dividends	290,759	166,280
Other Receivable	<u>36,492</u>	<u>58,825</u>
Total Receivables	1,739,336	672,914
<b>Payables</b>		
Accounts Payable	(549,358)	(410,569)
Benefits Payable	0	0
Other Payable	<u>(10,226,692)</u>	<u>(8,391,320)</u>
Total Payables	(10,776,050)	(8,801,889)
<b>Market Value of Assets</b>	<b>\$ 170,497,673</b>	<b>\$ 172,106,054</b>

SECTION II – 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 II-2 shows the components of a change in the market value of assets during 2014 and 2015.

<b>TABLE II-2</b>		
<b>Changes in Market Values</b>		
	<b><u>2014</u></b>	<b><u>2015</u></b>
<b>Contributions</b>		
Employer's Contribution	9,711,107	10,343,620
Members' Contributions	22,425	3,682
Total Contributions	<u>9,733,532</u>	<u>10,347,302</u>
<b>Investment Income</b>		
Interest & Dividends	2,394,445	2,208,131
Realized & Unrealized Gain/(Loss)	20,970,171	3,147,172
Other Investment Income	0	0
Investment Expenses	<u>(732,797)</u>	<u>(745,797)</u>
Total Investment Income	<u>22,631,819</u>	<u>4,609,506</u>
<b>Disbursements</b>		
Benefit Payments	(12,877,177)	(13,157,985)
Expenses	(230,365)	(190,442)
Transfer from (to) Salaried Plan	(174,166)	0
Adjustment to prior year expense	0	0
Total Disbursements	<u>(13,281,708)</u>	<u>(13,348,427)</u>
<b>Net increase (Decrease)</b>	19,083,643	1,608,381
<b>Net Assets Held in Trust for Benefits:</b>		
Beginning of Year	<u>151,414,030</u>	<u>170,497,673</u>
End of Year	<u>170,497,673</u>	<u>172,106,054</u>
Approximate Return	15.12%	2.73%
Administrative Expenses as a Percentage of Mean Assets	0.14%	0.11%

**RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES: ATU & IBEW  
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2015**

**SECTION II – ASSETS**

**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.

<b>TABLE II-3 Development of Actuarial Value of Assets as of July 1, 2015</b>							
	(a)	(b)	(c)	(d)	(e) = (d) – (c)	(f)	(g) = (e) x (f)
Year	Total Contributions	Total Disbursements	Expected Return	Actual Return	Additional Earnings	Not Recognized	Unrecognized Earnings
2010-2011	6,809,060	(11,504,894)	9,342,619	23,155,984	13,813,365	0%	0
2011-2012	7,884,551	(11,755,523)	10,513,288	2,481,586	(8,031,702)	20%	(1,606,340)
2012-2013	8,706,914	(12,070,149)	10,425,285	18,575,841	8,150,556	40%	3,260,222
2013-2014	9,733,532	(13,281,708)	11,597,096	22,631,819	11,034,723	60%	6,620,834
2014-2015	10,347,302	(13,348,427)	12,928,279	4,609,506	(8,318,773)	80%	<u>(6,655,018)</u>
1. Total Unrecognized Dollars							1,619,698
2. Market Value of Assets as of June 30, 2015							172,106,054
3. Actuarial Value of Assets as of June 30, 2015 : [(2) - (1)]							170,486,356
4. Ratio of Actuarial Value to Market Value [(3) ÷ (2)]							99.06%

**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 7.65% assumption.

<b>TABLE II-4</b>		
<b>Asset Gain/(Loss)</b>		
	<b>Market Value</b>	<b>Actuarial Value</b>
<b>July 1, 2014 value</b>	\$ <b>170,497,673</b>	\$ <b>157,229,569</b>
Employer Contributions	10,343,620	10,343,620
Employee Contributions	3,682	3,682
Benefit Payments and Expenses	(13,348,427)	(13,348,427)
Expected Investment Earnings (7.65%)	12,928,279	11,913,269
Expected Value June 30, 2015	\$ <b>180,424,827</b>	\$ <b>166,141,713</b>
Investment <b>Gain / (Loss)</b>	<u><b>(8,318,773)</b></u>	<u><b>4,344,643</b></u>
<b>July 1, 2015 value</b>	<b>172,106,054</b>	\$ <b>170,486,356</b>
Return	2.73%	10.44%

### SECTION III – LIABILITIES

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

- **Disclosure** of Plan liabilities at July 1, 2014 and July 1, 2015
- 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, this liability is calculated taking the equal to the total Projected Value of Benefits at Entry Age, divided by Present Value of Future Salary at Entry Age. The method used for this Plan is called the **Entry Age to Final Decrement (EAFD)** funding method.
- **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.

<b>TABLE III-1</b>			
<b>Liabilities/Net (Surplus)/Unfunded</b>			
		<b>July 1, 2014</b>	<b>July 1, 2015</b>
<b><u>Present Value of Future Benefits</u></b>			
Active Participant Benefits	\$	135,073,587	\$ 146,858,363
Retiree and Inactive Benefits		<u>119,365,353</u>	<u>127,737,798</u>
<b>Present Value of Future Benefits (PVB)</b>	<b>\$</b>	<b>254,438,940</b>	<b>\$ 274,596,161</b>
<b><u>Actuarial Liability</u></b>			
Present Value of Future Benefits (PVB)	\$	254,438,940	\$ 274,596,161
Present Value of Future Normal Costs (PVFNC)		<u>40,468,791</u>	<u>45,728,136</u>
<b>Actuarial Liability (AL = PVB – PVFNC)</b>	<b>\$</b>	<b>213,970,149</b>	<b>\$ 228,868,025</b>
Actuarial Value of Assets (AVA)		<u>157,229,569</u>	<u>170,486,356</u>
<b>Net (Surplus)/Unfunded (AL – AVA)</b>	<b>\$</b>	<b>56,740,580</b>	<b>\$ 58,381,669</b>

**SECTION III – 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

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

<b>TABLE III-2 Changes in Actuarial Liability</b>		
Actuarial Liability at July 1, 2014	\$	213,970,149
Actuarial Liability at July 1, 2015	\$	228,868,025
Liability Increase (Decrease)		14,897,876
Change due to:		
Actuarial Methods / Software Changes	\$	0
Assumption Change		7,533,304
Plan Amendments		(24,503)
Accrual of Benefits		5,345,353
Actual Benefit Payments		(13,157,985)
Interest		16,274,343
Actuarial (Gain)/Loss		(1,072,636)

**SECTION III – LIABILITIES**

**TABLE III-3  
 Development of Actuarial Gain / (Loss)**

1. Unfunded Actuarial Liability at Start of Year (not less than zero)	\$	56,740,580
2. Employer Normal Cost at Start of Year		5,345,353
3. Interest on 1. and 2. to End of Year		4,749,574
4. Contributions, Admin Expenses and Transfers in Prior Year		10,156,860
5. Interest on 4. to End of Year		388,500
6. Change in Unfunded Actuarial Liability Due to Changes in Actuarial Methods		0
7. Change in Unfunded Actuarial Liability Due to Changes in Assumptions		7,533,304
8. Change in Unfunded Actuarial Liability Due to Changes in Plan Design		(24,503)
9. Expected Unfunded Actuarial Liability at End of Year [1. + 2. + 3. – 4. – 5. + 6. + 7. + 8.]	\$	63,798,948
10. Actual Unfunded Actuarial Liability at End of Year (not less than zero)		58,381,669
11. Actuarial Gain / (Loss) [9. – 10.]	\$	5,417,279

## 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 and the unfunded actuarial liability is the **Entry Age to Final Decrement (EAFD)** cost method.

The normal cost rate 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. Starting with the June 30, 2014 valuation, the Entry Age was determined based on the members' current benefit service. Previously, this had been done based on the members' vesting service.

The unfunded actuarial liability is the difference between the EAFD actuarial liability and the actuarial value of assets. The UAL rate is based on an 17-year amortization of the remainder of the unfunded actuarial liability as of July 1, 2015, 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.

ATU members hired on or after January 1, 2015 will contribute 3% of Compensation to the Plan until the first payroll after the first valuation determining that the Plan is at least 100% funded, at which time member contributions will cease following the adoption by the Retirement Board.

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 Boards.



**RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES: ATU & IBEW  
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**SECTION IV – CONTRIBUTIONS**

<b>TABLE IV-I Development of Employer Contribution Amount</b>		
<b>Valuation Date</b>	<b>July 1, 2014</b>	<b>July 1, 2015</b>
1. Entry Age Normal Cost (Middle of Year)		
a. Termination	\$ 298,483	\$ 441,867
b. Retirement	3,945,046	4,427,405
c. Disability	1,124,333	780,804
d. Death	178,183	213,513
e. Refunds	-	2,675
f. Contributions	-	(28,600)
e. Total Normal Cost (a) + (b) + (c) + (d)	<u>\$ 5,546,045</u>	<u>\$ 5,837,664</u>
2. Entry Age Actuarial Liability		
<u>Active Members</u>		
a. Termination	\$ 1,023,598	\$ 784,340
b. Retirement	78,107,678	88,084,638
c. Disability	13,117,172	9,142,165
b. Death	<u>2,356,347</u>	<u>3,119,083</u>
e. Total Active Liability: (a) + (b) + (c) + (d)	<u>\$ 94,604,795</u>	<u>\$ 101,130,226</u>
<u>Inactive Members</u>		
f. Termination	\$ 3,428,613	\$ 3,842,925
g. Retirement	94,986,681	102,392,373
h. Disability	14,269,203	14,661,815
i. Death	6,680,857	6,840,686
j. Transfer	<u>0</u>	<u>0</u>
k. Total Inactive Liability: (f) + (g) + (h) + (i) + (j)	<u>\$ 119,365,354</u>	<u>\$ 127,737,799</u>
l. Total Entry Age Actuarial Liability: (2e) + (2k)	<u>\$ 213,970,149</u>	<u>\$ 228,868,025</u>
3. Actuarial Value of Assets	\$ 157,229,569	\$ 170,486,356
4. Unfunded Actuarial Liability: (2l) - (3)	\$ 56,740,580	\$ 58,381,669
5. Unfunded Actuarial Liability Amortization at Middle of Year as a Level Percentage of Payroll (18/17 Years Remaining)	\$ 4,588,321	\$ 4,855,008
6. Expected Administrative Expenses	\$ 185,850	\$ 402,579
7. Total Contribution Payable in Monthly Installments: (1e) + (5) + (6)	\$ 10,320,216	\$ 11,095,251
8. Covered Payroll (Normal Cost)	\$ 38,142,780	\$ 37,903,198
9. Covered Payroll (UAL Amort and Expenses)	39,895,284	39,858,375
10. Total Contribution as a Percent of Covered Payroll: (1) / (8) + [(5) + (6)] / (9)	26.51%	28.59%
11. Total Phased-in Contribution as a Percent of Covered Payroll	N/A	27.10% *

\* The District will begin paying this percentage of payroll July 1, 2016.

SECTION IV – CONTRIBUTIONS

**TABLE IV-2**  
**Allocation of Liabilities, Assets, and Cost among Groups**

	ATU	IBEW	Total
Actuarial Liability			
Active	71,138,401	29,991,826	101,130,227
Inactive	<u>94,831,399</u>	<u>32,906,399</u>	<u>127,737,798</u>
Total Actuarial Liability	165,969,800	62,898,225	228,868,025
Allocation of Market Value of Assets	126,041,522	46,064,532	172,106,054
Allocation of Actuarial Value of Assets	124,902,172	45,584,184	170,486,356
Unfunded Actuarial Liability (UAL) (AVA Basis)	41,067,628	17,314,041	58,381,669
UAL Amortization (Middle of Year)	3,415,176	1,439,832	4,855,008
Normal Cost (Middle of Year)	4,382,650	1,455,014	5,837,664
Administrative Expense	287,203	115,376	402,579
Total Contribution Payable Monthly	8,085,030	3,010,222	11,095,252
Covered Payroll (Normal Cost)	27,062,921	10,840,277	37,903,198
Covered Payroll (UAL Amort and Admin)	28,435,293	11,423,082	39,858,375
Total Contribution as a Percentage of Payroll (before phase-in)	29.21%	27.03%	28.59%
Total Contribution as a Percentage of Payroll (after phase-in)	27.69%	25.63%	27.10%

Assets have been allocated to the groups based on the following methodology:

- Actuarial liabilities measured using valuation methods and assumptions.
- If assets exceed inactive liability in total, assets allocated to inactive participants in an amount equal to that liability for each group. If assets are less than inactive liability in total, assets allocated to each group as a pro-rata portion of the total inactive liability.
- After allocation to inactive groups, any remaining assets are allocated as a pro-rata portion of the active actuarial liability. The liability associated with this Plan for transferred members of the Salaried plan (who have earned vested benefits with the ATU and/or IBEW) is allocated based on the share of the total active liability held by the current members of each group (ATU and IBEW).

**RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES: ATU & IBEW  
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**APPENDIX A - MEMBERSHIP INFORMATION**

The data for this valuation was provided by the Sacramento Regional District Transit staff as of July 1, 2015.

<b>Active Participants</b>	<b>July 1, 2014</b>	<b>July 1, 2015</b>
Number	708	692
Number Vested	417	432
Average Age	50.2	50.6
Average Service	10.6	11.0
Average Pay	\$53,649	\$54,598
<b>Retired</b>		
Number	391	411
Average Age	67.5	68.0
Average Annual Benefit	\$26,644	\$26,331
<b>Beneficiaries</b>		
Number	71	74
Average Age	69.3	69.4
Average Annual Benefit	\$10,510	\$10,841
<b>Disabled</b>		
Number	97	97
Average Age	64.8	65.4
Average Annual Benefit	\$17,744	\$17,610
<b>Term Vested</b>		
Number	46	49
Average Age	49.5	49.6
Average Annual Benefit	\$9,766	\$9,824
<b>Transferred</b>		
Number	93	96
Average Age	51.1	51.5
Average Annual Benefit	\$13,780	\$14,197

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

**RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES: ATU & IBEW  
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2015**

**APPENDIX A - MEMBERSHIP INFORMATION**

<b>Changes in Plan Membership: ATU</b>							
	<b>Actives</b>	<b>Actives with Transfer Service</b>	<b>Vested Terminations</b>	<b>Disabled</b>	<b>Retired</b>	<b>Beneficiaries*</b>	<b>Total</b>
July 1, 2014	510	58	23	82	290	48	1,011
New Entrants	30	0	0	0	0	0	30
Rehires	2	0	0	0	0	0	2
Disabilities	(3)	0	0	3	0	0	0
Retirements	(14)	0	(1)	0	15	0	0
Vested Terminations	(5)	(1)	6	0	0	0	0
Died, With Beneficiary, QDRO	(1)	0	0	0	(2)	3	0
Transfers	(3)	3	0	0	0	0	0
Died, No Beneficiary & Other Terminations	(15)	0	0	(4)	(2)	0	(21)
Transfer Retirement	0	(1)	0	0	1	0	0
Beneficiary Deaths	0	0	0	0	0	(2)	(2)
Funds Transferred	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	1	1
July 1, 2015	<b>501</b>	<b>59</b>	<b>28</b>	<b>81</b>	<b>302</b>	<b>50</b>	<b>1,021</b>

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

**RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES: ATU & IBEW  
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2015**

**APPENDIX A - MEMBERSHIP INFORMATION**

<b>Changes in Plan Membership: IBEW</b>							
	<b>Actives</b>	<b>Actives with Transfer Service</b>	<b>Vested Terminations</b>	<b>Disabled</b>	<b>Retired</b>	<b>Beneficiaries*</b>	<b>Total</b>
July 1, 2014	198	35	23	15	101	13	385
New Entrants	11	0	0	0	0	0	11
Rehires	0	0	0	0	0	0	0
Disabilities	(1)	0	0	1	0	0	0
Retirements	(5)	0	(3)	0	8	0	0
Vested Terminations	(1)	0	1	0	0	0	0
Died, With Beneficiary, QDRO	0	0	0	0	(1)	1	0
Transfers	(5)	5	0	0	0	0	0
Died, No Beneficiary & Other Terminations	(6)	0	0	0	(2)	0	(8)
Transfer Retirement	0	(3)	0	0	3	0	0
Beneficiary Deaths	0	0	0	0	0	0	0
Funds Transferred	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	0
July 1, 2015	<b>191</b>	<b>37</b>	<b>21</b>	<b>16</b>	<b>109</b>	<b>14</b>	<b>388</b>

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

**RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES: ATU & IBEW  
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2015**

**APPENDIX A - MEMBERSHIP INFORMATION**

<b>Changes in Plan Membership: All Contract Employees</b>							
	<b>Actives</b>	<b>Actives with Transfer Service</b>	<b>Vested Terminations</b>	<b>Disabled</b>	<b>Retired</b>	<b>Beneficiaries*</b>	<b>Total</b>
July 1, 2014	708	93	46	97	391	61	1,396
New Entrants	41	0	0	0	0	0	41
Rehires	2	0	0	0	0	0	2
Disabilities	(4)	0	0	4	0	0	0
Retirements	(19)	0	(4)	0	23	0	0
Vested Terminations	(6)	(1)	7	0	0	0	0
Died, With Beneficiary, QDRO	(1)	0	0	0	(3)	4	0
Transfers	(8)	8	0	0	0	0	0
Died, No Beneficiary & Other Terminations	(21)	0	0	(4)	(4)	0	(29)
Transfer Retirement	0	(4)	0	0	4	0	0
Beneficiary Deaths	0	0	0	0	0	(2)	(2)
Funds Transferred	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	1	1
July 1, 2015	<b>692</b>	<b>96</b>	<b>49</b>	<b>97</b>	<b>411</b>	<b>64</b>	<b>1,409</b>

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

**RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES: ATU & IBEW  
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2015**

**APPENDIX A - MEMBERSHIP INFORMATION**

<b>Age / Service Distribution Of Union Active Participants As of July 1, 2015</b>														
<b>Age</b>	<b>Service</b>												<b>Total</b>	
	<b>Under 1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5 to 9</b>	<b>10 to 14</b>	<b>15 to 19</b>	<b>20 to 24</b>	<b>25 to 29</b>	<b>30 to 34</b>	<b>35 &amp; up</b>		
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 to 24	1	1	2	0	0	0	0	0	0	0	0	0	0	4
25 to 29	3	7	6	2	1	2	0	0	0	0	0	0	0	21
30 to 34	5	7	11	3	1	6	3	0	0	0	0	0	0	36
35 to 39	7	8	11	3	1	10	20	1	0	0	0	0	0	61
40 to 44	6	8	8	5	0	11	29	5	0	0	0	0	0	72
45 to 49	2	9	5	4	1	19	40	18	4	3	0	0	0	105
50 to 54	4	5	7	7	3	14	51	25	9	6	2	0	0	133
55 to 59	8	4	8	0	0	18	47	19	11	10	0	0	0	125
60 to 64	0	2	4	1	0	17	41	7	6	13	1	6	6	98
65 to 69	0	1	3	1	0	9	7	6	0	3	1	0	0	31
70 & up	0	0	0	0	0	1	3	1	0	1	0	0	0	6
<b>Total</b>	<b>36</b>	<b>52</b>	<b>65</b>	<b>26</b>	<b>7</b>	<b>107</b>	<b>241</b>	<b>82</b>	<b>30</b>	<b>36</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>692</b>

Average Age = 50.6

Average Service = 11.0

**RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES: ATU & IBEW  
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**APPENDIX A - MEMBERSHIP INFORMATION**

Payroll Distribution Of Union Active Participants As of July 1, 2015														
Age	Service												Total	
	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		
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 to 24	33,302	34,174	39,003	0	0	0	0	0	0	0	0	0	0	36,371
25 to 29	33,020	41,467	36,221	41,600	58,838	44,184	0	0	0	0	0	0	0	39,860
30 to 34	38,877	40,776	38,994	43,917	46,863	53,302	51,976	0	0	0	0	0	0	43,420
35 to 39	35,899	36,781	37,959	41,253	51,635	56,868	54,586	61,429	0	0	0	0	0	46,890
40 to 44	36,829	39,400	38,580	43,875	0	60,313	56,660	59,930	0	0	0	0	0	50,978
45 to 49	42,164	39,391	39,245	53,715	61,595	55,739	55,211	62,462	62,103	62,079	0	0	0	54,648
50 to 54	37,712	36,566	42,645	42,191	60,815	54,987	58,807	66,761	71,472	62,543	54,034	0	0	57,703
55 to 59	36,665	43,912	38,636	0	0	54,880	59,839	67,194	62,486	68,242	0	0	0	57,798
60 to 64	0	37,908	38,552	46,173	0	55,751	62,820	68,623	60,592	68,237	82,355	66,035	0	61,318
65 to 69	0	40,799	41,280	37,670	0	52,990	61,847	67,809	0	43,334	80,325	0	0	55,785
70 & up	0	0	0	0	0	47,769	57,300	47,113	0	62,833	0	0	0	54,936
<b>Total</b>	<b>36,875</b>	<b>39,403</b>	<b>38,959</b>	<b>44,312</b>	<b>57,339</b>	<b>55,416</b>	<b>58,470</b>	<b>65,432</b>	<b>64,752</b>	<b>64,551</b>	<b>67,687</b>	<b>66,035</b>	<b>0</b>	<b>54,598</b>

Average Salary = \$ 54,598



**RETIREMENT PLAN FOR SACRAMENTO REGIONAL TRANSIT DISTRICT EMPLOYEES: ATU & IBEW  
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2015**

**APPENDIX A - MEMBERSHIP INFORMATION**

**Service Retired Participants and Beneficiaries**

Age	Number	Average Monthly Benefit
35-39	0	\$0
40-44	0	\$0
45-49	2	\$392
50-54	6	\$2,668
55-59	38	\$1,966
60-64	120	\$2,219
65-69	138	\$2,250
70-74	78	\$1,903
75-79	51	\$1,658
80-84	22	\$1,540
85-89	13	\$1,762
90-94	3	\$718
95+	0	\$0
<b>Total</b>	<b>471</b>	<b>\$2,039</b>

**Disabled Participants**

Age	Number	Average Monthly Benefit
30-34	0	\$0
35-39	0	\$0
40-44	1	\$1,173
45-49	2	\$967
50-54	11	\$1,314
55-59	16	\$1,591
60-64	18	\$1,737
65-69	19	\$1,532
70-74	17	\$1,529
75-79	6	\$942
80-84	3	\$705
85-89	2	\$1,064
90+	2	\$599
<b>All Ages</b>	<b>97</b>	<b>\$1,448</b>

**Terminated Vested Participants**

Age	Number	Average Monthly Benefit
25-29	0	\$0
30-34	3	\$450
35-39	4	\$614
40-44	5	\$525
45-49	9	\$1,116
50-54	20	\$932
55-59	3	\$614
60-64	4	\$591
65-69	1	\$805
70-74	0	\$0
75-79	0	\$0
80-84	0	\$0
85-89	0	\$0
90+	0	\$0
<b>All Ages</b>	<b>49</b>	<b>\$819</b>

**Transferred Participants**

Age	Number	Average Monthly Benefit
25-29	0	\$0
30-34	0	\$0
35-39	9	\$9,238
40-44	13	\$8,507
45-49	22	\$11,344
50-54	16	\$15,767
55-59	19	\$17,904
60-64	16	\$14,554
65-69	1	\$94,239
70-74	0	\$0
75-79	0	\$0
80-84	0	\$0
85-89	0	\$0
90+	0	\$0
<b>All Ages</b>	<b>96</b>	<b>\$14,197</b>

## APPENDIX B – STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the actuarial valuation as of July 1, 2015 are:

### Actuarial Method

As of July 1, 2012, the Normal Cost (and resulting Actuarial Liability) is determined as a single result for each individual: with the Normal Cost percentage equal to the total Projected Value of Benefits at Entry Age, divided by the Present Value of Future Salary at Entry Age. This variation 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, 2015 is 17 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.

### 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.

#### 1. Rate of Return

The annual rate of return on all Plan assets is assumed to be 7.50% for the current valuation. For the prior valuation, this was assumed to be 7.65%. As of the June 30, 2013, the rate of return is assumed to be net of investment, but not administrative, expenses. Prior to the June 30, 2013 valuation the return was assumed to be net of investment 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 3.15% per year.

## APPENDIX B – STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

### 3. Plan Expenses

Administrative expenses are assumed to be \$415,260 for Fiscal Year 2016-17, 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.

Based on an analysis of pay levels and service for ATU Participants, we assume that pay increases due to longevity and promotion will be 6.0% per year for the first 10 years of service and 0.5% per year thereafter. For 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 3.15% 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 ATU/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	ATU Rates	IBEW Rates
< 1	9.00%	8.00%
1-3	5.00%	8.00%
4	3.00%	8.00%
5-9	3.00%	5.00%
10-14	2.50%	2.75%
15-19	2.50%	0.50%
20-24	0.50%	0.50%
25+	0.00%	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								
ATU				IBEW				
Age	Years of Service			Age	Years of Service			
	10-24	25-29	30+		5-9	10-24	25-29	30+
50-54	0.00%	9.60%	9.60%	50-54	0.00%	0.00%	2.00%	2.00%
55	7.20%	9.60%	9.60%	55-59	2.30%	2.30%	2.30%	10.00%
56-61	5.00%	9.60%	9.60%	60-64	4.00%	11.70%	11.70%	20.00%
62-64	20.00%	20.80%	20.80%	65	4.00%	32.00%	32.00%	32.00%
65	30.00%	30.00%	30.00%	66-69	4.00%	25.00%	25.00%	32.00%
66-69	25.00%	25.00%	25.00%	70+	100.00%	100.00%	100.00%	100.00%
70+	100.00%	100.00%	100.00%					

**14. Changes Since Last Valuation**

Demographic assumptions (termination rates, retirement rates, disability rates, mortality rates, family composition and merit salary increases) were updated to reflect the most recent experience study. Refer to the prior year valuation report for prior year assumptions.

The assumed rate of return was changed from 7.65% to 7.50%.

Assumed administrative expenses were updated to \$415,260 for Fiscal Year 2016-17, increasing by the CPI annually.

## 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.

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 ATU members, service includes time with the District or predecessor companies immediately prior to April 1, 1979 and subsequent to hire. Service is measured in continuous fractions of a year.

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 of ATU Local 256 or IBEW Local 1245 is eligible to participate in the Plan.

### C. Retirement Benefit

Eligibility:

An ATU Participant is eligible for normal service retirement upon attaining age 55 and completing 10 or more years of service. In addition, ATU members are eligible to retire upon reaching 25 years of service.

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 or disability retirement upon attaining age 55 and completing five or more years of service. Effective April 1, 2015, an IBEW Participant hired or rehired on or after January 1, 2015 is eligible for normal service or disability retirement upon attaining age 55 and completing 10 or more years of service.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

**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 ATU retirements and terminations prior to March 1, 2004 and for IBEW retirements and terminations prior to July 1, 2008, the percentage is equal to:

- 2.0%, if the member retires prior to age 65, and
- 2.5%, if the member retires at age 65 or later.

For ATU retirements and terminations on and after March 1, 2004, the percentage is equal to:

- 2.0%, if the member retires at age 55 or with 25 years of service,
- 2.1%, if the member retires at age 56 or with 26 years of service,
- 2.2%, if the member retires at age 57 or with 27 years of service,
- 2.3%, if the member retires at age 58 or with 28 years of service,
- 2.4%, if the member retires at age 59 or with 29 years of service, and
- 2.5%, if the member retires at age 60 or later or with 30 years or more years of service.

For IBEW 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 IBEW members hired or rehired on or after January 1, 2015, the percentage is equal to:

- 2.0% if the member retires after age 55 and prior to age 63 or with 25 years of service,
- 2.1% if the member retires at age 63 or with 26 years of service,
- 2.2% if the member retires at age 64 or with 27 years of service,
- 2.3% if the member retires at age 65 or with 28 years of service,
- 2.4% if the member retires at age 66 or with 29 years of service, and
- 2.5% if the member retires at age 67 or later or with 30 or more years of service.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

Form of Benefit: The benefit begin 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. Ten years of service is required to qualify for disability. For IBEW, only five years of service is needed, if member has active service on or after November 1, 2006.

Benefit Amount: For ATU members, the benefit payable to a disabled Participant is equal to the Normal Retirement Benefit earned to the date of disability.

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 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.

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.

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



## APPENDIX C – SUMMARY OF PLAN PROVISIONS

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 2% multiplier.

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 ATU Participant is eligible for a termination benefit after earning 10 years of service.

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). For IBEW Participants hired or rehired on or after January 1, 2015 will eligible to commence benefits after attaining age 55 and completing at least 10 years of service.

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.

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.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

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

ATU members hired on or after January 1, 2015 will contribute 3% of Compensation to the Plan until the first payroll after the first valuation determining that the Plan is at least 100% funded, at which time member contributions will cease following the adoption by the Retirement Board.

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.

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

### I. Changes in Plan Provisions

An IBEW Participant hired or rehired on or after January 1, 2015 is eligible for normal service or disability retirement upon attaining age 55 and completing 10 or more years of service.

For IBEW members hired or rehired on or after January 1, 2015, the percentage is equal to:

- 2.0% if the member retires after age 55 and prior to age 63 or with 25 years of service,
- 2.1% if the member retires at age 63 or with 26 years of service,
- 2.2% if the member retires at age 64 or with 27 years of service,
- 2.3% if the member retires at age 65 or with 28 years of service,
- 2.4% if the member retires at age 66 or with 29 years of service, and
- 2.5% if the member retires at age 67 or later or with 30 or more years of service.

ATU members hired on or after January 1, 2015 will contribute 3% of Compensation to the Plan until the first payroll after the first valuation determining that the Plan is at least 100% funded, at which time member contributions will cease following the adoption by the Retirement Board.

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.

## 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.

## APPENDIX D – GLOSSARY

### 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.

### 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.



*Classic Values, Innovative Advice*