

**SPECIAL MEETING OF THE BOARD OF TRUSTEES
CONSOLIDATED MOSQUITO ABATEMENT DISTRICT
13151 E. Industrial Dr., Parlier, CA 93648**

**TELECONFERENCE DIAL-IN NUMBER
(669)900-9128**

- or -

**ZOOM VIDEO CONFERENCE
<https://us02web.zoom.us/j/89485901403>**

Meeting ID: 894 8590 1403

AGENDA

BOARD OF TRUSTEES MEETING 1:00 PM

Tuesday, February 22, 2022

1. **ROLL CALL:**
2. **INTRODUCTION OF VISITORS:**
The public may address the Board on each agenda item during consideration of that item.
3. **PUBLIC COMMENTS:**
This is an opportunity for public comment on non-agenda items. The President reserves the right to limit the duration of each speaker to five (5) minutes. It is the policy of the Board not to answer any questions impromptu.
4. **AUTHORIZE REMOTE TELECONFERENCE MEETINGS OF THE BOARD:**
Consider finding by a majority vote under Gov. Code Sec. 54953, subd. (e)(1)(B) that as a result of the COVID-19 emergency: (i) meeting of the Board of Trustees in person would present imminent risks to the health or safety of attendees; and (ii) the meeting is authorized to be held by teleconference pursuant to Gov. Code, Sec. 54953, subd. (e)(1)(C).
5. **APPROVAL OF JANUARY MINUTES:**
6. **APPROVAL OF JANUARY PAYROLL:**
7. **APPROVAL OF JANUARY BILLS:**

8. **COMMITTEE APPOINTMENTS FOR 2022:**
The President will appoint Board members to District standing committees.

9. **CALPERS UNFUNDED LIABILITY:**
The Board will consider making an additional discretionary payment towards the District's CalPERS Miscellaneous Plan Unfunded Accrued Liability.

10. **AERIAL PHOTOGRAPHIC SURVEY:**
The Board will consider options for an aerial photographic survey of the District's urban/suburban areas for the unmaintained swimming pool program.

11. **DISTRICT PARTICIPATION AT MEETING:**
The Board will be asked to approve District participation at the annual meeting of the Pacific Southwest Center of Excellence in Vector-borne Diseases on April 5-6, 2022 in Sacramento.

12. **COVID-19 UPDATES:**
The District Manager will update the Board on COVID-19 supplemental leave and masking mandates.

13. **MEETING REPORTS:**
Reports on District participation at authorized meetings will be given by those who attended.

14. **BOARD GENERAL DISCUSSION:**
This is an opportunity for Board Members to ask questions for clarification, provide information to staff, request staff to report back on a matter or direct staff to place a matter on a subsequent agenda.

15. **STAFF REPORTS:**
This is an opportunity for staff to report on District activities.

16. **ADJOURNMENT:**

**MINUTES OF THE BOARD OF TRUSTEES OF
THE CONSOLIDATED MOSQUITO ABATEMENT DISTRICT
JANUARY 18, 2022**

The regular meeting of the Board of Trustees of the Consolidated Mosquito Abatement District was held at the District Office, in Parlier, and by teleconference at 1:00 PM on January 18, 2022.

1. Roll Call:

Trustees Present at the Parlier Office:

Tokuo Fukuda	Kingsburg
Joe Reyna	Parlier
Bruce Taylor	County of Fresno

Trustees Present by Teleconference:

Peggy Brisendine	Fresno
David Cardenas	Fowler
Mary Anne Hill	County of Fresno
Charles Lockhart	Orange Cove
Jennifer Willems	Clovis

Trustees Absent:

Pete Esraelian	Selma
Karen Steinhauer	Sanger

Vacancy:

Reedley

Others Present at the Parlier Office:

Steve Mulligan	District Manager
Karan Cox	Office Administrator

2. President Fukuda called the meeting to order at 1:04 PM:

3. Public Comments: None.

4. Approval of December Minutes: A motion was made by Trustee Reyna, seconded by Trustee Cardenas and passed by 8 – 0 – 2 roll call vote (Esraelian, Steinhauer absent) to approve the minutes of the December 20, 2021 Board meeting.

5. Approval of December Payroll: A motion was made by Trustee Taylor, seconded by Trustee Brisendine and passed by 8 – 0 – 2 roll call vote (Esraelian, Steinhauer absent) to approve the December payroll checks having District numbers, 26965 – 26981, 26994 – 27022 and 27035 in the total amount of \$88,897.00.

6. **Approval of December Bills:** A motion was made by Trustee Cardenas, seconded by Trustee Lockhart and passed by 8 – 0 – 2 roll call vote (Esraelian, Steinhauer absent) to approve the December commercial checks having District numbers, 26979 – 26980, 26982 – 26993, 27018 – 27019 and 27023 – 27054 in the total amount of \$57,411.03.

7. **Election of Board Officers for 2022:** President Fukuda authorized District Manager Mulligan to conduct the election of officers for 2022. Officers of the Board are President and Vice President – Secretary.

Trustee Reyna nominated Trustee Taylor for Board President. With no further nominations made, a motion was made by Trustee Cardenas, seconded by Trustee Reyna and passed by 8 – 0 – 2 roll call vote (Esraelian, Steinhauer absent) to close nominations and cast a unanimous ballot to elect Trustee Taylor as Board President.

Trustee Fukuda nominated Trustee Hill for Vice President – Secretary. With no further nominations made, a motion was made by Trustee Cardenas, seconded by Trustee Reyna and passed by 8 – 0 – 2 roll call vote (Esraelian, Steinhauer absent) to close nominations and cast a unanimous ballot to elect Trustee Hill as Vice President – Secretary.

8. **Committee Appointments:** President Taylor stated he would appoint members to committees and report assignments at a subsequent Board meeting.

9. **Authorization of Individuals to Sign District Checks:** A motion was made by Trustee Cardenas, seconded by Trustee Brisendine and passed by 8 – 0 – 2 roll call vote (Esraelian, Steinhauer absent) to authorize Trustees Cardenas, Esraelian, Fukuda, Hill, Reyna, Steinhauer, Taylor and District Manager Mulligan to sign District checks and to authorize District Manager Mulligan and Office Administrator Cox to pick up validated checks and blank check stock.

10. **Statement of Economic Interest:** Each trustee received a Statement of Economic Interest Form 700 and was required to be completed and returned to the District Office by April 1, 2022.

11. **Quarterly Investment Report:** A motion was made by Trustee Cardenas, seconded by Trustee Fukuda and passed by 8 – 0 – 2 roll call vote (Esraelian, Steinhauer absent) to accept the investment report for the quarter ending December 31, 2021 as presented by the District Manager.

12. **Trustee Attendance Record:** A record of trustee attendance at District meetings during 2021 was presented to the Board.

13. **Trustee Vacancy City of Reedley:** The District Manager reported that Mr. Dan Munk no longer resides within the City of Reedley and, as such, is no longer qualified to serve in the capacity of trustee from the City of Reedley. A motion was made by Trustee Lockhart, seconded by Trustee Hill and passed by 8 – 0 – 2 roll call vote (Esraelian, Steinhauer absent) to declare Trustee Dan Munk’s seat vacant and to request the City of Reedley take action as soon as possible to appoint a person to fill the balance of Mr. Munk’s unexpired term that will end December 31, 2022.
14. **Initial Appointment of Employee:** A motion was made by Trustee Cardenas, seconded by Trustee Hill and passed by 6 – 2 – 2 roll call vote (Reyna, Taylor opposed; Esraelian, Steinhauer absent) to approve and authorize the District Manager to make an initial appointment of a new employee to the position of Area Supervisor at a salary above the initial step of the pay range.
15. **District Participation at Meeting:** A motion was made by Trustee Lockhart, seconded by Trustee Brisendine and passed by 8 – 0 – 2 roll call vote (Esraelian, Steinhauer absent) to approve and authorize GIS Coordinator Schaak to attend the ESRI User Conference in San Diego, CA on July 11-15, 2022.
16. **Manager Attendance at International Meetings:** A motion was made by Trustee Cardenas, seconded by Trustee Fukuda and passed by 7 – 1 – 2 roll call vote (Reyna opposed; Esraelian, Steinhauer absent) to approve and authorize Manager Mulligan to attend and participate in the following meetings:
 - a.) SOVE-Indian Chapter Second International Conference on April 16-19, 2022, in Puducherry, India; and
 - b.) 2nd International Congress of the Latin American SOVE on October 29 – November 3, 2022, in La Plata, Argentina.
17. **Renew Remote Teleconference Meetings of the Board:** A motion was made by Trustee Reyna, seconded by Trustee Fukuda and passed by 8 – 0 – 2 roll call vote (Esraelian, Steinhauer absent) that the Board, after reconsidering the state of the COVID-19 emergency, find that meeting of the Board in person would present imminent risks to the health or safety of attendees, and that the Board renews the prior authorization for meetings to be held by teleconference as authorized by subdivision (e)(1)(C) of section 54943 of the Government Code.
18. **Change January Board Meeting:** Trustee Hill left the meeting at 2:25 PM. A motion was made by Trustee Fukuda, seconded by Trustee Brisendine and passed by 7 – 0 – 3 roll call vote (Esraelian, Hill, Steinhauer absent) to cancel the regular Board meeting on February 21, 2022 and to schedule a special meeting of the Board of Trustees at 1:00 PM on Tuesday, February 22, 2022.

19. **Board General Discussion:** It was the consensus of the Board that Trustee Hill continue to participate in the Central Valley Emerging Issues in Public Health Consortium, formerly the Fresno County Emerging Infectious Diseases Taskforce.

20. **Staff Reports:** Manager Mulligan reminded those trustees who need to update Ethic and Supervisor training to contact Office Administrator Cox for a link to the online training module.

21. **Adjournment:** The meeting was adjourned at 2:38 PM. The next Board meeting will be held on Tuesday, February 22, 2022.

Attested
Member, Board of Trustees

**Consolidated Mosquito Abatement District
Payroll Expenses
January 2022**

Check #	Gross Pay	Net Pay	Payee	Description
27055	\$2,603.50	\$1,760.73	Amy Garcia	Full-Time Employee
27056	\$2,861.00	\$1,952.12	Brittany Deegan	Full-Time Employee
27057	\$2,861.00	\$2,075.56	Chris Monis	Full-Time Employee
27058	\$2,526.50	\$1,803.89	Conner Schaak	Full-Time Employee
27059	\$3,086.50	\$2,258.09	Derek Hill	Full-Time Employee
27060	\$2,739.50	\$1,887.38	Devon Cornel	Full-Time Employee
27061	\$2,861.00	\$2,148.92	Gha Vang	Full-Time Employee
27062	\$4,698.00	\$3,028.74	Jodi Holeman	Full-Time Employee
27063	\$2,861.00	\$1,763.55	Jose Moreno	Full-Time Employee
27064	\$2,526.50	\$1,770.80	Jovana Benavides	Full-Time Employee
27065	\$3,154.00	\$2,250.29	Karan Cox	Full-Time Employee
27066	\$4,145.00	\$2,580.20	Katherine Ramirez	Full-Time Employee
27067	\$6,600.00	\$4,427.32	Steve Mulligan	Full-Time Employee
27085	\$2,603.50	\$1,760.74	Amy Garcia	Full-Time Employee
27086	\$2,861.00	\$1,952.11	Brittany Deegan	Full-Time Employee
27087	\$2,861.00	\$2,076.03	Chris Monis	Full-Time Employee
27088	\$2,526.50	\$1,803.87	Conner Schaak	Full-Time Employee
27089	\$3,086.50	\$2,257.87	Derek Hill	Full-Time Employee
27090	\$2,739.50	\$1,887.37	Devon Cornel	Full-Time Employee
27091	\$2,861.00	\$2,148.45	Gha Vang	Full-Time Employee
27092	\$4,698.00	\$3,028.53	Jodi Holeman	Full-Time Employee
27093	\$2,861.00	\$1,763.09	Jose Moreno	Full-Time Employee
27094	\$2,526.50	\$1,770.78	Jovana Benavides	Full-Time Employee
27095	\$3,154.00	\$2,249.28	Karan Cox	Full-Time Employee
27096	\$4,145.00	\$2,579.96	Katherine Ramirez	Full-Time Employee
27097	\$6,600.00	\$4,427.33	Steve Mulligan	Full-Time Employee
Total	\$87,047.00	\$59,413.00		

**Consolidated Mosquito Abatement District
Payroll Expenses
January 2022**

Employee Deductions and Liabilities

Check #	Amount	Payee	Description
27068	\$1,742.31	EDD	State Income Tax
27070	\$8,187.08	CMAD	Federal, Social Security, Medicare
27071	\$2,974.96	CalPERS	Retirement
27072	\$700.00	VantagePoint Transfer	457K Retirement
27073	\$100.00	Valley First Credit Union	Credit Union
27098	\$1,742.32	EDD	State Income Tax
27099	\$8,189.26	CMAD	Federal, Social Security, Medicare
27100	\$2,974.96	CalPERS	Retirement
27101	\$700.00	VantagePoint Transfer	457K Retirement
27102	\$100.00	Valley First Credit Union	Credit Union
27116	\$71.68	Aflac	Life Insurance
27117	\$151.43	Mutual of Omaha	Disability Insurance
Total Deductions	\$27,634.00		
Total Net Pay	\$59,413.00		
Total Gross Pay	\$87,047.00		

**Consolidated Mosquito Abatement District
Maintenance and Operations Expenses
January 2022**

Bank of the West Checks

Check #	Amount	Payee	Description
27069	\$341.00	Edd	Unemployment Insurance
27070	\$3,343.08	CMAD	District Social Security & Medicare
27071	\$3,619.14	CalPERS	District Retirement
27074	\$750.00	Chris Monis	H S A Deductible
27075	\$1,500.00	Jose Moreno	H S A Deductible
27076	\$1,500.00	Gha Vang	H S A Deductible
27077	\$6,750.00	Premier Valley Bank	H S A Deductible
27078	\$21.50	Mid-Valley Disposal	Disposal
27079	\$676.52	City of Parlier	Water Sewer Disposal
27080	\$106.11	PG&E	Heat Light Power
27081	\$3,000.00	Sampson, Sampson & Patterson	Audit Fee
27082	\$11,869.72	SDRMA	Health Insurance Premium
27083	\$14.79	SoCal Gas	Heat
27084	\$300.00	Streamline	Website Design & Maintenance
27099	\$3,344.26	CMAD	District Social Security & Medicare
27100	\$3,619.14	CalPERS	District Retirement
27103	\$218.63	AT&T	Telephone
27104	\$95.67	PG&E	Heat Light Power
27105	\$1,417.72	SoCal Gas	Heat
27106	\$1,154.19	Verizon Wireless	Cell Phones / Tablets
27107	\$39.29	Waste Management	Disposal
27108	\$922.71	Tokuo Fukuda	Travel Expenses
27109	\$1,218.84	Bruce Taylor	Travel Expenses
27110	\$0.00	Voided	Void
27111	\$997.71	Jodi Holeman	Travel Expenses
27112	\$922.71	Katherine Ramirez	Travel Expenses
27113	\$0.00	Voided	Void
27114	\$997.71	Karan Cox	Travel Expenses
27115	\$997.71	Conner Schaak	Travel Expenses
27117	\$106.40	Mutual of Omaha	Life Insurance
27118	\$300.00	All-Pro Janitorial Services, Inc.	Janitorial Services
27119	\$40.26	AutoZone, Inc.	Repair Parts
27120	\$221.99	Bobcat of Fresno	Repair Parts
27121	\$651.00	California Dept of Tax & Fee Adm	Sales Tax Paid
27122	\$10,535.24	CitiBusiness Card	Fish Program/Meetings & Travel/Office Eq
27123	\$43.95	DoorKing, Inc.	Gate Service
27124	\$736.00	Fresno County Treasurer	Hazardous Materials Fees
27125	\$19.20	Gordon Industrial Supply	Shop Supplies
27126	\$406.60	Home Depot Credit Services	Field Equipment / Building & Ground

**Consolidated Mosquito Abatement District
Maintenance and Operations Expenses
January 2022**

Check #	Amount	Payee	Description
27127	\$135.00	Jorgensen Company	Safety Equipment
27128	\$75.00	Key Design Locksmithing	Service Call
27129	\$355.39	Kimball Midwest	Shop Supplies
27130	\$890.75	Lozano Smith	Legal Fees
27131	\$279.00	Matson Alarm Co., Inc.	Alarm Systems
27132	\$729.40	Mission Uniform Service	Uniforms & Safety
27133	\$144.77	Napa	Repair Parts / Lubricants
27134	\$124.58	Nelson's Ace Hardware & Lumber	Shop Supplies / Building & Ground
27135	\$35.00	Navia Benefit Solutions	Cobra Administration
27136	\$719.02	O'Reilly Auto Parts	Repair Parts
27137	\$1,675.00	Pacific Engineering & Consulting	Safety Consulting Services
27138	\$240.28	PBM Supply & Mfg, Inc.	Field Equipment
27139	\$760.59	Silvas Oil Company, Inc.	Lubricants
27140	\$103.13	Target Specialty Products	Field Equipment
27141	\$16.69	Valley Iron, Inc.	Field Equipment
27142	\$31.05	Wizix Technology Group, Inc.	Copier Maintenance
27143	\$95.00	World Oil Environmental Services	Recycle Oil
Total	\$69,208.44		

County of Fresno Checks

Check #	Amount	Payee	Description
297281	\$77,203.81	Consolidated Mosquito	Transfer funds to checking
297282	\$61,574.78	Consolidated Mosquito	Transfer funds to checking
297283	\$17,476.85	Consolidated Mosquito	Transfer funds to checking
	\$156,255.44		

Summary of January Expenses

January 2022 Salaries & Wages	\$87,047.00
January 2022 Maintenance & Operations	\$69,208.44
Total January 2022 Expenditures	\$156,255.44

**Consolidated Mosquito Abatement District
Monthly Expenditures**

ACCOUNT NUMBER	ACCOUNT NAME	BUDGET FY 2021/2022	SPENT TO DATE	BALANCE JAN 31, 2022
<u>SALARIES, WAGES & EMPLOYEE BENEFITS</u>				
6101-01	Salaried Wages	\$1,150,000.00	\$611,729.00	\$538,271.00
6101-06	Hourly Wages & Extra Help	\$615,000.00	\$243,280.22	\$371,719.78
6101-02	FICA Employers Contribution	\$135,000.00	\$67,889.71	\$67,110.29
6101-03	Unemployment Insurance	\$24,000.00	\$6,674.19	\$17,325.81
6101-04	Retirement District's Payment	\$150,000.00	\$58,568.46	\$91,431.54
6101-05	Group Health Insurance	\$260,000.00	\$121,211.69	\$138,788.31
6101-07	Pre-Employment & Misc. Expenses	\$8,000.00	\$35.00	\$7,965.00
	TOTALS	\$2,342,000.00	\$1,109,388.27	\$1,232,611.73
<u>OPERATING & MAINTENANCE SUPPLIES & EXPENSE</u>				
6102-01	Insecticides & Herbicides	\$400,000.00	\$170,792.18	\$229,207.82
6102-02	Power Spray & Field Equipment	\$25,000.00	\$8,196.27	\$16,803.73
6102-03	Misc Operating Supplies & Expense	\$6,000.00	\$1,589.56	\$4,410.44
6102-04	Fish Program	\$10,000.00	\$7,196.18	\$2,803.82
6102-05	Building & Ground Maintenance	\$40,000.00	\$11,008.69	\$28,991.31
6102-06	Airplane Expense	\$3,000.00	\$0.00	\$3,000.00
	TOTALS	\$484,000.00	\$198,782.88	\$285,217.12
<u>MOTOR VEHICLE SUPPLIES & EXPENSE</u>				
6103-01	Fuel & Lubricants	\$150,000.00	\$59,463.72	\$90,536.28
6103-02	Repairs & Shop Tools	\$45,000.00	\$11,558.64	\$33,441.36
6103-03	Tires & Batteries	\$12,000.00	\$1,389.71	\$10,610.29
	TOTALS	\$207,000.00	\$72,412.07	\$134,587.93
<u>UTILITIES & COMMUNICATIONS</u>				
6104-01	Heat, Light & Power	\$40,000.00	\$18,172.58	\$21,827.42
6104-04	Water Sewer & Disposal	\$18,000.00	\$8,276.60	\$9,723.40
6105-01	Telephone	\$22,000.00	\$11,755.63	\$10,244.37
6105-02	Cellular Phones	\$22,000.00	\$11,006.95	\$10,993.05
	TOTALS	\$102,000.00	\$49,211.76	\$52,788.24
<u>OFFICE SUPPLIES & EXPENSE</u>				
6106-02	Postage, Printing & Stationery	\$6,000.00	\$736.27	\$5,263.73
6106-04	Repairs & Maintenance	\$6,000.00	\$651.75	\$5,348.25
6106-05	Misc Office Supplies	\$13,000.00	\$3,681.75	\$9,318.25
6106-06	Office Equipment & Furniture	\$8,000.00	\$4,088.92	\$3,911.08
	TOTALS	\$33,000.00	\$9,158.69	\$23,841.31
<u>INSURANCE</u>				
6107-01	Liability, Property & Auto	\$87,000.00	\$78,740.00	\$8,260.00
6107-02	Workers Compensation	\$76,000.00	\$67,751.00	\$8,249.00
	TOTALS	\$163,000.00	\$146,491.00	\$16,509.00

Consolidated Mosquito Abatement District Monthly Expenditures

ACCOUNT NUMBER	ACCOUNT NAME	BUDGET FY 2021/2022	SPENT TO DATE	BALANCE JAN 31, 2022
<u>TRAVEL & SUBSISTENCE EXPENSE</u>				
6108-01	Meetings & Travel Allowance	\$50,000.00	\$19,633.57	\$30,366.43
6108-02	Trustee Allowance	\$1,000.00	\$0.00	\$1,000.00
6108-03	Meal Allowance	\$5,000.00	\$1,213.69	\$3,786.31
	TOTALS	\$56,000.00	\$20,847.26	\$35,152.74
<u>MISCELLANEOUS EXPENDITURES</u>				
6109-01	Rent: Land, Buildings and Equipment	\$2,000.00	\$0.00	\$2,000.00
6109-02	Dues, Subscriptions and Fees	\$28,000.00	\$16,598.46	\$11,401.54
6109-03	Education & Publicity	\$30,000.00	\$3,212.00	\$26,788.00
6109-04	Accounting	\$14,000.00	\$11,600.00	\$2,400.00
6109-05	Legal	\$14,000.00	\$4,425.29	\$9,574.71
6109-06	County Service Charge	\$0.00	\$0.00	\$0.00
6109-07	Uniforms, Safety Apparel & Equipment	\$30,000.00	\$10,426.00	\$19,574.00
6109-08	Surveillance & Research	\$50,000.00	\$21,584.32	\$28,415.68
6109-09	Other Miscellaneous Expenditures	\$20,000.00	\$231.84	\$19,768.16
6109-10	GIS & GPS	\$60,000.00	\$11,472.72	\$48,527.28
	TOTALS	\$248,000.00	\$79,550.63	\$168,449.37
TOTAL OPERATIONAL EXPENDITURES		\$3,635,000.00	\$1,685,842.56	\$1,949,157.44
<u>CAPITAL OUTLAY</u>				
6110-01	Office & Lab Furniture & Equipment	\$15,000.00	\$0.00	\$15,000.00
6110-02	Auto Equipment	\$300,000.00	\$0.00	\$300,000.00
6110-03	Shop Equipment	\$10,000.00	\$0.00	\$10,000.00
6110-04	Field Equipment	\$20,000.00	\$5,106.42	\$14,893.58
6110-05	Building & Ground Improvement	\$50,000.00	\$0.00	\$50,000.00
6110-06	Loan & Lease Purchase Payments	\$290,000.00	\$0.00	\$290,000.00
	TOTAL CAPITAL OUTLAY EXPENDITURES	\$685,000.00	\$5,106.42	\$679,893.58
TOTAL EXPENDITURES		\$4,320,000.00	\$1,690,948.98	\$2,629,051.02
<u>SPECIAL PROJECTS RESERVE</u>		\$250,000.00	\$0.00	\$250,000.00
<u>CONTINGENT LIABILITY RESERVE</u>		\$300,000.00	\$0.00	\$300,000.00
<u>BUILDING RESERVE</u>		\$900,000.00	\$0.00	\$900,000.00
<u>EQUIPMENT RESERVE</u>		\$400,000.00	\$0.00	\$400,000.00
<u>GENERAL RESERVE</u>		\$3,978,000.00	\$0.00	\$3,978,000.00
	TOTAL RESERVES	\$5,828,000.00	\$0.00	\$5,828,000.00
TOTAL EXPENDITURES AND RESERVES		\$10,148,000.00	\$1,690,948.98	\$8,457,051.02

Consolidated Mosquito Abatement District Monthly Expenditures

FRESNO COUNTY ACCOUNT- BANK OF THE WEST

CASH ON HAND, DECEMBER 31, 2021	\$6,676,144.62
PROPERTY TAXES WITHHELD BY FRS COUNTY	\$0.00
JANUARY REVENUE	\$45,216.48
JANUARY INTEREST	\$20,229.53
TAXES - FRESNO COUNTY / KINGS COUNTY	\$140,977.43
TOTAL REVENUE FOR JANUARY	<u>\$206,423.44</u>
SUB-TOTAL	\$6,882,568.06
COUNTY ADMIN COST FOR FY WITHHELD BY COUNTY	\$0.00
MONEY TRANSFERRED TO CHECKING	<u>(\$156,255.44)</u>
CASH ON HAND, JANUARY 31, 2022	\$6,726,312.62

YEARLY REVENUE THROUGH 12-31-21	\$2,133,279.27
JANUARY REVENUE	<u>\$206,423.44</u>
YEARLY REVENUE THROUGH 01-31-22	\$2,339,702.71

CMAD CHECKING ACCOUNT - BANK OF THE WEST

CASH ON HAND, DECEMBER 31, 2021	\$135,000.00
MONEY TRANSFERRED FROM FRS CO ACCT	\$156,255.44
JANUARY EXPENDITURES	<u>(\$156,255.44)</u>
CASH ON HAND, JANUARY 31, 2022	\$135,000.00

SAVINGS ACCOUNT- CITIBANK

CASH ON HAND, DECEMBER 31, 2021	\$14,115.10
INTEREST EARNED FOR JANUARY	\$0.12
CASH ON HAND, JANUARY 31, 2022	<u>\$14,115.22</u>

STEVE MULLIGAN - XXXX-XXXX-XXXX-8590

Statement Balance: \$10,535.24
 Last Payment Amount: \$5,971.35
Minimal Payment Due on 03/02/22: \$158.00
 Statement/Closing Date: 02/08/2022

6102-04 6707.67
 6102-02 129.01
 6100-05 71.34
 6106-06 697.79
 6108-01 2466.00
 6102-03 81.06
 6109-03 176.41

ACCOUNT SUMMARY

Previous Balance	\$5,971.35
Payments, Credits, and Adjustments	\$6,031.34
Purchases	\$10,595.23
Cash Advances	\$0.00
Fees	\$0.00
Interest Charges	\$0.00
New Balance	\$10,535.24

QUICK REFERENCE

Minimum Payment	\$158.00
New Balance	\$10,535.24
Payment Due Date	03/02/2022
Business Credit Line	\$50,900.00
Cash Advance Line	\$21,500.00
Available Credit Line	\$40,364.00
Available Cash Advance Line	\$21,500.00

6103-02 180.00

STATEMENT MESSAGES

Please be sure to pay on time. If you submit your payment by mail, we suggest you mail it no later than 02/23/2022 to allow enough time for regular mail to reach us.

FINANCE CHARGE SUMMARY

	Nominal APR	Periodic Finance Change	Transaction Fee/Interest Change
Purchases (Standard Purch)	15.990%	\$0.00	\$0.00
Cash Advances (Standard Adv)	21.240%	\$0.00	\$0.00
TOTAL Interest Charge	\$0.00		

BUSINESS PAYMENTS, CREDITS, AND ADJUSTMENTS

Post Date	Description	Amount
01/20	ONLINE PAYMENT, THANK YOU	(\$5,971.35)


CARDHOLDER SUMMARY

Cardholder	Account Number (Last 4 digits)	Employee Credit Line	Employee Cash Advance Line	Total Activity Amount
FRED S MULLIGAN	0151	\$15,100	\$0	\$10,535.24

Transaction Date:	Post Date:	Description:	Charged to:	Amount:
02/07	02/07	AMZN Mktp US*LG1Y547D3 Amzn.com/bill <i>Fish Program, WA Paint, Paint brushes, Pond vacuum</i>	Standard Purch	\$237.05 <i>6102-04</i>
02/07	02/07	AMZN Mktp US*KZ7TD4N13 Amzn.com/bill <i>Robot Pump, weights, caribeaner</i>	Standard	\$217.72 <i>6102-04</i>

		WA		Purch	
02/04	02/04	BIG 5 SPORTING GOODS 3 SELMA CA 5 gallon water containers	Standard Purch	\$129.01	6102-02
02/03	02/03	AMZN Mktp US*I74CA1K83 Amzn.com/bill WA Filter - Fish program	Standard Purch	\$1,580.14	6102-04
02/03	02/03	ZOOM.US 888-799-9666 SAN JOSE CA Meeting software	Standard Purch	\$14.99	6106-05
02/03	02/03	AMZN Mktp US*TC2SQ4MS3 Amzn.com/bill WA Alcohol Wipes	Standard Purch	\$33.84	6106-05
01/30	01/30	AMZN Mktp US*PJ82G0DB3 Amzn.com/bill WA fish net	Standard Purch	\$21.78	6102-04
01/28	01/28	AMZN Mktp US*UL41C1D63 Amzn.com/bill WA webcam for Board meetings	Standard Purch	\$278.67	6106-06
01/27	01/27	EVENT* AMERICAN MOSQUI TYSONS CORNER VA AMCA meeting registration	Standard Purch	\$2,410.00	6108-01
01/26	01/26	AMZN Mktp US*645X79J13 Amzn.com/bill WA computer	Standard Purch	\$261.54	6106-06
01/26	01/26	UNDERWATER360ONLINE 2152444300 PA fish medication	Standard Purch	\$228.00	6102-04
01/26	01/26	AMZN Mktp US*BA0HA5N33 Amzn.com/bill WA Computer mount	Standard Purch	\$24.23	6106-06
01/25	01/25	USPS PO 0558560648 PARLIER CA postage	Standard Purch	\$5.96	6106-02
01/25	01/25	AMZN Mktp US*J564R1L73 Amzn.com/bill WA webcam/microphone	Standard Purch	\$29.63	6106-06
01/25	01/25	MSFT * E0700HHBZJ MSBILL.INFO WA Monthly Microsoft account	Standard Purch	\$82.50	6106-05
01/24	01/24	AMZN Mktp US*S622Y52H3 Amzn.com/bill WA Fish tank pump to be returned and credited	Standard Purch	\$735.58	6102-04
01/24	01/24	AMZN Mktp US*WO2QA5A93 Amzn.com/bill WA 500 gallon pump	Standard Purch	\$44.68	6102-04
01/24	01/24	WAL-MART #1882 SELMA CA Coffee, trash bags, creamer	Standard Purch	\$81.06	6102-03
01/23	01/23	AMZN MKTP US*9K13H8EZ3 AMZN.COM/BILL WA Fish tank supplies	Standard Purch	\$35.78	6102-04
01/23	01/23	AMZN MKTP US*1888019K0 AMZN.COM/BILL WA Fish nets ; tank air valve small	Standard Purch	\$32.82	6102-04
01/22	01/22	AMZN Mktp US*NX0003AH3 Amzn.com/bill WA water test strips	Standard Purch	\$20.04	6102-04
01/21	01/21	AMZN Mktp US*U62X551B3 Amzn.com/bill WA Black twine	Standard Purch	\$38.12	6102-04
01/21	01/21	ALLIANZ INSURANCE 8666729580 VA trainfare insurance	Standard Purch	\$9.00	6108-01

01/21	01/21	INTERNATIONAL AGRICENT 5593580156 CA <i>World Ag Expo tickets</i>	Standard Purch	\$80.00 <i>6109-03</i>
01/21	01/21	AMTRAK .0210705523244 8008727245 DC NAME: RAMIREZ/KATHERINE DEPART: 0 <i>train fare to MVCA</i> TO : : CLASS: : STOP: <i>meeting</i>	Standard Purch	\$47.00 <i>6108-01</i>
01/21	01/21	SAN FRANCISCO FLORAL C 5592680111 CA <i>Condolence gift</i>	Standard Purch	\$96.41 <i>6109-03</i>
01/21	01/21	POND USA.COM WATERLOO CAN <i>Air pump kit for fish tanks</i>	Standard Purch	\$121.98 <i>6102-04</i>
01/20	01/20	NATIONAL TANK 8886868265 TN <i>1000 Gallon fish tank for Clovis depot</i>	Standard Purch	\$3,393.98 <i>6102-04</i>
01/19	01/19	SQ *ACADEMY UPHOLSTERY Sanger CA <i>Repair vehicle seat</i>	Standard Purch	\$180.00 <i>6103-03</i>
01/16	01/16	AMZN Mktg US*VT8633DP3 Amzn.com/bill WA <i>3- Webcams w/microphones</i>	Standard Purch	\$103.72 <i>6106-06</i>
01/11	01/11	USPS PO 0558560648 PARLIER CA <i>Postage to mail board packet</i>	Standard Purch	\$20.00 <i>6106-02</i>
01/11	01/11	NORTON *AP276503489 8772945265 AZ <i>Credit for erroneous charge</i>	N/A	(\$59.99) <i>6106-05</i>
STEVE MULLIGAN	2859	\$50,900	\$21,500	\$0.00

 There are no transactions available for this account in this statement.

Staff Report

To: Board of Trustees
From: District Manager
Re: Agenda Item No. 4
Date: February 22, 2022

Authorization: Consider finding by a majority vote under Gov. Code § 54953, subd. (e)(1)(B) that as a result of the COVID-19 emergency: (i) meeting of the Board of Trustees in person would present imminent risks to the health or safety of attendees; and (ii) the meeting is authorized to be held by teleconference pursuant to Gov. Code, § 54953, subd. (e)(1)(C).

In light of the Governor's declaration that a state of emergency exists due to the incidence and spread of the novel coronavirus SARS-CoV-2, and the pandemic caused by the resulting disease COVID-19, the Board should consider whether meeting in person would present imminent risks to the health or safety of meeting attendees.

The Centers for Disease Control indicates that COVID-19 is a highly transmissible virus that is spread when an infected person breathes out droplets and very small particles that contain the virus, and such droplets and particles are breathed in by other people.¹ In November of 2021, a much more infectious variant of the virus, known as the Omicron Variant, was reported and now accounts for the vast majority of COVID-19 cases. Although individual Omicron infections might be somewhat less severe than those of other variants, it is much more infectious and the increases in cases and hospitalizations are expected to stress the healthcare system.

Although effective vaccines have been approved by the U.S. Food and Drug Administration for emergency use, vaccination rates are slow and have not yet reached a point to significantly control community transmission. As of February 15, 2022, 74.3% of Californians who are eligible to be vaccinated are fully vaccinated², but only 64.3% of Fresno County residents and just 52.4% of Kings County residents five years and older eligible to be vaccinated are fully vaccinated (<https://covid.cdc.gov/covid-data-tracker>).

Those who become infected with COVID-19 are at risk of serious illness and death. As of February 15, 2022, over 916,900 Americans have died from the virus.³ Many more have been hospitalized with serious illness. Currently (as of February 14, 2022), in Fresno County, 446 people were hospitalized with COVID-19, with 76 of these patients in intensive care unit (ICU) beds.

¹ www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html

² State of California Covid-19 Dashboard <https://covid19.ca.gov/vaccination-progress-data/>

³ Johns Hopkins University Coronavirus Resource Center <https://coronavirus.jhu.edu/>

Conducting meetings by teleconference would directly reduce the risk of transmission of COVID-19 among meeting attendees, including members of the public and agency staff, which has the ancillary effect of reducing risk of serious illness and death as well as reducing community spread of the virus. Board members will need to make their own determinations in any decision whether to attend a Board meeting in person.

If the authorization to meet by teleconference is not approved by a majority vote, then the meeting will adjourn after this item and the remaining agenda items will be rescheduled to a future in-person meeting.

Recommendation:

Authorization: Move that the Board find that, as a result of the COVID-19 emergency, meeting in person would present imminent risks to the health or safety of attendees, and the meeting should be held by teleconference as authorized by subdivision (e)(1)(C) of section 54943 of the Government Code.

Board of Trustees Committee Appointments

2022

Budget	2021	2022
	Esraelian	Esraelian
	Munk	Fukuda
	Reyna	Hill
	Taylor	Reyna
	(Fukuda)	(Taylor)

Building	2021	2022
	Hill	Fukuda
	Reyna	Hill
	Steinhauer	Reyna
	Taylor	Steinhauer
	(Fukuda)	(Taylor)

Equipment	2021	2022
	Brisendine	Brisendine
	Cardenas	Cardenas
	Lockhart	Lockhart
	Peterson	Willems
	(Fukuda)	(Taylor)

Trustee Seniority: Reyna (48); Esraelian (36); Taylor (29); Fukuda (17); Cardenas (15);
Steinhauer (12); Hill (10); Brisendine (3); Lockhart (2); Willems (1)

Committee Assignments: Brisendine (1); Cardenas (1); Esraelian (1); Fukuda (2); Hill (2);
Lockhart (1); Reyna (2); Steinhauer (1); Taylor (3), Willems (1)

AGENDA ITEM 9: CALPERS UNFUNDED LIABILITY

Background:

At the October 19, 2020 Board meeting, the Board was presented with the District's CalPERS annual actuarial valuation reports for the District's Miscellaneous Plan and the PEPRAs Miscellaneous Plan. The reports dated July 2021 are actuarial valuations as of June 30, 2020. The Board can use these reports as a reflection in time of funding status for the Plans but recognizing that the financial position will vary based on investment returns and employer normal cost rates. Previous reports have been used by the Board as a basis for making additional employer discretionary contributions to pay down the unfunded accrued liability (UAL).

The Annual Valuation Report for the Miscellaneous Plan for the District is attached and presented once more for review by trustees and discussion of whether to make an additional discretionary contribution to the unfunded accrued liability. On the page numbered Page 5 under the heading Additional Discretionary Employer Contributions several tables are listed. The estimated normal cost of \$76,320 refers to the employer payroll deduction cost based on active employees and this does not constitute an additional payment. The minimum UAL payment required to be made for the current year is \$6,166. The employer contribution necessary to avoid negative amortization is \$13,590. There are also several additional discretionary payments (ADP) for a greater UAL reduction listed in the last table based on shorter amortization schedules. A total UAL contribution of \$47,350 would place the District on a five-year funding target.

The Annual Valuation Report for the PEPRAs Plan is not included as no additional UAL contributions are needed.

Action requested:

The Board will be asked to consider making an additional discretionary contribution to reduce the UAL above the minimum UAL payment of \$6,166.



California Public Employees' Retirement System
Actuarial Office
400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or 888-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov

July 2021

Miscellaneous Plan of the Consolidated Mosquito Abatement District (CalPERS ID: 1965051103) Annual Valuation Report as of June 30, 2020

Dear Employer,

Attached to this letter, you will find the June 30, 2020 actuarial valuation report of your CalPERS pension plan. **Provided in this report is the determination of the minimum required employer contributions for fiscal year 2022-23.** In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

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, 2020.

Section 2 can be found on the CalPERS website (calpers.ca.gov). From the home page, go to "*Forms & Publications*" and select "*View All*". In the search box, enter "*Risk Pool*" and from the results list download the Miscellaneous Risk Pool Actuarial Valuation Report for June 30, 2020.

Your June 30, 2020 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.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution rates as needed. This valuation is based on an investment return assumption of 7.0% which was adopted by the board in December 2016. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from December 2017.

Required Contribution

The exhibit below displays the minimum employer contributions for fiscal year 2022-23 along with estimates of the required contributions for fiscal year 2023-24. 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.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability
2022-23	8.63%	\$6,166
<i>Projected Results</i>		
2023-24	8.6%	\$10,000

The actual investment return for fiscal year 2020-21 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.00%. ***To the extent the actual investment return for fiscal year 2020-21 differs from 7.00%, the actual contribution requirements for fiscal year 2023-24 will differ from those shown above.*** 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. This section also contains projected required contributions through fiscal year 2027-28.

Changes from Previous Year's Valuation

There are no significant changes in actuarial assumptions or policies in your 2020 actuarial valuation. Your annual valuation report is an important tool for monitoring the health of your CalPERS pension plan. Your report contains useful information about future required contributions and ways to control your plan's funding progress. In addition to your annual actuarial report my office has developed tools for employers to plan, project and protect the retirement benefits of your employees. Pension Outlook is a tool to help plan and budget pension costs into the future with easy to understand results and charts.

You will be able to view the projected funded status and required employer contributions for pension plans in different potential scenarios for up to 30 years into the future — which will make budgeting more predictable. While Pension Outlook can't predict the future, it can provide valuable planning information based on a variety of future scenarios that you select.

Pension Outlook can help you answer specific questions about your plans, including:

- When is my plan's funded status expected to increase?
- What happens to my required contributions in a down market?
- How does the discount rate assumption affect my contributions?
- What is the impact of making an additional discretionary payment to my plan?

To get started, visit our Pension Outlook page at www.calpers.ca.gov/page/employers/actuarial-resources/pension-outlook-overview and take the steps to register online.

CalPERS will be completing an Asset Liability Management (ALM) review process in November 2021 that will review the capital market assumptions and the strategic asset allocation and ascertain whether a change in the discount rate and other economic assumptions is warranted. In addition, the Actuarial Office will be completing its Experience Study to review the demographic experience within the pension system and make recommendations to modify future assumptions where appropriate.

Furthermore, this valuation does not reflect any impacts from the COVID-19 pandemic on your pension plan. The impact of COVID-19 on retirement plans is not yet known and CalPERS actuaries will continue to monitor the effects and where necessary make future adjustments to actuarial assumptions.

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

Questions

We understand that you might have questions about these results, and your assigned CalPERS actuary whose signature is on the valuation report is available to discuss. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or **(888-225-7377)**.

Sincerely,



SCOTT TERANDO, ASA, EA, MAAA, FCA, CFA
Chief Actuary



**Actuarial Valuation
as of June 30, 2020**

**for the
Miscellaneous Plan
of the
Consolidated Mosquito Abatement District
(CalPERS ID: 1965051103)**

**Required Contributions
for Fiscal Year
July 1, 2022 - June 30, 2023**

Table of Contents

Section 1 – Plan Specific Information

Section 2 – Risk Pool Actuarial Valuation Information

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

**Plan Specific Information
for the
Miscellaneous Plan
of the
Consolidated Mosquito Abatement
District**

**(CalPERS ID: 1965051103)
(Rate Plan ID: 3366)**

Table of Contents

Actuarial Certification	1
Highlights and Executive Summary	
Introduction	3
Purpose of Section 1	3
Required Employer Contributions	4
Additional Discretionary Employer Contributions	5
Plan's Funded Status	6
Projected Employer Contributions	6
Other Pooled Miscellaneous Risk Pool Rate Plans	7
Cost	8
Changes Since the Prior Year's Valuation	9
Subsequent Events	9
Assets and Liabilities	
Breakdown of Entry Age Accrued Liability	11
Allocation of Plan's Share of Pool's Experience/Assumption Change	11
Development of Plan's Share of Pool's Market Value of Assets	11
Schedule of Plan's Amortization Bases	12
Amortization Schedule and Alternatives	13
Employer Contribution History	15
Funding History	15
Risk Analysis	
Future Investment Return Scenarios	17
Discount Rate Sensitivity	18
Mortality Rate Sensitivity	18
Maturity Measures	19
Maturity Measures History	20
Hypothetical Termination Liability	21
Participant Data	22
List of Class 1 Benefit Provisions	22
Plan's Major Benefit Options	23

Actuarial Certification

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2020 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, 2020 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 actuaries have 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 the Unfunded Accrued Liability amortization bases as of June 30, 2020 and employer contribution as of July 1, 2022 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary who satisfies the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States with regard to pensions.



TONY CUNY, ASA, MAAA
Associate Pension Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Employer Contributions**
- **Additional Discretionary Employer Contributions**
- **Plan's Funded Status**
- **Projected Employer Contributions**
- **Other Pooled Miscellaneous Risk Pool Rate Plans**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2020 actuarial valuation of the Miscellaneous Plan of the Consolidated Mosquito Abatement District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for fiscal year 2022-23.

Purpose of Section 1

This Section 1 report for the Miscellaneous Plan of the Consolidated Mosquito Abatement District of CalPERS was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2020;
- Determine the minimum required employer contribution for this plan for the fiscal year July 1, 2022 through June 30, 2023; and
- Provide actuarial information as of June 30, 2020 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 Governmental Accounting Standards Board (GASB) Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS 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.

Assessment and Disclosure of Risk

This report includes the following risk disclosures consistent with the recommendations of Actuarial Standards of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0% and 8.0%.
- A "Sensitivity Analysis," showing the impact on current valuation results assuming rates of mortality are 10% lower or 10% higher than our current post-retirement mortality assumptions adopted in 2017.
- Pension Plan maturity measures quantifying the risks the employer bears.

Required Employer Contributions

	Fiscal Year
Required Employer Contributions	2022-23
Employer Normal Cost Rate	8.63%
<i>Plus</i>	
Required Payment on Amortization Bases¹	\$6,166
<i>Paid either as</i>	
1) Monthly Payment	\$513.83
<i>Or</i>	
2) Annual Prepayment Option*	\$5,961
<p><i>The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).</i></p> <p><i>* Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31).</i></p>	

	Fiscal Year	Fiscal Year
	2021-22	2022-23
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	15.57%	15.56%
Surcharge for Class 1 Benefits ²		
None	0.00%	0.00%
Phase out of Normal Cost Difference ³	0.00%	0.00%
Plan's Total Normal Cost	15.57%	15.56%
Formula's Expected Employee Contribution Rate	6.92%	6.93%
Employer Normal Cost Rate	8.65%	8.63%

¹ The required payment on amortization bases does not take into account any additional discretionary payment made after April 30, 2021.

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

³ The normal cost change is phased out over a five-year period in accordance with the CalPERS contribution allocation policy.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for the 2022-23 fiscal year is \$6,166. CalPERS allows employers to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Employers can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during fiscal year 2022-23 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

If you are considering making an ADP, please contact your actuary for additional information.

Minimum Required Employer Contribution for Fiscal Year 2022-23

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
\$76,320	\$6,166	\$0	\$6,166	\$82,486

The minimum required contribution above is less than interest on the UAL. With no ADP the UAL is projected to increase over the following year. If the minimum UAL payment were split between interest and principal, the principal portion would be negative. This situation is referred to as "negative amortization."

Fiscal Year 2022-23 Employer Contribution Necessary to Avoid Negative Amortization

Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
\$76,320	\$6,166	\$7,424	\$13,590	\$89,910

Alternative Fiscal Year 2022-23 Employer Contributions for Greater UAL Reduction

Funding Target	Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
20 years	\$76,320	\$6,166	\$12,160	\$18,326	\$94,646
15 years	\$76,320	\$6,166	\$15,150	\$21,316	\$97,636
10 years	\$76,320	\$6,166	\$21,476	\$27,642	\$103,962
5 years	\$76,320	\$6,166	\$41,184	\$47,350	\$123,670

¹ The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

Note that the calculations above are based on the projected Unfunded Accrued Liability as of June 30, 2022 as determined in the June 30, 2020 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Plan's Funded Status

	June 30, 2019	June 30, 2020
1. Present Value of Projected Benefits (PVB)	\$7,738,618	\$7,981,511
2. Entry Age Accrued Liability (AL)	6,775,031	7,143,580
3. Plan's Market Value of Assets (MVA)	6,219,429	6,483,464
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	555,602	660,116
5. Funded Ratio [(3) / (2)]	91.8%	90.8%

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 the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. Actual contribution rates during this projection period could be significantly higher or lower than the projection shown below.

Fiscal Year	Required Contribution	Projected Future Employer Contributions (Assumes 7.00% Return for Fiscal Year 2020-21)				
		2022-23	2023-24	2024-25	2025-26	2026-27
Rate Plan 3366 Results						
Normal Cost %	8.63%	8.6%	8.6%	8.6%	8.6%	8.6%
UAL Payment	\$6,166	\$10,000	\$14,000	\$18,000	\$21,000	\$21,000

For some sources of UAL, the change in UAL is 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 the Section 2 Report. This method phases in the impact of the change in UAL over a 5-year period in order to reduce 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 when 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.

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

Our online pension plan modeling and projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook is a tool to help plan and budget pension costs into the future with results and charts that are easy to understand.

Other Pooled Miscellaneous Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown below, correspond to rate plan 3366. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Miscellaneous Risk Pool are shown below and assume that the payroll for each rate plan will grow according to the overall payroll growth assumption of 2.75% per year for three years.

	Fiscal Year	Fiscal Year
	2021-22	2022-23
Estimated Combined Employer Contributions for all Pooled Miscellaneous Rate Plans		
Projected Payroll for the Contribution Year	\$1,371,769	\$1,303,255
Estimated Employer Normal Cost	\$115,490	\$107,611
Required Payment on Amortization Bases	\$37,366	\$7,449
Estimated Total Employer Contributions	\$152,856	\$115,060
Estimated Total Employer Contribution Rate (illustrative only)	11.14%	8.83%

Cost

Actuarial Determination of Pension Plan Cost

Contributions to fund the pension plan are comprised of two components:

- Normal Cost, expressed as a percentage of total active payroll
- Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to 2016-17, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with fiscal year 2016-17, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There continues to be an option to prepay this amount during July of each fiscal year.

The Normal Cost component is expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 5.5% over the 20 years ending June 30, 2020, yet individual fiscal year returns have ranged from -23.6% to +20.7%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2017.

Changes Since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the valuation date is prior to the effective date of the amendment.

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 the Section 2 Report for a summary of the plan provisions used in this valuation.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the 2020 actuarial valuation.

Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2020. Changes in the value of assets subsequent to that date are not reflected. Investment returns below the assumed rate of return will increase future required contributions while investment returns above the assumed rate of return will decrease future required contributions.

CalPERS will be completing an Asset Liability Management (ALM) process in November 2021 that will review the capital market assumptions and the strategic asset allocation and ascertain whether a change in the discount rate and other economic assumptions is warranted. As part of the ALM process the Actuarial Office will be completing an Experience Study to review the demographic experience of the retirement system and make recommendations to modify future assumptions where appropriate.

Furthermore, this valuation does not reflect any impacts from the COVID-19 pandemic on your pension plan. The impact of COVID-19 on retirement plans is not yet known and CalPERS actuaries will continue to monitor the effects and where necessary make future adjustments to actuarial assumptions.

The projected employer contributions on Page 6 are calculated under the assumption that the discount rate remains at 7.0% going forward and that the realized rate of return on assets for fiscal year 2020-21 is 7.0%.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2021. Any subsequent changes or actions are not reflected.

Assets and Liabilities

- **Breakdown of Entry Age Accrued Liability**
- **Allocation of Plan's Share of Pool's Experience/Assumption Change**
- **Development of Plan's Share of Pool's Market Value of Assets**
- **Schedule of Plan's Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Accrued Liability

Active Members	\$2,847,703
Transferred Members	119,504
Terminated Members	338,237
Members and Beneficiaries Receiving Payments	<u>3,838,136</u>
Total	\$7,143,580

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	\$7,143,580
2. Projected UAL balance at 6/30/2020	484,707
3. Pool's Accrued Liability ¹	19,314,480,060
4. Sum of Pool's Individual Plan UAL Balances at 6/30/2020 ¹	4,306,566,797
5. Pool's 2019/20 Investment (Gain)/Loss ¹	344,968,792
6. Pool's 2019/20 Non-Investment (Gain)/Loss ¹	60,428,629
7. Plan's Share of Pool's Investment (Gain)/Loss: $[(1) - (2)] \div [(3) - (4)] \times (5)$	153,059
8. Plan's Share of Pool's Non-Investment (Gain)/Loss: $(1) \div (3) \times (6)$	22,350
9. Plan's New (Gain)/Loss as of 6/30/2020: $(7) + (8)$	175,409

¹ Does not include plans that transferred to Pool on the valuation date.

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

10. Plan's UAL: $(2) + (9)$	\$660,116
11. Plan's Share of Pool's MVA: $(1) - (10)$	\$6,483,464

Schedule of Plan's Amortization Bases

Note that 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, 2020.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: fiscal year 2022-23.

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 required 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 expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

Reason for Base	Date Est.	Ramp Level 2022-23	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Expected Payment 2021-22	Balance 6/30/22	Minimum Required Payment 2022-23
Fresh Start	6/30/15	No Ramp		2.75%	1	150,511	155,690	0	0	0	0
Non-Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.75%	1	(46,193)	(47,782)	0	0	0	0
Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.75%	1	111,641	115,483	0	0	0	0
Assumption Change	6/30/16	100%	Up/Down	2.75%	1	116,895	120,917	0	0	0	0
Non-Investment (Gain)/Loss	6/30/17	80%	Up/Down	2.75%	1	(9,516)	(9,843)	0	0	0	0
Investment (Gain)/Loss	6/30/17	80%	Up/Down	2.75%	1	(222,507)	(230,163)	0	0	0	0
Assumption Change	6/30/17	80%	Up/Down	2.75%	1	131,125	135,637	0	0	0	0
Investment (Gain)/Loss	6/30/18	60%	Up/Down	2.75%	1	(68,589)	(70,949)	0	0	0	0
Assumption Change	6/30/18	60%	Up/Down	2.75%	1	205,426	212,494	0	0	0	0
Method Change	6/30/18	60%	Up/Down	2.75%	1	55,273	57,175	0	0	0	0
Non-Investment (Gain)/Loss	6/30/19	No Ramp		0.00%	1	27,976	28,938	0	0	0	0
Investment (Gain)/Loss	6/30/19	40%	Up Only	0.00%	1	32,665	33,789	0	0	0	0
Non-Investment (Gain)/Loss	6/30/20	No Ramp		0.00%	20	22,350	0	23,915	0	25,589	2,335
Investment (Gain)/Loss	6/30/20	20%	Up Only	0.00%	20	153,059	0	163,773	0	175,237	3,831
Total						660,116	501,386	187,688	0	200,826	6,166

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed in "Allocation of Plan's Share of Pool's Experience/Assumption Change" earlier in this section. These (gain)/loss bases will be amortized in accordance with the CalPERS amortization policy in effect at the time the base was established.

Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed a desire for a more stable pattern of payments or have indicated interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings 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) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. To initiate a Fresh Start, please consult with your plan actuary.

The Current Amortization Schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease 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:

- When a negative payment would be required on a positive unfunded actuarial liability; or
- When the payment would completely amortize the total unfunded liability in a very short time period, and results in a large change in the employer contribution requirement.

In any year when 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.

Amortization Schedule and Alternatives (continued)

Date	<u>Current Amortization Schedule</u>		<u>Alternate Schedules</u>			
	Balance	Payment	20 Year Amortization		15 Year Amortization	
			Balance	Payment	Balance	Payment
6/30/2022	200,826	6,166	200,826	18,326	200,826	21,316
6/30/2023	208,506	9,998	195,927	18,326	192,834	21,316
6/30/2024	212,759	13,829	190,685	18,326	184,283	21,316
6/30/2025	213,347	17,661	185,076	18,326	175,133	21,316
6/30/2026	210,012	21,492	179,075	18,326	165,343	21,316
6/30/2027	202,481	21,492	172,654	18,326	154,868	21,316
6/30/2028	194,424	21,492	165,783	18,326	143,659	21,316
6/30/2029	185,802	21,492	158,431	18,326	131,666	21,316
6/30/2030	176,577	21,492	150,565	18,326	118,833	21,316
6/30/2031	166,706	21,492	142,148	18,326	105,102	21,316
6/30/2032	156,144	21,492	133,142	18,326	90,410	21,317
6/30/2033	144,842	21,492	123,505	18,326	74,688	21,317
6/30/2034	132,749	21,491	113,194	18,326	57,866	21,316
6/30/2035	119,811	21,492	102,161	18,326	39,867	21,317
6/30/2036	105,966	21,491	90,356	18,326	20,607	21,316
6/30/2037	91,154	21,492	77,724	18,326		
6/30/2038	75,303	21,492	64,208	18,325		
6/30/2039	58,342	21,492	49,747	18,326		
6/30/2040	40,194	21,491	34,273	18,326		
6/30/2041	20,777	21,492	17,716	18,326		
6/30/2042						
6/30/2043						
6/30/2044						
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
6/30/2050						
6/30/2051						
Total		391,523		366,519		319,743
Interest Paid		190,697		165,693		118,917
Estimated Savings				25,004		71,780

Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan. The amounts are based on the actuarial valuation from two years prior and does not account for prepayments or benefit changes made during a fiscal year. Additional discretionary payments before July 1, 2019 or after June 30, 2020 are not included.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment (\$)	Additional Discretionary Payments
2016 - 17	7.159%	\$0	N/A
2017 - 18	7.200%	9,372	N/A
2018 - 19	7.634%	16,165	N/A
2019 - 20	8.081%	18,994	100,000
2020 - 21	8.794%	24,003	
2021 - 22	8.65%	35,908	
2022 - 23	8.63%	6,166	

Funding History

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

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2011	\$4,255,192	\$3,192,254	\$1,062,938	75.0%	\$889,238
06/30/2012	4,474,251	3,239,234	1,235,017	72.4%	872,354
06/30/2013	4,533,778	3,463,567	1,070,211	76.4%	844,634
06/30/2014	5,110,508	4,159,849	950,659	81.4%	858,682
06/30/2015	5,378,411	5,247,552	130,859	97.6%	935,598
06/30/2016	5,653,700	5,098,615	555,085	90.2%	902,267
06/30/2017	5,867,005	5,371,384	495,621	91.6%	901,246
06/30/2018	6,409,967	5,849,022	560,945	91.2%	930,379
06/30/2019	6,775,031	6,219,429	555,602	91.8%	989,075
06/30/2020	7,143,580	6,483,464	660,116	90.8%	815,238

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Hypothetical Termination Liability**

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 (2020-21, 2021-22, 2022-23 and 2023-24). 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.

For fiscal years 2020-21, 2021-22, 2022-23, and 2023-24, each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are 1.0%, 4.0%, 7.0%, 9.0% and 12.0%.

These alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four-year period ending June 30, 2024. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced five thousand stochastic outcomes for this period based on the most recently completed Asset Liability Management process. We then selected annual returns that approximate the 5th, 25th, 50th, 75th, and 95th percentiles for these outcomes. For example, of all the 4-year outcomes generated in the stochastic analysis, approximately 25% had an average annual return of 4.0% or less.

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 1.0% or greater than 12.0% over this four-year period, the likelihood of a single investment return less than 1.0% or greater than 12.0% in any given year is much greater.

Assumed Annual Return From 2020-21 through 2023-24	Projected Employer Contributions			
	2023-24	2024-25	2025-26	2026-27
1.0%				
Normal Cost	8.6%	8.6%	8.6%	8.6%
UAL Contribution	\$20,000	\$43,000	\$76,000	\$119,000
4.0%				
Normal Cost	8.6%	8.6%	8.6%	8.6%
UAL Contribution	\$15,000	\$29,000	\$48,000	\$72,000
7.0%				
Normal Cost	8.6%	8.6%	8.6%	8.6%
UAL Contribution	\$10,000	\$14,000	\$18,000	\$21,000
9.0%				
Normal Cost	8.8%	9.0%	9.2%	9.4%
UAL Contribution	\$8,200	\$8,100	\$0	\$0
12.0%				
Normal Cost	8.8%	9.0%	9.2%	9.4%
UAL Contribution	\$0	\$0	\$0	\$0

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.50% and 2.50%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2020 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 7.0% as well as alternate discount rates of 6.0% and 8.0%. The rates of 6.0% and 8.0% were selected since they illustrate the impact of a 1.0% increase or decrease to the 7.0% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2020	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	6.0%	7.0%	8.0%
Inflation	2.5%	2.5%	2.5%
Real Rate of Return	3.5%	4.5%	5.5%
a) Total Normal Cost	19.21%	15.56%	12.74%
b) Accrued Liability	\$8,014,759	\$7,143,580	\$6,414,378
c) Market Value of Assets	\$6,483,464	\$6,483,464	\$6,483,464
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$1,531,295	\$660,116	(\$69,086)
e) Funded Status	80.9%	90.8%	101.1%

Sensitivity to the Price Inflation Assumption

As of June 30, 2020	1% Lower Inflation Rate	Current Assumptions	1% Higher Inflation Rate
Discount Rate	6.0%	7.0%	8.0%
Inflation	1.5%	2.5%	3.5%
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	16.65%	15.56%	14.26%
b) Accrued Liability	\$7,514,230	\$7,143,580	\$6,640,696
c) Market Value of Assets	\$6,483,464	\$6,483,464	\$6,483,464
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$1,030,766	\$660,116	\$157,232
e) Funded Status	86.3%	90.8%	97.6%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2020 plan costs and funded status under two different longevity scenarios, namely assuming post-retirement rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2017. This type of analysis highlights the impact on the plan of improving or worsening mortality over the long-term.

As of June 30, 2020	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	15.84%	15.56%	15.30%
b) Accrued Liability	\$7,314,247	\$7,143,580	\$6,986,980
c) Market Value of Assets	\$6,483,464	\$6,483,464	\$6,483,464
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$830,783	\$660,116	\$503,516
e) Funded Status	88.6%	90.8%	92.8%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan sponsor to tolerate risk is important in understanding how the pension plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions. Since it is the employer that bears the risk, it is appropriate to perform this analysis on a pension plan level considering all rate plans. The following measures are for one rate plan only.

One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan's retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2019	June 30, 2020
1. Retired Accrued Liability	2,966,695	3,838,136
2. Total Accrued Liability	6,775,031	7,143,580
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.44	0.54

Another measure of maturity level of CalPERS and its plans is to look at the ratio of actives to retirees, also called the Support Ratio. A pension plan in its infancy will have a very high ratio of active to retired members. As the plan matures, and members retire, the ratio starts declining. A mature plan will often have a ratio near or below one. The average support ratio for CalPERS public agency plans is 1.25.

Support Ratio	June 30, 2019	June 30, 2020
1. Number of Actives	15	12
2. Number of Retirees	9	10
3. Support Ratio [(1) / (2)]	1.67	1.20

Maturity Measures (Continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., 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)

Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have higher AVR 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. 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)

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with LVR ratio of 8 is expected to have twice the contribution volatility of a plan with LVR of 4. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The AVR, described above, will tend to move closer to the LVR as a plan matures.

Contribution Volatility	June 30, 2019	June 30, 2020
1. Market Value of Assets	\$6,219,429	\$6,483,464
2. Payroll	989,075	815,238
3. Asset Volatility Ratio (AVR) [(1) / (2)]	6.3	8.0
4. Accrued Liability	\$6,775,031	\$7,143,580
5. Liability Volatility Ratio (LVR) [(4) / (2)]	6.8	8.8

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.49	1.67	6.0	6.5
06/30/2018	0.47	1.67	6.3	6.9
06/30/2019	0.44	1.67	6.3	6.8
06/30/2020	0.54	1.20	8.0	8.8

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, 2020. 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 limiting the funding risk. 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 19-month period from 12 months before the valuation date to 7 months after.

Market Value of Assets (MVA)	Hypothetical Termination Liability^{1,2} at 0.75%	Funded Status	Unfunded Termination Liability at 0.75%	Hypothetical Termination Liability^{1,2} at 2.50%	Funded Status	Unfunded Termination Liability at 2.50%
\$6,483,464	\$15,081,634	43.0%	\$8,598,170	\$11,769,679	55.1%	\$5,286,215

¹ The hypothetical liabilities calculated above include a 5% mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A of the Section 2 report.

² 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 1.18% on June 30, 2020, and was 1.68% on January 31, 2021.

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:

	June 30, 2019	June 30, 2020
Active Members		
Counts	15	12
Average Attained Age	N/A	52.9
Average Entry Age to Rate Plan	N/A	38.7
Average Years of Credited Service	N/A	13.7
Average Annual Covered Pay	\$65,938	\$67,937
Annual Covered Payroll	\$989,075	\$815,238
Projected Annual Payroll for Contribution Year	\$1,072,938	\$884,362
Present Value of Future Payroll	\$6,713,777	\$5,786,539
Transferred Members		
	1	1
Separated Members		
	3	5
Retired Members and Beneficiaries		
Counts*	9	10
Average Annual Benefits*	N/A	\$31,754

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- None

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 Section 2.

	Benefit Group	
Member Category	Misc	
Demographics		
Actives	Yes	
Transfers/Separated	Yes	
Receiving	Yes	
Benefit Provision		
Benefit Formula	2% @ 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 2	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

Risk Pool Actuarial Valuation Information

**Section 2 may be found on the CalPERS website
(calpers.ca.gov) in the Forms and
Publications section**

AGENDA ITEM 10: AERIAL PHOTOGRAPHIC SURVEY

Background:

The District utilizes photographic images of residential neighborhoods in urban and suburban areas to identify unmaintained swimming pools (green pools) within individual properties to locate potential mosquito breeding sources. These surveys are taken by aerial service vendors and recently In-Flight Camera has been used as the provider. In-Flight Camera is no longer providing this service, and the District is contacting vendors that can provide this type of service to determine which company would best serve the quality of image and cost that is desired.

Action requested:

The Board will be asked to authorize the District Manager to select a vendor to provide aerial photographic survey of the District's urban/suburban residential areas to assist in identification of green pools.