

MINUTES OF THE ADJOURNED MEETING OF THE  
BOARD OF DIRECTORS OF  
VISTA IRRIGATION DISTRICT

January 17, 2018

An Adjourned Meeting of the Board of Directors of Vista Irrigation District was held on Wednesday, January 17, 2018, at the offices of the District, 1391 Engineer Street, Vista, California.

**1. CALL TO ORDER**

President Dorey called the meeting to order at 8:31 a.m.

**2. ROLL CALL**

Directors present: Miller, Vásquez, Dorey, Sanchez, and MacKenzie.

Directors absent: None.

Staff present: Eldon Boone, General Manager; Lisa Soto, Secretary of the Board; Brett Hodgkiss, Assistant General Manager; Don Smith, Director of Water Resources; Brian Smith, District Engineer; Randy Whitmann, Director of Engineering; Frank Wolinski, Operations and Field Services Manager; Alisa Nichols, Management Analyst; Al Ducusin, Engineering Services Manager; Marlene Kelleher, Finance Manager; and Marian Schmidt, Administrative Assistant. Back-up General Counsel Jeremy Jungreis was also present.

Other attendees: Greg Pieratt and Isaac Little of Lee & Associates joined the meeting at 9:00 a.m. for agenda Item 15.

**3. PLEDGE OF ALLEGIANCE**

Director Vásquez led the pledge of allegiance.

**4. APPROVAL OF AGENDA**

18-01-07	<i>Upon motion by Director Vásquez, seconded by Director MacKenzie and unanimously carried (5 ayes: Miller, Vásquez, Dorey, Sanchez, and MacKenzie), the Board of Directors approved the agenda as presented.</i>
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**5. PUBLIC COMMENT TIME**

No public comments were presented on items not appearing on the agenda.

**6. CONSENT CALENDAR**

18-01-08	<i>Upon motion by Director MacKenzie, seconded by Director Vásquez and unanimously carried (5 ayes: Miller, Vásquez, Dorey, Sanchez, and MacKenzie), the Board of Directors approved the Consent Calendar, including Resolution No. 18-02 approving disbursements.</i>
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A. Grant of Right of Way

See staff report attached hereto. Staff recommended and the Board accepted Grant of Right of Way (A52) for a 20-foot wide specific easement over a single-family parcel consisting of approximately 0.62 gross acres owned by Rebecca S. Ashlock, located at Pine Heights Way, Escondido (LN 2017-043; APN 228-100-29; DIV NO 5).

B. Grant of Right of Way

See staff report attached hereto. Staff recommended and the Board accepted Grant of Right of Way (W63) via parcel map for a 20-foot wide specific easement over a single-family parcel consisting of approximately 1.42 gross acres owned by Walcia Trust, located at 2016 Buena Creek Road, Vista (LN 2015-031; APN 184-060-98; DIV NO 5).

C. Minutes of Board of Directors meeting on January 3, 2018

The minutes of January 3, 2018 were approved as presented.

D. Resolution ratifying check disbursements

**RESOLUTION NO. 18-02**

**BE IT RESOLVED**, that the Board of Directors of Vista Irrigation District does hereby approve checks numbered 57882 through 57921 drawn on Union Bank totaling \$67,280.51.

**FURTHER RESOLVED** that the Board of Directors does hereby authorize the execution of the checks by the appropriate officers of the District.

**PASSED AND ADOPTED** unanimously by a roll call vote of the Board of Directors of Vista Irrigation District this 17<sup>th</sup> day of January 2018.

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**7. RESOLUTION HONORING PAST PRESIDENT MARTY MILLER**

See staff report attached hereto.

The Board congratulated Director Miller on his successful term as President of the Board of Directors in 2017.

18-01-09	<p><i>Upon motion by Director MacKenzie, seconded by Director Sanchez, the Board of Directors adopted Resolution 18-03 honoring Past President Marty Miller, by the following roll call vote:</i></p> <p><b>AYES:</b> Directors Vásquez, Dorey, Sanchez, MacKenzie, and Miller</p> <p><b>NOES:</b> None</p> <p><b>ABSTAIN:</b> None</p> <p><b>ABSENT:</b> None</p> <p><i>A copy of Resolution 18-03 is on file in the official Resolution Book of the District.</i></p>
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**8. CALIFORNIA PUBLIC EMPLOYEE RETIREMENT SYSTEM ACTUARIAL REPORTS**

See staff report attached hereto.

Finance Manager Marlene Kelleher provided an overview of the California Public Employee Retirement System (CalPERS) Actuarial Reports (Reports) on the District's three retirement plans. She noted that the three retirement plans offer varying benefit levels to employees based on their hire date. She stated that in Tier 1 there are 66 employees who were hired prior January 1, 2012; Tier 2 has six employees hired between January 1 and December 31, 2012; and in the Public Employees' Pension Reform Retirement Act (PEPRA) plan there are 18 employees hired on or after January 1, 2013. Each plan has a distinct benefit formula, retirement age, monthly benefit, and required employee and employer contribution rates, all of which are factors in determining the District's liabilities.

Ms. Kelleher reviewed the District's funding ratio for each plan and the District's anticipated contribution rates for 2018 and 2019, per the Reports. General Manager Eldon Boone noted that the District's level of funding is higher than average because the Board chose a few years prior to pay down some its debt. Ms. Kelleher noted that by paying down its debt, the District was able to lower its contribution rate substantially.

**9. MATTERS PERTAINING TO THE ACTIVITIES OF THE SAN DIEGO COUNTY WATER AUTHORITY**

See staff report attached hereto.

Director Miller reported on a meeting he attended the previous week of the San Diego County Water Authority (Water Authority) Energy Storage Committee (ESC), where the Committee reviewed what will be covered in its next workshop. Mr. Boone updated the Board on the wheeling of water related to the Indian Water Rights Settlement. He stated that water is supposed to be wheeled through the Metropolitan Water District (MWD) and the Water Authority to the District and the District is then supposed to pay the San Luis Rey Indian Water Authority (SLRIWA) for the water. Mr. Boone said that there have been disagreements amongst the parties regarding the accounting procedures related to this matter but a resolution has been reached and the Water Authority has issued the District credits equaling \$4.2 million; Mr. Boone said that the District will pay that amount to the SLRIWA by the end of the month. Mr. Boone noted that this matter could still be submitted for dispute resolution until March 1, 2018.

Al Ducusin left the meeting following the above discussion.

**10. MEETINGS AND EVENTS**

See staff report attached hereto.

Director Vásquez and President Dorey reported on their attendance at the recent meeting of the Council of Water Utilities where a presentation was made by Carlos Michelin, Principal Water Resources Specialist for the Water Authority, who spoke about the quest for water sustainability. A handout provided during the presentation showed that in 2015, the San Diego Region received 57 percent of its water supply from MWD. The handout also showed that by 2020, the San Diego Region would only be receiving 26 percent of its water from MWD, and by 2035 only 18 percent. Mr. Michelin also provided an overview of the programs offered by the Water Authority related to water conservation and sustainability.

Director MacKenzie reported on Senate Bill (SB) 522, a bill to dissolve the existing elected board of directors of the West Contra Costa Healthcare District, effective January 1, 2019, and require the Board of Supervisors of the County of Contra Costa to either serve as the district board or appoint a district board. She also reported briefly on other pending legislation including SB 831 which would eliminate provisions authorizing local agencies to require an applicant to install a separate utility connection for an accessory dwelling unit and would state that an accessory dwelling unit shall not be considered a new residential use subject to capacity charges or any other fees levied by those entities.

President Dorey reported on behalf of himself and the rest of the Board regarding the sexual Harassment Prevention training the Board attended on-site the previous week.

Directors Sanchez, Vásquez, MacKenzie, Miller, and President Dorey all requested authorization to attend the ACWA Spring Conference in Sacramento in May 2018.

18-01-10	<i>Upon motion by Director Miller, seconded by Director MacKenzie and unanimously carried (5 ayes: Miller, Vásquez, Dorey, Sanchez, and MacKenzie), the Board of Directors authorized Directors Sanchez, Dorey, Vásquez, Miller, and MacKenzie to attend the ACWA Spring Conference in May in Sacramento.</i>
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Greg Pieratt and Isaac Little of Lee & Associates joined the meeting during the above discussion.

#### **11. ITEMS FOR FUTURE AGENDAS AND/OR PRESS RELEASES**

See staff report attached hereto.

The Board set the date for a Workshop to discuss the District's Master Plan update for January 30, 2018 at 9:00 a.m.

Mr. Boone stated that a representative from the Association of California Water Agencies (ACWA) Joint Powers Insurance Authority (JPIA) was scheduled to make a presentation regarding the ACWA JPIA Liability Insurance Program at the next Board meeting. He noted that there would also be an agenda item regarding the obtaining of a District credit card. Director MacKenzie suggested that staff check with the California Special Districts Association (CSDA) to see if its credit card offering would be advantageous for the District. Mr. Boone said that staff will include the credit card offered by CSDA in its analysis.

#### **12. COMMENTS BY DIRECTORS**

Director Miller asked if there were plans for ethics training for the Board since most of the Directors' training certifications expire in June 2018. Mr. Boone responded that staff plans to follow suit with what has been done in recent years and have the District's General Counsel provide ethics training for the Board and executive staff onsite before the June expiration date.

Director Vásquez reported on recent water-related news articles including one regarding water promised to the farmers during the last presidential election campaign and another regarding the snowpack, which is reportedly at only three percent of normal.

#### **13. COMMENTS BY GENERAL COUNSEL**

None were presented.

**14. COMMENTS BY GENERAL MANAGER**

Mr. Boone informed the Board that the recent storm dropped four and a half inches rain over a two day period at Lake Henshaw but only resulted in about 275 acre-feet of surface water run-off; Mr. Boone noted that the water level at Lake Henshaw was at 3,300 acre feet at the beginning of the year, and was at 3,600 feet after the storm. Mr. Boone also explained that the storm had caused damage to the Escondido Canal due to rock slides. He pointed out the photos of the canal damage, which were provided at the Board's places (attached hereto as Exhibit A). He stated that City of Escondido employees are working on cleaning up the rock slide and making the necessary repairs.

A brief break was taken from 9:27 a.m. to 9:34 a.m. During the break, Director Miller left the Board meeting due to a possible conflict of interest related to the fact that he owns property in the same business park association as the property to be discussed in the following closed session agenda item.

Upon return from break, present in the Boardroom were Greg Pieratt and Isaac Little of Lee & Associates. Also present were Randy Whitmann and Brian Smith.

**15. CLOSED SESSION FOR CONFERENCE WITH REAL PROPERTY NEGOTIATORS**

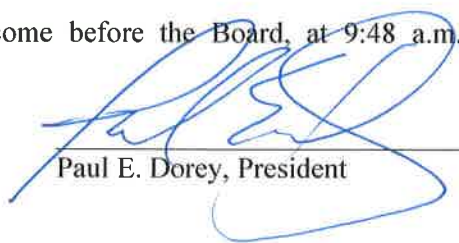
Director Dorey adjourned the meeting to closed session at 9:34 a.m. for a conference with Real Property Negotiators, per Government Code section 54956.8 to discuss the following:

- Property: Vista Irrigation District property located at the northwest corner of Engineer St. and Pipeline Dr. in Vista, CA 92081 (APN 219-532-22)
- Agency Negotiators: Eldon Boone and Brian Smith
- Negotiating Parties: Public generally
- Under Negotiation: Price

The meeting reconvened in open session at 9:48 a.m. Director Dorey declared that no reportable action had been taken.

**16. ADJOURNMENT**

There being no further business to come before the Board, at 9:48 a.m., President Dorey adjourned the meeting.




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Paul E. Dorey, President

ATTEST: 

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Lisa R. Soto, Secretary  
Board of Directors  
VISTA IRRIGATION DISTRICT



## STAFF REPORT

Agenda Item: 6.A

<b>Board Meeting Date:</b>	<b>January 17, 2018</b>
<b>Prepared By:</b>	<b>Al Ducusin</b>
<b>Reviewed By:</b>	<b>Randy Whitmann</b>
<b>Approved By:</b>	<b>Eldon Boone</b>

SUBJECT: GRANT OF RIGHT OF WAY

RECOMMENDATION: Accept Grant of Right of Way (A52) for a 20-foot wide specific easement over a single-family parcel consisting of approximately 0.62 gross acres owned by Rebecca S. Ashlock, located at Pine Heights Way, Escondido (LN 2017-043; APN 228-100-29; DIV NO 5).

PRIOR BOARD ACTION: None.

FISCAL IMPACT: None.

SUMMARY: The owner is in the process of developing a single-family home on Assessor Parcel Number 228-100-29. The acceptance of Grant of Right of Way (A52) will allow the District to secure a dedicated 20-foot specific easement over an existing 6" water main on the parcel.

ATTACHMENT: Map



**EXISTING**

- W ——— 6" AC
- ⊗ BLOW OFF
- ▽ AIR VENT
- ⊗ VALVE
- ⊗ WATER METER
- ④ 4" FH

6" AC WATER MAIN MD13 (I-326-1957) EXISTING ROAD & UTILITY EASEMENT

PINE HEIGHTS WAY S89°35'50"E 24.65'

N.E. COR. PCL. "A"

N26°48'10"E 313.45'

98.65'

WA2017.0073 3/4"x1" METER

P.O.B. PCL. 2

S83°00'00"E 257.29'

PARCEL "A"  
CERTIFICATE OF COMPLIANCE  
REC. 12/23/2011  
DOC. NO. 2011-0694131 O.R.

PARCEL 1 (FEE TITLE)


S83°00'00"W 198.82'

T.P.O.B. PCL. 1

**OWNERS**

SIM & REBECCA ASHLOCK  
10465 - 2100 ROAD  
AUSTIN, CO 81410

**LEGEND**

 INDICATES EASEMENT TO BE GRANTED TO VISTA IRRIGATION DISTRICT (PARCEL 2) (A52)



11/30/2017



**SITE VICINITY MAP**  
NOT TO SCALE

VISTA IRRIGATION DISTRICT			
GRANT OF RIGHT-OF-WAY (A52)			
APN: 228-100-29	T.B. 1109-E7		
SCALE: NONE	L.N. 2017-043		
APPD. BY: <i>AMP</i>	DATE: 1/9/18	W.O.	
DRAWN BY: AMP	DATE:		
SHEET OF	MAP R25		
REVISED:			



## STAFF REPORT

**Agenda Item: 6.B**

<b>Board Meeting Date:</b>	<b>January 17, 2018</b>
<b>Prepared By:</b>	<b>Al Ducusin</b>
<b>Reviewed By:</b>	<b>Randy Whitmann</b>
<b>Approved By:</b>	<b>Eldon Boone</b>

**SUBJECT:** GRANT OF RIGHT OF WAY

**RECOMMENDATION:** Accept Grant of Right of Way (W63) via parcel map for a 20-foot wide specific easement over a single-family parcel consisting of approximately 1.42 gross acres owned by Walcia Trust, located at 2016 Buena Creek Road, Vista (LN 2015-031; APN 184-060-98; DIV NO 5).

**PRIOR BOARD ACTION:** None.

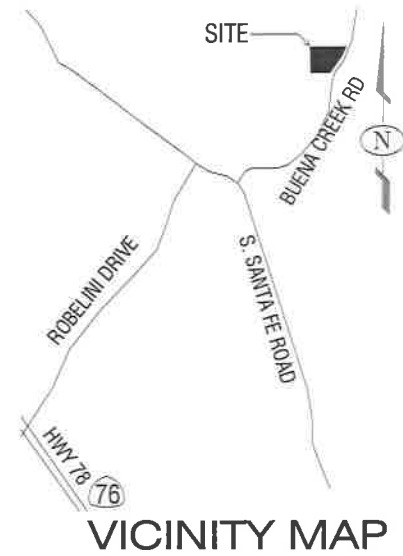
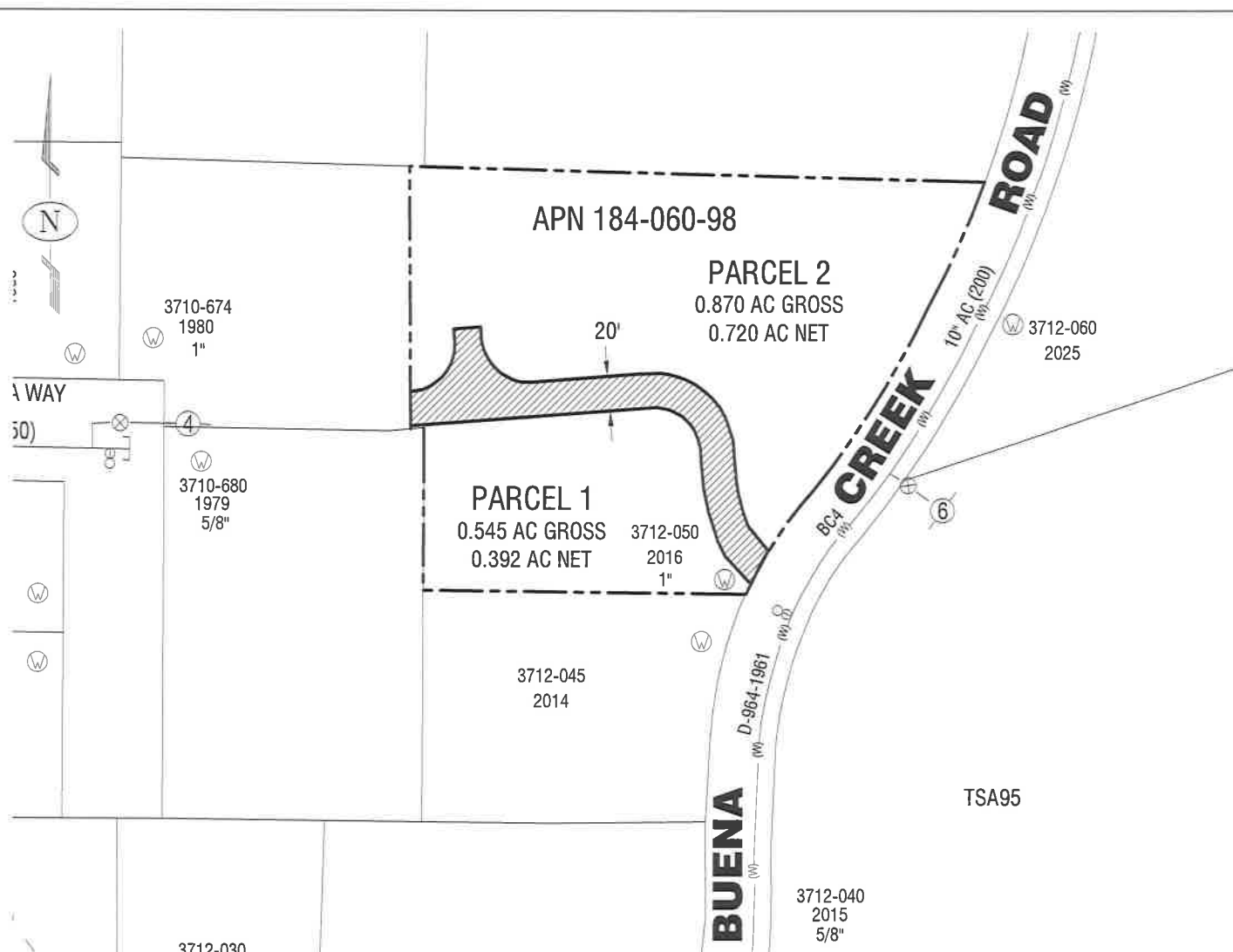
**FISCAL IMPACT:** None.

**SUMMARY:** The acceptance of Grant of Right of Way (W63) via parcel map will allow the District to secure a dedicated 20-foot specific easement over Assessor Parcel Number 184-060-98 and allow the owner to record the map with the County Recorder.

**DETAILED REPORT:** The owners are in the process of adjusting their existing single-family parcel into two separate parcels and granting the District a specific easement over a private road and utility easement also being dedicated on the parcel map. The District currently has Blanket Easement (BR119) encumbered over this property. The acceptance of Grant of Right of Way (W63) will allow any future water facilities to be within a 20-foot dedicated specific easement and will allow the owner to proceed with the development of their project.

**ATTACHMENT:** Map






**VICINITY MAP**  
NO SCALE

**ENGINEER:**  
EXCEL ENGINEERING  
440 STATE PLACE  
ESCONDIDO, CA 92029  
(760) 745-8118

**OWNER:**  
WALCIA TRUST  
ATTN: ROBERTO GARCIA  
2016 BUENA CREEK ROAD  
VISTA, CA 92084

**LEGEND**

 PROPOSED 20' WATER EASEMENT TO VISTA IRRIGATION DISTRICT (W63) VIA PARCEL MAP

**VISTA IRRIGATION DISTRICT  
GRANT OF RIGHT OF WAY W63  
2016 BUENA CREEK PARCEL MAP**

APN 184-060-98		T.B. 1088-C2	
SCALE NTS		L.N. 2015-031	
APPD. BY <i>AD</i>	DATE <i>1/9/18</i>	W.O.	
DRAWN BY JB/PD	DATE 1/9/18		
SHEET 1 OF 1	MAP I18		
REVISED: 1/9/18 Jeanette Bradshaw			
Z:\Engineering\JOBS\LN-Jobs\LN2015\In2015-031 Waldrop\In2015-031 -esmt.dwg			

# Cash Disbursement Report



Payment Dates 12/21/2017 - 01/03/2018

Payment Number	Payment Date	Vendor	Description	Amount
57882-57883	01/03/2018	Refund Checks 57882-57883	Customer Refunds	340.88
57884	01/03/2018	Airgas USA LLC	Welding Rod	153.81
57885	01/03/2018	Basic pacific	Flexible Spending Service/Cobra 12/2017	254.00
57886	01/03/2018	Boot World Inc	Footwear Program	175.00
57887	01/03/2018	Cal-West Concrete Cutting	Asphalt Cutting	225.00
	01/03/2018		Concrete Cutting	225.00
57888	01/03/2018	CI Solutions	Annual Database Maintenance 12/19/17-12/18/18	120.00
57889	01/03/2018	CDW Government Inc	Cisco Memory	256.47
57890	01/03/2018	Cecilia's Safety Service Inc	Traffic Control - Copper Ave/W Vista Way	467.50
	01/03/2018		Traffic Control - San Luis Rey Ave/Monterey	1,360.00
	01/03/2018		Traffic Control - San Luis Rey Ave/Monterey	3,740.00
57891	01/03/2018	Christopher Craghead	Tuition Reimbursement 12/2017	960.00
57892	01/03/2018	County of San Diego DPW	ROW Permits 11/2017	862.60
57893	01/03/2018	DIRECTV	Direct TV Service	78.99
57894	01/03/2018	El Camino Rental	Concrete	184.02
57895	01/03/2018	Endicott Comm., Inc - CV	Answering Service	307.72
57896	01/03/2018	Fastenal Company	Fittings - Truck 10	5.22
57897	01/03/2018	Ferguson Waterworks	Claval Maintenance Parts	3,951.15
57898	01/03/2018	GASB	Subscription Renewal 2018	265.00
57899	01/03/2018	Glennie's Office Products Inc	Office Supplies	194.08
	01/03/2018		Office Supplies	1.09
57900	01/03/2018	Grainger	SCADA Backup UPS (4)	1,215.21
57901	01/03/2018	Hawthorne Machinery Co	Hydraulic Hoses (2) - B16	353.64
	01/03/2018		Kickout Switch & Brackets	281.36
	01/03/2018		Side Brush - B20	37.43
57902	01/03/2018	Innovyze Inc	H2Onet Annual Support/Maintenance	2,000.00
57903	01/03/2018	James Miyashiro	Reimbursement for Damage	550.00
57904	01/03/2018	Leon Perrault Trucking & Materials	Trucking & Material 11/2017	6,917.50
57905	01/03/2018	Lighthouse Inc	Lightbar & Mounting - Truck 46	1,174.51
57906	01/03/2018	Lightning Messenger Express	Messenger Service 12/01/17	48.00
57907	01/03/2018	Matheson Tri-Gas Inc	Hose Fittings	12.66

Payment Number	Payment Date	Vendor	Description	Amount
57908	01/03/2018	Moodys	Dump Fees (4)	800.00
	01/03/2018		Dump Fee	200.00
	01/03/2018		Dump Fees (2)	400.00
57909	01/03/2018	Pacific Pipeline Supply	Poly Air Vent Enclosure	418.93
	01/03/2018		Insulating Flange Kit, Gaskets	156.96
	01/03/2018		Weld Flange & Gaskets	444.53
57910	01/03/2018	Benetrac	Employee Benefits Tracking 11/2017	400.00
57911	01/03/2018	S & J Supply Company Inc	Ball Valves	586.72
57912	01/03/2018	San Diego Gas & Electric	Electric 12/2017 - Henshaw Building & Grounds	589.53
	01/03/2018		Electric 12/2017 - Henshaw Well Field	8,656.18
	01/03/2018		Electric 12/2017 - Warner Ranch House	32.04
	01/03/2018		Electric 11/2017 - Cathodic Protection & T&D	213.09
	01/03/2018		Electric 11/2017 - Reservoirs	111.18
	01/03/2018		Electric 11/2017 - Pump Stations	8,952.14
	01/03/2018		Electric 11/2017 - Plants	87.60
57913	01/03/2018	Shannon Anzelon	Computer Loan Program 01/18	709.61
57914	01/03/2018	Southern Counties Lubricants, LLC	Fuel 12/01/2017-12/15/2017	6,268.57
	01/03/2018		Engine Oil (65)	818.59
57915	01/03/2018	Technically Funny, Inc	Employee Appreciation Event 12/19/2017	2,000.00
57916	01/03/2018	Terryberry	Service Pins (2)	692.72
57917	01/03/2018	UniFirst Corporation	Uniform Service	339.13
	01/03/2018		Uniform Service	349.01
57918	01/03/2018	Vista Lock & Safe Co	Padlocks for VID Gates, Flumes & Reservoirs (300)	3,637.20
57919	01/03/2018	Vulcan Materials Company and Affiliates	Cold Mix	2,033.94
57920	01/03/2018	White Nelson Diehl Evans LLP	Auditing Services 11/2017	1,500.00
57921	01/03/2018	WorkPartners OHS	New Hire Physical	165.00
<b>Grand Total:</b>				<b>67,280.51</b>



## STAFF REPORT

Agenda Item: 7

<b>Board Meeting Date:</b>	<b>January 17, 2018</b>
<b>Prepared By:</b>	<b>Lisa Soto</b>
<b>Reviewed By:</b>	<b>Brett Hodgkiss</b>
<b>Approved By:</b>	<b>Eldon Boone</b>

**SUBJECT:** RESOLUTION HONORING PAST PRESIDENT MARTY MILLER

**RECOMMENDATION:** Adopt a resolution honoring the District's 2017 past president, Marty Miller.

**PRIOR BOARD ACTION:** None.

**FISCAL IMPACT:** None.

**SUMMARY:** Director Miller has served as Director of Division 1 since 2008. He completed his term as Board President for 2017, during which time the District accomplished many undertakings, highlighted by the finalization of a settlement agreement resolving a decades-long dispute over rights to the waters of the San Luis Rey River. The District successfully completed labor negotiations resulting in new four-year agreements with all of the District's employee groups; completed significant capital projects, including the rehabilitation of HP Reservoir and the demolition of E2 and F reservoirs; and continued to aggressively pursue efforts to replace the Nipponite pipe remaining in the District's system.

Under Director Miller's leadership, the District received national and statewide recognition for its commitment to good governance, transparency and sound financial management. For the tenth straight year, the District received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for the District's Comprehensive Annual Financial Report for the fiscal year 2016. The District also received the District of Distinction award and Transparency Certificate of Excellence from the Special District Leadership Foundation in recognition of the District's commitment to good governance, sound financial management and transparency.

Director Miller has actively represented the District's best interests through his dedicated service on the San Diego County Water Authority Board of Directors, to which the Vista Irrigation District Board of Directors appointed him to continue his service for another six years. He also admirably served as Chair of the District's Fiscal Policy Committee.

In recognition of Director Miller's accomplishments and outstanding efforts for the benefit of all the people of the Vista Irrigation District during his tenure as President, the attached resolution is presented for the Board's consideration.

**ATTACHMENT:** Draft resolution

RESOLUTION NO. 18-xx

RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE VISTA IRRIGATION DISTRICT  
HONORING PAST PRESIDENT MARTY MILLER

WHEREAS, Marty Miller has served as Director of Division 1 since 2008; and

WHEREAS, he has conscientiously and ably served as President of the Board for 2017; and

WHEREAS, during his term as President, the District accomplished many undertakings highlighted by the resolution of a decades-long dispute of the rights to the waters of the San Luis Rey River when the historic San Luis Rey Indian Water Rights Settlement became effective May 17, 2017; successful conclusion of labor negotiations resulting in new four-year agreements with all of the District's employee groups; completion of significant capital projects including the rehabilitation of HP Reservoir and the demolition of E2 and F reservoirs; and continuation of efforts to aggressively pursue the replacement of Nipponite pipe in the District's water system; and

WHEREAS, under Director Miller's leadership, the District received national and statewide recognition for its commitment to good governance, transparency and sound financial management, receiving the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for the tenth straight year for the District's Comprehensive Annual Financial Report for the fiscal year 2016 and the District of Distinction award and Transparency Certificate of Excellence from the Special District Leadership Foundation; and

WHEREAS, Director Miller has actively represented the District's best interests through his dedicated service on the San Diego County Water Authority Board of Directors, to which the Vista Irrigation District Board of Directors appointed him to continue his service for another six years, and as Chair of the District's Fiscal Policy Committee.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors and staff of the Vista Irrigation District do hereby express to Marty Miller appreciation for his accomplishments and outstanding efforts for the benefit of all the people of the Vista Irrigation District during his tenure as President.

PASSED AND ADOPTED by the following roll call vote of the Board of Directors for the Vista Irrigation District this 17<sup>th</sup> day of January 2018.

AYES:

NOES:

ABSTAIN:

ABSENT:

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Paul E. Dorey, President

ATTEST:

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Lisa R. Soto, Secretary  
Board of Directors  
VISTA IRRIGATION DISTRICT



## STAFF REPORT

Agenda Item: 8

**Board Meeting Date:** January 17, 2018  
**Prepared By:** Marlene Kelleher  
**Reviewed By:** Brett Hodgkiss  
**Approved By:** Eldon Boone

**SUBJECT:** CALIFORNIA PUBLIC EMPLOYEE RETIREMENT SYSTEM ACTUARIAL REPORTS

**RECOMMENDATION:** For information only.

**PRIOR BOARD ACTION:** None.

**FISCAL IMPACT:** The District's pension cost for fiscal year 2018 is estimated at \$1.9 million.

**SUMMARY:** At its September 6, 2017 meeting, the Board requested that summary information on the California Public Employee Retirement System (CalPERS) actuarial reports be presented at a future meeting. Staff advised the Board that the actuarial reports are not received until late in the calendar year; therefore, the item would be placed on a January 2018 meeting agenda. The information presented in this report covers actuarial reports for the District's three CalPERS retirement plans that offer varying benefit levels to employees based on their hire date.

**DETAILED REPORT:** The District participates in CalPERS, which provides retirement, disability and death benefits to District employees. The District has three CalPERS retirement plans; Tier 1 for employees hired prior January 1, 2012, Tier 2 for employees hired between January 1 and December 31, 2012 and Public Employees' Pension Reform Retirement Act (PEPRA) for employees hired on or after January 1, 2013. Each plan has a distinct benefit formula, retirement age, monthly benefit, required employee contribution rate and required employer contribution rate which are factors in determining the District's liabilities.

The District's contributions for each plan are determined through CalPERS' annual actuarial valuation process. The District is part of a CalPERS risk pool, which is mandatory for agencies that have less than 100 active members on any valuation date. Each plan's actuarially determined rate is based on the estimated amount necessary to pay the plan's allocated share of the risk pool's costs, benefits earned by employees during the year, and any unfunded accrued liability. The District is required to contribute the difference between the actuarially determined rate and the employee contribution rate (**NOTE:** All District employees pay 100% of the required employee contribution).

The most recent CalPERS Actuarial Valuation Reports (Reports) as of June 30, 2016, dated August 2017 for the District's three retirement plans, show that the District has a funded ratio of 82.1% for Tier 1, 90.1% for Tier 2 and 90.0% for PEPRA. For fiscal year 2018, the District's contribution rates are 17.045% for Tier 1, 7.200% for Tier 2 and 6.533% for PEPRA. Per the Reports, the District's contribution rates for fiscal year 2019 will be 17.869% for Tier 1, 7.634% for Tier 2, and 6.842% for PEPRA.

On December 21, 2016 the CalPERS Board lowered the discount rate from 7.500% to 7.000% using a three year phase-in beginning with the June 30, 2016 Actuarial Valuation Report which determines fiscal year 2019 rates at a phased in discount rate of 7.375%. In addition to changes in the contribution rates because of the lowered discount rate, changes in the unfunded liability due to actuarial gains or losses as well as changes in actuarial assumptions or methods are amortized using a 5-year ramp up.

**ATTACHMENTS:** CalPERS Actuarial Valuation Reports



**California Public Employees' Retirement System**  
**Actuarial Office**  
 P.O. Box 942709  
 Sacramento, CA 94229-2709  
 TTY: (916) 795-3240  
 (888) 225-7377 phone – (916) 795-2744 fax  
[www.calpers.ca.gov](http://www.calpers.ca.gov)

**August 2017**

**MISCELLANEOUS PLAN OF THE VISTA IRRIGATION DISTRICT  
 (CalPERS ID: 1377855511)  
 Annual Valuation Report as of June 30, 2016**

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2016 actuarial valuation report of the pension plan.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2016.

Section 2 can be found on the CalPERS website at ([www.calpers.ca.gov](http://www.calpers.ca.gov)). From the home page, go to "Forms & Publications" and select "View All". In the search box, enter "Risk Pool Report" and from the results list download the Miscellaneous or Safety Risk Pool Actuarial Valuation Report as appropriate.

Your June 30, 2016 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you after August 31, 2017.

The exhibit below displays the minimum employer contributions, before any cost sharing, for Fiscal Year 2018-19 along with estimates of the required contributions for Fiscal Years 2019-20 and 2020-21. Member contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees.**

**Required Contribution**

Fiscal Year	Employer Normal Cost Rate	Employer Payment of Unfunded Liability
2018-19	17.869%	\$857,124
<i>Projected Results</i>		
2019-20	18.6%	\$1,041,000
2020-21	20.0%	\$1,290,000

The actual investment return for Fiscal Year 2016-17 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.375 percent. ***If the actual investment return for Fiscal Year 2016-17 differs from 7.375 percent, the actual contribution requirements for the projected years will differ from those shown above.***

Moreover, the projected results for Fiscal Years 2019-20 and 2020-21 also assume that there are no future plan changes, no further changes in assumptions other than those recently approved, and no liability gains or losses. Such changes can have a significant impact on required contributions. Since they cannot be predicted in advance, the projected employer results shown above are estimates. The actual required employer contributions for Fiscal Year 2019-20 will be provided in next year's report.

For additional details regarding the assumptions and methods used for these projections please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section.

The "Risk Analysis" section of the valuation report also contains estimated employer contributions in future years under a variety of investment return scenarios.

### **Changes since the Prior Year's Valuation**

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 determined in this valuation were calculated using a discount rate of 7.375 percent. The projected employer contributions on Page 5 are calculated assuming that the discount rate will be lowered to 7.25 percent next year and to 7.00 percent the following year as adopted by the Board.

The CalPERS Board of Administration adopted a Risk Mitigation Policy which is designed to reduce funding risk over time. This Policy has been temporarily suspended during the period over which the discount rate is being lowered. More details on the Risk Mitigation Policy can be found on our website.

Besides the above noted changes, there may also be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Statement of Actuarial Data, Methods and Assumptions" of the Section 2 report.

We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 31 to contact us with actuarial related questions.

If you have other questions, please call our customer contact center at (888) CalPERS or **(888-225-7377)**.

Sincerely,

SCOTT TERANDO  
Chief Actuary





**ACTUARIAL VALUATION  
as of June 30, 2016**

**for the  
MISCELLANEOUS PLAN  
of the  
VISTA IRRIGATION DISTRICT  
(CalPERS ID: 1377855511)**

**REQUIRED CONTRIBUTIONS  
FOR FISCAL YEAR  
July 1, 2018 - June 30, 2019**

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**SECTION 1 – PLAN SPECIFIC INFORMATION**

**SECTION 2 – RISK POOL ACTUARIAL VALUATION INFORMATION**

# Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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**Plan Specific Information  
for the  
MISCELLANEOUS PLAN  
of the  
VISTA IRRIGATION DISTRICT**

**(CalPERS ID: 1377855511)  
(Rate Plan: 365)**

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## ACTUARIAL CERTIFICATION

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2016 which was provided by your agency and the benefit provisions under your contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2016 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuary has certified that, in their opinion, the valuation of the risk pool containing your MISCELLANEOUS PLAN has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that Unfunded Accrued Liability amortization bases as of June 30, 2016 and employer contribution as of July 1, 2018, have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, a member of both the American Academy of Actuaries and Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

NANCY E. CAMPBELL, ASA, MAAA  
Enrolled Actuary  
Supervising Pension Actuary, CalPERS  
Plan Actuary

# HIGHLIGHTS AND EXECUTIVE SUMMARY

- **INTRODUCTION**
- **PURPOSE OF SECTION 1**
- **REQUIRED EMPLOYER CONTRIBUTION**
- **PLAN'S FUNDED STATUS**
- **PROJECTED EMPLOYER CONTRIBUTIONS**
- **CHANGES SINCE THE PRIOR YEAR'S VALUATION**
- **SUBSEQUENT EVENTS**

## Introduction

This report presents the results of the June 30, 2016 actuarial valuation of the MISCELLANEOUS PLAN of the VISTA IRRIGATION DISTRICT of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for Fiscal Year 2018-19.

## Purpose of Section 1

This Section 1 report for the MISCELLANEOUS PLAN of the VISTA IRRIGATION DISTRICT of the California Public Employees' Retirement System (CalPERS) was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2016;
- Determine the required employer contribution for this plan for the fiscal year July 1, 2018 through June 30, 2019; and
- Provide actuarial information as of June 30, 2016 to the CalPERS Board of Administration and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to GASB Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available from CalPERS and details for ordering are available on our website.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; and changes in plan provisions or applicable law.

### California Actuarial Advisory Panel Recommendations

This report includes all the basic disclosure elements as described in the *Model Disclosure Elements for Actuarial Valuation Reports* recommended in 2011 by the California Actuarial Advisory Panel (CAAP), with the exception of including the original base amounts of the various components of the unfunded liability in the Schedule of Amortization Bases shown on page 9.

Additionally, this report includes the following "Enhanced Risk Disclosures" also recommended by the CAAP in the Model Disclosure Elements document:

- A "Deterministic Stress Test," projecting future results under different investment income scenarios
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0 percent, 7.0 percent and 8.0 percent.

## Required Employer Contribution

	<b>Fiscal Year</b>	
<b>Required Employer Contribution</b>	<b>2018-19</b>	
<b>Employer Normal Cost Rate</b>	<b>17.869%</b>	
<i>Plus Either</i>		
<b>1) Monthly Employer Dollar UAL Payment</b>	<b>\$</b>	<b>71,427.00</b>
<i>Or</i>		
<b>2) Annual Lump Sum Prepayment Option</b>	<b>\$</b>	<b>827,165</b>
<p><i>The total minimum required employer contribution is the <b>sum</b> of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll) <b>plus</b> the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars).</i></p> <p><i>Only the UAL portion of the employer contribution can be prepaid (<b>which must be received in full no later than July 31</b>). Plan Normal Cost contributions will be made as part of the payroll reporting process. If there is contractual cost sharing or other change, this amount will change.</i></p> <p><i>§ 20572 of the Public Employees' Retirement Law assesses interest at an annual rate of 10 percent if a contracting agency fails to remit the required contributions when due.</i></p>		

	<b>Fiscal Year</b>	<b>Fiscal Year</b>
	<b>2017-18</b>	<b>2018-19</b>
<b>Development of Normal Cost as a Percentage of Payroll<sup>1</sup></b>		
Base Total Normal Cost for Formula	19.807%	20.535%
Surcharge for Class 1 Benefits <sup>2</sup>		
a) FAC 1	0.662%	0.680%
b) PRSA	0.847%	0.930%
c) 3.50% EE Contribution Reduction	3.500%	3.500%
Phase out of Normal Cost Difference <sup>3</sup>	0.000%	0.000%
Plan's Total Normal Cost	24.816%	25.645%
Formula's Expected Employee Contribution Rate	7.771%	7.776%
Employer Normal Cost Rate	17.045%	17.869%
Projected Payroll for the Contribution Fiscal Year	\$ 7,220,531	\$ 6,727,785
<b>Estimated Employer Contributions Based on Projected Payroll</b>		
Plan's Estimated Employer Normal Cost	\$ 1,230,739	\$ 1,202,188
Plan's Payment on Amortization Bases <sup>4</sup>	710,539	857,124
% of Projected Payroll (illustrative only)	9.841%	12.740%
Estimated Total Employer Contribution	\$ 1,941,278	\$ 2,059,312
% of Projected Payroll (illustrative only)	26.886%	30.609%

<sup>1</sup> The results shown for Fiscal Year 2017-18 reflect the prior year valuation and may not take into account any lump sum payment, side fund payoff, or rate adjustment made after June 30, 2016.

<sup>2</sup> Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

<sup>3</sup> The normal cost difference is phased out over a five year period. The phase out of normal cost difference is 100 percent for the first year of pooling, and is incrementally reduced by 20 percent of the original normal cost difference for each subsequent year. This is non-zero only for plans that joined a pool within the past 5 years. Most plans joined a pool June 30, 2003, when risk pooling was implemented.

<sup>4</sup> See page 9 for a breakdown of the Amortization Bases.



## Plan's Funded Status

		<b>June 30, 2015</b>		<b>June 30, 2016</b>
1. Present Value of Projected Benefits (PVB)	\$	90,683,962	\$	94,365,167
2. Entry Age Normal Accrued Liability (AL)		81,680,936		86,093,733
3. Plan's Market Value of Assets (MVA)		64,392,498		70,656,822
4. Unfunded Accrued Liability (UAL) [(2) - (3)]		17,288,438		15,436,911
5. Funded Ratio [(3) / (2)]		78.8%		82.1%

This measure of funded status is an assessment of the need for future employer contributions based on the selected actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

## Projected Employer Contributions

The table below shows projected employer contributions (before cost sharing) for the next six fiscal years. Projected results reflect the adopted changes to the discount rate described in Appendix A, "Statement of Actuarial Data, Methods and Assumptions" of the Section 2 report. The projections also assume that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period.

Fiscal Year	Required Contribution	Projected Future Employer Contributions (Assumes 7.375% Return for Fiscal Year 2016-17)					
		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Normal Cost %	17.869%	18.6%	20.0%	20.0%	20.0%	20.0%	20.0%
UAL Payment	\$857,124	\$1,041,000	\$1,290,000	\$1,588,000	\$1,846,000	\$2,007,000	\$2,139,000

Changes in the UAL due to actuarial gains or losses as well as changes in actuarial assumptions or methods are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of Section 2. This method phases in the impact of unanticipated changes in UAL over a 5-year period and attempts to minimize employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years where there is a large increase in UAL the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially while the contribution impact of the increase in the UAL is phased in.

Due to the adopted changes in the discount rate for the next two valuations in combination with the 5-year phase-in ramp, the increases in the required contributions are expected to continue for seven years from Fiscal Year 2018-19 through Fiscal Year 2024-25.

For projected contributions under alternate investment return scenarios, please see the "Analysis of Future Investment Return Scenarios" in the "Risk Analysis" section.

## Changes since the Prior Year's Valuation

### Benefits

None. This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B of Section 2 for a summary of the plan provisions used in this valuation.

### Actuarial Methods and Assumptions

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 determined in this valuation were calculated using a discount rate of 7.375 percent. The projected employer contributions on Page 5 are calculated assuming that the discount rate will be lowered to 7.25 percent next year and 7.00 percent the following year as adopted by the Board. The decision to reduce the discount rate was primarily based on reduced capital market assumptions provided by external investment consultants and CalPERS investment staff. The specific decision adopted by the Board reflected recommendations from CalPERS staff and additional input from employer and employee stakeholder groups. Based on the investment allocation adopted by the Board and capital market assumptions, the reduced discount rate assumption provides a more realistic assumption for the long term investment return of the fund.

Notwithstanding the Board's decision to phase into a 7.0 percent discount rate, subsequent analysis of the expected investment return of CalPERS assets or changes to the investment allocation may result in a change to this three year discount rate schedule. A comprehensive analysis of all actuarial assumptions and methods including the discount rate will be conducted in 2017.

## Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2016. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the required contribution, while investment returns above the assumed rate of return will decrease the actuarial cost of the plan.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2017. Any subsequent changes or actions are not reflected.

## **ASSETS AND LIABILITIES**

- **BREAKDOWN OF ENTRY AGE NORMAL ACCRUED LIABILITY**
- **ALLOCATION OF PLAN'S SHARE OF POOL'S EXPERIENCE/ASSUMPTION CHANGE**
- **DEVELOPMENT OF PLAN'S SHARE OF POOL'S MVA**
- **SCHEDULE OF PLAN'S AMORTIZATION BASES**
- **30-YEAR AMORTIZATION SCHEDULE AND ALTERNATIVES**
- **EMPLOYER CONTRIBUTION HISTORY**
- **FUNDING HISTORY**

## Breakdown of Entry Age Normal Accrued Liability

1. Active Members	\$	32,314,069
2. Transferred Members		1,713,153
3. Terminated Members		542,750
4. Members and Beneficiaries Receiving Payments		<u>51,523,761</u>
5. Total	\$	86,093,733

## Allocation of Plan's Share of Pool's Experience/Assumption Change

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The Pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1. Plan's Accrued Liability	\$	86,093,733
2. Projected UAL balance at 6/30/16		9,683,830
3. Pool's Accrued Liability	\$	14,775,287,594
4. Sum of Pool's Individual Plan UAL Balances at 6/30/16		2,987,498,021
5. Pool's 2015/16 Investment & Asset (Gain)/Loss		771,070,186
6. Pool's 2015/16 Other (Gain)/Loss		(95,296,686)
7. Plan's Share of Pool's Asset (Gain)/Loss $[(1)-(2)]/[(3)-(4)] * (5)$		4,998,172
8. Plan's Share of Pool's Other (Gain)/Loss $[(1)]/[(3)] * (6)$		(555,282)
9. Plan's New (Gain)/Loss as of 6/30/2016 $[(7)+(8)]$	\$	4,442,890
10. Increase in Pool's Accrued Liability due to Change in Assumptions		224,853,121
11. Plan's Share of Pool's Change in Assumptions $[(1)]/[(3)] * (10)$	\$	1,310,191

## Development of the Plan's Share of Pool's Market Value of Assets

1. Plan's Accrued Liability	\$	86,093,733
2. Plan's UAL	\$	15,436,911
3. Plan's Share of Pool's MVA $[(1)-(2)]$	\$	<b>70,656,822</b>

## Schedule of Plan's Side Fund and Other Amortization Bases

There is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2016.
- The employer contribution determined by the valuation is for the fiscal year beginning two years after the valuation date: Fiscal Year 2018-19.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the payment on the UAL for the fiscal year and adjusting for interest.

Reason for Base	Date Established	Amortization Period	Balance 6/30/16	Payment 2016-17	Balance 6/30/17	Payment 2017-18	Amounts for Fiscal 2018-19	
							Balance 6/30/18	Scheduled Payment for 2018-19
NON-ASSET (GAIN)/LOSS	06/30/13	27	\$(519,502)	\$(14,194)	\$(543,107)	\$(21,930)	\$(560,437)	\$(29,681)
SHARE OF PRE-2013 POOL UAL	06/30/13	18	\$9,086,777	\$686,101	\$9,045,976	\$706,684	\$8,980,837	\$719,431
NON-ASSET (GAIN)/LOSS	06/30/14	28	\$7,053	\$99	\$7,471	\$204	\$7,811	\$311
ASSET (GAIN)/LOSS	06/30/14	28	\$(6,406,177)	\$(90,103)	\$(6,785,266)	\$(185,612)	\$(7,093,345)	\$(282,432)
ASSUMPTION CHANGE	06/30/14	18	\$4,044,919	\$77,046	\$4,263,395	\$158,715	\$4,413,357	\$242,510
ASSET (GAIN)/LOSS	06/30/15	29	\$3,780,711	\$0	\$4,059,538	\$57,164	\$4,299,694	\$115,886
NON-ASSET (GAIN)/LOSS	06/30/15	29	\$(309,951)	\$0	\$(332,810)	\$(4,686)	\$(352,499)	\$(9,501)
ASSET (GAIN)/LOSS	06/30/16	30	\$4,998,172	\$0	\$5,366,787	\$0	\$5,762,588	\$79,872
NON-ASSET (GAIN)/LOSS	06/30/16	30	\$(555,282)	\$0	\$(596,234)	\$0	\$(640,206)	\$(8,874)
ASSUMPTION CHANGE	06/30/16	20	\$1,310,191	\$(27,459)	\$1,435,270	\$(28,282)	\$1,570,428	\$29,601
<b>TOTAL</b>			<b>\$15,436,911</b>	<b>\$631,490</b>	<b>\$15,921,020</b>	<b>\$682,257</b>	<b>\$16,388,228</b>	<b>\$857,123</b>

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed on the previous page. These (gain)/loss bases will be amortized according to Board policy over 30 years with a 5-year ramp-up.

If the total Unfunded Liability is negative (i.e., plan has a surplus), the scheduled payment is \$0, because the minimum required contribution under PEPRA must be at least equal to the normal cost.

## 30-Year Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to CalPERS amortization policy. There has been considerable interest from many agencies in paying off these unfunded accrued liabilities sooner and the possible savings in doing so. As a result, we have provided alternate amortization schedules to help analyze the current amortization schedule and illustrate the advantages of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on: 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternate "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. Note that the payments under each alternate scenario increase by 3 percent for each year into the future. **The schedules do not attempt to reflect any experience after June 30, 2016 that may deviate from the actuarial assumptions. Therefore, future amortization payments displayed in the Current Amortization Schedule may not match projected amortization payments shown in connection with Projected Employer Contributions provided elsewhere in this report.**

The Current Amortization Schedule typically contains individual bases that are both positive and negative. Positive bases result from plan changes, assumption changes or plan experience that result in increases to unfunded liability. Negative bases result from plan changes, assumption changes or plan experience that result in decreases to unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years such as:

- A positive total unfunded liability with a negative total payment,
- A negative total unfunded liability with a positive total payment, or
- Total payments that completely amortize the unfunded liability over a very short period of time

In any year where one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over a reasonable period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy. For purposes of this display, total payments include any negative payments. Therefore, the amount of estimated savings may be understated to the extent that negative payments appear in the current schedule.

## 30-Year Amortization Schedule and Alternatives

Date	<u>Current Amortization Schedule</u>		<u>Alternate Schedules</u>			
	Balance	Payment	20 Year Amortization		15 Year Amortization	
			Balance	Payment	Balance	Payment
6/30/2018	16,388,228	857,124	16,388,228	1,225,061	16,388,228	1,490,605
6/30/2019	16,708,691	1,020,001	16,327,428	1,261,813	16,052,266	1,535,323
6/30/2020	16,884,013	1,199,751	16,224,061	1,299,667	15,645,189	1,581,383
6/30/2021	16,886,004	1,403,796	16,073,846	1,338,657	15,160,363	1,628,824
6/30/2022	16,676,706	1,559,135	15,872,150	1,378,817	14,590,621	1,677,689
6/30/2023	16,291,008	1,605,910	15,613,965	1,420,181	13,928,226	1,728,020
6/30/2024	15,828,395	1,654,087	15,293,876	1,462,787	13,164,826	1,779,860
6/30/2025	15,281,743	1,703,709	14,906,032	1,506,670	12,291,406	1,833,256
6/30/2026	14,643,356	1,754,821	14,444,111	1,551,870	11,298,243	1,888,254
6/30/2027	13,904,924	1,807,465	13,901,287	1,598,427	10,174,844	1,944,901
6/30/2028	13,057,482	1,861,689	13,270,186	1,646,379	8,909,894	2,003,248
6/30/2029	12,091,354	1,917,540	12,542,853	1,695,771	7,491,195	2,063,346
6/30/2030	10,996,100	1,975,066	11,710,698	1,746,644	5,905,592	2,125,246
6/30/2031	9,760,461	2,034,318	10,764,457	1,799,043	4,138,909	2,189,004
6/30/2032	8,372,296	1,973,075	9,694,133	1,853,014	2,175,866	2,254,674
6/30/2033	6,945,215	1,906,326	8,488,946	1,908,605		
6/30/2034	5,482,053	1,786,297	7,137,273	1,965,863		
6/30/2035	4,035,359	1,657,350	5,626,582	2,024,839		
6/30/2036	2,615,590	294,274	3,943,366	2,085,584		
6/30/2037	2,503,557	251,198	2,073,067	2,148,152		
6/30/2038	2,427,898	205,272				
6/30/2039	2,394,249	211,430				
6/30/2040	2,351,737	217,773				
6/30/2041	2,299,517	238,951				
6/30/2042	2,221,501	452,368				
6/30/2043	1,916,585	567,001				
6/30/2044	1,470,395	534,990				
6/30/2045	1,024,470	500,548				
6/30/2046	581,347	446,581				
6/30/2047	161,465	167,314				
<b>Totals</b>		<b>33,765,160</b>		<b>32,917,843</b>		<b>27,723,633</b>
<b>Interest Paid</b>		<b>17,376,932</b>		<b>16,529,617</b>		<b>11,335,406</b>
<b>Estimated Savings</b>				<b>847,316</b>		<b>6,041,527</b>

\* This schedule does not reflect the impact of adopted discount rate changes that will become effective beyond June 30, 2016. For Projected Employer Contributions, please see Page 5.

## Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made during a fiscal year.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment (\$)
2016 - 17	17.004%	\$881,388
2017 - 18	17.045%	\$710,539
2018 - 19	17.869%	\$857,124

## Funding History

The funding history below shows the plan's actuarial accrued liability, share of the pool's market value of assets, share of the pool's unfunded liability, funded ratio, and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Plan's Share of Pool's Unfunded Liability	Funded Ratio	Annual Covered Payroll
06/30/2011	\$ 65,962,365	\$ 45,301,370	\$ 20,660,995	68.7%	\$ 7,677,957
06/30/2012	68,387,176	50,944,312	17,442,864	74.5%	7,220,924
06/30/2013	71,544,523	56,716,434	14,828,089	79.3%	7,172,824
06/30/2014	78,231,596	64,738,688	13,492,908	82.8%	6,713,267
06/30/2015	81,680,936	64,392,498	17,288,438	78.8%	6,607,809
06/30/2016	86,093,733	70,656,822	15,436,911	82.1%	6,156,876



## **RISK ANALYSIS**

- **ANALYSIS OF FUTURE INVESTMENT RETURN SCENARIOS**
- **ANALYSIS OF DISCOUNT RATE SENSITIVITY**
- **VOLATILITY RATIOS**
- **HYPOTHETICAL TERMINATION LIABILITY**

## Analysis of Future Investment Return Scenarios

Analysis was performed to determine the effects of various future investment returns on required employer contributions. The projections below provide a range of results based on five investment return scenarios assumed to occur during the next four fiscal years (2016-17, 2017-18, 2018-19 and 2019-20). The projections also assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Each of the five investment return scenarios assumes a return of 7.375 percent for fiscal year 2016-17. For fiscal years 2017-18, 2018-19, and 2019-20 each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are -3.0 percent, 3.0 percent, 7.0 percent (7.25 percent for 2017-18), 11.0 percent and 17.0 percent.

Alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four year period ending June 30, 2020. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced ten thousand stochastic outcomes for this period. We then selected annual returns that approximate the 5<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 95<sup>th</sup> percentiles for these outcomes. For example, of all of the 4-year outcomes generated in the stochastic analysis, approximately 25 percent of them had an average annual return of 3.0 percent or less.

Required contributions outside of this range are also possible. In particular, while it is unlikely that investment returns will average less than -3.0 percent or greater than 17.0 percent over this four year period, the possibility of a single investment return less than -3.0 percent or greater than 17.0 percent in any given year is much greater.

Assumed Annual Return From 2017-18 through 2019-20	Projected Employer Contributions			
	2019-20	2020-21	2021-22	2022-23
<b>(3.0%)</b>				
Normal Cost	18.6%	20.0%	20.0%	20.0%
UAL Contribution	\$1,041,000	\$1,407,000	\$1,940,000	\$2,553,000
<b>3.0%</b>				
Normal Cost	18.6%	20.0%	20.0%	20.0%
UAL Contribution	\$1,041,000	\$1,338,000	\$1,735,000	\$2,145,000
<b>Assumed Discount Rate</b>				
Normal Cost	18.6%	20.0%	20.0%	20.0%
UAL Contribution	\$1,041,000	\$1,290,000	\$1,588,000	\$1,846,000
<b>11.0%</b>				
Normal Cost	18.6%	20.0%	20.4%	20.7%
UAL Contribution	\$1,041,000	\$1,247,000	\$1,455,000	\$1,573,000
<b>17.0%</b>				
Normal Cost	18.6%	20.0%	21.1%	22.1%
UAL Contribution	\$1,041,000	\$1,178,000	\$1,247,000	\$0

Given the temporary suspension of the Risk Mitigation Policy during the period over which the discount rate assumption is being phased down to 7.0 percent, the projections above were performed without reflection of any possible impact of this Policy for Fiscal Years 2019-20 and 2020-21.

## Analysis of Discount Rate Sensitivity

Shown below are various valuation results as of June 30, 2016 assuming alternate discount rates. Results are shown using the current discount rate of 7.375 percent as well as alternate discount rates of 6.0 percent, 7.0 percent, and 8.0 percent. The alternate rate of 7.0 percent was selected since the Board has adopted this rate as the final discount rate at the end of the three year phase-in of the reduction in this assumption. The rates of 6.0 percent and 8.0 percent were selected since they illustrate the impact of a 1 percent increase or decrease to the 7.0 percent assumption. This analysis shows the potential plan impacts if the PERF were to realize investment returns of 6.0 percent, 7.0 percent, or 8.0 percent over the long-term.

This type of analysis gives the reader a sense of the long-term risk to required contributions. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

<b>Sensitivity Analysis</b>				
<b>As of June 30, 2016</b>	<b>Plan's Total Normal Cost</b>	<b>Accrued Liability</b>	<b>Unfunded Accrued Liability</b>	<b>Funded Status</b>
7.375% (current discount rate)	25.645%	\$86,093,733	\$15,436,911	82.1%
6.0%	34.808%	\$102,195,452	\$31,538,630	69.1%
7.0%	27.813%	\$90,070,020	\$19,413,198	78.4%
8.0%	22.482%	\$80,056,257	\$9,399,435	88.3%

## Volatility Ratios

Actuarial calculations are based on a number of assumptions about long-term demographic and economic behavior. Unless these assumptions (terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

### Asset Volatility Ratio (AVR)

Plans that have higher asset-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility, than a plan with an asset-to-payroll ratio of 4. Shown below is the asset volatility ratio, a measure of the plan's current contribution volatility. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

### Liability Volatility Ratio (LVR)

Plans that have higher liability-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with a liability-to-payroll ratio of 8 is expected to have twice the contribution volatility of a plan with a liability-to-payroll ratio of 4. The liability volatility ratio is also shown in the table below. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The asset volatility ratio, described above, will tend to move closer to the liability volatility ratio as the plan matures. Since the liability volatility ratio is a long-term measure, it is shown below at the current discount rate (7.375 percent) as well as the discount rate the Board has adopted to determine the contribution requirement in the June 30, 2018 actuarial valuation (7.00 percent).

<b>Rate Volatility</b>	<b>As of June 30, 2016</b>	
1. Market Value of Assets	\$	70,656,822
2. Payroll		6,156,876
3. Asset Volatility Ratio (AVR) [(1) / (2)]		11.5
4. Accrued Liability	\$	86,093,733
5. Liability Volatility Ratio (LVR) [(4) / (2)]		14.0
6. Accrued Liability (7.00% discount rate)		90,070,020
7. Projected Liability Volatility Ratio [(6) / (2)]		14.6

## Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2016. The plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. For the hypothetical termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees.

A more conservative investment policy and asset allocation strategy was adopted by the CalPERS Board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while funding risk is limited. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 2-year period centered around the valuation date.

<b>Market Value of Assets (MVA)</b>	<b>Hypothetical Termination Liability<sup>1,2</sup> @ 1.75%</b>	<b>Funded Status</b>	<b>Unfunded Termination Liability @ 1.75%</b>	<b>Hypothetical Termination Liability<sup>1,2</sup> @ 3.00%</b>	<b>Funded Status</b>	<b>Unfunded Termination Liability @ 3.00%</b>
\$70,656,822	\$167,976,083	42.1%	\$97,319,260	\$144,971,034	48.7%	\$74,314,212

<sup>1</sup> The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A.

<sup>2</sup> The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 1.75 percent on June 30, 2016, and was 2.75 percent on January 31, 2017.

In order to terminate the plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to terminate. The completed Resolution will allow the plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. CalPERS advises you to consult with the plan actuary before beginning this process.

## Participant Data

The table below shows a summary of your plan's member data upon which this valuation is based:

	<b>June 30, 2015</b>	<b>June 30, 2016</b>
Reported Payroll	\$ 6,607,809	\$ 6,156,876
Projected Payroll for Contribution Purposes	\$ 7,220,531	\$ 6,727,785
Number of Members		
Active	74	69
Transferred	11	15
Separated	23	21
Retired	103	105

## List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- One Year Final Compensation (FAC 1)
- Post-Retirement Survivor Allowance (PRSA)
- 3.50% Employees Contribution Reduction

## **PLAN'S MAJOR BENEFIT OPTIONS**

**SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE VISTA IRRIGATION DISTRICT**

**Plan’s Major Benefit Options**

Shown below is a summary of the major optional benefits for which your agency has contracted. A description of principal standard and optional plan provisions is in Appendix B within Section 2 of this report.

Benefit Provision	Contract package					
	Active Misc	Inactive Misc	Inactive Misc	Inactive Misc	Receiving Misc	
Benefit Formula	3.0% @ 60	2.0% @ 55	2.0% @ 55	3.0% @ 60		
Social Security Coverage	Yes	Yes	Yes	Yes		
Full/Modified	Full	Modified	Full	Modified		
Employee Contribution Rate	8.00%					
Final Average Compensation Period	One Year	One Year	One Year	One Year		
Sick Leave Credit	Yes	Yes	Yes	Yes		
Non-Industrial Disability	Standard	Standard	Standard	Standard		
Industrial Disability	No	No	No	No		
Pre-Retirement Death Benefits						
Optional Settlement 2W	Yes	Yes	Yes	Yes		
1959 Survivor Benefit Level	No	No	No	No		
Special	No	No	No	No		
Alternate (firefighters)	No	No	No	No	No	
Post-Retirement Death Benefits						
Lump Sum	\$500	\$500	\$500	\$500	\$500	
Survivor Allowance (PRSA)	Yes	Yes	Yes	Yes	Yes	
COLA	2%	2%	2%	2%	2%	



# Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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**Section 2 may be found on the CalPERS website  
([www.calpers.ca.gov](http://www.calpers.ca.gov)) in the Forms and  
Publications section**



**California Public Employees' Retirement System**  
**Actuarial Office**  
 P.O. Box 942709  
 Sacramento, CA 94229-2709  
 TTY: (916) 795-3240  
 (888) 225-7377 phone – (916) 795-2744 fax  
[www.calpers.ca.gov](http://www.calpers.ca.gov)

**August 2017**

**MISCELLANEOUS SECOND TIER PLAN OF THE VISTA IRRIGATION DISTRICT  
 (CalPERS ID: 1377855511)  
 Annual Valuation Report as of June 30, 2016**

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2016 actuarial valuation report of the pension plan.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2016.

Section 2 can be found on the CalPERS website at ([www.calpers.ca.gov](http://www.calpers.ca.gov)). From the home page, go to "Forms & Publications" and select "View All". In the search box, enter "Risk Pool Report" and from the results list download the Miscellaneous or Safety Risk Pool Actuarial Valuation Report as appropriate.

Your June 30, 2016 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you after August 31, 2017.

The exhibit below displays the minimum employer contributions, before any cost sharing, for Fiscal Year 2018-19 along with estimates of the required contributions for Fiscal Years 2019-20 and 2020-21. Member contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees.**

**Required Contribution**

Fiscal Year	Employer Normal Cost Rate	Employer Payment of Unfunded Liability
2018-19	7.634%	\$353
<i>Projected Results</i>		
2019-20	8.0%	\$850
2020-21	8.8%	\$1,600

The actual investment return for Fiscal Year 2016-17 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.375 percent. ***If the actual investment return for Fiscal Year 2016-17 differs from 7.375 percent, the actual contribution requirements for the projected years will differ from those shown above.***

Moreover, the projected results for Fiscal Years 2019-20 and 2020-21 also assume that there are no future plan changes, no further changes in assumptions other than those recently approved, and no liability gains or losses. Such changes can have a significant impact on required contributions. Since they cannot be predicted in advance, the projected employer results shown above are estimates. The actual required employer contributions for Fiscal Year 2019-20 will be provided in next year's report.

For additional details regarding the assumptions and methods used for these projections please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section.

The "Risk Analysis" section of the valuation report also contains estimated employer contributions in future years under a variety of investment return scenarios.

### **Changes since the Prior Year's Valuation**

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 determined in this valuation were calculated using a discount rate of 7.375 percent. The projected employer contributions on Page 5 are calculated assuming that the discount rate will be lowered to 7.25 percent next year and to 7.00 percent the following year as adopted by the Board.

The CalPERS Board of Administration adopted a Risk Mitigation Policy which is designed to reduce funding risk over time. This Policy has been temporarily suspended during the period over which the discount rate is being lowered. More details on the Risk Mitigation Policy can be found on our website.

Besides the above noted changes, there may also be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Statement of Actuarial Data, Methods and Assumptions" of the Section 2 report.

We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 31 to contact us with actuarial related questions.

If you have other questions, please call our customer contact center at (888) CalPERS or **(888-225-7377)**.

Sincerely,

SCOTT TERANDO  
Chief Actuary



**ACTUARIAL VALUATION  
as of June 30, 2016**

**for the  
MISCELLANEOUS SECOND TIER PLAN  
of the  
VISTA IRRIGATION DISTRICT  
(CalPERS ID: 1377855511)**

**REQUIRED CONTRIBUTIONS  
FOR FISCAL YEAR  
July 1, 2018 - June 30, 2019**

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**SECTION 1 – PLAN SPECIFIC INFORMATION**

**SECTION 2 – RISK POOL ACTUARIAL VALUATION INFORMATION**

# Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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**Plan Specific Information  
for the  
MISCELLANEOUS SECOND TIER PLAN  
of the  
VISTA IRRIGATION DISTRICT**

**(CalPERS ID: 1377855511)  
(Rate Plan: 23250)**

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## ACTUARIAL CERTIFICATION

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2016 which was provided by your agency and the benefit provisions under your contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2016 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuary has certified that, in their opinion, the valuation of the risk pool containing your MISCELLANEOUS SECOND TIER PLAN has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that Unfunded Accrued Liability amortization bases as of June 30, 2016 and employer contribution as of July 1, 2018, have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, a member of both the American Academy of Actuaries and Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

NANCY E. CAMPBELL, ASA, MAAA  
Enrolled Actuary  
Supervising Pension Actuary, CalPERS  
Plan Actuary



# HIGHLIGHTS AND EXECUTIVE SUMMARY

- **INTRODUCTION**
- **PURPOSE OF SECTION 1**
- **REQUIRED EMPLOYER CONTRIBUTION**
- **PLAN'S FUNDED STATUS**
- **PROJECTED EMPLOYER CONTRIBUTIONS**
- **CHANGES SINCE THE PRIOR YEAR'S VALUATION**
- **SUBSEQUENT EVENTS**

## Introduction

This report presents the results of the June 30, 2016 actuarial valuation of the MISCELLANEOUS SECOND TIER PLAN of the VISTA IRRIGATION DISTRICT of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for Fiscal Year 2018-19.

## Purpose of Section 1

This Section 1 report for the MISCELLANEOUS SECOND TIER PLAN of the VISTA IRRIGATION DISTRICT of the California Public Employees' Retirement System (CalPERS) was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2016;
- Determine the required employer contribution for this plan for the fiscal year July 1, 2018 through June 30, 2019; and
- Provide actuarial information as of June 30, 2016 to the CalPERS Board of Administration and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to GASB Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available from CalPERS and details for ordering are available on our website.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; and changes in plan provisions or applicable law.

### California Actuarial Advisory Panel Recommendations

This report includes all the basic disclosure elements as described in the *Model Disclosure Elements for Actuarial Valuation Reports* recommended in 2011 by the California Actuarial Advisory Panel (CAAP), with the exception of including the original base amounts of the various components of the unfunded liability in the Schedule of Amortization Bases shown on page 9.

Additionally, this report includes the following "Enhanced Risk Disclosures" also recommended by the CAAP in the Model Disclosure Elements document:

- A "Deterministic Stress Test," projecting future results under different investment income scenarios
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0 percent, 7.0 percent and 8.0 percent.

## Required Employer Contribution

	<b>Fiscal Year</b>	
<b>Required Employer Contribution</b>	<b>2018-19</b>	
<b>Employer Normal Cost Rate</b>	<b>7.634%</b>	
<i>Plus Either</i>		
<b>1) Monthly Employer Dollar UAL Payment</b>	<b>\$</b>	<b>29.39</b>
<i>Or</i>		
<b>2) Annual Lump Sum Prepayment Option</b>	<b>\$</b>	<b>340</b>
<p><i>The total minimum required employer contribution is the <b>sum</b> of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll) <b>plus</b> the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars).</i></p> <p><i>Only the UAL portion of the employer contribution can be prepaid (<b>which must be received in full no later than July 31</b>). Plan Normal Cost contributions will be made as part of the payroll reporting process. If there is contractual cost sharing or other change, this amount will change.</i></p> <p><i>§ 20572 of the Public Employees' Retirement Law assesses interest at an annual rate of 10 percent if a contracting agency fails to remit the required contributions when due.</i></p>		

	<b>Fiscal Year</b>	<b>Fiscal Year</b>
	<b>2017-18</b>	<b>2018-19</b>
<b>Development of Normal Cost as a Percentage of Payroll<sup>1</sup></b>		
Base Total Normal Cost for Formula	14.100%	14.546%
Surcharge for Class 1 Benefits <sup>2</sup>		
None	0.000%	0.000%
Phase out of Normal Cost Difference <sup>3</sup>	0.000%	0.000%
Plan's Total Normal Cost	14.100%	14.546%
Formula's Expected Employee Contribution Rate	6.900%	6.912%
Employer Normal Cost Rate	7.200%	7.634%
Projected Payroll for the Contribution Fiscal Year	\$ 436,072	\$ 510,368
<b>Estimated Employer Contributions Based on Projected Payroll</b>		
Plan's Estimated Employer Normal Cost	\$ 31,397	\$ 38,962
Plan's Payment on Amortization Bases <sup>4</sup>	8	353
% of Projected Payroll (illustrative only)	0.002%	0.069%
Estimated Total Employer Contribution	\$ 31,405	\$ 39,315
% of Projected Payroll (illustrative only)	7.202%	7.703%

<sup>1</sup> The results shown for Fiscal Year 2017-18 reflect the prior year valuation and may not take into account any lump sum payment, side fund payoff, or rate adjustment made after June 30, 2016.

<sup>2</sup> Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

<sup>3</sup> The normal cost difference is phased out over a five year period. The phase out of normal cost difference is 100 percent for the first year of pooling, and is incrementally reduced by 20 percent of the original normal cost difference for each subsequent year. This is non-zero only for plans that joined a pool within the past 5 years. Most plans joined a pool June 30, 2003, when risk pooling was implemented.

<sup>4</sup> See page 9 for a breakdown of the Amortization Bases.

## Plan's Funded Status

	<b>June 30, 2015</b>	<b>June 30, 2016</b>
1. Present Value of Projected Benefits (PVB)	\$ 653,259	\$ 854,981
2. Entry Age Normal Accrued Liability (AL)	93,889	146,696
3. Plan's Market Value of Assets (MVA)	91,065	132,109
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	2,824	14,587
5. Funded Ratio [(3) / (2)]	97.0%	90.1%

This measure of funded status is an assessment of the need for future employer contributions based on the selected actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

## Projected Employer Contributions

The table below shows projected employer contributions (before cost sharing) for the next six fiscal years. Projected results reflect the adopted changes to the discount rate described in Appendix A, "Statement of Actuarial Data, Methods and Assumptions" of the Section 2 report. The projections also assume that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period.

Fiscal Year	Required Contribution	Projected Future Employer Contributions (Assumes 7.375% Return for Fiscal Year 2016-17)					
		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Normal Cost %	7.634%	8.0%	8.8%	8.8%	8.8%	8.8%	8.8%
UAL Payment	\$353	\$850	\$1,600	\$2,500	\$3,300	\$3,900	\$4,400

Changes in the UAL due to actuarial gains or losses as well as changes in actuarial assumptions or methods are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of Section 2. This method phases in the impact of unanticipated changes in UAL over a 5-year period and attempts to minimize employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years where there is a large increase in UAL the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially while the contribution impact of the increase in the UAL is phased in.

Due to the adopted changes in the discount rate for the next two valuations in combination with the 5-year phase-in ramp, the increases in the required contributions are expected to continue for seven years from Fiscal Year 2018-19 through Fiscal Year 2024-25.

For projected contributions under alternate investment return scenarios, please see the "Analysis of Future Investment Return Scenarios" in the "Risk Analysis" section.

## Changes since the Prior Year's Valuation

### Benefits

None. This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B of Section 2 for a summary of the plan provisions used in this valuation.

### Actuarial Methods and Assumptions

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 determined in this valuation were calculated using a discount rate of 7.375 percent. The projected employer contributions on Page 5 are calculated assuming that the discount rate will be lowered to 7.25 percent next year and 7.00 percent the following year as adopted by the Board. The decision to reduce the discount rate was primarily based on reduced capital market assumptions provided by external investment consultants and CalPERS investment staff. The specific decision adopted by the Board reflected recommendations from CalPERS staff and additional input from employer and employee stakeholder groups. Based on the investment allocation adopted by the Board and capital market assumptions, the reduced discount rate assumption provides a more realistic assumption for the long term investment return of the fund.

Notwithstanding the Board's decision to phase into a 7.0 percent discount rate, subsequent analysis of the expected investment return of CalPERS assets or changes to the investment allocation may result in a change to this three year discount rate schedule. A comprehensive analysis of all actuarial assumptions and methods including the discount rate will be conducted in 2017.

## Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2016. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the required contribution, while investment returns above the assumed rate of return will decrease the actuarial cost of the plan.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2017. Any subsequent changes or actions are not reflected.

## **ASSETS AND LIABILITIES**

- **BREAKDOWN OF ENTRY AGE NORMAL ACCRUED LIABILITY**
- **ALLOCATION OF PLAN'S SHARE OF POOL'S EXPERIENCE/ASSUMPTION CHANGE**
- **DEVELOPMENT OF PLAN'S SHARE OF POOL'S MVA**
- **SCHEDULE OF PLAN'S AMORTIZATION BASES**
- **30-YEAR AMORTIZATION SCHEDULE AND ALTERNATIVES**
- **EMPLOYER CONTRIBUTION HISTORY**
- **FUNDING HISTORY**

## Breakdown of Entry Age Normal Accrued Liability

1. Active Members	\$	136,842
2. Transferred Members		578
3. Terminated Members		9,276
4. Members and Beneficiaries Receiving Payments		0
5. Total	\$	146,696

## Allocation of Plan's Share of Pool's Experience/Assumption Change

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The Pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1. Plan's Accrued Liability	\$	146,696
2. Projected UAL balance at 6/30/16		3,964
3. Pool's Accrued Liability	\$	14,775,287,594
4. Sum of Pool's Individual Plan UAL Balances at 6/30/16		2,987,498,021
5. Pool's 2015/16 Investment & Asset (Gain)/Loss		771,070,186
6. Pool's 2015/16 Other (Gain)/Loss		(95,296,686)
7. Plan's Share of Pool's Asset (Gain)/Loss $[(1)-(2)]/[(3)-(4)] * (5)$		9,336
8. Plan's Share of Pool's Other (Gain)/Loss $[(1)]/[(3)] * (6)$		(946)
9. Plan's New (Gain)/Loss as of 6/30/2016 $[(7)+(8)]$	\$	8,390
10. Increase in Pool's Accrued Liability due to Change in Assumptions		224,853,121
11. Plan's Share of Pool's Change in Assumptions $[(1)]/[(3)] * (10)$	\$	2,232

## Development of the Plan's Share of Pool's Market Value of Assets

1. Plan's Accrued Liability	\$	146,696
2. Plan's UAL	\$	14,587
3. Plan's Share of Pool's MVA $[(1)-(2)]$	\$	<b>132,109</b>

## Schedule of Plan's Side Fund and Other Amortization Bases

There is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2016.
- The employer contribution determined by the valuation is for the fiscal year beginning two years after the valuation date: Fiscal Year 2018-19.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the payment on the UAL for the fiscal year and adjusting for interest.

Reason for Base	Date Established	Amortization Period	Balance 6/30/16	Payment 2016-17	Balance 6/30/17	Payment 2017-18	Amounts for Fiscal 2018-19	
							Balance 6/30/18	Scheduled Payment for 2018-19
FRESH START	06/30/14	28	\$(1,031)	\$0	\$(1,107)	\$(68)	\$(1,118)	\$(69)
ASSET (GAIN)/LOSS	06/30/15	29	\$5,351	\$0	\$5,746	\$81	\$6,086	\$164
NON-ASSET (GAIN)/LOSS	06/30/15	29	\$(356)	\$0	\$(382)	\$(5)	\$(405)	\$(11)
ASSET (GAIN)/LOSS	06/30/16	30	\$9,336	\$0	\$10,025	\$0	\$10,764	\$149
NON-ASSET (GAIN)/LOSS	06/30/16	30	\$(946)	\$0	\$(1,016)	\$0	\$(1,091)	\$(15)
ASSUMPTION CHANGE	06/30/16	20	\$2,232	\$(2,083)	\$4,556	\$(2,145)	\$7,115	\$134
<b>TOTAL</b>			<b>\$14,586</b>	<b>\$(2,083)</b>	<b>\$17,822</b>	<b>\$(2,137)</b>	<b>\$21,351</b>	<b>\$352</b>

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed on the previous page. These (gain)/loss bases will be amortized according to Board policy over 30 years with a 5-year ramp-up.

If the total Unfunded Liability is negative (i.e., plan has a surplus), the scheduled payment is \$0, because the minimum required contribution under PEPRA must be at least equal to the normal cost.



## 30-Year Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to CalPERS amortization policy. There has been considerable interest from many agencies in paying off these unfunded accrued liabilities sooner and the possible savings in doing so. As a result, we have provided alternate amortization schedules to help analyze the current amortization schedule and illustrate the advantages of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on: 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternate "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. Note that the payments under each alternate scenario increase by 3 percent for each year into the future. **The schedules do not attempt to reflect any experience after June 30, 2016 that may deviate from the actuarial assumptions. Therefore, future amortization payments displayed in the Current Amortization Schedule may not match projected amortization payments shown in connection with Projected Employer Contributions provided elsewhere in this report.**

The Current Amortization Schedule typically contains individual bases that are both positive and negative. Positive bases result from plan changes, assumption changes or plan experience that result in increases to unfunded liability. Negative bases result from plan changes, assumption changes or plan experience that result in decreases to unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years such as:

- A positive total unfunded liability with a negative total payment,
- A negative total unfunded liability with a positive total payment, or
- Total payments that completely amortize the unfunded liability over a very short period of time

In any year where one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over a reasonable period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy. For purposes of this display, total payments include any negative payments. Therefore, the amount of estimated savings may be understated to the extent that negative payments appear in the current schedule.

## 30-Year Amortization Schedule and Alternatives

Date	<u>Current Amortization Schedule</u>		<u>Alternate Schedules</u>			
	Balance	Payment	25 Year Amortization		20 Year Amortization	
			Balance	Payment	Balance	Payment
6/30/2018	21,351	353	21,351	1,394	21,351	1,596
6/30/2019	22,560	718	21,481	1,436	21,272	1,644
6/30/2020	23,479	1,106	21,577	1,479	21,137	1,693
6/30/2021	24,065	1,515	21,635	1,524	20,941	1,744
6/30/2022	24,270	1,863	21,652	1,569	20,678	1,796
6/30/2023	24,129	1,919	21,623	1,616	20,342	1,850
6/30/2024	23,921	1,976	21,543	1,665	19,925	1,906
6/30/2025	23,637	2,036	21,406	1,715	19,420	1,963
6/30/2026	23,271	2,097	21,208	1,766	18,818	2,022
6/30/2027	22,815	2,159	20,942	1,819	18,111	2,082
6/30/2028	22,260	2,224	20,601	1,874	17,289	2,145
6/30/2029	21,597	2,291	20,179	1,930	16,341	2,209
6/30/2030	20,815	2,360	19,667	1,988	15,257	2,276
6/30/2031	19,905	2,431	19,058	2,048	14,024	2,344
6/30/2032	18,855	2,503	18,341	2,109	12,630	2,414
6/30/2033	17,651	2,579	17,509	2,172	11,060	2,487
6/30/2034	16,281	2,441	16,549	2,237	9,299	2,561
6/30/2035	14,953	2,292	15,451	2,305	7,330	2,638
6/30/2036	13,680	2,133	14,203	2,374	5,137	2,717
6/30/2037	12,479	1,962	12,791	2,445	2,701	2,799
6/30/2038	11,367	1,778	11,200	2,518		
6/30/2039	10,363	1,832	9,417	2,594		
6/30/2040	9,229	1,887	7,424	2,672		
6/30/2041	7,955	1,943	5,203	2,752		
6/30/2042	6,528	2,001	2,735	2,834		
6/30/2043	4,936	1,901				
6/30/2044	3,330	1,504				
6/30/2045	2,017	1,081				
6/30/2046	1,045	789				
6/30/2047	305	316				
<b>Totals</b>		<b>53,988</b>		<b>50,835</b>		<b>42,886</b>
<b>Interest Paid</b>		<b>32,637</b>		<b>29,484</b>		<b>21,535</b>
<b>Estimated Savings</b>				<b>3,153</b>		<b>11,102</b>

\* This schedule does not reflect the impact of adopted discount rate changes that will become effective beyond June 30, 2016. For Projected Employer Contributions, please see Page 5.

## Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made during a fiscal year.

<b>Fiscal Year</b>	<b>Employer Normal Cost</b>	<b>Unfunded Liability Payment (\$)</b>
2016 - 17	7.159%	\$0
2017 - 18	7.200%	\$8
2018 - 19	7.634%	\$353

## Funding History

The funding history below shows the plan's actuarial accrued liability, share of the pool's market value of assets, share of the pool's unfunded liability, funded ratio, and annual covered payroll.

<b>Valuation Date</b>	<b>Accrued Liability (AL)</b>	<b>Share of Pool's Market Value of Assets (MVA)</b>	<b>Plan's Share of Pool's Unfunded Liability</b>	<b>Funded Ratio</b>	<b>Annual Covered Payroll</b>
06/30/2013	\$ 27,471	\$ 23,162	\$ 4,309	84.3%	\$ 237,288
06/30/2014	44,731	44,117	614	98.6%	176,816
06/30/2015	93,889	91,065	2,824	97.0%	399,068
06/30/2016	146,696	132,109	14,587	90.1%	467,059

## **RISK ANALYSIS**

- **ANALYSIS OF FUTURE INVESTMENT RETURN SCENARIOS**
- **ANALYSIS OF DISCOUNT RATE SENSITIVITY**
- **VOLATILITY RATIOS**
- **HYPOTHETICAL TERMINATION LIABILITY**

## Analysis of Future Investment Return Scenarios

Analysis was performed to determine the effects of various future investment returns on required employer contributions. The projections below provide a range of results based on five investment return scenarios assumed to occur during the next four fiscal years (2016-17, 2017-18, 2018-19 and 2019-20). The projections also assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Each of the five investment return scenarios assumes a return of 7.375 percent for fiscal year 2016-17. For fiscal years 2017-18, 2018-19, and 2019-20 each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are -3.0 percent, 3.0 percent, 7.0 percent (7.25 percent for 2017-18), 11.0 percent and 17.0 percent.

Alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four year period ending June 30, 2020. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced ten thousand stochastic outcomes for this period. We then selected annual returns that approximate the 5<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 95<sup>th</sup> percentiles for these outcomes. For example, of all of the 4-year outcomes generated in the stochastic analysis, approximately 25 percent of them had an average annual return of 3.0 percent or less.

Required contributions outside of this range are also possible. In particular, while it is unlikely that investment returns will average less than -3.0 percent or greater than 17.0 percent over this four year period, the possibility of a single investment return less than -3.0 percent or greater than 17.0 percent in any given year is much greater.

Assumed Annual Return From 2017-18 through 2019-20	Projected Employer Contributions			
	2019-20	2020-21	2021-22	2022-23
<b>(3.0%)</b>				
Normal Cost	8.0%	8.8%	8.8%	8.8%
UAL Contribution	\$850	\$1,900	\$3,200	\$4,700
<b>3.0%</b>				
Normal Cost	8.0%	8.8%	8.8%	8.8%
UAL Contribution	\$850	\$1,700	\$2,800	\$3,900
<b>Assumed Discount Rate</b>				
Normal Cost	8.0%	8.8%	8.8%	8.8%
UAL Contribution	\$850	\$1,600	\$2,500	\$3,300
<b>11.0%</b>				
Normal Cost	8.0%	8.8%	9.0%	9.2%
UAL Contribution	\$850	\$1,600	\$2,300	\$2,800
<b>17.0%</b>				
Normal Cost	8.0%	8.8%	9.4%	10.0%
UAL Contribution	\$850	\$1,400	\$1,900	\$970

Given the temporary suspension of the Risk Mitigation Policy during the period over which the discount rate assumption is being phased down to 7.0 percent, the projections above were performed without reflection of any possible impact of this Policy for Fiscal Years 2019-20 and 2020-21.

## Analysis of Discount Rate Sensitivity

Shown below are various valuation results as of June 30, 2016 assuming alternate discount rates. Results are shown using the current discount rate of 7.375 percent as well as alternate discount rates of 6.0 percent, 7.0 percent, and 8.0 percent. The alternate rate of 7.0 percent was selected since the Board has adopted this rate as the final discount rate at the end of the three year phase-in of the reduction in this assumption. The rates of 6.0 percent and 8.0 percent were selected since they illustrate the impact of a 1 percent increase or decrease to the 7.0 percent assumption. This analysis shows the potential plan impacts if the PERF were to realize investment returns of 6.0 percent, 7.0 percent, or 8.0 percent over the long-term.

This type of analysis gives the reader a sense of the long-term risk to required contributions. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

<b>Sensitivity Analysis</b>				
<b>As of June 30, 2016</b>	<b>Plan's Total Normal Cost</b>	<b>Accrued Liability</b>	<b>Unfunded Accrued Liability</b>	<b>Funded Status</b>
7.375% (current discount rate)	14.546%	\$146,696	\$14,587	90.1%
6.0%	19.527%	\$207,361	\$75,252	63.7%
7.0%	15.729%	\$161,074	\$28,965	82.0%
8.0%	12.815%	\$125,764	\$(6,345)	105.0%

## Volatility Ratios

Actuarial calculations are based on a number of assumptions about long-term demographic and economic behavior. Unless these assumptions (terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

### Asset Volatility Ratio (AVR)

Plans that have higher asset-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility, than a plan with an asset-to-payroll ratio of 4. Shown below is the asset volatility ratio, a measure of the plan's current contribution volatility. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

### Liability Volatility Ratio (LVR)

Plans that have higher liability-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with a liability-to-payroll ratio of 8 is expected to have twice the contribution volatility of a plan with a liability-to-payroll ratio of 4. The liability volatility ratio is also shown in the table below. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The asset volatility ratio, described above, will tend to move closer to the liability volatility ratio as the plan matures. Since the liability volatility ratio is a long-term measure, it is shown below at the current discount rate (7.375 percent) as well as the discount rate the Board has adopted to determine the contribution requirement in the June 30, 2018 actuarial valuation (7.00 percent).

<b>Rate Volatility</b>	<b>As of June 30, 2016</b>	
1. Market Value of Assets	\$	132,109
2. Payroll		467,059
3. Asset Volatility Ratio (AVR) [(1) / (2)]		0.3
4. Accrued Liability	\$	146,696
5. Liability Volatility Ratio (LVR) [(4) / (2)]		0.3
6. Accrued Liability (7.00% discount rate)		161,074
7. Projected Liability Volatility Ratio [(6) / (2)]		0.3

## Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2016. The plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. For the hypothetical termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees.

A more conservative investment policy and asset allocation strategy was adopted by the CalPERS Board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while funding risk is limited. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 2-year period centered around the valuation date.

<b>Market Value of Assets (MVA)</b>	<b>Hypothetical Termination Liability<sup>1,2</sup> @ 1.75%</b>	<b>Funded Status</b>	<b>Unfunded Termination Liability @ 1.75%</b>	<b>Hypothetical Termination Liability<sup>1,2</sup> @ 3.00%</b>	<b>Funded Status</b>	<b>Unfunded Termination Liability @ 3.00%</b>
\$132,109	\$378,374	34.9%	\$246,265	\$256,228	51.6%	\$124,118

<sup>1</sup> The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A.

<sup>2</sup> The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 1.75 percent on June 30, 2016, and was 2.75 percent on January 31, 2017.

In order to terminate the plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to terminate. The completed Resolution will allow the plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. CalPERS advises you to consult with the plan actuary before beginning this process.



## Participant Data

The table below shows a summary of your plan's member data upon which this valuation is based:

	<b>June 30, 2015</b>		<b>June 30, 2016</b>
Reported Payroll	\$ 399,068	\$	467,059
Projected Payroll for Contribution Purposes	\$ 436,072	\$	510,368
Number of Members			
Active	6		6
Transferred	1		1
Separated	1		2
Retired	0		0

## List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- None

## **PLAN'S MAJOR BENEFIT OPTIONS**

**SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS SECOND TIER PLAN OF THE VISTA IRRIGATION DISTRICT**

## Plan’s Major Benefit Options

Shown below is a summary of the major optional benefits for which your agency has contracted. A description of principal standard and optional plan provisions is in Appendix B within Section 2 of this report.

	Contract package	
<b>Benefit Provision</b>	Active Misc	
Benefit Formula	2.0% @ 60	
Social Security Coverage	Yes	
Full/Modified	Modified	
Employee Contribution Rate	7.00%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Standard	
Industrial Disability	No	
Pre-Retirement Death Benefits		
Optional Settlement 2W	Yes	
1959 Survivor Benefit Level	No	
Special	No	
Alternate (firefighters)	No	
Post-Retirement Death Benefits		
Lump Sum	\$500	
Survivor Allowance (PRSA)	No	
COLA	2%	

# Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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**Section 2 may be found on the CalPERS website  
([www.calpers.ca.gov](http://www.calpers.ca.gov)) in the Forms and  
Publications section**



**California Public Employees' Retirement System**  
**Actuarial Office**  
 P.O. Box 942709  
 Sacramento, CA 94229-2709  
 TTY: (916) 795-3240  
 (888) 225-7377 phone – (916) 795-2744 fax  
[www.calpers.ca.gov](http://www.calpers.ca.gov)

**August 2017**

**PEPRA MISCELLANEOUS PLAN OF THE VISTA IRRIGATION DISTRICT  
 (CalPERS ID: 1377855511)  
 Annual Valuation Report as of June 30, 2016**

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2016 actuarial valuation report of the pension plan.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2016.

Section 2 can be found on the CalPERS website at ([www.calpers.ca.gov](http://www.calpers.ca.gov)). From the home page, go to "Forms & Publications" and select "View All". In the search box, enter "Risk Pool Report" and from the results list download the Miscellaneous or Safety Risk Pool Actuarial Valuation Report as appropriate.

Your June 30, 2016 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you after August 31, 2017.

The exhibit below displays the minimum employer contributions, before any cost sharing, for Fiscal Year 2018-19 along with estimates of the required contributions for Fiscal Years 2019-20 and 2020-21. Member contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees.**

**Required Contribution**

Fiscal Year	Employer Normal Cost Rate	Employer Payment of Unfunded Liability
2018-19	6.842%	\$639
<i>Projected Results</i>		
2019-20	6.8%	\$1,400
2020-21	7.1%	\$2,600

The actual investment return for Fiscal Year 2016-17 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.375 percent. ***If the actual investment return for Fiscal Year 2016-17 differs from 7.375 percent, the actual contribution requirements for the projected years will differ from those shown above.***

Moreover, the projected results for Fiscal Years 2019-20 and 2020-21 also assume that there are no future plan changes, no further changes in assumptions other than those recently approved, and no liability gains or losses. Such changes can have a significant impact on required contributions. Since they cannot be predicted in advance, the projected employer results shown above are estimates. The actual required employer contributions for Fiscal Year 2019-20 will be provided in next year's report.

For additional details regarding the assumptions and methods used for these projections please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section.

The "Risk Analysis" section of the valuation report also contains estimated employer contributions in future years under a variety of investment return scenarios.

### **Changes since the Prior Year's Valuation**

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 determined in this valuation were calculated using a discount rate of 7.375 percent. The projected employer contributions on Page 5 are calculated assuming that the discount rate will be lowered to 7.25 percent next year and to 7.00 percent the following year as adopted by the Board.

The CalPERS Board of Administration adopted a Risk Mitigation Policy which is designed to reduce funding risk over time. This Policy has been temporarily suspended during the period over which the discount rate is being lowered. More details on the Risk Mitigation Policy can be found on our website.

Besides the above noted changes, there may also be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Statement of Actuarial Data, Methods and Assumptions" of the Section 2 report.

We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 31 to contact us with actuarial related questions.

If you have other questions, please call our customer contact center at (888) CalPERS or **(888-225-7377)**.

Sincerely,

SCOTT TERANDO  
Chief Actuary



**ACTUARIAL VALUATION  
as of June 30, 2016**

**for the  
PEPRA MISCELLANEOUS PLAN  
of the  
VISTA IRRIGATION DISTRICT  
(CalPERS ID: 1377855511)**

**REQUIRED CONTRIBUTIONS  
FOR FISCAL YEAR  
July 1, 2018 - June 30, 2019**

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**SECTION 1 – PLAN SPECIFIC INFORMATION**

**SECTION 2 – RISK POOL ACTUARIAL VALUATION INFORMATION**



# Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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**Plan Specific Information  
for the  
PEPRA MISCELLANEOUS PLAN  
of the  
VISTA IRRIGATION DISTRICT**

**(CalPERS ID: 1377855511)  
(Rate Plan: 26292)**

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## ACTUARIAL CERTIFICATION

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2016 which was provided by your agency and the benefit provisions under your contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2016 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuary has certified that, in their opinion, the valuation of the risk pool containing your PEPRA MISCELLANEOUS PLAN has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that Unfunded Accrued Liability amortization bases as of June 30, 2016 and employer contribution as of July 1, 2018, have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, a member of both the American Academy of Actuaries and Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

NANCY E. CAMPBELL, ASA, MAAA  
Enrolled Actuary  
Supervising Pension Actuary, CalPERS  
Plan Actuary

# HIGHLIGHTS AND EXECUTIVE SUMMARY

- **INTRODUCTION**
- **PURPOSE OF SECTION 1**
- **REQUIRED EMPLOYER CONTRIBUTION**
- **PLAN'S FUNDED STATUS**
- **PROJECTED EMPLOYER CONTRIBUTIONS**
- **CHANGES SINCE THE PRIOR YEAR'S VALUATION**
- **SUBSEQUENT EVENTS**

## Introduction

This report presents the results of the June 30, 2016 actuarial valuation of the PEPRA MISCELLANEOUS PLAN of the VISTA IRRIGATION DISTRICT of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for Fiscal Year 2018-19.

## Purpose of Section 1

This Section 1 report for the PEPRA MISCELLANEOUS PLAN of the VISTA IRRIGATION DISTRICT of the California Public Employees' Retirement System (CalPERS) was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2016;
- Determine the required employer contribution for this plan for the fiscal year July 1, 2018 through June 30, 2019; and
- Provide actuarial information as of June 30, 2016 to the CalPERS Board of Administration and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to GASB Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available from CalPERS and details for ordering are available on our website.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; and changes in plan provisions or applicable law.

### California Actuarial Advisory Panel Recommendations

This report includes all the basic disclosure elements as described in the *Model Disclosure Elements for Actuarial Valuation Reports* recommended in 2011 by the California Actuarial Advisory Panel (CAAP), with the exception of including the original base amounts of the various components of the unfunded liability in the Schedule of Amortization Bases shown on page 9.

Additionally, this report includes the following "Enhanced Risk Disclosures" also recommended by the CAAP in the Model Disclosure Elements document:

- A "Deterministic Stress Test," projecting future results under different investment income scenarios
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0 percent, 7.0 percent and 8.0 percent.

## Required Employer Contribution

	<b>Fiscal Year</b>	
<b>Required Employer Contribution</b>	<b>2018-19</b>	
<b>Employer Normal Cost Rate</b>	<b>6.842%</b>	
<i>Plus Either</i>		
<b>1) Monthly Employer Dollar UAL Payment</b>	<b>\$</b>	<b>53.21</b>
<i>Or</i>		
<b>2) Annual Lump Sum Prepayment Option</b>	<b>\$</b>	<b>616</b>
<p><i>The total minimum required employer contribution is the <b>sum</b> of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll) <b>plus</b> the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars).</i></p> <p><i>Only the UAL portion of the employer contribution can be prepaid (<b>which must be received in full no later than July 31</b>). Plan Normal Cost contributions will be made as part of the payroll reporting process. If there is contractual cost sharing or other change, this amount will change.</i></p> <p><i>§ 20572 of the Public Employees' Retirement Law assesses interest at an annual rate of 10 percent if a contracting agency fails to remit the required contributions when due.</i></p>		

	<b>Fiscal Year</b>	<b>Fiscal Year</b>
	<b>2017-18</b>	<b>2018-19</b>
<b>Development of Normal Cost as a Percentage of Payroll<sup>1</sup></b>		
Base Total Normal Cost for Formula	12.783%	13.092%
Surcharge for Class 1 Benefits <sup>2</sup>		
None	0.000%	0.000%
Phase out of Normal Cost Difference <sup>3</sup>	0.000%	0.000%
Plan's Total Normal Cost	12.783%	13.092%
Plan's Employee Contribution Rate	6.250%	6.250%
Employer Normal Cost Rate	6.533%	6.842%
Projected Payroll for the Contribution Fiscal Year	\$ 570,167	\$ 908,812
<b>Estimated Employer Contributions Based on Projected Payroll</b>		
Plan's Estimated Employer Normal Cost	\$ 37,249	\$ 62,181
Plan's Payment on Amortization Bases <sup>4</sup>	126	639
% of Projected Payroll (illustrative only)	0.022%	0.070%
Estimated Total Employer Contribution	\$ 37,375	\$ 62,820
% of Projected Payroll (illustrative only)	6.555%	6.912%

<sup>1</sup> The results shown for Fiscal Year 2017-18 reflect the prior year valuation and may not take into account any lump sum payment, side fund payoff, or rate adjustment made after June 30, 2016.

<sup>2</sup> Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

<sup>3</sup> The normal cost difference is phased out over a five year period. The phase out of normal cost difference is 100 percent for the first year of pooling, and is incrementally reduced by 20 percent of the original normal cost difference for each subsequent year. This is non-zero only for plans that joined a pool within the past 5 years. Most plans joined a pool June 30, 2003, when risk pooling was implemented.

<sup>4</sup> See page 9 for a breakdown of the Amortization Bases.

## Plan's Funded Status

	<b>June 30, 2015</b>	<b>June 30, 2016</b>
1. Present Value of Projected Benefits (PVB)	\$ 733,485	\$ 1,257,187
2. Entry Age Normal Accrued Liability (AL)	85,010	197,774
3. Plan's Market Value of Assets (MVA)	81,137	177,936
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	3,873	19,838
5. Funded Ratio [(3) / (2)]	95.4%	90.0%

This measure of funded status is an assessment of the need for future employer contributions based on the selected actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

## Projected Employer Contributions

The table below shows projected employer contributions (before cost sharing) for the next six fiscal years. Projected results reflect the adopted changes to the discount rate described in Appendix A, "Statement of Actuarial Data, Methods and Assumptions" of the Section 2 report. The projections also assume that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period.

Fiscal Year	Required Contribution	Projected Future Employer Contributions (Assumes 7.375% Return for Fiscal Year 2016-17)					
		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Normal Cost %	6.842%	6.8%	7.1%	7.1%	7.1%	7.1%	7.1%
UAL Payment	\$639	\$1,400	\$2,600	\$3,900	\$5,300	\$6,200	\$6,900

Changes in the UAL due to actuarial gains or losses as well as changes in actuarial assumptions or methods are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of Section 2. This method phases in the impact of unanticipated changes in UAL over a 5-year period and attempts to minimize employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years where there is a large increase in UAL the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially while the contribution impact of the increase in the UAL is phased in.

Due to the adopted changes in the discount rate for the next two valuations in combination with the 5-year phase-in ramp, the increases in the required contributions are expected to continue for seven years from Fiscal Year 2018-19 through Fiscal Year 2024-25.

For projected contributions under alternate investment return scenarios, please see the "Analysis of Future Investment Return Scenarios" in the "Risk Analysis" section.

## Changes since the Prior Year's Valuation

### Benefits

None. This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B of Section 2 for a summary of the plan provisions used in this valuation.

### Actuarial Methods and Assumptions

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 determined in this valuation were calculated using a discount rate of 7.375 percent. The projected employer contributions on Page 5 are calculated assuming that the discount rate will be lowered to 7.25 percent next year and 7.00 percent the following year as adopted by the Board. The decision to reduce the discount rate was primarily based on reduced capital market assumptions provided by external investment consultants and CalPERS investment staff. The specific decision adopted by the Board reflected recommendations from CalPERS staff and additional input from employer and employee stakeholder groups. Based on the investment allocation adopted by the Board and capital market assumptions, the reduced discount rate assumption provides a more realistic assumption for the long term investment return of the fund.

Notwithstanding the Board's decision to phase into a 7.0 percent discount rate, subsequent analysis of the expected investment return of CalPERS assets or changes to the investment allocation may result in a change to this three year discount rate schedule. A comprehensive analysis of all actuarial assumptions and methods including the discount rate will be conducted in 2017.

## Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2016. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the required contribution, while investment returns above the assumed rate of return will decrease the actuarial cost of the plan.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2017. Any subsequent changes or actions are not reflected.



## **ASSETS AND LIABILITIES**

- **BREAKDOWN OF ENTRY AGE NORMAL ACCRUED LIABILITY**
- **ALLOCATION OF PLAN'S SHARE OF POOL'S EXPERIENCE/ASSUMPTION CHANGE**
- **DEVELOPMENT OF PLAN'S SHARE OF POOL'S MVA**
- **SCHEDULE OF PLAN'S AMORTIZATION BASES**
- **30-YEAR AMORTIZATION SCHEDULE AND ALTERNATIVES**
- **EMPLOYER CONTRIBUTION HISTORY**
- **FUNDING HISTORY**

## Breakdown of Entry Age Normal Accrued Liability

1. Active Members	\$	193,947
2. Transferred Members		3,827
3. Terminated Members		0
4. Members and Beneficiaries Receiving Payments		0
5. Total	\$	197,774

## Allocation of Plan's Share of Pool's Experience/Assumption Change

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The Pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1. Plan's Accrued Liability	\$	197,774
2. Projected UAL balance at 6/30/16		5,529
3. Pool's Accrued Liability	\$	14,775,287,594
4. Sum of Pool's Individual Plan UAL Balances at 6/30/16		2,987,498,021
5. Pool's 2015/16 Investment & Asset (Gain)/Loss		771,070,186
6. Pool's 2015/16 Other (Gain)/Loss		(95,296,686)
7. Plan's Share of Pool's Asset (Gain)/Loss $[(1)-(2)]/[(3)-(4)] * (5)$		12,575
8. Plan's Share of Pool's Other (Gain)/Loss $[(1)]/[(3)] * (6)$		(1,276)
9. Plan's New (Gain)/Loss as of 6/30/2016 $[(7)+(8)]$	\$	11,300
10. Increase in Pool's Accrued Liability due to Change in Assumptions		224,853,121
11. Plan's Share of Pool's Change in Assumptions $[(1)]/[(3)] * (10)$	\$	3,010

## Development of the Plan's Share of Pool's Market Value of Assets

1. Plan's Accrued Liability	\$	197,774
2. Plan's UAL	\$	19,838
3. Plan's Share of Pool's MVA $[(1)-(2)]$	\$	<b>177,936</b>

## Schedule of Plan's Side Fund and Other Amortization Bases

There is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2016.
- The employer contribution determined by the valuation is for the fiscal year beginning two years after the valuation date: Fiscal Year 2018-19.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the payment on the UAL for the fiscal year and adjusting for interest.

Reason for Base	Date Established	Amortization Period	Balance 6/30/16	Payment 2016-17	Balance 6/30/17	Payment 2017-18	Amounts for Fiscal 2018-19	
							Balance 6/30/18	Scheduled Payment for 2018-19
FRESH START	06/30/13	27	\$(406)	\$(25)	\$(410)	\$(26)	\$(413)	\$(26)
NON-ASSET (GAIN)/LOSS	06/30/14	28	\$2	\$0	\$2	\$0	\$2	\$0
ASSET (GAIN)/LOSS	06/30/14	28	\$(2,553)	\$(36)	\$(2,704)	\$(74)	\$(2,827)	\$(113)
ASSUMPTION CHANGE	06/30/14	18	\$4,041	\$77	\$4,259	\$159	\$4,408	\$242
ASSET (GAIN)/LOSS	06/30/15	29	\$4,768	\$0	\$5,120	\$72	\$5,423	\$146
NON-ASSET (GAIN)/LOSS	06/30/15	29	\$(323)	\$0	\$(347)	\$(5)	\$(367)	\$(10)
NON-ASSET (GAIN)/LOSS	06/30/16	30	\$(1,276)	\$0	\$(1,370)	\$0	\$(1,471)	\$(20)
ASSET (GAIN)/LOSS	06/30/16	30	\$12,575	\$0	\$13,503	\$0	\$14,498	\$201
ASSUMPTION CHANGE	06/30/16	20	\$3,010	\$(3,709)	\$7,075	\$(3,820)	\$11,556	\$218
<b>TOTAL</b>			<b>\$19,838</b>	<b>\$(3,693)</b>	<b>\$25,128</b>	<b>\$(3,694)</b>	<b>\$30,809</b>	<b>\$638</b>

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed on the previous page. These (gain)/loss bases will be amortized according to Board policy over 30 years with a 5-year ramp-up.

If the total Unfunded Liability is negative (i.e., plan has a surplus), the scheduled payment is \$0, because the minimum required contribution under PEPRA must be at least equal to the normal cost.

## 30-Year Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to CalPERS amortization policy. There has been considerable interest from many agencies in paying off these unfunded accrued liabilities sooner and the possible savings in doing so. As a result, we have provided alternate amortization schedules to help analyze the current amortization schedule and illustrate the advantages of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on: 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternate "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. Note that the payments under each alternate scenario increase by 3 percent for each year into the future. **The schedules do not attempt to reflect any experience after June 30, 2016 that may deviate from the actuarial assumptions. Therefore, future amortization payments displayed in the Current Amortization Schedule may not match projected amortization payments shown in connection with Projected Employer Contributions provided elsewhere in this report.**

The Current Amortization Schedule typically contains individual bases that are both positive and negative. Positive bases result from plan changes, assumption changes or plan experience that result in increases to unfunded liability. Negative bases result from plan changes, assumption changes or plan experience that result in decreases to unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years such as:

- A positive total unfunded liability with a negative total payment,
- A negative total unfunded liability with a positive total payment, or
- Total payments that completely amortize the unfunded liability over a very short period of time

In any year where one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over a reasonable period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy. For purposes of this display, total payments include any negative payments. Therefore, the amount of estimated savings may be understated to the extent that negative payments appear in the current schedule.

## 30-Year Amortization Schedule and Alternatives

Date	<u>Current Amortization Schedule</u>		<u>Alternate Schedules</u>			
	Balance	Payment	25 Year Amortization		20 Year Amortization	
			Balance	Payment	Balance	Payment
6/30/2018	30,809	639	30,809	2,012	30,809	2,303
6/30/2019	32,419	1,183	30,996	2,072	30,695	2,372
6/30/2020	33,585	1,759	31,135	2,134	30,500	2,443
6/30/2021	34,239	2,322	31,219	2,199	30,218	2,517
6/30/2022	34,358	2,840	31,244	2,264	29,839	2,592
6/30/2023	33,950	2,925	31,201	2,332	29,353	2,670
6/30/2024	33,423	3,013	31,086	2,402	28,752	2,750
6/30/2025	32,766	3,103	30,889	2,474	28,023	2,832
6/30/2026	31,968	3,196	30,603	2,549	27,154	2,917
6/30/2027	31,014	3,292	30,219	2,625	26,134	3,005
6/30/2028	29,890	3,391	29,727	2,704	24,947	3,095
6/30/2029	28,581	3,492	29,118	2,785	23,580	3,188
6/30/2030	27,070	3,597	28,380	2,869	22,015	3,284
6/30/2031	25,339	3,705	27,500	2,955	20,237	3,382
6/30/2032	23,368	3,694	26,467	3,043	18,224	3,484
6/30/2033	21,264	3,679	25,265	3,135	15,959	3,588
6/30/2034	19,020	3,310	23,880	3,229	13,418	3,696
6/30/2035	16,992	2,916	22,296	3,325	10,578	3,807
6/30/2036	15,224	2,495	20,494	3,425	7,413	3,921
6/30/2037	13,761	2,188	18,457	3,528	3,897	4,038
6/30/2038	12,508	1,861	16,162	3,634		
6/30/2039	11,502	1,916	13,589	3,743		
6/30/2040	10,365	1,974	10,712	3,855		
6/30/2041	9,084	2,033	7,508	3,971		
6/30/2042	7,647	2,170	3,947	4,090		
6/30/2043	5,962	2,171				
6/30/2044	4,151	1,781				
6/30/2045	2,612	1,423				
6/30/2046	1,330	982				
6/30/2047	411	426				
<b>Totals</b>		<b>73,475</b>		<b>73,354</b>		<b>61,884</b>
<b>Interest Paid</b>		<b>42,666</b>		<b>42,546</b>		<b>31,076</b>
<b>Estimated Savings</b>				<b>121</b>		<b>11,591</b>

\* This schedule does not reflect the impact of adopted discount rate changes that will become effective beyond June 30, 2016. For Projected Employer Contributions, please see Page 5.

## Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made during a fiscal year.

<b>Fiscal Year</b>	<b>Employer Normal Cost</b>	<b>Unfunded Liability Payment (\$)</b>
2016 - 17	6.555%	\$16
2017 - 18	6.533%	\$126
2018 - 19	6.842%	\$639

## Funding History

The funding history below shows the plan's actuarial accrued liability, share of the pool's market value of assets, share of the pool's unfunded liability, funded ratio, and annual covered payroll.

<b>Valuation Date</b>	<b>Accrued Liability (AL)</b>	<b>Share of Pool's Market Value of Assets (MVA)</b>	<b>Plan's Share of Pool's Unfunded Liability</b>	<b>Funded Ratio</b>	<b>Annual Covered Payroll</b>
06/30/2013	\$ 957	\$ 1,284	\$ (327)	134.2%	\$ 207,396
06/30/2014	24,617	26,095	(1,478)	106.0%	259,971
06/30/2015	85,010	81,137	3,873	95.4%	521,784
06/30/2016	197,774	177,936	19,838	90.0%	831,692

## **RISK ANALYSIS**

- **ANALYSIS OF FUTURE INVESTMENT RETURN SCENARIOS**
- **ANALYSIS OF DISCOUNT RATE SENSITIVITY**
- **VOLATILITY RATIOS**
- **HYPOTHETICAL TERMINATION LIABILITY**

## Analysis of Future Investment Return Scenarios

Analysis was performed to determine the effects of various future investment returns on required employer contributions. The projections below provide a range of results based on five investment return scenarios assumed to occur during the next four fiscal years (2016-17, 2017-18, 2018-19 and 2019-20). The projections also assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Each of the five investment return scenarios assumes a return of 7.375 percent for fiscal year 2016-17. For fiscal years 2017-18, 2018-19, and 2019-20 each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are -3.0 percent, 3.0 percent, 7.0 percent (7.25 percent for 2017-18), 11.0 percent and 17.0 percent.

Alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four year period ending June 30, 2020. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced ten thousand stochastic outcomes for this period. We then selected annual returns that approximate the 5<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 95<sup>th</sup> percentiles for these outcomes. For example, of all of the 4-year outcomes generated in the stochastic analysis, approximately 25 percent of them had an average annual return of 3.0 percent or less.

Required contributions outside of this range are also possible. In particular, while it is unlikely that investment returns will average less than -3.0 percent or greater than 17.0 percent over this four year period, the possibility of a single investment return less than -3.0 percent or greater than 17.0 percent in any given year is much greater.

Assumed Annual Return From 2017-18 through 2019-20	Projected Employer Contributions			
	2019-20	2020-21	2021-22	2022-23
<b>(3.0%)</b>				
Normal Cost	6.8%	7.1%	7.1%	7.1%
UAL Contribution	\$1,400	\$2,900	\$4,800	\$7,000
<b>3.0%</b>				
Normal Cost	6.8%	7.1%	7.1%	7.1%
UAL Contribution	\$1,400	\$2,800	\$4,300	\$6,000
<b>Assumed Discount Rate</b>				
Normal Cost	6.8%	7.1%	7.1%	7.1%
UAL Contribution	\$1,400	\$2,600	\$3,900	\$5,300
<b>11.0%</b>				
Normal Cost	6.8%	7.1%	7.2%	7.2%
UAL Contribution	\$1,400	\$2,500	\$3,600	\$4,600
<b>17.0%</b>				
Normal Cost	6.8%	7.1%	7.3%	7.6%
UAL Contribution	\$1,400	\$2,400	\$3,100	\$3,500

Given the temporary suspension of the Risk Mitigation Policy during the period over which the discount rate assumption is being phased down to 7.0 percent, the projections above were performed without reflection of any possible impact of this Policy for Fiscal Years 2019-20 and 2020-21.



## Analysis of Discount Rate Sensitivity

Shown below are various valuation results as of June 30, 2016 assuming alternate discount rates. Results are shown using the current discount rate of 7.375 percent as well as alternate discount rates of 6.0 percent, 7.0 percent, and 8.0 percent. The alternate rate of 7.0 percent was selected since the Board has adopted this rate as the final discount rate at the end of the three year phase-in of the reduction in this assumption. The rates of 6.0 percent and 8.0 percent were selected since they illustrate the impact of a 1 percent increase or decrease to the 7.0 percent assumption. This analysis shows the potential plan impacts if the PERF were to realize investment returns of 6.0 percent, 7.0 percent, or 8.0 percent over the long-term.

This type of analysis gives the reader a sense of the long-term risk to required contributions. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

<b>Sensitivity Analysis</b>				
<b>As of June 30, 2016</b>	<b>Plan's Total Normal Cost</b>	<b>Accrued Liability</b>	<b>Unfunded Accrued Liability</b>	<b>Funded Status</b>
7.375% (current discount rate)	13.092%	\$197,774	\$19,838	90.0%
6.0%	17.506%	\$270,111	\$92,175	65.9%
7.0%	14.139%	\$215,000	\$37,064	82.8%
8.0%	11.561%	\$172,430	\$(5,506)	103.2%

## Volatility Ratios

Actuarial calculations are based on a number of assumptions about long-term demographic and economic behavior. Unless these assumptions (terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

### Asset Volatility Ratio (AVR)

Plans that have higher asset-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility, than a plan with an asset-to-payroll ratio of 4. Shown below is the asset volatility ratio, a measure of the plan's current contribution volatility. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

### Liability Volatility Ratio (LVR)

Plans that have higher liability-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with a liability-to-payroll ratio of 8 is expected to have twice the contribution volatility of a plan with a liability-to-payroll ratio of 4. The liability volatility ratio is also shown in the table below. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The asset volatility ratio, described above, will tend to move closer to the liability volatility ratio as the plan matures. Since the liability volatility ratio is a long-term measure, it is shown below at the current discount rate (7.375 percent) as well as the discount rate the Board has adopted to determine the contribution requirement in the June 30, 2018 actuarial valuation (7.00 percent).

<b>Rate Volatility</b>	<b>As of June 30, 2016</b>	
1. Market Value of Assets	\$	177,936
2. Payroll		831,692
3. Asset Volatility Ratio (AVR) [(1) / (2)]		0.2
4. Accrued Liability	\$	197,774
5. Liability Volatility Ratio (LVR) [(4) / (2)]		0.2
6. Accrued Liability (7.00% discount rate)		215,000
7. Projected Liability Volatility Ratio [(6) / (2)]		0.3

## Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2016. The plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. For the hypothetical termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees.

A more conservative investment policy and asset allocation strategy was adopted by the CalPERS Board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while funding risk is limited. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 2-year period centered around the valuation date.

<b>Market Value of Assets (MVA)</b>	<b>Hypothetical Termination Liability<sup>1,2</sup> @ 1.75%</b>	<b>Funded Status</b>	<b>Unfunded Termination Liability @ 1.75%</b>	<b>Hypothetical Termination Liability<sup>1,2</sup> @ 3.00%</b>	<b>Funded Status</b>	<b>Unfunded Termination Liability @ 3.00%</b>
\$177,936	\$488,171	36.5%	\$310,236	\$344,754	51.6%	\$166,818

<sup>1</sup> The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A.

<sup>2</sup> The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 1.75 percent on June 30, 2016, and was 2.75 percent on January 31, 2017.

In order to terminate the plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to terminate. The completed Resolution will allow the plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. CalPERS advises you to consult with the plan actuary before beginning this process.

## Participant Data

The table below shows a summary of your plan's member data upon which this valuation is based:

	<b>June 30, 2015</b>	<b>June 30, 2016</b>
Reported Payroll	\$ 521,784	\$ 831,692
Projected Payroll for Contribution Purposes	\$ 570,167	\$ 908,812
Number of Members		
Active	9	13
Transferred	0	1
Separated	1	0
Retired	0	0

## List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- None

## **PLAN'S MAJOR BENEFIT OPTIONS**

**SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE PEPRA MISCELLANEOUS PLAN OF THE VISTA IRRIGATION DISTRICT**

## Plan’s Major Benefit Options

Shown below is a summary of the major optional benefits for which your agency has contracted. A description of principal standard and optional plan provisions is in Appendix B within Section 2 of this report.

	Contract package	
<b>Benefit Provision</b>	Active Misc	
Benefit Formula	2.0% @ 62	
Social Security Coverage	Yes	
Full/Modified	Full	
Employee Contribution Rate	6.25%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Standard	
Industrial Disability	No	
Pre-Retirement Death Benefits		
Optional Settlement 2W	Yes	
1959 Survivor Benefit Level	No	
Special	No	
Alternate (firefighters)	No	
Post-Retirement Death Benefits		
Lump Sum	\$500	
Survivor Allowance (PRSA)	No	
COLA	2%	

# Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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**Section 2 may be found on the CalPERS website  
([www.calpers.ca.gov](http://www.calpers.ca.gov)) in the Forms and  
Publications section**



**Agenda Item: 9**

**STAFF REPORT**

**Board Meeting Date: January 17, 2018**  
**Prepared By: Eldon Boone**

SUBJECT: MATTERS PERTAINING TO THE ACTIVITIES OF THE SAN DIEGO COUNTY WATER AUTHORITY

SUMMARY: Informational report by staff and directors concerning the San Diego County Water Authority. No action will be required.





## **STAFF REPORT**

**Agenda Item: 10.A**

**Board Meeting Date: January 17, 2018**  
**Prepared By: Lisa Soto**  
**Approved By: Eldon Boone**

**SUBJECT: REPORTS ON MEETINGS AND EVENTS ATTENDED BY DIRECTORS**

**SUMMARY: Directors will present brief reports on meetings and events attended since the last Board meeting.**



**STAFF REPORT**

**Agenda Item: 10.B**

**Board Meeting Date: January 17, 2018**  
**Prepared By: Marian Schmidt**  
**Approved By: Eldon Boone**

**SUBJECT:** SCHEDULE OF UPCOMING MEETINGS AND EVENTS

**SUMMARY:** The following is a listing of upcoming meetings and events. Requests to attend any of the following events should be made during this agenda item.

	<b>SCHEDULE OF UPCOMING MEETINGS AND EVENTS</b>	<b>ATTENDEES</b>
<b>1</b>	<b>AB 1234 Ethics Compliance Training on Demand Webinar (CSDA)</b> <i>Free through March 15, 2018 on a computer of your choice</i> <i>Contact Marian Schmidt for log-on instructions</i>	
<b>2</b>	<b>State of the Community Luncheon</b> <i>Jan. 22, 2018 – 11:00 a.m. – 1:00 p.m. – Vista Civic Center</i> <i>Reservation deadline: None</i>	Dorey (R) MacKenzie (R) Sanchez (R)
<b>3</b>	<b>Required Harassment Prevention Training Webinar (CSDA)</b> <i>Jan. 23, 2018 – 10:00 a.m. – 12:00 p.m.</i> <i>Registration deadline: 1/18/18</i>	
<b>4</b>	<b>Proposition 26, Proposition 218, and Rate Setting (CSDA)</b> <i>Jan. 25, 2018 – 8:30 a.m. – 4:00 p.m. – Isla Vista</i> <i>Registration deadline: 1/18/18</i>	
<b>5</b>	<b>Special District Leadership Academy (CSDA)</b> <i>Feb. 4-7, 2018 – Embassy Suites, La Quinta</i> <i>Registration deadline: 1/22/18</i>	
<b>6</b>	<b>Urban Water Institute’s Spring Water Conference</b> <i>Feb. 7-9, 2018 – Hilton Palm Springs Hotel</i> <i>Registration deadline: 1/25/18</i>	Vásquez (R,H)
<b>7</b>	<b>AB 1234 Ethics Compliance Training (CSDA)</b> <i>Feb. 15, 2018 – 9:00 a.m. – 1:00 p.m. – Vista Irrigation District</i> <i>Registration deadline: 2/1/18</i>	
<b>8 *</b>	<b>CSDA Quarterly Dinner Meeting</b> <i>Feb. 15, 2018 – 6:00-9:00 p.m. – The Butcher Shop Steakhouse, Kearny Mesa</i> <i>Reservation deadline: 2/8/18</i>	Vásquez
<b>9 *</b>	<b>Council of Water Utilities Meeting</b> <i>Feb. 20, 2018 – 7:15 a.m., Hotel Karlan San Diego</i> <i>Reservation deadline: 2/15/18</i>	Vásquez Dorey
<b>10</b>	<b>State Water Project/Bay Delta Project (SDCWA/MWD)</b> <i>Mar. 2-3, 2018 – Meet at SDCWA</i> <i>Reservation: First come, first serve</i>	
<b>11</b>	<b>ACWA Legislative Symposium</b> <i>March 12, 2018 – Sacramento Convention Center</i> <i>Registration deadline: 3/2/18</i>	
<b>12</b>	<b>Central Valley Water Tour (Water Education Foundation)</b> <i>March 14-16, 2018 – Sacramento International Airport</i> <i>Reservation deadline: 2/28/18</i>	
<b>13</b>	<b>Colorado River Aqueduct System (SDCWA/MWD)</b> <i>Mar. 17-18, 2018 – Meet at SDCWA</i> <i>Reservation: First come, first serve</i>	

	<b>SCHEDULE OF UPCOMING MEETINGS AND EVENTS</b>	<b>ATTENDEES</b>
14 *	<b>Council of Water Utilities Meeting</b> <i>Mar. 20, 2018 – 7:15 a.m., Location TBD</i> <i>Reservation deadline: 3/15/18</i>	
15	<b>California Water Policy Conference 27</b> <i>Mar. 22-23, 2018 – UC Davis Conference Center</i> <i>Registration deadline: None</i>	
16	<b>Colorado River Aqueduct System (SDCWA/MWD)</b> <i>Mar. 24-25, 2018 – Meet at SDCWA</i> <i>Reservation unavailable at this time</i>	
17	<b>Lower Colorado River Tour (Water Education Foundation)</b> <i>Apr. 10-13, 2018 – Ontario International Airport</i> <i>Reservation deadline: 3/27/18</i>	
18	<b>Special District Leadership Academy (CSDA)</b> <i>Apr. 15-18, 2018 – Embassy Suites Monterey Bay – Seaside</i> <i>Registration deadline: 3/16/18</i>	
19 *	<b>Council of Water Utilities Meeting</b> <i>Apr. 17, 2018 – 7:15 a.m., Location TBD</i> <i>Reservation deadline: 4/12/18</i>	
20	<b>ACWA Spring Conference</b> <i>May 8-11, 2018 – Sacramento</i> <i>Registration deadline: TBD</i>	
21 *	<b>Council of Water Utilities Meeting</b> <i>May. 15, 2018 – 7:15 a.m., Location TBD</i> <i>Reservation deadline: 5/10/18</i>	
22	<b>Bay-Delta Tour (Water Education Foundation)</b> <i>May 16-18, 2018 – Sacramento International Airport</i> <i>Reservation deadline: 5/2/18</i>	
23 *	<b>CSDA Quarterly Dinner Meeting</b> <i>May 17, 2018 – 6:00-9:00 p.m. – The Butcher Shop Steakhouse, Kearny Mesa</i> <i>Reservation deadline: 5/10/18</i>	
24	<b>Special District Legislative Days (CSDA)</b> <i>May 22-23, 2018 – Sacramento</i> <i>Registration deadline: TBD</i>	
25 *	<b>Council of Water Utilities Meeting</b> <i>June 19, 2018 – 7:15 a.m., Location TBD</i> <i>Reservation deadline: 6/14/18</i>	
26	<b>General Manager Leadership Summit (CSDA)</b> <i>June 24-26, 2018 – Resort at Squaw Creek, Olympic Valley</i> <i>Registration deadline: 5/25/18</i>	
27	<b>Headwaters Tour (Water Education Foundation)</b> <i>June 28-29, 2018 – Rancho Cordova (GEI Consultants)</i> <i>Reservation deadline: 6/14/18</i>	
28	<b>Special District Leadership Academy (CSDA)</b> <i>July 8-11, 2018 – Embassy Suites Napa Valley, Napa</i> <i>Registration deadline: 6/8/18</i>	
29 *	<b>Council of Water Utilities Meeting</b> <i>July 17, 2018 – 7:15 a.m., Location TBD</i> <i>Reservation deadline: 7/12/18</i>	
30 *	<b>CSDA Quarterly Dinner Meeting</b> <i>Aug. 16, 2018 – 6:00-9:00 p.m. – The Butcher Shop Steakhouse, Kearny Mesa</i> <i>Reservation deadline: 8/9/18</i>	

	<b>SCHEDULE OF UPCOMING MEETINGS AND EVENTS</b>	<b>ATTENDEES</b>
<b>31 *</b>	<b>Council of Water Utilities Meeting</b> <i>Aug. 21, 2018 – 7:15 a.m., Location TBD</i> <i>Reservation deadline: 8/16/18</i>	
<b>32 *</b>	<b>Council of Water Utilities Meeting</b> <i>Sept. 18, 2018 – 7:15 a.m., Location TBD</i> <i>Reservation deadline: 9/13/18</i>	
<b>33</b>	<b>CSDA Annual Conference</b> <i>Sept. 24-27, 2018 – Palm Springs</i> <i>Registration deadline: TBD</i>	
<b>34</b>	<b>Northern California Tour</b> (Water Education Foundation) <i>Oct. 10-12, 2018 – Sacramento International Airport</i> <i>Reservation deadline: 9/26/18</i>	
<b>35 *</b>	<b>Council of Water Utilities Meeting</b> <i>Oct. 16, 2018 – 7:15 a.m., Location TBD</i> <i>Reservation deadline: 10/11/18</i>	
<b>36</b>	<b>San Joaquin River Restoration Tour</b> (Water Education Foundation) <i>Nov. 7-8, 2018 – Fresno</i> <i>Reservation deadline: 10/24/18</i>	
<b>37 *</b>	<b>CSDA Quarterly Dinner Meeting</b> <i>Nov. 15, 2018 – 6:00-9:00 p.m. – The Butcher Shop Steakhouse, Kearny Mesa</i> <i>Reservation deadline: 11/8/18</i>	
<b>38</b>	<b>ACWA Fall Conference</b> <i>Nov. 27-30, 2018 – San Diego</i> <i>Registration deadline: TBD</i>	

\* Non-per diem meeting except when serving as an officer of the organization

The following abbreviations indicate arrangements that have been made by staff:

**A**=Airline; **R**=Registration; **C**=Car; **H**=Hotel; **T**=Tentative



**Agenda Item: 11**

**STAFF REPORT**

**Board Meeting Date: January 17, 2018**  
**Prepared By: Lisa Soto**

SUBJECT: ITEMS FOR FUTURE AGENDAS AND/OR PRESS RELEASES

SUMMARY: This item is placed on the agenda to enable the Board to identify and schedule future items for discussion at upcoming Board meetings and/or identify press release opportunities.

*Staff-generated list of tentative items for future agendas:*

- JPIA Liability Insurance
- Nomination to Consolidated Redevelopment Oversight Board
- 2017 Water Master Plan
- Weese treatment plant agreement amendment



**Agenda Item: 12**

**STAFF REPORT**

**Board Meeting Date: January 17, 2018**  
**Prepared By: Lisa Soto**

SUBJECT: COMMENTS BY DIRECTORS

SUMMARY: This item is placed on the agenda to enable individual Board members to convey information to the Board and the public not requiring discussion or action.



**Agenda Item: 13**

**STAFF REPORT**

**Board Meeting Date: January 17, 2018**  
**Prepared By: Eldon Boone**

SUBJECT: COMMENTS BY GENERAL COUNSEL

SUMMARY: Informational report by the General Counsel on items not requiring discussion or action.



**Agenda Item: 14**

**STAFF REPORT**

**Board Meeting Date: January 17, 2018**  
**Prepared By: Eldon Boone**

SUBJECT: COMMENTS BY GENERAL MANAGER

SUMMARY: Informational report by the General Manager on items not requiring discussion or action.



EXHIBIT A







**STAFF REPORT**

**Board Meeting Date: January 17, 2018**  
**Prepared By: Eldon Boone**

SUBJECT: CLOSED SESSION: CONFERENCE WITH REAL PROPERTY NEGOTIATORS

SUMMARY: Discussion concerning real property transactions in compliance with Government Code section 54956.8 regarding:

Property: Vista Irrigation District property located at the northwest corner of Engineer Street and Pipeline Drive in Vista, CA 92081 (APN 219-532-22)

Agency Negotiators: Eldon Boone and Brian Smith

Negotiating Party: Public generally

Under Negotiation: Price