

**Agenda**  
Sacramento Suburban Water District  
**Finance and Audit Committee**

3701 Marconi Avenue, Suite 100  
Sacramento, CA 95821

Tuesday, December 5, 2017  
4:00 p.m.

Where appropriate or deemed necessary, the Board may take action on any item listed on the agenda, including items listed as information items. Public documents relating to any open session item listed on this agenda that are distributed to all or a majority of the members of the Board of Directors less than 72 hours before the meeting are available for public inspection in the customer service area of the District's Administrative Office at the address listed above.

The public may address the Board concerning an agenda item either before or during the Board's consideration of that agenda item. Persons who wish to comment on either agenda or non-agenda items should fill out a Comment Card and give it to the General Manager. The President will call for comments at the appropriate time. Comments will be subject to reasonable time limits (3 minutes).

In compliance with the Americans with Disabilities Act, if you have a disability, and you need a disability-related modification or accommodation to participate in this meeting, then please contact Sacramento Suburban Water District Human Resources at 679.3972. Requests must be made as early as possible, and at least one full business day before the start of the meeting.

**Call to Order**

**Roll Call**

**Announcements**

**Public Comment**

This is the opportunity for the public to comment on non-agenda items within the Committee's jurisdiction. Comments are limited to 3 minutes.

**Items for Discussion and Action**

1. New Other Post Employment Benefit (OPEB) Actuarial Valuation  
*Discussion and possible action on the new OPEB Valuation received from Total Compensation Systems.*

**Adjournment**

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**Upcoming Meetings:**

Monday, December 11, 2017 at 3:30 p.m., Facilities and Operations Committee Meeting

Monday, December 18, 2017 at 3:00 p.m., Water Quality Committee Meeting

Monday, December 18, 2017 at 6:30 p.m., Regular Board Meeting

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I certify that the foregoing agenda for the December 5, 2017, meeting of the Sacramento Suburban Water District Finance and Audit Committee was posted by November 30, 2017, in a publicly-accessible location at the Sacramento Suburban Water District office, 3701 Marconi Avenue, Suite 100, Sacramento, California, and was made available to the public during normal business hours.

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Robert S. Roscoe  
General Manager/Secretary  
Sacramento Suburban Water District



## Agenda Item: 1

**Date:** November 29, 2017

**Subject:** New Other Post Employment Benefit (OPEB) Actuarial Valuation

**Staff Contact:** Daniel A. Bills, Finance Director

### **Discussion:**

As a participant in the California Employers' Retiree Benefit Trust (CERBT)\* the District is required to perform an updated actuarial valuation every two years. For 2017, the District contracted with a CERBT approved actuary – Total Compensation Systems - to perform the valuation at a cost of \$4,000.00. Attached as Exhibit 1 is the 2017 actuarial report for the Board's information and as Exhibit 2 inception-to-date results of the Trust.

The current valuation recommends a \$557,200 Annual Required Contribution Amount, or ARC, beginning in 2018. The previous valuation recommended an annual ARC of roughly \$470,000 in 2016 and 2017. The increase is due to a change in the estimated number of retirees requiring dependent care coverage.

In addition to the actuarial report, CERBT also asks the District to reaffirm its Asset Allocation Strategy (Investment strategy) and the strategy's related discount rate, funding procedure, and contribution method. With Committee approval, and consistent with prior Board direction, the District will continue to: 1) use CERBT's Asset Allocation Strategy No. 1 with a 7.28% expected long-term rate of return and a standard deviation of 11.74%; 2) to, at a minimum, fully fund the ARC as determined by the biennial actuarial valuation, and 3) because the contribution is fully funded at the beginning of the year, the District will seek reimbursement from CERBT for all direct medical, dental and vision payments made during the year on behalf of current retirees on a quarterly basis.

\*CERBT is the Trust selected by the District for all retiree medical, dental and vision premium payments.

**Total Compensation Systems, Inc.**

**Sacramento Suburban Water District  
Actuarial Study of  
Retiree Health Liabilities  
As of July 1, 2017**

*Prepared by:*  
*Total Compensation Systems, Inc.*

*Date: August 27, 2017*

# Total Compensation Systems, Inc.

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# Total Compensation Systems, Inc.

## Sacramento Suburban Water District Actuarial Study of Retiree Health Liabilities

### PART I: EXECUTIVE SUMMARY

#### A. Introduction

Sacramento Suburban Water District engaged Total Compensation Systems, Inc. (TCS) to analyze liabilities associated with its current retiree health program as of July 1, 2017 (the valuation date). The numbers in this report are based on the assumption that they will first be used to determine accounting entries for the fiscal year ending December 31, 2017. If the report will first be used for a different fiscal year, the numbers will need to be adjusted accordingly.

This report does not reflect any cash benefits paid unless the retiree is required to provide proof that the cash benefits are used to reimburse the retiree's cost of health benefits. Costs and liabilities attributable to cash benefits paid to retirees are reportable under Governmental Accounting Standards Board (GASB) Standards 25/27.

This actuarial study is intended to serve the following purposes:

- To provide information to enable Sacramento Suburban Water District to manage the costs and liabilities associated with its retiree health benefits.
- To provide information to enable Sacramento Suburban Water District to communicate the financial implications of retiree health benefits to internal financial staff, the Board, employee groups and other affected parties.
- To provide information needed to comply with Governmental Accounting Standards Board Accounting Standards 43 and 45 related to "other postemployment benefits" (OPEB's).

Because this report was prepared in compliance with GASB 43 and 45, as appropriate, Sacramento Suburban Water District should not use this report for any other purpose without discussion with TCS. This means that any discussions with employee groups, governing Boards, etc. should be restricted to the implications of GASB 43 and 45 compliance.

This actuarial report includes several estimates for Sacramento Suburban Water District's retiree health program. In addition to the tables included in this report, we also performed cash flow adequacy tests as required under Actuarial Standard of Practice 6 (ASOP 6). Our cash flow adequacy testing covers a twenty-year period. We would be happy to make this cash flow adequacy test available to Sacramento Suburban Water District in spreadsheet format upon request.

We calculated the following estimates separately for active employees and retirees. We estimated the following:

- the total liability created. (The actuarial present value of total projected benefits or APVTPB)
- the ten year "pay-as-you-go" cost to provide these benefits.
- the "actuarial accrued liability (AAL)." (The AAL is the portion of the APVTPB

## **Total Compensation Systems, Inc.**

attributable to employees' service prior to the valuation date.)

- the amount necessary to amortize the UAAL over a period of 8 years.
- the annual contribution required to fund retiree benefits over the working lifetime of eligible employees (the "normal cost").
- The Annual Required Contribution (ARC) which is the basis of calculating the annual OPEB cost and net OPEB obligation under GASB 43 and 45.

We summarized the data used to perform this study in Appendix A. No effort was made to verify this information beyond brief tests for reasonableness and consistency.

All cost and liability figures contained in this study are estimates of future results. Future results can vary dramatically and the accuracy of estimates contained in this report depends on the actuarial assumptions used. Normal costs and liabilities could easily vary by 10 - 20% or more from estimates contained in this report.

### **B. General Findings**

We estimate the "pay-as-you-go" cost of providing retiree health benefits in the year beginning July 1, 2017 to be \$308,062 (see Section IV.A.). The "pay-as-you-go" cost is the cost of benefits for current retirees.

For current employees, the value of benefits "accrued" in the year beginning July 1, 2017 (the normal cost) is \$191,174. This normal cost would increase each year based on covered payroll. Had Sacramento Suburban Water District begun accruing retiree health benefits when each current employee and retiree was hired, a substantial liability would have accumulated. We estimate the amount that would have accumulated to be \$7,295,798. This amount is called the "actuarial accrued liability" (AAL). The remaining unamortized balance of the initial unfunded AAL (UAAL) is \$1,950,130. This leaves a "residual" AAL of \$5,345,668.

Sacramento Suburban Water District has established a GASB 43 trust for future OPEB benefits. The actuarial value of plan assets at June 30, 2017 was \$4,726,714. This leaves a residual unfunded actuarial accrued liability (UAAL) of \$618,954. We calculated the annual cost to amortize the residual unfunded actuarial accrued liability using a 6.5% discount rate. We used an open 8 year amortization period. The current year cost to amortize the residual unfunded actuarial accrued liability is \$90,607.

Combining the normal cost with both the initial and residual UAAL amortization costs produces an annual required contribution (ARC) of \$557,202. The ARC is used as the basis for determining expenses and liabilities under GASB 43/45. The ARC is used in lieu of (rather than in addition to) the "pay-as-you-go" cost.

We based all of the above estimates on employees as of June, 2017. Over time, liabilities and cash flow will vary based on the number and demographic characteristics of employees and retirees.

### **C. Description of Retiree Benefits**

Following is a description of the current retiree benefit plan:

## Total Compensation Systems, Inc.

<i>All employee</i>	
Benefit types provided	Medical, dental and vision
Duration of Benefits	Lifetime
Required Service	10 years*
Minimum Age	Retirement age under CalPERS
Dependent Coverage	All eligible
District Contribution %	California Government Code Section 22893**
District Cap	Per Section 22893 or, if higher the lowest cost HMO or lowest cost PPO plan

\*CalPERS retirement for those hired prior to 1/1/03

\*\*100% at CalPERS retirement if hired prior to 1/1/03

### **D. Recommendations**

It is outside the scope of this report to make specific recommendations of actions Sacramento Suburban Water District should take to manage the liability created by the current retiree health program. Total Compensation Systems, Inc. can assist in identifying and evaluating options once this report has been studied. The following recommendations are intended only to allow the District to get more information from this and future studies. Because we have not conducted a comprehensive administrative audit of Sacramento Suburban Water District's practices, it is possible that Sacramento Suburban Water District is already complying with some or all of our recommendations.

- We recommend that Sacramento Suburban Water District inventory all benefits and services provided to retirees – whether contractually or not and whether retiree-paid or not. For each, Sacramento Suburban Water District should determine whether the benefit is material and subject to GASB 43 and/or 45.
- We recommend that Sacramento Suburban Water District conduct a study whenever events or contemplated actions significantly affect present or future liabilities, but no less frequently than every two years, as required under GASB 43/45.
- We recommend that the District communicate the magnitude of these costs to employees and include employees in discussions of options to control the costs.
- Under GASB 45, it is important to isolate the cost of retiree health benefits. Sacramento Suburban Water District should have all premiums, claims and expenses for retirees separated from active employee premiums, claims, expenses, etc. To the extent any retiree benefits are made available to retirees over the age of 65 – *even on a retiree-pay-all basis* – all premiums, claims and expenses for post-65 retiree coverage should be segregated from those for pre-65 coverage. Furthermore, Sacramento Suburban Water District should arrange for the rates or prices of all retiree benefits to be set on what is expected to be a self-sustaining basis.
- Sacramento Suburban Water District should establish a way of designating employees as eligible or ineligible for future OPEB benefits. Ineligible employees can include those in ineligible job classes; those hired after a designated date restricting eligibility; those who, due to their age at hire cannot qualify for District-paid OPEB benefits; employees who exceed the termination age for OPEB



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benefits, etc.

- Several assumptions were made in estimating costs and liabilities under Sacramento Suburban Water District's retiree health program. Further studies may be desired to validate any assumptions where there is any doubt that the assumption is appropriate. (See Appendices B and C for a list of assumptions and concerns.) For example, Sacramento Suburban Water District should maintain a retiree database that includes – in addition to date of birth, gender and employee classification – retirement date and (if applicable) dependent date of birth, relationship and gender. It will also be helpful for Sacramento Suburban Water District to maintain employment termination information – namely, the number of OPEB-eligible employees in each employee class that terminate employment each year for reasons other than death, disability or retirement.

Respectfully submitted,



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# Total Compensation Systems, Inc.

## PART II: BACKGROUND

### A. Summary

Accounting principles provide that the cost of retiree benefits should be “accrued” over employees’ working lifetime. For this reason, the Governmental Accounting Standards Board (GASB) issued in 2004 Accounting Standards 43 and 45 for retiree health benefits. These standards apply to all public employers that pay any part of the cost of retiree health benefits for current or future retirees (including early retirees).

### B. Actuarial Accrual

To actuarially accrue retiree health benefits requires determining the amount to expense each year so that the liability accumulated at retirement is, on average, sufficient (with interest) to cover all retiree health expenditures without the need for additional expenses. There are many different ways to determine the annual accrual amount. The calculation method used is called an “actuarial cost method.”

Under most actuarial cost methods, there are two components of actuarial cost - a “normal cost” and amortization of something called the “unfunded actuarial accrued liability.” Both accounting standards and actuarial standards usually address these two components separately (though alternative terminology is sometimes used).

The normal cost can be thought of as the value of the benefit earned each year if benefits are accrued during the working lifetime of employees. This report will not discuss differences between actuarial cost methods or their application. Instead, following is a description of a commonly used, generally accepted actuarial cost method permitted under GASB 43 and 45. This actuarial cost method is called the “entry age normal” method.

Under the entry age normal cost method, the actuary determines the annual amount needing to be expensed from hire until retirement to fully accrue the cost of retiree health benefits. This amount is the normal cost. Under GASB 43 and 45, normal cost can be expressed either as a level dollar amount or a level percentage of payroll.

The normal cost is determined using several key assumptions:

- The current **cost of retiree health benefits** (often varying by age, Medicare status and/or dependent coverage). The higher the current cost of retiree benefits, the higher the normal cost.
- The **“trend” rate** at which retiree health benefits are expected to increase over time. A higher trend rate increases the normal cost. A “cap” on District contributions can reduce trend to zero once the cap is reached thereby dramatically reducing normal costs.
- **Mortality rates** varying by age and sex. (Unisex mortality rates are not often used as individual OPEB benefits do not depend on the mortality table used.) If employees die prior to retirement, past contributions are available to fund benefits for employees who live to retirement. After retirement, death results in benefit termination or reduction. Although higher mortality rates reduce normal costs, the mortality assumption is not likely to vary from employer to employer.
- **Employment termination rates** have the same effect as mortality inasmuch as higher termination rates reduce normal costs. Employment termination can vary considerably between public agencies.
- The **service requirement** reflects years of service required to earn full or partial retiree benefits.

## Total Compensation Systems, Inc.

While a longer service requirement reduces costs, cost reductions are not usually substantial unless the service period exceeds 20 years of service.

- **Retirement rates** determine what proportion of employees retire at each age (assuming employees reach the requisite length of service). Retirement rates often vary by employee classification and implicitly reflect the minimum retirement age required for eligibility. Retirement rates also depend on the amount of pension benefits available. Higher retirement rates increase normal costs but, except for differences in minimum retirement age, retirement rates tend to be consistent between public agencies for each employee type.
- **Participation rates** indicate what proportion of retirees are expected to elect retiree health benefits if a significant retiree contribution is required. Higher participation rates increase costs.
- The **discount rate** estimates investment earnings for assets earmarked to cover retiree health benefit liabilities. The discount rate depends on the nature of underlying assets. For example, employer funds earning money market rates in the county treasury are likely to earn far less than an irrevocable trust containing a diversified asset portfolio including stocks, bonds, etc. A higher discount rate can dramatically lower normal costs. GASB 43 and 45 require the interest assumption to reflect likely *long term* investment return.

The assumptions listed above are not exhaustive, but are the most common assumptions used in actuarial cost calculations. The actuary selects the assumptions which - taken together - will yield reasonable results. It's not necessary (or even possible) to predict individual assumptions with complete accuracy.

If all actuarial assumptions are exactly met and an employer expensed the normal cost every year for all past and current employees and retirees, a sizeable liability would have accumulated (after adding interest and subtracting retiree benefit costs). The liability that would have accumulated is called the actuarial accrued liability or AAL. The excess of AAL over the **actuarial value of plan assets** is called the *unfunded* actuarial accrued liability (or UAAL). Under GASB 43 and 45, in order for assets to count toward offsetting the AAL, the assets have to be held in an irrevocable trust that is safe from creditors and can only be used to provide OPEB benefits to eligible participants.

The actuarial accrued liability (AAL) can arise in several ways. At inception of GASB 43 and 45, there is usually a substantial UAAL. Some portion of this amount can be established as the "transition obligation" subject to certain constraints. UAAL can also increase as the result of operation of a retiree health plan - e.g., as a result of plan changes or changes in actuarial assumptions. Finally, AAL can arise from actuarial gains and losses. Actuarial gains and losses result from differences between actuarial assumptions and actual plan experience.

Under GASB 43 and 45, employers have several options on how the UAAL can be amortized as follows:

- The employer can select an amortization period of 1 to 30 years. (For certain situations that result in a reduction of the AAL, the amortization period must be at least 10 years.)
- The employer may apply the same amortization period to the total combined UAAL or can apply different periods to different components of the UAAL.
- The employer may elect a "closed" or "open" amortization period.
- The employer may choose to amortize on a level dollar or level percentage of payroll method.

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## PART III: LIABILITIES AND COSTS FOR RETIREE BENEFITS

### A. Introduction.

We calculated the actuarial present value of projected benefits (APVPB) separately for each employee. We determined eligibility for retiree benefits based on information supplied by Sacramento Suburban Water District. We then selected assumptions for the factors discussed in the above Section that, based on plan experience and our training and experience, represent our best prediction of future plan experience. For each employee, we applied the appropriate factors based on the employee's age, sex and length of service.

We summarized actuarial assumptions used for this study in Appendix C.

### B. Medicare

The extent of Medicare coverage can affect projections of retiree health costs. The method of coordinating Medicare benefits with the retiree health plan's benefits can have a substantial impact on retiree health costs. We will be happy to provide more information about Medicare integration methods if requested.

### C. Liability for Retiree Benefits.

For each employee, we projected future premium costs using an assumed trend rate (see Appendix C). To the extent Sacramento Suburban Water District uses contribution caps, the influence of the trend factor is further reduced.

We multiplied each year's projected cost by the probability that premium will be paid; i.e. based on the probability that the employee is living, has not terminated employment and has retired. The probability that premium will be paid is zero if the employee is not eligible. The employee is not eligible if s/he has not met minimum service, minimum age or, if applicable, maximum age requirements.

The product of each year's premium cost and the probability that premium will be paid equals the expected cost for that year. We discounted the expected cost for each year to the valuation date July 1, 2017 at 6.5% interest.

Finally, we multiplied the above discounted expected cost figures by the probability that the retiree would elect coverage. A retiree may not elect to be covered if retiree health coverage is available less expensively from another source (e.g. Medicare risk contract) or the retiree is covered under a spouse's plan.

For any current retirees, the approach used was similar. The major difference is that the probability of payment for current retirees depends only on mortality and age restrictions (i.e. for retired employees the probability of being retired and of not being terminated are always both 1.0000).

We added the APVPB for all employees to get the actuarial present value of total projected benefits (APVTPB). The APVTPB is the estimated present value of all future retiree health benefits for all **current** employees and retirees. The APVTPB is the amount on July 1, 2017 that, if all actuarial assumptions are exactly right, would be sufficient to expense all promised benefits until the last current employee or retiree dies or reaches the maximum eligibility age.

## Total Compensation Systems, Inc.

### Actuarial Present Value of Total Projected Benefits at July 1, 2017

<i>All Participants</i>	
Active: Pre-65	\$2,154,839
Post-65	\$3,154,110
Subtotal	\$5,308,949
Retiree: Pre-65	\$354,369
Post-65	\$3,092,435
Subtotal	\$3,446,804
Grand Total	\$8,755,753
Subtotal Pre-65	\$2,509,208
Subtotal Post-65	\$6,246,545

The APVTPB should be accrued over the working lifetime of employees. At any time much of it has not been "earned" by employees. The APVTPB is used to develop expense and liability figures. To do so, the APVTPB is divided into two parts: the portions attributable to service rendered prior to the valuation date (the past service liability or actuarial accrued liability under GASB 43 and 45) and to service after the valuation date but prior to retirement (the future service liability).

The past service and future service liabilities are each funded in a different way. We will start with the future service liability which is funded by the normal cost.

#### D. Cost to Prefund Retiree Benefits

##### 1. Normal Cost

The average hire age for eligible employees is 34. To accrue the liability by retirement, the District would accrue the retiree liability over a period of about 28 years (assuming an average retirement age of 62). We applied an "entry age normal" actuarial cost method to determine funding rates for active employees. The table below summarizes the calculated normal cost.

#### Normal Cost Year Beginning July 1, 2017

<i>All Participants</i>	
# of Employees	61
<b>Per Capita Normal Cost</b>	
Pre-65 Benefit	\$1,264
Post-65 Benefit	\$1,870
<b>First Year Normal Cost</b>	
Pre-65 Benefit	\$77,104
Post-65 Benefit	\$114,070
Total	\$191,174

Accruing retiree health benefit costs using normal costs levels out the cost of retiree health benefits over time and more fairly reflects the value of benefits "earned" each year by employees. This normal cost would increase each year based on covered payroll.

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## 2. Amortization of Unfunded Actuarial Accrued Liability (UAAL)

If actuarial assumptions are borne out by experience, the District will fully accrue retiree benefits by expensing an amount each year that equals the normal cost. If no accruals had taken place in the past, there would be a shortfall of many years' accruals, accumulated interest and forfeitures for terminated or deceased employees. This shortfall is called the actuarial accrued liability (AAL). We calculated the AAL as the APVTPB minus the present value of future normal costs.

The initial UAAL was amortized using level percent, closed 18 year amortization. The District can amortize the remaining or residual UAAL over many years. The table below shows the annual amount necessary to amortize the UAAL over a period of 8 years at 6.5% interest. (Thirty years is the longest amortization period allowable under GASB 43 and 45.) GASB 43 and 45 allow amortizing the UAAL using either payments that stay the same as a dollar amount, or payments that are a flat percentage of covered payroll over time. The figures below reflect level percent, open 8 year amortization.

### Actuarial Accrued Liability as of July 1, 2017

	<i>All Participants</i>
Active: Pre-65	\$1,566,012
Post-65	\$2,282,982
Subtotal	\$3,848,994
Retiree: Pre-65	\$354,369
Post-65	\$3,092,435
Subtotal	\$3,446,804
Subtot Pre-65	\$1,920,381
Subtot Post-65	\$5,375,417
Grand Total	\$7,295,798
Unamortized Initial UAAL	\$1,950,130
Plan assets at 6/30/17	\$4,726,714
Residual UAAL	\$618,954
Residual UAAL Amortization at 6.5% over 8 Years	\$90,607

## 3. Annual Required Contributions (ARC)

If the District determines retiree health plan expenses in accordance with GASB 43 and 45, costs include both normal cost and one or more components of UAAL amortization costs. The sum of normal cost and UAAL amortization costs is called the Annual Required Contribution (ARC) and is shown below.

### Annual Required Contribution (ARC) Year Beginning July 1, 2017

	<i>Total</i>
Normal Cost	\$191,174
Initial UAAL Amortization	\$275,421
Residual UAAL Amortization	\$90,607
ARC	\$557,202

The normal cost remains as long as there are active employees who may some day qualify for District-paid

## **Total Compensation Systems, Inc.**

retiree health benefits. This normal cost would increase each year based on covered payroll.

### 4. Other Components of Annual OPEB Cost (AOC)

Expense and liability amounts may include more components of cost than the normal cost plus amortization of the UAAL. This applies to employers that don't fully fund the Annual Required Contribution (ARC) through an irrevocable trust.

- The annual OPEB cost (AOC) includes assumed interest on the net OPEB obligation (NOO). The annual OPEB cost also includes an amortization adjustment for the net OPEB obligation. (It should be noted that there is no NOO if the ARC is fully funded through a qualifying "plan".)
- The net OPEB obligation equals the accumulated differences between the (AOC) and qualifying "plan" contributions.

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## PART IV: "PAY AS YOU GO" FUNDING OF RETIREE BENEFITS

We used the actuarial assumptions shown in Appendix C to project ten year cash flow under the retiree health program. Because these cash flow estimates reflect average assumptions applied to a relatively small number of employees, estimates for individual years are certain to be *in*accurate. However, these estimates show the size of cash outflow.

The following table shows a projection of annual amounts needed to pay the District share of retiree health premiums.

<i>Year Beginning July 1</i>	<i>All Participants</i>
2017	\$308,062
2018	\$325,761
2019	\$346,562
2020	\$377,781
2021	\$402,512
2022	\$425,290
2023	\$453,791
2024	\$481,832
2025	\$523,242
2026	\$554,175



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### **PART V: RECOMMENDATIONS FOR FUTURE VALUATIONS**

To effectively manage benefit costs, an employer must periodically examine the existing liability for retiree benefits as well as future annual expected premium costs. GASB 43/45 require biennial valuations. In addition, a valuation should be conducted whenever plan changes, changes in actuarial assumptions or other employer actions are likely to cause a material change in accrual costs and/or liabilities.

Following are examples of actions that could trigger a new valuation.

- An employer should perform a valuation whenever the employer considers or puts in place an early retirement incentive program.
- An employer should perform a valuation whenever the employer adopts a retiree benefit plan for some or all employees.
- An employer should perform a valuation whenever the employer considers or implements changes to retiree benefit provisions or eligibility requirements.
- An employer should perform a valuation whenever the employer introduces or changes retiree contributions.

We recommend Sacramento Suburban Water District take the following actions to ease future valuations.

- We have used our training, experience and information available to us to establish the actuarial assumptions used in this valuation. We have no information to indicate that any of the assumptions do not reasonably reflect future plan experience. However, the District should review the actuarial assumptions in Appendix C carefully. If the District has any reason to believe that any of these assumptions do not reasonably represent the expected future experience of the retiree health plan, the District should engage in discussions or perform analyses to determine the best estimate of the assumption in question.

# **Total Compensation Systems, Inc.**

## **PART VI: APPENDICES**

### **APPENDIX A: MATERIALS USED FOR THIS STUDY**

We relied on the following materials to complete this study.

- We used paper reports and digital files containing employee demographic data from the District personnel records.
- We used relevant sections of collective bargaining agreements provided by the District.

## **Total Compensation Systems, Inc.**

### **APPENDIX B: EFFECT OF ASSUMPTIONS USED IN CALCULATIONS**

While we believe the estimates in this study are reasonable overall, it was necessary for us to use assumptions which inevitably introduce errors. We believe that the errors caused by our assumptions will not materially affect study results. If the District wants more refined estimates for decision-making, we recommend additional investigation. Following is a brief summary of the impact of some of the more critical assumptions.

1. Where actuarial assumptions differ from expected experience, our estimates could be overstated or understated. One of the most critical assumptions is the medical trend rate. The District may want to commission further study to assess the sensitivity of liability estimates to our medical trend assumptions. For example, it may be helpful to know how liabilities would be affected by using a trend factor 1% higher than what was used in this study. There is an additional fee required to calculate the impact of alternative trend assumptions.
2. We used an "entry age normal" actuarial cost method to estimate the actuarial accrued liability and normal cost. GASB allows this as one of several permissible methods under GASB45. Using a different cost method could result in a somewhat different recognition pattern of costs and liabilities.

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## APPENDIX C: ACTUARIAL ASSUMPTIONS AND METHODS

Following is a summary of actuarial assumptions and methods used in this study. The District should carefully review these assumptions and methods to make sure they reflect the District's assessment of its underlying experience. It is important for Sacramento Suburban Water District to understand that the appropriateness of all selected actuarial assumptions and methods are Sacramento Suburban Water District's responsibility. Unless otherwise disclosed in this report, TCS believes that all methods and assumptions are within a reasonable range based on the provisions of GASB 43 and 45, applicable actuarial standards of practice, Sacramento Suburban Water District's actual historical experience, and TCS's judgment based on experience and training.

### ACTUARIAL METHODS AND ASSUMPTIONS:

ACTUARIAL COST METHOD: Entry age normal. The allocation of OPEB cost is based on years of service. We used the level percentage of payroll method to allocate OPEB cost over years of service.

Entry age is based on the age at hire for eligible employees. The attribution period is determined as the difference between the expected retirement age and the age at hire. The present value of future benefits and present value of future normal costs are determined on an employee by employee basis and then aggregated.

To the extent that different benefit formulas apply to different employees of the same class, the normal cost is based on the benefit plan applicable to the most recently hired employees (including future hires if a new benefit formula has been agreed to and communicated to employees).

AMORTIZATION METHODS: We used a level percent, closed 18 year amortization period for the initial UAAL. We used a level percent, open 8 year amortization period for any residual UAAL.

SUBSTANTIVE PLAN: As required under GASB 43 and 45, we based the valuation on the substantive plan. The formulation of the substantive plan was based on a review of written plan documents as well as historical information provided by Sacramento Suburban Water District regarding practices with respect to employer and employee contributions and other relevant factors.

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### ECONOMIC ASSUMPTIONS:

Economic assumptions are set under the guidance of Actuarial Standard of Practice 27 (ASOP 27). Among other things, ASOP 27 provides that economic assumptions should reflect a consistent underlying rate of general inflation. For that reason, we show our assumed long-term inflation rate below.

INFLATION: We assumed 2.75% per year.

INVESTMENT RETURN / DISCOUNT RATE: We assumed 6.5% per year. This is based on assumed long-term return on plan assets assuming 100% funding through CERBT. We used the "Building Block Method" as described in ASOP 27 Paragraph 3.6.2.

TREND: We assumed 4% per year. Our long-term trend assumption is based on the conclusion that, while medical trend will continue to be cyclical, the average increase over time cannot continue to outstrip general inflation by a wide margin. Trend increases in excess of general inflation result in dramatic increases in unemployment, the number of uninsured and the number of underinsured. These effects are nearing a tipping point which will inevitably result in fundamental changes in health care finance and/or delivery which will bring increases in health care costs more closely in line with general inflation. We do not believe it is reasonable to project historical trend vs. inflation differences several decades into the future.

PAYROLL INCREASE: We assumed 2.75% per year. This assumption applies only to the extent that either or both of the normal cost and/or UAAL amortization use the level percentage of payroll method. For purposes of applying the level percentage of payroll method, payroll increase must not assume any increases in staff or merit increases.

ACTUARIAL VALUE OF PLAN ASSETS (AVA): Because plan assets are primarily short term, we did not use a smoothing formula.

## Total Compensation Systems, Inc.

### NON-ECONOMIC ASSUMPTIONS:

Economic assumptions are set under the guidance of Actuarial Standard of Practice 35 (ASOP 35).

### ***MORTALITY***

<i>Employee Type</i>	<i>Mortality Tables</i>
Miscellaneous	2014 CalPERS Active Mortality for Miscellaneous Employees

### ***RETIREMENT RATES***

<i>Employee Type</i>	<i>Retirement Rate Tables</i>
All Participants	Hired < 9/25/06: 2009 CalPERS 3%@60 rates for Miscellaneous employees Hired 9/25/06 to 12/31/12: 2009 CalPERS 2@55 rates for Miscellaneous employees Hired after 12/31/12: 2009 CalPERS 2@60 rates for Miscellaneous employees adjusted to reflect a minimum retirement age of 52

### ***VESTING RATES***

<i>Employee Type</i>	<i>Vesting Rate Tables</i>
All Participants	Hired prior to 1/1/03 Hired after 12/31/02: 50% at 10 years of service + 5% per year to 100% at 20 years of service

### ***COSTS FOR RETIREE COVERAGE***

Actuarial Standard of Practice 6 (ASOP 6) provides that, as a general rule, retiree costs should be based on actual claim costs or age-adjusted premiums. This is true even for many medical plans that are commonly considered to be “community-rated.” However, ASOP 6 contains a provision – specifically section 3.7.7(c) – that allows use of unadjusted premiums in certain circumstances.

Because the section 3.7.7(c) exception is new, there is not a consensus among practicing actuaries regarding the specific circumstances under which a section 3.7.7(c) exception may be invoked. It is my opinion that the section 3.7.7(c)(4) exception allows use of unadjusted premium for PEMHCA agencies if certain conditions are met. Other actuaries have taken the position that ASOP 6 does not explicitly allow use of unadjusted premium for any agencies participating in the CalPERS medical plan.

Prior to the most recent ASOP 6 revision, there was general agreement that ASOP 6 allowed use of unadjusted premium as a retiree cost basis for PEMHCA agencies (under section 3.4.5 of the prior version of ASOP 6). Since there have been no changes to the CalPERS medical plan, use of unadjusted premium must still be viewed as appropriate actuarial practice to the extent that it was under the prior version of ASOP 6. That means that if the current ASOP 6 section 3.7.7(c)(4) exception is not deemed to *explicitly* allow use of unadjusted premium as a retiree cost basis for Sacramento Suburban Water District, then it would be allowable as a “deviation.” (Under GASB 45, there is no prohibition against using a “deviation.”)

While I am confident that ASOP 6 section 3.7.7(c)(4) will ultimately be found to explicitly allow use of unadjusted premium as a retiree cost basis for most PEMHCA agencies, I cannot be certain that this will be the case if and when this issue is fully reviewed. Therefore, I am including disclosure information required for a “deviation” so that the valuation will not need to be revised in the event section 3.7.7(c)(4) should be found not to explicitly allow use of unadjusted premium. Following is the disclosure information that is required should a deviation be necessary.

Use of *age-adjusted* premium for the CalPERS medical plan results in an overstatement of Sacramento Suburban Water District’s Annual Required Contribution (ARC) and Actuarial Accrued Liability (AAL) to the extent that Sacramento Suburban Water District continues to participate in the CalPERS medical plan AND that the rate structure of the CalPERS medical plan continues in its current form (i.e. with no rate distinction between active

## Total Compensation Systems, Inc.

employees and retirees). In addition to the overstatement of OPEB costs and liabilities, Sacramento Suburban Water District's policy of funding OPEB obligations could lead to an inability of Sacramento Suburban Water District to recover overfunded assets. It is important to note that, should Sacramento Suburban Water District leave the CalPERS medical plan, the subsequent plan may not qualify to use unadjusted premium rates. In this event, leaving the CalPERS medical plan would be comparable to a significant change in plan terms and would likely require a new valuation.

Following are the criteria we applied to Sacramento Suburban Water District to determine that it is reasonable to assume that Sacramento Suburban Water District's future participation in PEMHCA is likely and that the CalPERS medical program as well as its premium structure are sustainable. (We also have an extensive white paper on this subject that provides a basis for our rationale entirely within the context of ASOP 6. We will make this white paper available upon request.)

The District participates in the CalPERS medical program. We have performed the required evaluation of the CalPERS medical program and we have determined that there is sufficient evidence to apply the 3.7.7(c)(4) exception. Following are details regarding the evaluation based on the criteria we have set:

- **Plan qualifies as a "pooled health plan."** ASOP 6 defines a "pooled health plan" as one in which premiums are based at least in part on the claims experience of groups other than the one being valued." Since CalPERS rates are the same for all employers in each region, rates are clearly based on the experience of many groups.
- **Rates not based to any extent on the agency's claim experience.** As mentioned above, rates are the same for all participating employers regardless of claim experience or size.
- **Rates not based to any extent on the agency's demographics.** As mentioned above, rates are the same for all participating employers regardless of demographics.
- **No refunds or charges based on the agency's claim experience or demographics.** The terms of operation of the CalPERS program are set by statute and there is no provision for any refunds and charges that vary from employer to employer for any reason. The only charges are uniform administrative charges.
- **Plan in existence 20 or more years.** Enabling legislation to allow "contracting agencies" to participate in the CalPERS program was passed in 1967. The CalPERS medical plan has been successfully operating for almost 50 years. As far back as we can obtain records, the rating structure has been consistent, with the only difference having been a move to regional rating which is unrelated to age-adjusted rating.
- **No recent large increases or decreases in the number of participating plans or enrollment.** The CalPERS medical plan has shown remarkably stable enrollment. In the past 10 years, there has been small growth in the number of employers in most years – with the maximum being a little over 2% and a very small decrease in one year. Average year over year growth in the number of employers over the last 10 years has been about 0.75% per year. Groups have been consistently leaving the CalPERS medical plan while other groups have been joining with no disruption to its stability.

## Total Compensation Systems, Inc.

- **Agency is not expecting to leave plan in foreseeable future.** The District does not plan to leave CalPERS at present.
- **No indication the plan will be discontinued.** We are unaware of anything that would cause the CalPERS medical plan to cease or to significantly change its operation in a way that would affect this determination.
- **The agency does not represent a large part of the pool.** The District is in the CalPERS Sacramento Area region. Based on the information we have, the District constitutes no more than 0.5% of the Sacramento Area pool. In our opinion, this is not enough for the District to have a measurable effect on the rates or viability of the Sacramento Area pool.

Retiree liabilities are based on actual retiree costs. Liabilities for active participants are based on the first year costs shown below. Subsequent years' costs are based on first year costs adjusted for trend and limited by any District contribution caps.

<i>Employee Type</i>	<i>Future Retirees Pre-65</i>	<i>Future Retirees Post-65</i>
All Participants	\$14,328	\$7,015

### ***PARTICIPATION RATES***

<i>Employee Type</i>	<i>&lt;65 Non-Medicare Participation %</i>	<i>65+ Medicare Participation %</i>
Miscellaneous	100%	100%

### ***TURNOVER***

<i>Employee Type</i>	<i>Turnover Rate Tables</i>
Miscellaneous	2009 CalPERS Turnover for Miscellaneous Employees

### ***SPOUSE PREVALENCE***

To the extent not provided and when needed to calculate benefit liabilities, 80% of retirees assumed to be married at retirement. After retirement, the percentage married is adjusted to reflect mortality.

### ***SPOUSE AGES***

To the extent spouse dates of birth are not provided and when needed to calculate benefit liabilities, female spouse assumed to be three years younger than male.



## Total Compensation Systems, Inc.

### APPENDIX D: DISTRIBUTION OF ELIGIBLE PARTICIPANTS BY AGE

#### **ELIGIBLE ACTIVE EMPLOYEES**

<i>Age</i>	<i>All Participants</i>
Under 25	4
25-29	4
30-34	5
35-39	10
40-44	5
45-49	9
50-54	11
55-59	9
60-64	3
65 and older	1
Total	61

#### **ELIGIBLE RETIREES**

<i>Age</i>	<i>All Participants</i>
Under 50	0
50-54	0
55-59	2
60-64	6
65-69	9
70-74	6
75-79	6
80-84	2
85-89	2
90 and older	2
Total	35

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### **APPENDIX E: CALCULATION OF GASB 43/45 ACCOUNTING ENTRIES**

This report is to be used to calculate accounting entries rather than to provide the dollar amount of accounting entries. How the report is to be used to calculate accounting entries depends on several factors. Among them are:

- 1) The amount of prior accounting entries;
- 2) Whether individual components of the ARC are calculated as a level dollar amount or as a level percentage of payroll;
- 3) Whether the employer using a level percentage of payroll method elects to use for this purpose projected payroll, budgeted payroll or actual payroll;
- 4) Whether the employer chooses to adjust the numbers in the report to reflect the difference between the valuation date and the first fiscal year for which the numbers will be used.

To the extent the level percentage of payroll method is used, the employer should adjust the numbers in this report as appropriate to reflect the change in OPEB covered payroll. It should be noted that OPEB covered payroll should only reflect types of pay generating pension credits for plan participants. Please note that plan participants do not necessarily include all active employees eligible for health benefits for several reasons. Following are examples.

- 1) The number of hours worked or other eligibility criteria may differ for OPEB compared to active health benefits;
- 2) There may be active employees over the maximum age OPEB are paid through. For example, if an OPEB plan pays benefits only to Medicare age, any active employees currently over Medicare age are not plan participants;
- 3) Employees hired at an age where they will exceed the maximum age for benefits when the service requirement is met are also not plan participants.

Finally, GASB 43 and 45 require reporting covered payroll in RSI schedules regardless of whether any ARC component is based on the level percentage of payroll method. This report does not provide, nor should the actuary be relied on to report covered payroll.

GASB 45 Paragraph 26 specifies that the items presented as RSI "should be calculated in accordance with the parameters." The RSI items refer to Paragraph 25.c which includes annual covered payroll. Footnote 3 provides that when the ARC is based on covered payroll, the payroll measure may be the projected payroll, budgeted payroll or actual payroll. Footnote 3 further provides that comparisons between the ARC and contributions should be based on the same measure of covered payroll.

At the time the valuation is being done, the actuary may not know which payroll method will be used for reporting purposes. The actuary may not even know for which period the valuation will be used to determine the ARC. Furthermore, the actuary doesn't know if the client will make adjustments to the ARC in order to use it for the first year of the biennial or triennial period. (GASB 45 is silent on this.) Even if the actuary were to know all of these things, it would be a rare situation that would result in knowing the appropriate covered payroll number

## **Total Compensation Systems, Inc.**

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to report. For example, if the employer uses actual payroll, that number would not be known at the time the valuation is done.

As a result, we believe the proper approach is to report the ARC components as a dollar amount. It is the client's responsibility to turn this number into a percentage of payroll factor by using the dollar amount of the ARC (adjusted, if desired) as a numerator and then calculating the appropriate amount of the denominator based on the payroll determination method elected by the client for the appropriate fiscal year.

If we have been provided with payroll information, we are happy to use that information to help the employer develop an estimate of covered payroll for reporting purposes. However, the validity of the covered payroll remains the employer's responsibility even if TCS assists the employer in calculating it.

## Total Compensation Systems, Inc.

### APPENDIX F: GLOSSARY OF RETIREE HEALTH VALUATION TERMS

Note: The following definitions are intended to help a *non*-actuary understand concepts related to retiree health valuations. Therefore, the definitions may not be actuarially accurate.

<u>Actuarial Accrued Liability:</u>	The amount of the actuarial present value of total projected benefits attributable to employees' past service based on the actuarial cost method used.
<u>Actuarial Cost Method:</u>	A mathematical model for allocating OPEB costs by year of service.
<u>Actuarial Present Value of Total Projected Benefits:</u>	The projected amount of all OPEB benefits to be paid to current and future retirees discounted back to the valuation date.
<u>Actuarial Value of Assets:</u>	Market-related value of assets which may include an unbiased formula for smoothing cyclical fluctuations in asset values.
<u>Annual OPEB Cost:</u>	This is the amount employers must recognize as an expense each year. The annual OPEB expense is equal to the Annual Required Contribution plus interest on the Net OPEB obligation minus an adjustment to reflect the amortization of the net OPEB obligation.
<u>Annual Required Contribution:</u>	The sum of the normal cost and an amount to amortize the unfunded actuarial accrued liability. This is the basis of the annual OPEB cost and net OPEB obligation.
<u>Closed Amortization Period:</u>	An amortization approach where the original ending date for the amortization period remains the same. This would be similar to a conventional, 30-year mortgage, for example.
<u>Discount Rate:</u>	Assumed investment return net of all investment expenses. Generally, a higher assumed interest rate leads to lower normal costs and actuarial accrued liability.
<u>Implicit Rate Subsidy:</u>	The estimated amount by which retiree rates are understated in situations where, for rating purposes, retirees are combined with active employees.
<u>Mortality Rate:</u>	Assumed proportion of people who die each year. Mortality rates always vary by age and often by sex. A mortality table should always be selected that is based on a similar "population" to the one being studied.
<u>Net OPEB Obligation:</u>	The accumulated difference between the annual OPEB cost and amounts contributed to an irrevocable trust exclusively providing retiree OPEB benefits and protected from creditors.
<u>Normal Cost:</u>	The dollar value of the "earned" portion of retiree health benefits if retiree health benefits are to be fully accrued at retirement.

## **Total Compensation Systems, Inc.**

<u>OPEB Benefits:</u>	Other PostEmployment Benefits. Generally medical, dental, prescription drug, life, long-term care or other postemployment benefits that are not pension benefits.
<u>Open Amortization Period:</u>	Under an open amortization period, the remaining unamortized balance is subject to a new amortization schedule each valuation. This would be similar, for example, to a homeowner refinancing a mortgage with a new 30-year conventional mortgage every two or three years.
<u>Participation Rate:</u>	The proportion of retirees who elect to receive retiree benefits. A lower participation rate results in lower normal cost and actuarial accrued liability. The participation rate often is related to retiree contributions.
<u>Retirement Rate:</u>	The proportion of active employees who retire each year. Retirement rates are usually based on age and/or length of service. (Retirement rates can be used in conjunction with vesting rates to reflect both age and length of service). The more likely employees are to retire early, the higher normal costs and actuarial accrued liability will be.
<u>Transition Obligation:</u>	The amount of the unfunded actuarial accrued liability at the time actuarial accrual begins in accordance with an applicable accounting standard.
<u>Trend Rate:</u>	The rate at which the cost of retiree benefits is expected to increase over time. The trend rate usually varies by type of benefit (e.g. medical, dental, vision, etc.) and may vary over time. A higher trend rate results in higher normal costs and actuarial accrued liability.
<u>Turnover Rate:</u>	The rate at which employees cease employment due to reasons other than death, disability or retirement. Turnover rates usually vary based on length of service and may vary by other factors. Higher turnover rates reduce normal costs and actuarial accrued liability.
<u>Unfunded Actuarial Accrued Liability:</u>	This is the excess of the actuarial accrued liability over assets irrevocably committed to provide retiree health benefits.
<u>Valuation Date:</u>	The date as of which the OPEB obligation is determined. Under GASB 43 and 45, the valuation date does not have to coincide with the statement date.
<u>Vesting Rate:</u>	The proportion of retiree benefits earned, based on length of service and, sometimes, age. (Vesting rates are often set in conjunction with retirement rates.) More rapid vesting increases normal costs and actuarial accrued liability.

# CERBT Account Annual Update

Sacramento Suburban Water District

November 14, 2017

## Discussion overview

- Employer summaries
  - OPEB cost report summary
  - CERBT account summary
  - Funded status
- Investment management
- Financial reporting
- Simple, focused administration
- CERBT experience data
- Questions and contact information

# Employer summaries



# OPEB cost report summary

2013 Valuation completed by Steve Itelson 2015 Valuation completed by Total Compensation Systems	7/1/2013		7/1/2015	
Actuarial Accrued Liability (AAL)	\$6,348,900		\$6,239,224	
Present Value of Benefits (PVB)	\$9,433,900		\$7,424,388	
Remaining Amortization Period	24 Years	Closed	10 Years	Closed
	FY 2015-16		FY 2016-17	
Annual Required Contribution (ARC)	\$459,542		\$472,179	
Normal Cost	\$160,857		\$165,281	
Amortization of Unfunded Actuarial Accrued Liability	\$298,685		\$306,899	
Pay-as-you-go	\$269,867		\$279,023	
Implicit Rate Subsidy	Not Applicable		Not Applicable	
Total Covered Lives (Active & Retiree)	87		91	
Asset Allocation Strategy Selection	Strategy 1		Strategy1	
Discount Rate	7.50%		7.00%	

## Submission of Renewal OPEB Cost Report

- To comply with GASB 74, the CERBT requires that employers submit an OPEB cost report at least biennially.
- Documents Required for OPEB Cost Report Renewal:
  - Actuarial Valuation Report or AMM Report
  - Summary of Actuarial Information
  - Certification of Actuarial Information (Valuation), or Affirmation of OPEB Cost Analysis Report (AMM)
  - Certification of Funding Policy
- Please provide CERBT with renewal OPEB documents as soon as possible

## OPEB data extracts

- For CalPERS Health Benefits contracted employers
  - Must be requested by completing two forms
- Within 30 days after receipt of request CERBT will provide
  - Participant data maintained by CalPERS
  - Excel workbook sent via password protected email
- Things to consider
  - May not include all of your OPEB participant data
  - Accuracy of data is responsibility of employer

# CERBT account summary

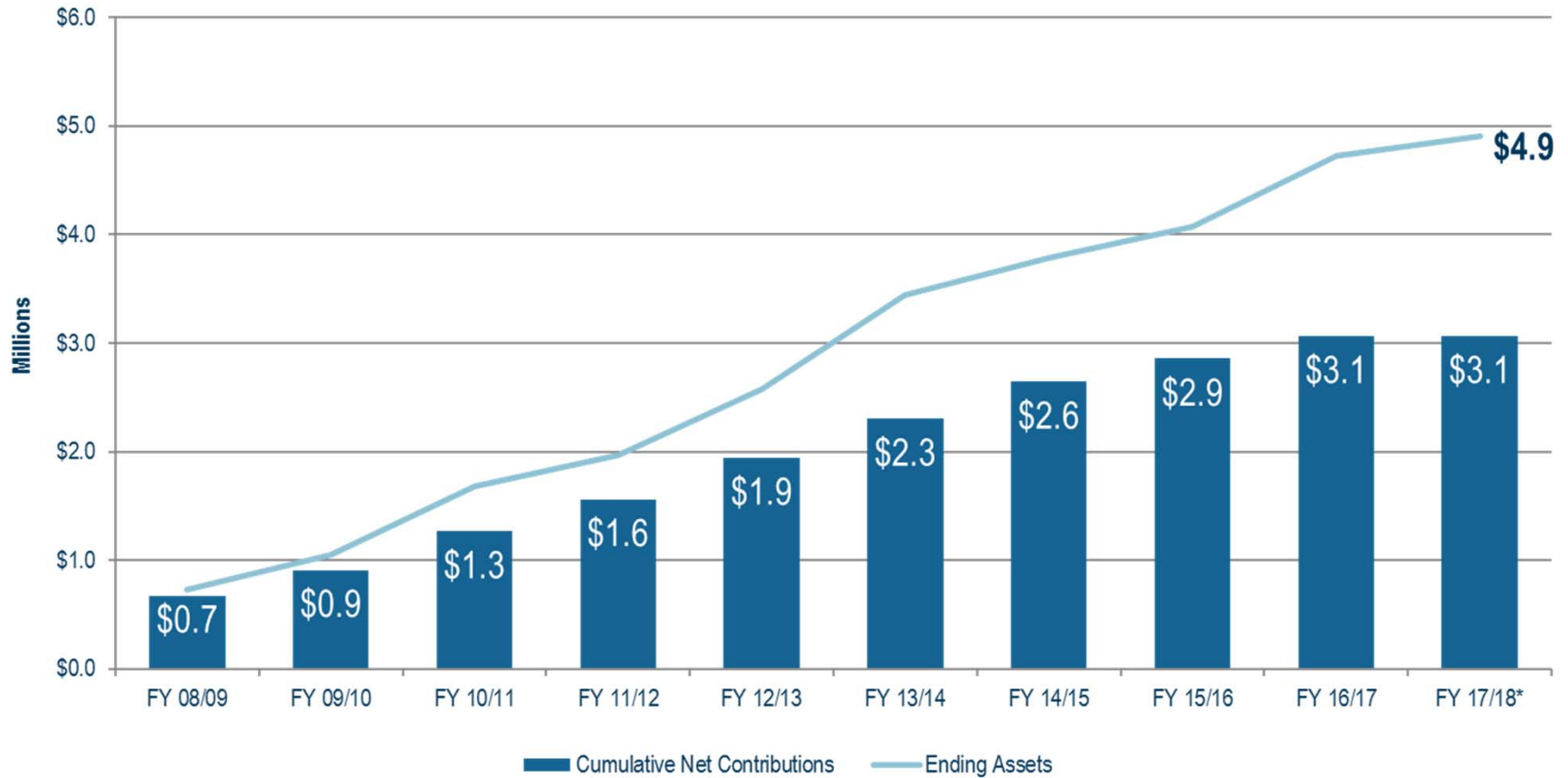
## Account summary as of September 30, 2017

Initial contribution (12/19/2008)	\$248,419
Additional contributions	\$4,744,400
Disbursements	(\$1,928,194)
CERBT expenses	(\$24,236)
Investment earnings	\$1,864,129
Total assets	\$4,904,519
Average annualized internal rate of return (12/19/2008-9/30/2017)	8.86%

As of the District's most recent Annual Update through September 30, 2016, the Average Annualized Internal ROR was 8.44%

Agreement effective date: 12/10/2008  
In PEMHCA: Yes

# CERBT account summary by fiscal year



\*FY 2017-18 is through September 30, 2017

## Cash flow summary by fiscal year

FY	Contributions	Disbursements	Net Contributions
2008-09	\$726,419	(53,007.84)	\$673,411
2009-10	\$495,000	(256,173.19)	\$238,827
2010-11	\$511,000	(155,611.68)	\$355,388
2011-12	\$558,200	(262,802.15)	\$295,398
2012-13	\$576,300	(195,030.18)	\$381,270
2013-14	\$592,700	(233,194.08)	\$359,506
2014-15	\$591,000	(250,308.24)	\$340,692
2015-16	\$470,000	(258,551.15)	\$211,449
2016-17	\$472,200	(263,515.06)	\$208,685
2017-18*	\$0	(\$0)	\$0

\*FY 2017-18 is through September 30, 2017.

# Funded status comparison

Measurement Date	AAL	Market Value of Assets	Funded Ratio
7/1/2015	\$6,239,224	\$3,780,086	60.59%
6/30/2017	\$6,895,645*	\$4,726,714	68.55%

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\* Estimated AAL represents roll forward projections of AAL to fiscal year end

# Investment management



## CERBT asset allocation strategies

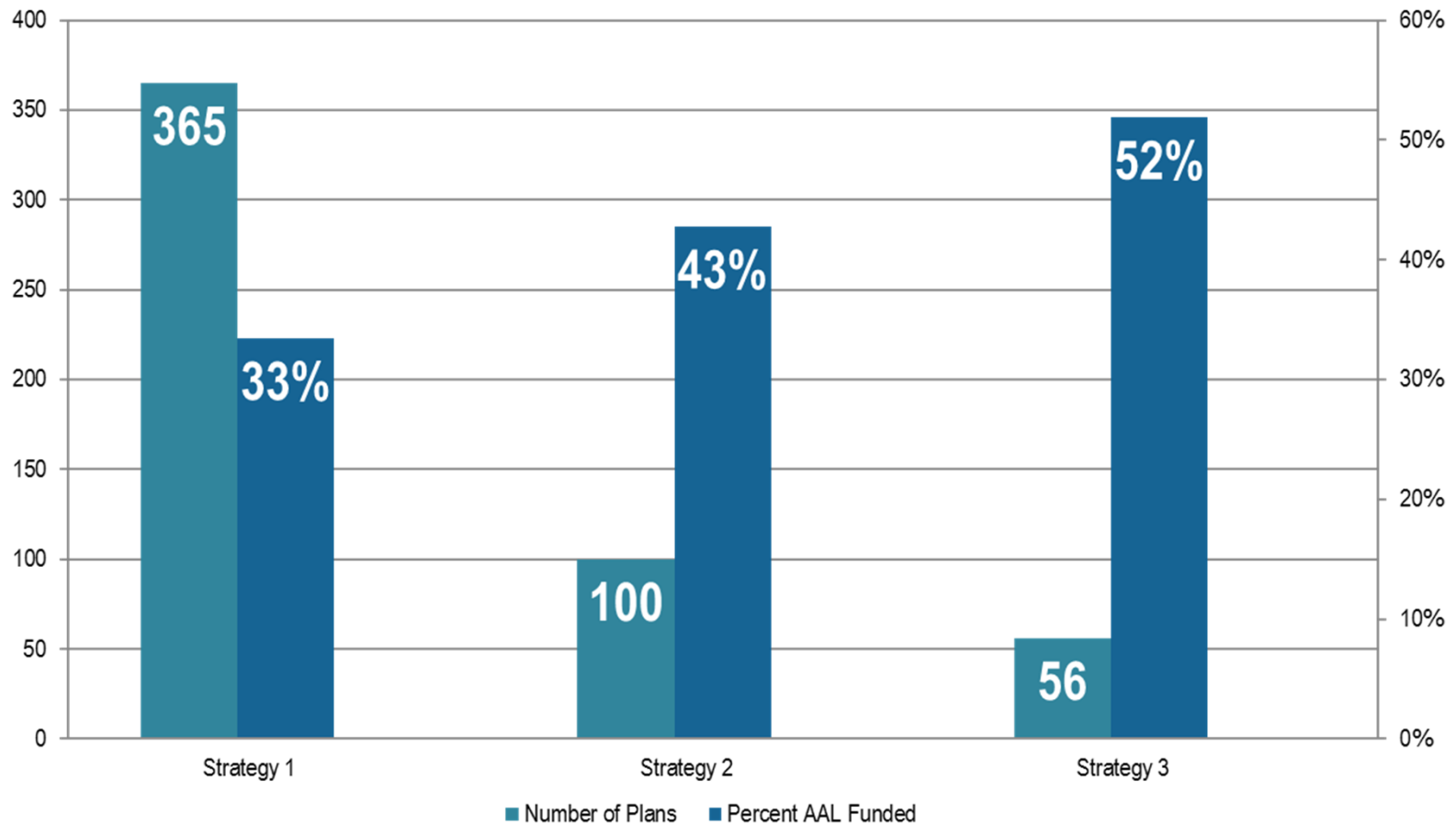
	Strategy 1	Strategy 2	Strategy 3
Expected Long Term Rate of Return <small>(General Inflation Rate Assumption of 2.75%)</small>	7.28%	6.73%	6.12%
Standard Deviation of Expected Returns	11.74%	9.32%	7.14%

- All CERBT asset allocation strategies share the same public market asset classes
  - Allocation strategies differ only to the extent to which they participate in each of the asset classes

# CERBT asset class target allocations

Asset Classification	Investment Management	Strategy 1	Strategy 2	Strategy 3
Global Equity	Passive MSCI All Country World Index	57%	40%	24%
Fixed Income	Active Barclays Capital Long Liability Index	27%	39%	39%
Global Real Estate (REITs)	Passive FTSE EPRA/NAREIT Developed Liquid Index	8%	8%	8%
Treasury Inflation Protected Securities (TIPS)	Passive Barclays Capital Global Real: US TIPS Index	5%	10%	26%
Commodities	Active S&P GSCI Total Return Index	3%	3%	3%

# Participation by Asset Allocation Strategy



\* Certain agencies excluded

As of September 30, 2017

# CERBT investment results – time weighted

Periods Ended September 30, 2017

<u>Fund</u>	<u>Assets</u>	<u>1 Month</u>	<u>3 Months</u>	<u>FYTD</u>	<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>	<u>ITD</u>
CERBT Strategy 1 (Inception June 1, 2007)	\$6,041,042,995	1.08%	3.78%	3.78%	10.80%	5.93%	7.69%	4.76%
Benchmark		1.04%	3.71%	3.71%	10.18%	5.44%	7.26%	4.29%
CERBT Strategy 2 (Inception October 1, 2011)	\$956,507,092	0.59%	3.05%	3.05%	7.51%	5.10%	6.27%	7.94%
Benchmark		0.54%	2.98%	2.98%	6.90%	4.66%	5.85%	7.62%
CERBT Strategy 3 (Inception January 1, 2012)	\$267,320,152	0.14%	2.34%	2.34%	4.39%	4.13%	4.74%	5.81%
Benchmark		0.10%	2.27%	2.27%	3.87%	3.72%	4.30%	5.44%

Time weighted return reports the performance of the investment vehicle, not of the employer assets. Returns are gross. Historical performance is not necessarily indicative of actual future investment performance or of future total program cost. Current and future performance may be lower or higher than the historical performance data reported here. Investment return and principal value may fluctuate so that your investment, when redeemed, may be worth more or less than the original cost. The value of an employer's CERBT fund shares will go up and down based on the performance of the underlying funds in which the assets are invested. The value of the underlying funds' assets will, in turn, fluctuate based on the performance and other factors generally affecting the securities market.

# Financial reporting

# Financial reporting

## GASB 74 & 75 overview:

- Effective dates for implementation of GASB 75

Employer Fiscal Year End	Effective Dates
December	12/31/2018
March	03/31/2019
June	06/30/2018
September	09/30/2018

## Financial reporting

- CERBT is the Plan
  - Provides audited and compliant GASB 74 report
    - Schedule of Changes in Fiduciary Net Position (FNP)

NFP Fiscal Year	Expected Availability
2015-16	November 2017
2016-17	February 2018
2017-18	November 2018

# Financial reporting

## GASB 74 & 75 overview:

- Employers will report the Net OPEB Liability on their financials
  - ARC no longer relevant for accounting purposes
- GASB 75 requires an audited Schedule of Change in Fiduciary Net Position from CERBT
- Significant increase in Note Disclosures and Required Supplementary Information



# Financial reporting

## GASB 74 & 75 overview:

- Measurement date detached from actuarial valuation date
- Amortization periods likely to be substantially shorter
- Late contribution accruals will not be allowed
- Triennial valuations will not be allowed

Simple, focused administration

## Simple, focused administration - statements

- Quarterly account statements
  - Available online ~ two weeks post quarter close (except Q4)
  - Email notification will be sent once statements published
- Annual account statements
  - Available online ~ six weeks post fiscal year close
  - Email notification will be sent once statements published
  - Annual statement delivered in August is unaudited
    - CERBT will provide an audited, GASB 75 compliant, Schedule of Change in Fiduciary Net Position

## CERBT total participation cost

- Total cost of CERBT participation is 10 basis points of assets under management
  - Consists of all administrative and investment management expenses including:
    - State Street Global Advisors (SSGA) (external investment management)
      - Includes imbedded external investment management fees (1.5 basis points)
    - Northeast Retirement Services (online record keeping)

# CERBT fee rate breakdown

Source of Fees	CERBT FY 2017-2018
External investment management fees	2.03 basis points
External investment operating expenses to fund managers	1.50 basis points
Internal investment fees	0.67 basis points
Custodial services fees	0.19 basis points
Online record keeping fees	0.15 basis points
Program administration fees	5.46 basis points
Total (all inclusive):	10.00 basis points

## CERBT total participation cost

- Total cost of CERBT participation is 10 basis points of assets under management
  - CERBT is a self-funded trust
  - CERBT does not profit
  - Employer account charged daily
  - Rate can be changed without prior notice and may be higher or lower in the future

# CERBT fee rate history

Fiscal Year	Total Participation Cost
2007-2008	2.00 basis points
2008-2009	6.00 basis points
2009-2010	9.00 basis points
2010-2011	12.00 basis points
2011-2012	12.00 basis points
2012-2013	15.00 basis points
2013-2014	14.00 basis points
2014-2015	10.00 basis points
2015-2016	10.00 basis points
2016-2017	10.00 basis points
2017-2018	10.00 basis points

# CERBT experience data



## CERBT FY 2016-17 highlights

CERBT experienced a number of significant milestones

- Total CERBT contracts – 524
- Over \$1 billion in net contributions during the FY
- \$562 million in investment earnings
- Total assets under management grew by more than 30% ending the FY at \$6.8 billion
- Total covered lives increased 81.3% ending the FY at 729,315

# CERBT employers under contract

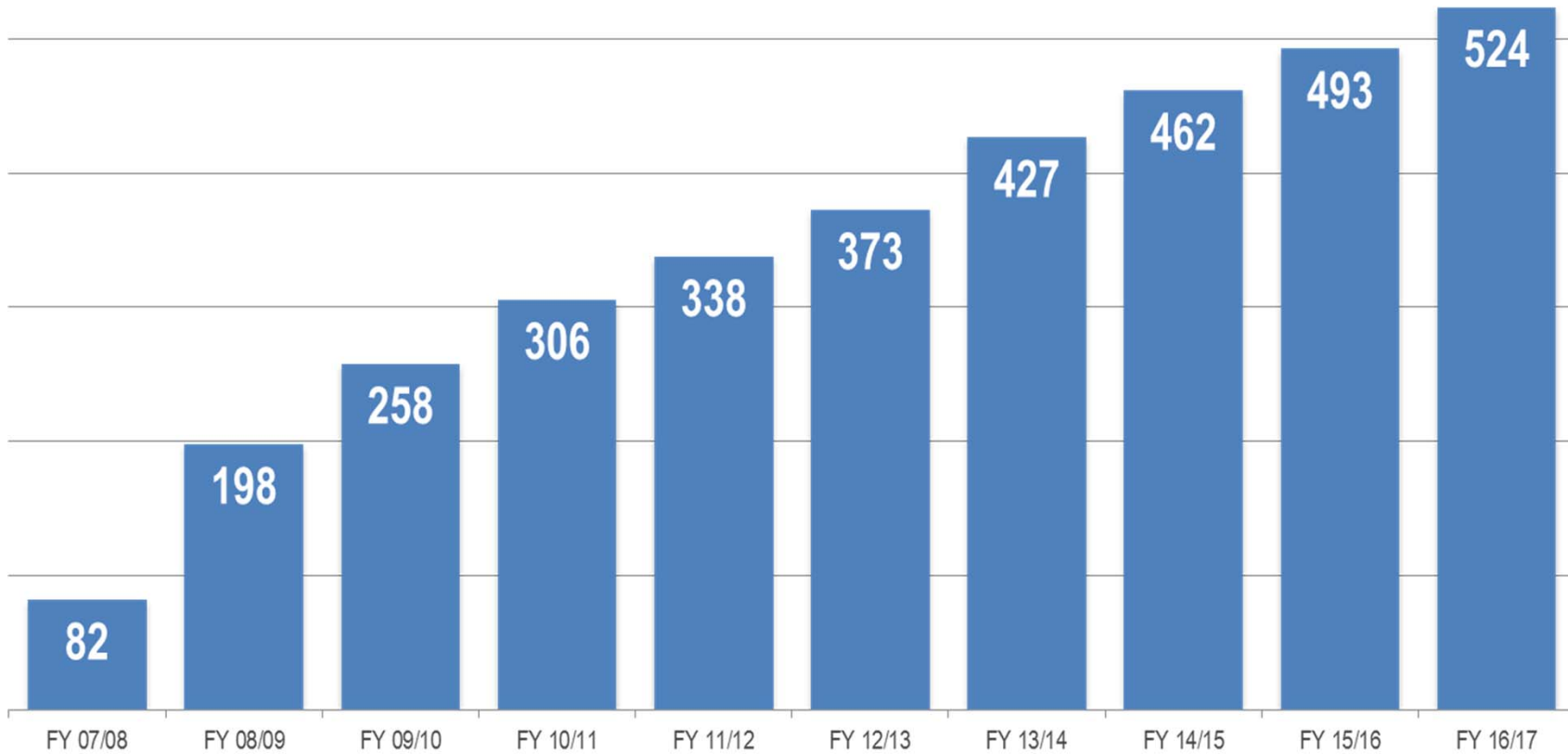
528 Total

- State of California
- 137 Cities or Towns
- 14 Counties
- 60 Schools
- 23 Courts
- 293 Special Districts and other Public Agencies
  - (90 Water, 33 Sanitation, 29 Fire, 22 Transportation)

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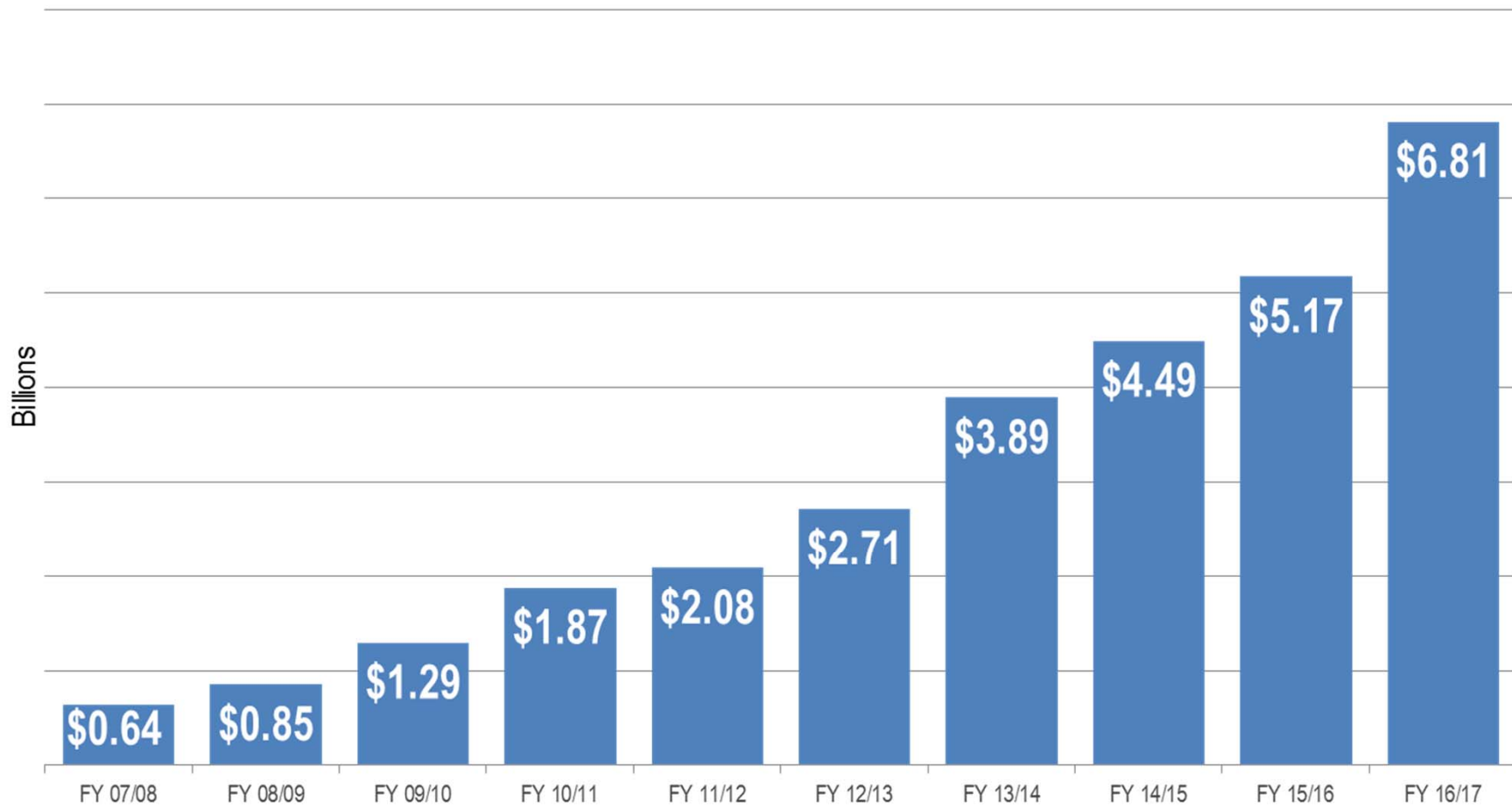
As of November 6, 2017

# CERBT employers cumulative growth



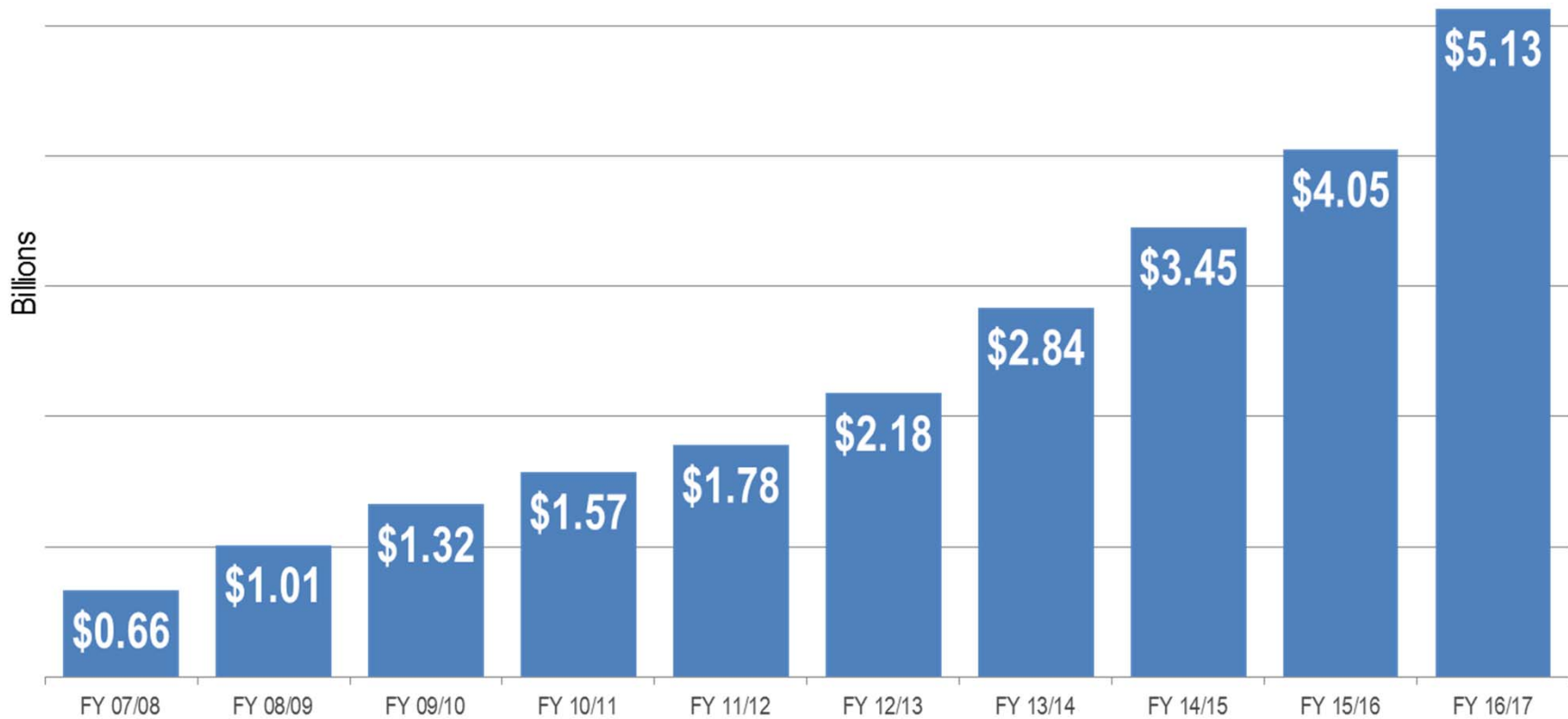
As of June 30, 2017

# CERBT employer cumulative assets under management



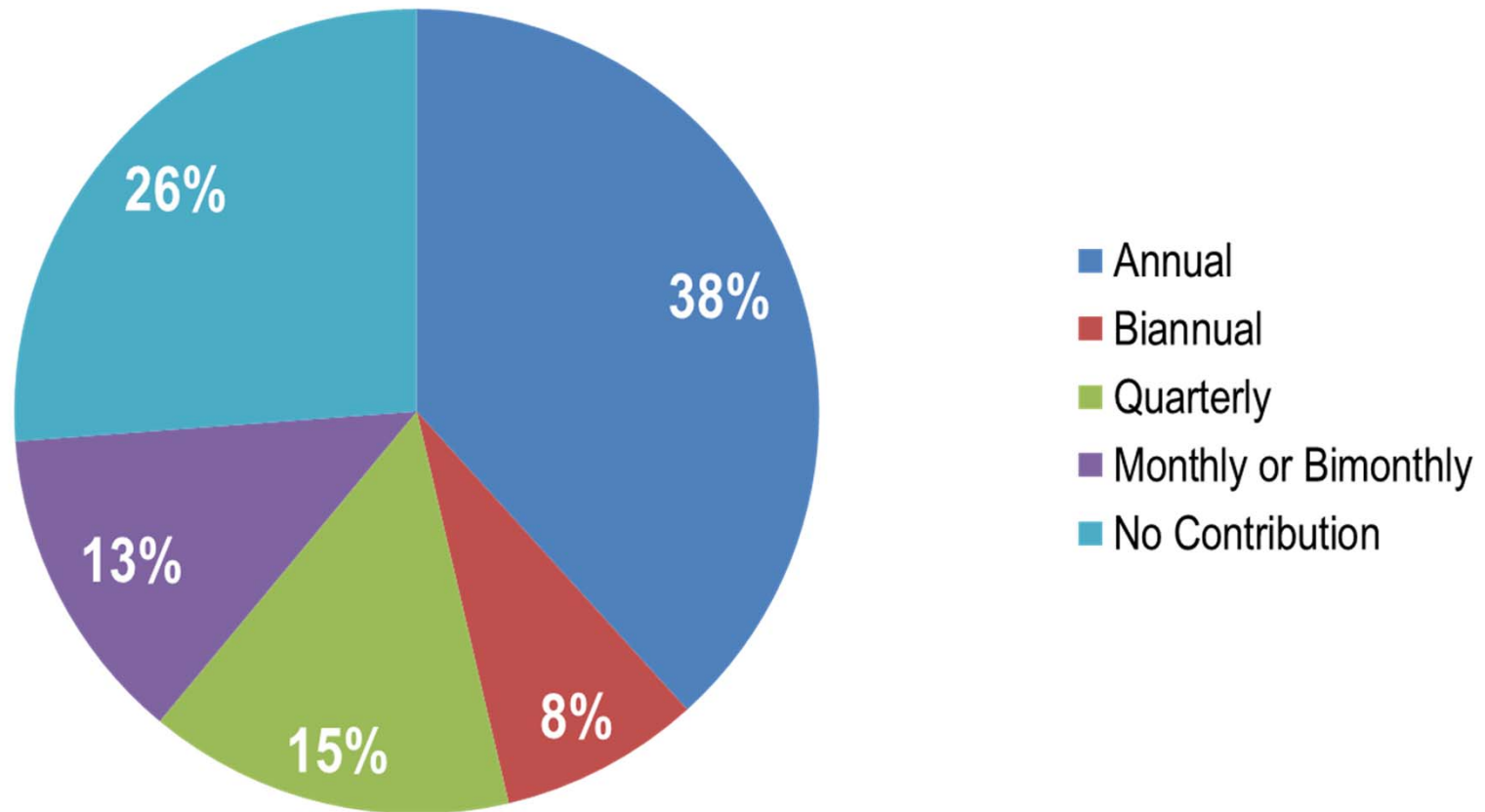
As of June 30, 2017

# CERBT employer cumulative net contributions



As of June 30, 2017

# CERBT contribution patterns



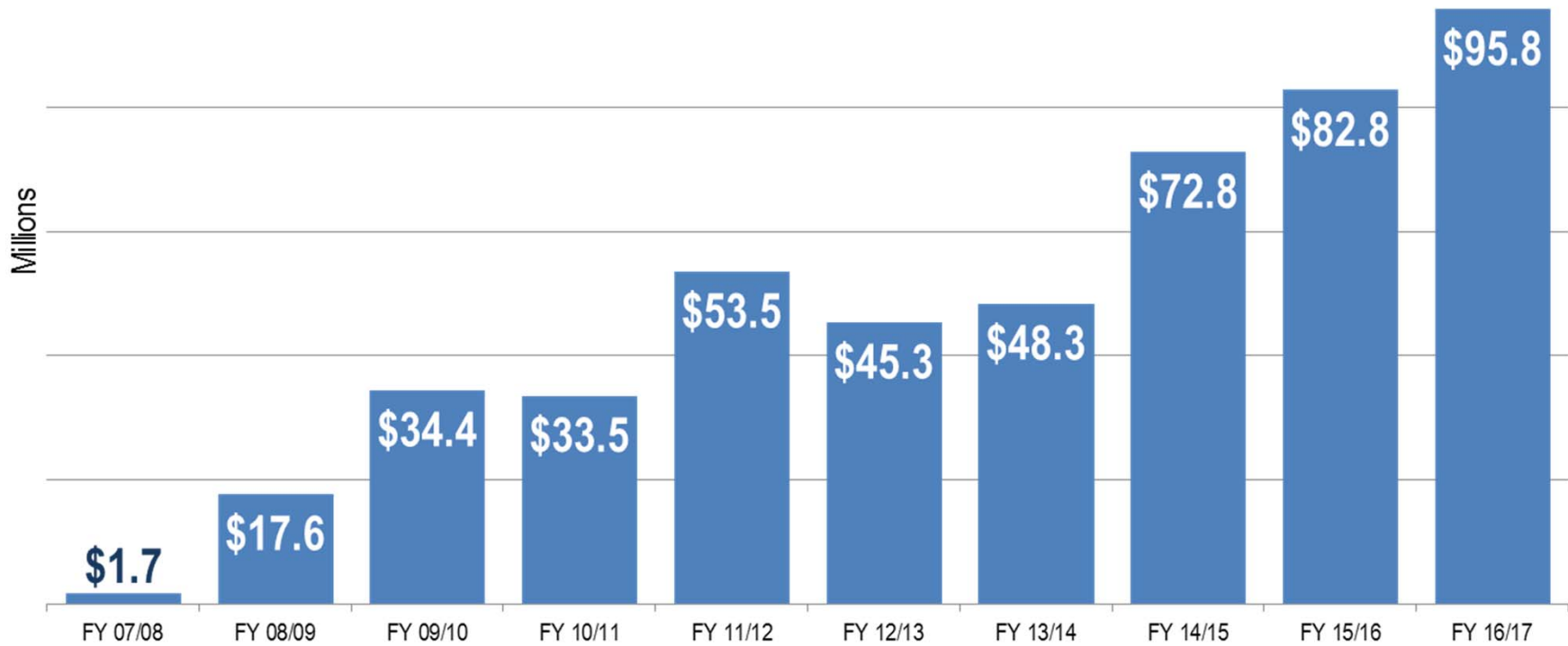
FY 2016-17 contribution patterns

## Cost-sharing of OPEB

Conditions that may allow for employee sharing of employer OPEB costs in an IRC Section 115 trust fund

- Employee shared contributions must be mandatory and uniform
  - May vary by bargaining unit only
- No voluntary or elective contributions
- No one-time irrevocable elections
- Assets contributed to the CERBT belong to the employer
  - Employees, former employees, retirees and dependents have no reversion rights

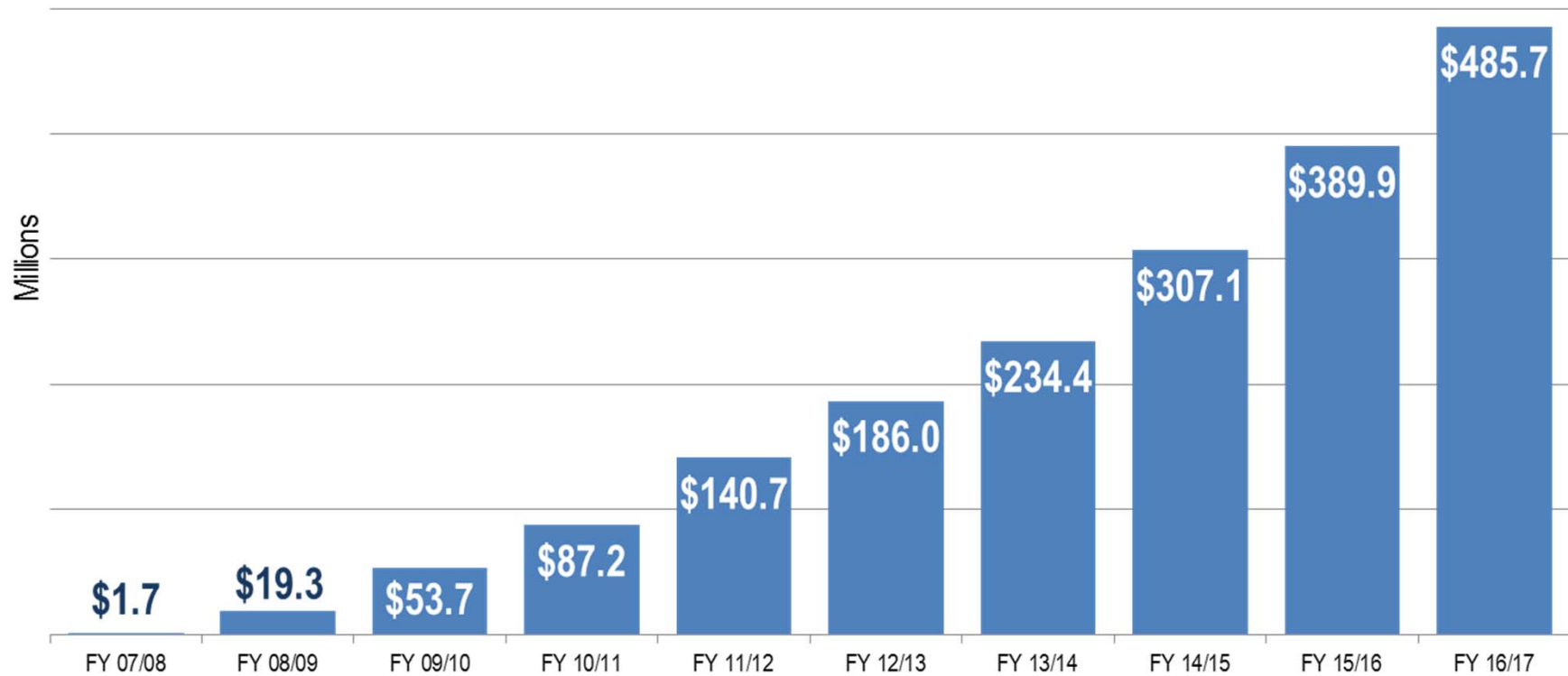
# CERBT disbursements by fiscal year



As of June 30, 2017



# CERBT cumulative disbursements



As of June 30, 2017

## CERBT disbursement frequency

28%

Percentage of employers requesting disbursements

72%

Percentage of employers not requesting disbursements

As of June 30, 2017

## CERBT employer funding levels

Funding level	Actuarial Accrued Liability	Present Value of Benefits
0% - 25%	144	195
25% - 50%	151	175
50% - 75%	97	92
75% - 100%	69	41
> 100%	63	21

As of June 30, 2017

## CERBT Accrued Liabilities and Market Value of Assets

Agency Type	AAL	MVA	Funded Level
Cities and Towns	\$5.9 Billion	\$1.4 Billion	24%
Counties	\$4.1 Billion	\$1.8 Billion	44%
Courts	\$393.2 Million	\$67.6 Million	17%
Fire	\$798.4 Million	\$179.0 Million	22%
Other Special Districts	\$1.6 Billion	\$996.7 Million	62%
Sanitation	\$480.8 Million	\$236.8 Million	49%
Schools	\$19.8 Billion	\$867.1 Million	4%
State of California	\$80.6 Billion	\$538.8 Million	1%
Water	\$1.7 Billion	\$711.2 Million	42%
All CERBT Agencies	\$115.4 Billion	\$6.8 Billion	6%

As of June 30, 2017

## Questions? Where to get information?

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