

CERBT Account Annual Update

Metropolitan Water District of
Southern California
November 13, 2017

Discussion overview

- Employer summaries
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 - CERBT account summary
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Employer summaries

OPEB cost report summary

Valuations completed by Bartel Associates, LLC.	6/30/2013		6/30/2015	
Actuarial Accrued Liability (AAL)	\$315,326,000		\$423,420,000	
Present Value of Benefits (PVB)	\$373,613,000		\$493,345,000	
Remaining Amortization Period	23 Years	Closed	21 Years	Closed
	FY 2016-17		FY 2017-18	
Annual Required Contribution (ARC)	\$29,272,000		\$30,086,000	
Normal Cost	\$10,463,000		\$10,712,000	
Amortization of Unfunded Actuarial Accrued Liability	\$18,809,000		\$19,374,000	
Pay-as-you-go	\$16,129,000		\$17,981,000	
Implicit Rate Subsidy	\$4,374,000		\$4,914,000	
Total Covered Lives (Active & Retiree)	3,325		3,437	
Asset Allocation Strategy Selection	Strategy 1		Strategy 1	
Discount Rate	7.25%		7.25%	

CERBT account summary

Account summary as of September 30, 2017

Initial contribution (9/25/2013)	\$40,000,000
Additional contributions	\$212,705,919
Disbursements	(\$42,058,526)
CERBT expenses	(\$594,274)
Investment earnings	\$36,047,030
Total assets	\$246,100,149
Average annualized internal rate of return (9/25/2013-9/30/2017)	5.46%

As of the District's most recent Annual Update through October 31, 2016, the Average Annualized Internal ROR was 2.03%

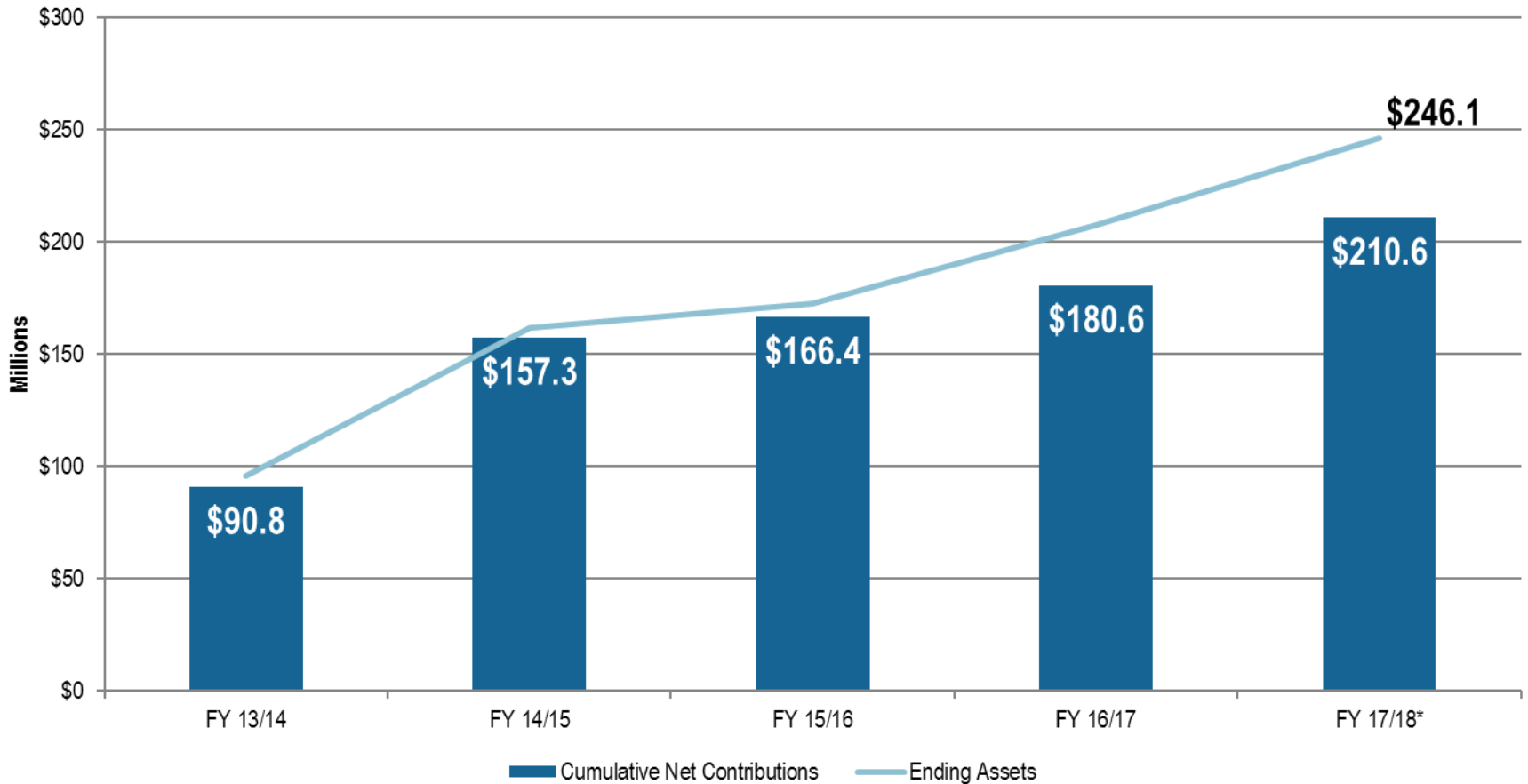
Agreement effective date: 9/23/2013
In PEMHCA: Yes

CERBT account summary

Account summary for fiscal year 2016-17

Beginning Balance (7/1/2016)	\$172,640,181
Contributions	\$29,272,000
Disbursements	(\$15,151,140)
CERBT expenses	(\$177,377)
Investment earnings	\$20,858,718
Total assets	\$207,442,383
Average annualized internal rate of return (7/1/2016-6/30/2017)	10.46%

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
2013-14	\$90,794,919	(\$0)	\$90,794,919
2014-15	\$79,457,000	(\$13,001,655)	\$66,455,345
2015-16	\$23,096,000	(\$13,905,730)	\$9,190,270
2016-17	\$29,272,000	(\$15,151,140)	\$14,120,860
2017-18*	\$30,086,000	(\$0)	\$30,086,000

*FY 2017-18 is through September 30, 2017

CERBT Employer Information

- Top 10 CERBT employers* by total contributions

Employer	Total Contributions	Disbursements
County of Santa Clara	\$619,151,443	\$0
County of San Mateo	\$287,876,683	(\$88,709,857)
Sacramento Municipal Utility District	\$280,269,532	\$0
Metropolitan Water District of Southern California	\$252,705,919	(\$42,058,526)
Los Angeles Unified School District	\$219,000,000	\$0
County of Placer	\$218,840,446	\$0
Los Angeles County Sanitation District No. 2	\$110,454,000	\$0
City of San Diego	\$105,860,252	(\$39,749,742)
Los Angeles Community College District	\$75,464,593	\$0
County of Marin	\$72,769,087	\$0

*Excluding the State of California

As of September 30, 2017

Funded status comparison

Measurement Date	AAL	Market Value of Assets	Funded Ratio
6/30/2015	\$423,420,000	\$161,835,000	38.22%
6/30/2017	\$464,800,603*	\$207,442,383	44.63%

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

Funded status comparison

- Funded status of top 10 CERBT employers* by AAL

Employer	AAL **	AUM†	Funded Status
Los Angeles Unified School District	\$15,297,626,594	\$244,129,536	1.60%
County of Santa Clara	\$2,306,632,050	\$857,271,477	37.17%
Fresno Unified School District	\$1,041,196,901	\$36,358,826	3.49%
City of Oakland	\$953,659,551	\$4,324,822	0.45%
Los Angeles Community College District	\$696,376,378	\$98,669,276	14.17%
Sacramento City Unified School District	\$673,826,684	\$54,750,917	8.16%
City of San Diego	\$652,746,423	\$115,885,608	17.75%
Metropolitan Water District of Southern California	\$464,800,603	\$207,442,383	44.63%
County of San Mateo	\$434,722,691	\$277,449,828	63.82%
County of Placer	\$421,738,765	\$319,895,078	75.85%

*Excluding the State of California

**AAL roll forward from most recent actuarial valuation report

†Assets Under Management

As of June 30, 2017

Funded status comparison

- Funded status of top 10 CERBT Water Districts by AAL

Employer	AAL*	AUM†	Funded Status
Metropolitan Water District of Southern California	\$464,800,603	\$207,442,383	44.63%
Imperial Irrigation District	\$256,353,852	\$53,620,268	20.92%
Santa Clara Valley Water District	\$197,832,532	\$96,639,696	48.85%
Eastern Municipal Water District	\$114,931,297	\$38,386,762	33.40%
Marin Municipal Water District	\$57,703,274	\$24,251,607	42.03%
Alameda County Water District	\$55,608,608	\$20,490,056	36.85%
Helix Water District	\$35,721,748	\$12,087,846	33.84%
Placer County Water Agency	\$31,307,333	\$18,562,455	59.29%
Padre Dam Municipal Water District	\$30,769,092	\$12,653,479	41.12%
Palmdale Water District	\$29,893,489	\$0	0.00%

*AAL roll forward from most recent actuarial valuation report

†Assets Under Management

As of June 30, 2017

Investment management

CERBT asset allocation strategies

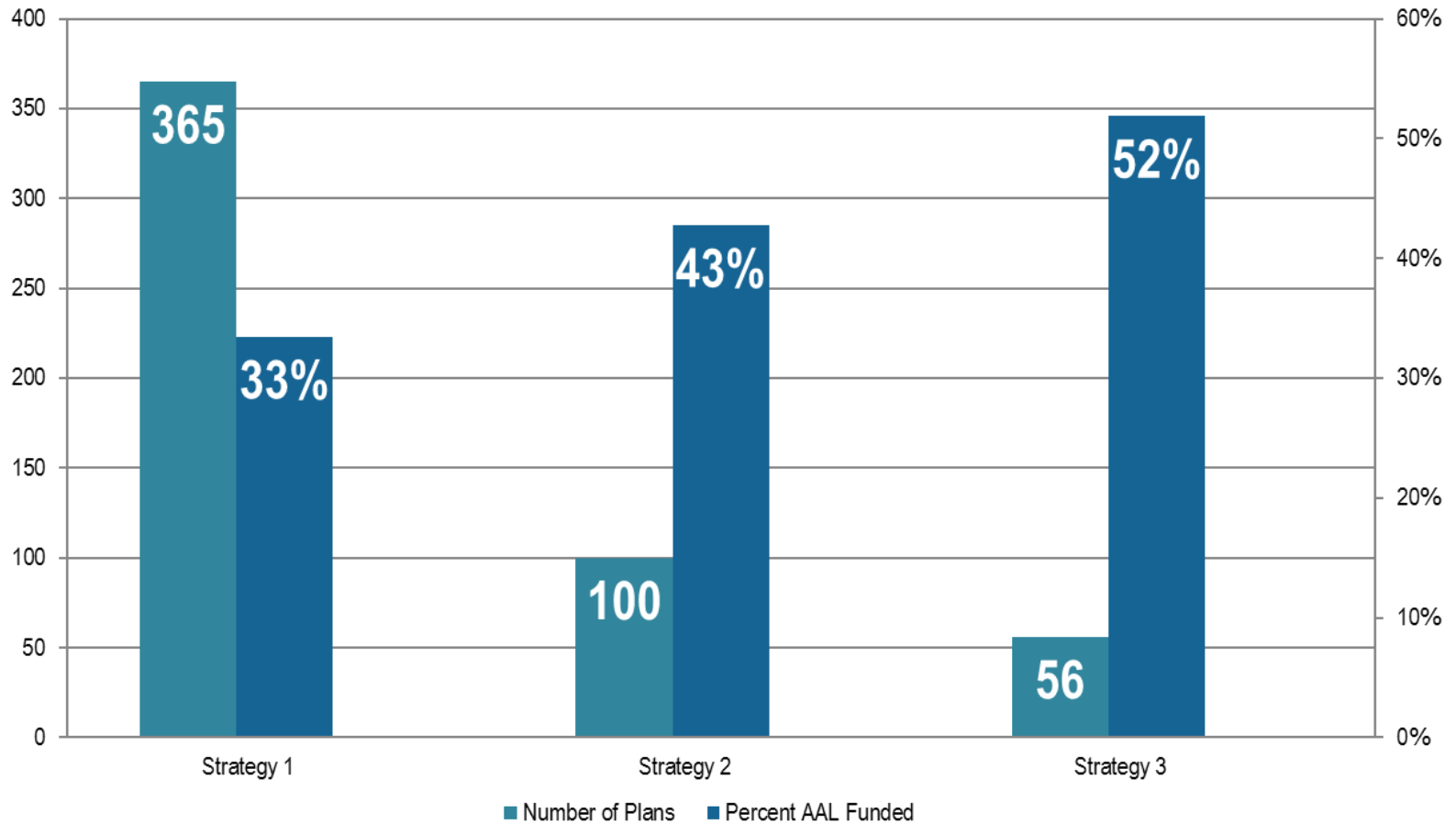
	Strategy 1	Strategy 2	Strategy 3
Expected Long Term Rate of Return <small>(General Inflation Rate Assumption of 2.75%)</small>	7.28%	6.73%	6.12%
Standard Deviation of Expected Returns	11.74%	9.32%	7.14%

- 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 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

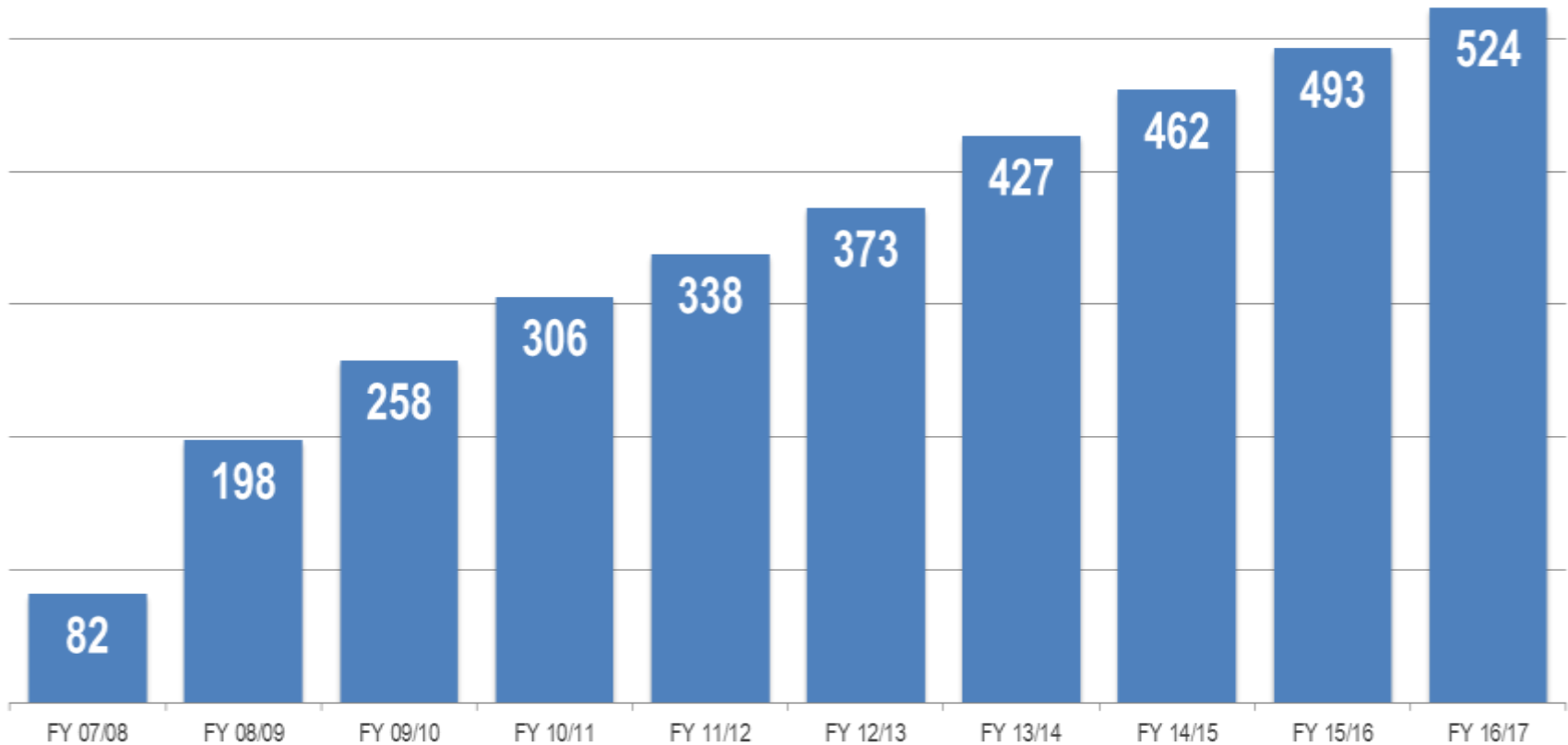
- Total CERBT contracts – 524
- Over \$1 billion in net contributions during the FY
- \$562 million in investment earnings
- Total assets under management grew by more than 30% ending the FY at \$6.8 billion
- Total covered lives increased 81.3% ending the FY at 729,315

CERBT employers under contract

527 Total

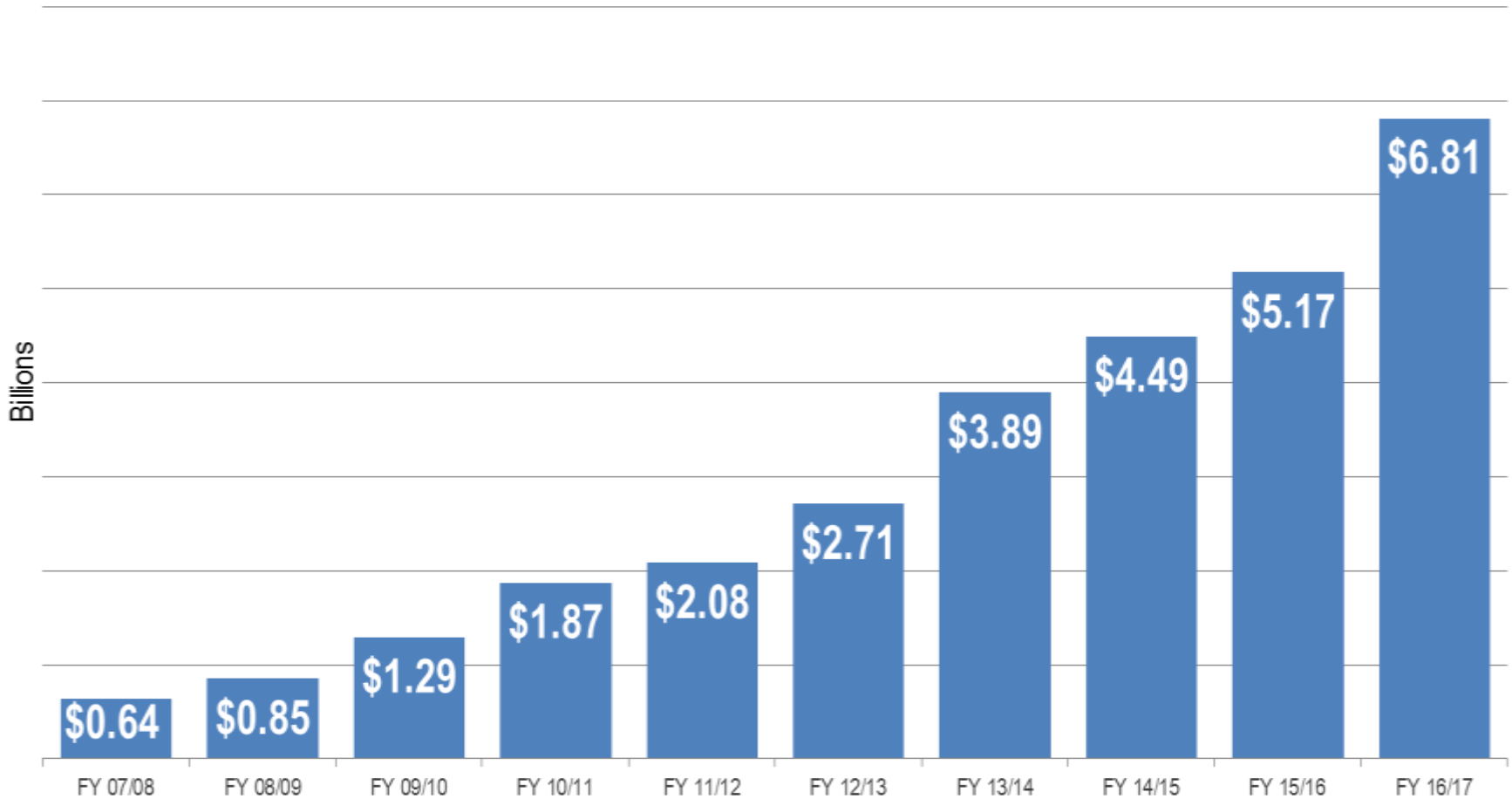
- State of California
- 137 Cities or Towns
- 14 Counties
- 60 Schools
- 22 Courts
- 293 Special Districts and other Public Agencies
 - (90 Water, 33 Sanitation, 29 Fire, 22 Transportation)

CERBT employers cumulative growth



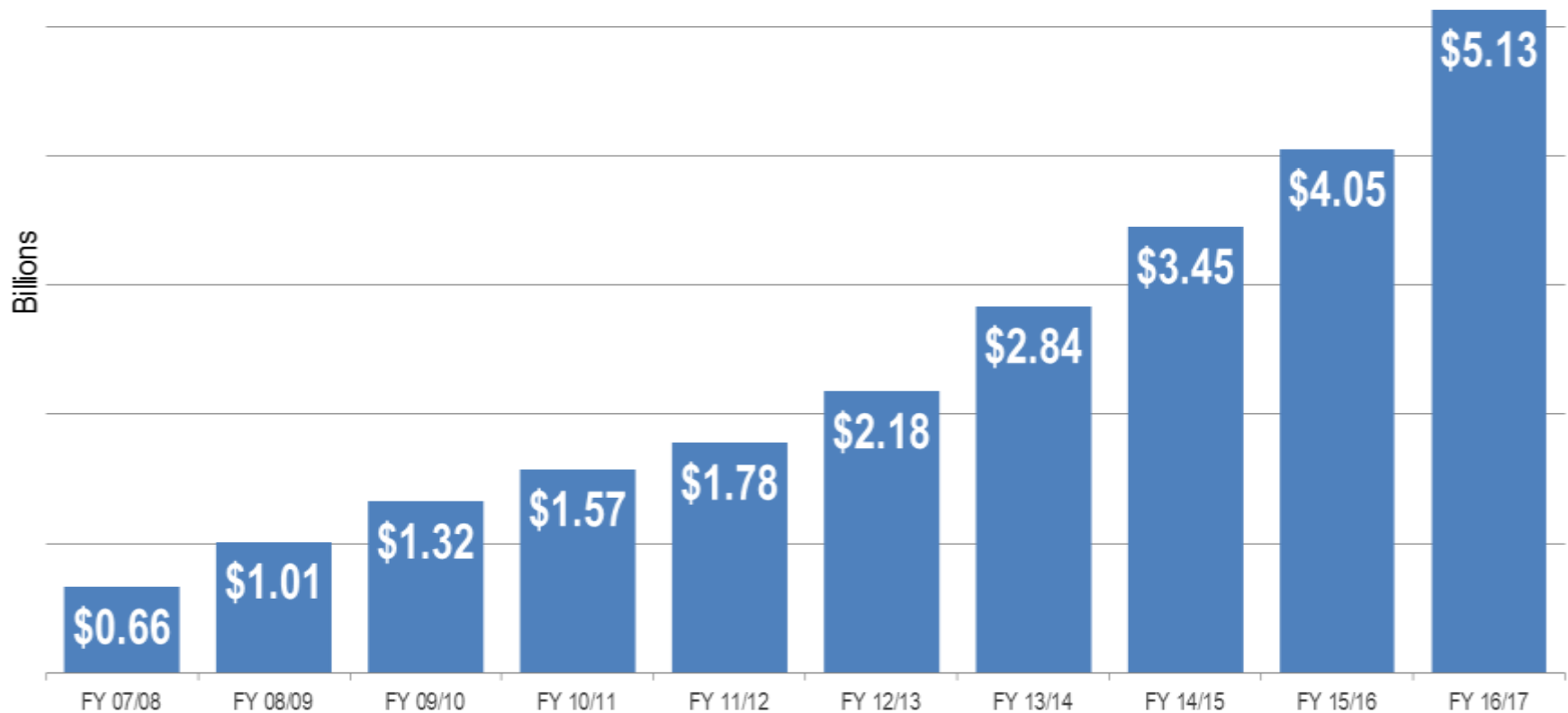
As of June 30, 2017

CERBT employer cumulative assets under management



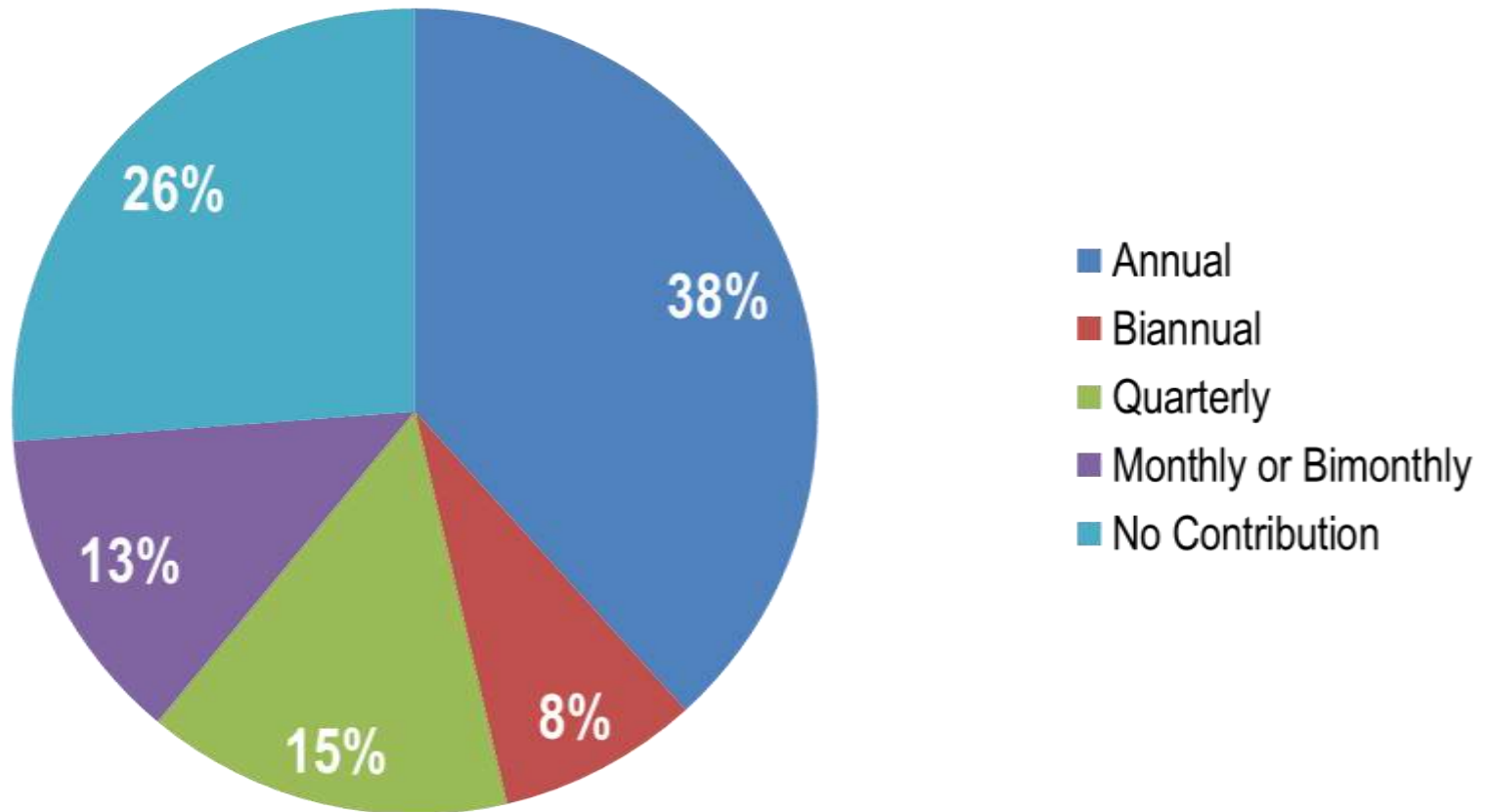
As of June 30, 2017

CERBT employer cumulative net contributions



As of June 30, 2017

CERBT contribution patterns



FY 2016-17 contribution patterns

CERBT disbursement frequency

28%

Percentage of employers requesting disbursements

72%

Percentage of employers not requesting disbursements

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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Questions