**MIDWAY CITY SANITARY DISTRICT**
**REGULAR MEETING**
**BOARD OF DIRECTORS**
**DISTRICT OFFICE**
**14451 CEDARWOOD STREET**
**WESTMINSTER, CA**

**Tuesday, October 3, 2023**
**5:30 P.M.**

# AGENDA

## OUR MISSION STATEMENT

**THE BOARD OF DIRECTORS AND EMPLOYEES OF THE MIDWAY CITY SANITARY DISTRICT WORK DILIGENTLY TO PROVIDE SEWER AND SOLID WASTE SERVICES TO THE RESIDENTS OF THE DISTRICT. OUR TOP PRIORITY IS TO ACCOMPLISH THIS IN AN ETHICAL, EFFICIENT, AND COST-EFFECTIVE MANNER THAT WILL PROTECT THE HEALTH AND SAFETY OF THOSE WE SERVE.**

In accordance with the requirements of California Government Code Section 54954.2, this Agenda is posted not less than 72 hours prior to the meeting date and time above. All written materials relating to each agenda item are available for public inspection in the office of the Board Secretary.

In the event any matter not listed on this agenda is proposed to be submitted to the Board for discussion and/or action, it will be done in compliance with Section 54954.2, or as set forth on a Supplemental Agenda posted not less than 72 hours prior to the meeting.

Please Note: The District complies with the provisions of the Americans with Disabilities Act (ADA). Anyone needing special assistance please contact the District's Secretary at (714) 893-3553, at least one business day prior to the meeting so that we may accommodate you.

**1. CALL TO ORDER, PLEDGE OF ALLEGIANCE AND INVOCATION**

**2. ROLL CALL AND DECLARATION OF QUORUM**

**3. PUBLIC COMMENTS**

All persons wishing to address the Board on specific Agenda items or matters of general interest should do so at this time. As determined by the President, speakers may be deferred until the specific item is taken for discussion and remarks may be limited to three (3) minutes.

4. **APPROVAL OF THE MINUTES**

   A. Approval of the Minutes of the Regular Meeting on September 19, 2023

5. **APPROVAL OF EXPENDITURES**

   A. Approval of Demands in the Amount of $120,907.51

6. **REPORTS**

   The President, General Manager, Legal Counsel, and other staff present verbal reports on miscellaneous matters of general interest to the Directors. These reports are for information only and require no action by the Directors.

   A. Report of President
   B. Report of General Manager
   C. Report of AAPI Leadership Summit Conference on September 7, 2023
   D. Report of Fall Festival on September 22-24, 2023
   E. Report of Building Project Ad Hoc Committee Meeting on September 27, 2023
   F. Report of OC San District Board of Directors Meeting on September 27, 2023
   G. Report of District Employee Luncheon on September 27
   H. Report of ISDOC In-Person Quarterly Luncheon on September 28

*7.* **CONSENT CALENDAR**

   All matters listed on the Consent Calendar are considered routine and will be acted upon at the same time unless separate discussion and/or action is requested by a Board Member, the public, or staff.

   A. Approve request of Solid Waste Driver R. Mayfield to Received 40 hours of Vacation Pay in Lieu of Time Off Due to Financial Hardship

   B. Approval of Amendment No. 2 to Professional Services Agreement with Rengel+CO Architects Incorporated for Additional Services in the Amount of $16,850.49 for The District's Building and Solar Project

8. **OLD BUSINESS**

   None

9. **NEW BUSINESS**

   A. Review, Receive, and File the CalPERS June 30, 2022 Annual Valuation Reports for the District's Pension Plans

10. **INFORMATIONAL ITEMS**

   None

## 11. BOARD CONCERNS/COMMENTS

## 12. GM/STAFF CONCERNS/COMMENTS

## 13. LEGAL COUNSEL CONCERNS/COMMENTS

## 14. CLOSED SESSION

CLOSED SESSION: During the course of conducting the business set forth on this agenda as a regular meeting of the Board, the Chair may convene the Board in closed session to consider matters of pending real estate negotiations, pending or potential litigation, or personnel matters, pursuant to Government Code Sections 54956.8, 54956.9, 54957 or 54957.6, as noted.

Reports relating to (a) purchase and sale of property; (b) matters of pending or potential litigation; (c) employment actions or negotiations with employee representatives; or which are exempt from public disclosure under the California Public Records Act, may be reviewed by the Board during a permitted closed session and are not available for public inspection. At such time as the Board takes final action on any of these subjects, the minutes will reflect all required disclosures of information.

None

## 15. ADJOURNMENT TO TUESDAY, OCTOBER 17, 2023

**MINUTES OF THE REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE MIDWAY CITY SANITARY DISTRICT OF ORANGE COUNTY**
**14451 CEDARWOOD STREET**
**WESTMINSTER, CA 92683**

**September 19, 2023**

## CALL TO ORDER

President T. Diep called the regular meeting of the Governing Board of the Midway City Sanitary District to order at 14451 Cedarwood Street, Westminster, California on Tuesday, September 19, 2023 at 5:35 PM.

| **BOARD MEMBERS PRESENT:** | **STAFF MEMBERS PRESENT:** |
|---|---|
| Tyler Diep | Robert Housley, General Manager |
| Sergio Contreras | Nicolas Castro, Director of Operations & Safety |
| Andrew Nguyen | Siamlu Cox, Director of Finance & Human Resources |
| Mark Nguyen | Milo Ebrahimi, District Engineer, P.E. |
| | Ashley Davies, Director of Servs. & Program Development |
| **BOARD MEMBERS ABSENT:** | Cynthia Olsder, Executive/Board Secretary |
| Chi Charlie Nguyen | |

**OTHER MEMBERS PRESENT:**
Cassie Trapesonian, Assistant General Counsel, Woodruff & Smart
James R. Fisler, Commissioner, Orange County Local Agency Formation
John Lewis, Consultant, Mesa Water District

## PLEDGE AND INVOCATION

President T. Diep led the Pledge of Allegiance. Director S. Contreras gave the Invocation.

## PUBLIC COMMENTS

J. Fisler, Commissioner of the Orange County Local Agency Formation (LAFCO) provided an update relevant to special districts in Orange County. He also handed out a newsletter for distribution. He said the purpose of his visit was to ensure open dialogue and transparency.

## APPROVAL OF THE MINUTES OF THE REGULAR MEETING ON SEPTEMBER 5, 2023

A motion was made by Director A. Nguyen, seconded by Director S. Contreras, to approve the minutes of the Regular Meeting on September 5, 2023. The motion was approved by the following 4-0 vote:

AYES: A. Nguyen, M. Nguyen, T. Diep, S. Contreras
NAYS:
ABSTAIN:
ABSENT: C. Nguyen

## APPROVAL OF EXPENDITURES

A. Demands in the amount of $1,182,744.54.

| # | CK # | DATE | AMOUNT | VENDOR CHECKS: | MEMO: |
|---|---|---|---|---|---|
| 1 | 14912 | 8/23 | 599.00 | Eduardo Ceja | District Luncheon 2023_08_23 |
| 2 | 14913 | 8/25 | 531.34 | AT&T (Brookhurst Lift Station) | Acct # 714 531-0272 115 1 |
| 3 | 14914 | 8/25 | 280.00 | Ayala's Car Wash | Fleet Wash 08/21/23 |
| 4 | 14915 | 8/25 | 1,840.50 | Bodyworks Equip. Inc. | Heil Switch (5) Control Box (1) Interface (1) |
| 5 | 14916 | 8/25 | 84.94 | City of Westminster Hydrant | Hydrant Water Service Aug-2023 |
| 6 | 14917 | 8/25 | 4,882.50 | CliftonLarsonAllen, LLP | Financial Stmt Audit FYE 06/30/2023 Interim |
| 7 | 14918 | 8/25 | 149.69 | Cummins Pacific LLC | Oil Pan Gasket (1) NG-5 |
| 8 | 14919 | 8/25 | 5,544.05 | Daniels Tire Service | Recap and Front Tires |
| 9 | 14920 | 8/25 | 1,070.65 | Dartco Transmission Sales & Srvs. | Transmission Filters (12) |
| 10 | 14921 | 8/25 | 1,931.53 | Dtntech | Stadium Seats (40) |
| 11 | 14922 | 8/25 | 1,411.00 | Heritage Container Corporation | Cardboard Trash Boxes (250) |
| 12 | 14923 | 8/25 | 3,718.55 | Hydraulic Solutions And Supplies | Heil cylinders (4) Heil Packer (2) |
| 13 | 14924 | 8/25 | 678.12 | Intuit, Inc. | Void |
| 14 | 14925 | 8/25 | 2,383.80 | Lock N Climb LLC | Truck Engine Platform Ladder (1) |
| 15 | 14926 | 8/25 | 30.00 | MemorialCare Medical Foundation | Lab Spec R. Mayfield 03/08/2023 |
| 16 | 14927 | 8/25 | 33.90 | Pre-Paid Legal Services, Inc. | Prepaid legal Aug-2023 |
| 17 | 14928 | 8/25 | 27,256.56 | Samsara Inc. | License/Support Vehicle Cameras 07/22/23-07/21/24 (18) |
| 18 | 14929 | 8/25 | 458.47 | SoCal Auto & Truck Parts, Inc. | Shop Fan (1) Venom Steel (2) Brake Cleaner (36) |
| 19 | 14930 | 8/25 | 2,368.44 | Southwest Sign Company | Building Dedication Plaque Dpt |
| 20 | 14931 | 8/25 | 2,017.03 | Studio E. Interiors | Issue & Evaluate bids; Board Room layout |
| 21 | 14932 | 8/25 | 361.66 | UniFirst Corporation | August - 2023 |
| 22 | 14933 | 8/25 | 9,812.50 | Woodruff & Smart | Legal Services July-2023 |
| 23 | 14934 | 9/1 | 615.50 | Advanced Workplace Strategies, Inc. | DOT Test P.Mariscal, D.Solano, J.Contreras, R.Mayfield 08/04/23 |
| 24 | 14935 | 9/1 | 620.00 | Ayala's Car Wash | Fleet Wash (4) |
| 25 | 14936 | 9/1 | 5,961.26 | Bodyworks Equip. Inc. | Packer Paddle & Actuator Kit (1), Journal Block (1) |
| 26 | 14937 | 9/1 | 282.13 | Cameron Welding Supply | Revco Tigster Flame Res. LG (2), Revso Tigster Flame Res. XL (1), Med Marking Soapstone 120PK (1) |
| 27 | 14938 | 9/1 | 167.04 | City of Westminster-Water Billing | Wash Rack and District Office |
| 28 | 14939 | 9/1 | 193,214.13 | CR Transfer, Inc. | Tonnage Fees July 2023 |
| 29 | 14940 | 9/1 | 1,990.00 | CRC Cloud | Maintenance & Support Aug-2023 |
| 30 | 14941 | 9/1 | 1,970.28 | Daniels Tire Service | Recap Tires (15) |
| 31 | 14942 | 9/1 | 10,117.50 | Davis Farr LLP | Accounting Assistance July-2023 |
| 32 | 14943 | 9/1 | 0.00 | Frontier Communications | VOID: Acct # 209-188-5155-071808-5 |
| 33 | 14944 | 9/1 | 419.67 | Haaker Equipment Co. | Repairs to NG-6 Vactor Truck |
| 34 | 14945 | 9/1 | 276.55 | Hillco Fastener Warehouse Inc. | Restock bolts, washers, terminal packs & nylon wire for shop use |
| 35 | 14946 | 9/1 | 42.53 | Los Angeles Truck Centers, LLC | Turn Signal Lamp (2) for NG-12 |
| 36 | 14947 | 9/1 | 2,541.87 | NVB Equipment, Inc. | A/C Repair NG-6, 10, 7 |
| 37 | 14948 | 9/1 | 696.00 | Odyssey Power Corporation | Generator Emergency Diagnostic 08/21/23 |
| 38 | 14949 | 9/1 | 36.43 | PSI | Replacement Parts for Wash Rack |
| 39 | 14950 | 9/1 | 476.85 | Safety-Kleen Systems, Inc. | Model 90 Parts Washers (1) |
| 40 | 14951 | 9/1 | 11,816.73 | Southern California Edison | Willow Aug-2023 |
| 41 | 14952 | 9/1 | 98.02 | Spectrum Enterprise (Time Warner Cab | Aug-2023 |
| 42 | 14953 | 9/1 | 1,471.36 | Standard Insurance Company Life | Sep - 2023 |
| 43 | 14954 | 9/1 | 683.98 | Tell Steel | Metal plates (3) Solid Waste trucks |
| 44 | 14955 | 9/1 | 349.57 | UniFirst Corporation | August - 2023 |
| 45 | 14956 | 9/1 | 621.40 | Frontier Communications | (714)903-1863 Willow Aug - 2023 |
| 46 | 14957 | 9/8 | 74.47 | Andrew Nguyen | 2023 CSDA Conference Reimbursement |
| 47 | 14958 | 9/8 | 360.00 | Ayala's Car Wash | Fleet Wash (9) |
| 48 | 14959 | 9/8 | 335.15 | Cameron Welding Supply | Oxygen, Compressed (2), Acetylene, Dissolved (1), Weldmark Cutting Tips (4) |

| | | | | | |
|---|---|---|---|---|---|
| 49 | 14960 | 9/8 | 1,891.48 | Clean Energy | CNG Station Service 08/28/23 |
| 50 | 14961 | 9/8 | 11,025.00 | CliftonLarsonAllen, LLP | Financial Stmt Audit FYE 06/30/2023 Interim |
| 51 | 14962 | 9/8 | 900.41 | CR&R Incorporated | Compost Event Westminster Mall 07/22/23 |
| 52 | 14963 | 9/8 | 12,465.00 | Rengel + Company Architects, Inc | Bldg Proj Mgt August-2023 |
| 53 | 14964 | 9/8 | 2,175.00 | Safety Research Consultants, Inc. | Driver's Safety Training on 05/20/23 |
| 54 | 14965 | 9/8 | 7,473.38 | SCI Consulting Group | Sewer & Trash Fee Levy Admin FY 2023-22 |
| 55 | 14966 | 9/8 | 4,218.88 | SDRMA - Employee Benefits | Oct-2023 |
| 56 | 14967 | 9/8 | 245.00 | Shannon Frost | EE Education Reimbursement |
| 57 | 14968 | 9/8 | 11,725.19 | SoCalGas | CNG Station Aug-2023 (12,439) |
| 58 | 14969 | 9/8 | 81.76 | Staples Business Credit | Office Supplies Aug-2023 |
| 59 | 14970 | 9/8 | 2,865.50 | Studio E. Interiors | 08/01 - 08/31 |
| 60 | 14971 | 9/8 | 473,927.04 | Woodcliff Corporation - Contractor | Solar & Building Project |
| 61 | 14972 | 9/8 | 24,943.54 | Woodcliff Corporation - Escrow Accoun | Solar & Building Project |
| 62 | | | **$ 856,619.83** | **CHECKS SUBTOTAL** | |
| **63** | | | | | |
| 64 | | | | **PAYROLL:** | **MEMO** |
| 65 | ACH | 8/22 | 87,055.43 | Paychex | Employee Payroll - Checks, Taxes, & Direct Deposits |
| 66 | ACH | 8/23 | 5,985.16 | Nationwide | 457 Deferred Compensation (Employees) |
| 67 | ACH | 9/1 | 8,221.16 | Paychex | Board Payroll - Checks, Taxes, & Direct Deposits |
| 68 | ACH | 9/1 | 846.00 | Nationwide | 457 Deferred Compensation (Board) |
| 69 | ACH | 9/5 | 86,399.72 | Paychex | Employee Payroll - Checks, Taxes, & Direct Deposits |
| 70 | | 9/11 | 5,929.20 | Nationwide | 457 Deferred Compensation (Employees) |
| 71 | | | **$ 194,436.67** | **ACH TRANSFERS SUBTOTAL** | |
| **72** | | | | | |
| 73 | | | | **ACH PAYMENTS:** | **MEMO** |
| 74 | FY24M1002 | 8/21 | 389.23 | Paychex | Time & Attendance |
| 75 | FY24M1003 | 8/25 | 17,005.28 | US Bank Corporate Payment System | CAL-Card Purchases Statement 08/22/23 |
| 75 | FY24M1004 | 8/24 | 19,076.37 | CalPERS-Retirement | Earned Period 08/07/23 - 08/20/23 |
| 77 | FY24M1005 | 8/28 | 1,572.71 | Chevron Texaco (WEX Bank) | Fleet Fuel |
| 75 | FY24M1006 | 8/23 | 67,662.68 | CalPERS-Health | September 2023 Health (Employees) |
| 79 | FY24M1007 | 8/23 | 6,874.06 | CalPERS-Health | September 2023 Health (Board) |
| 80 | FY24M1008 | 8/25 | 72.00 | Wex Health | Monthly HRA Admin Fee |
| 81 | FY24M1009 | 9/11 | 19,035.71 | CalPERS-Retirement | Earned Period 08/21/23 - 09/03/23 |
| 81 | | | **$ 131,688.04** | **ACH TRANSFERS SUBTOTAL** | |
| **83** | | | | | |
| 84 | | | **$ 1,182,744.54** | **TOTAL EXPENDITURES (ACCOUNTS PAYABLE CHECKS, PAYROLL, ACH TRANSFERS)** | |
| **85** | | | | | |
| 86 | | | | **BANK TRANSFERS:** | |
| 86 | | 8/22 | 400,000.00 | Funds Transfer from Checking to Money Market | |
| 87 | | 8/22 | 500,000.00 | Funds Transfer from LAIF to Checking | |
| 88 | | 9/8 | 262,167.50 | Funds Transfer from Money Market to Checking | |
| 89 | | | **$ 1,162,167.50** | **BANK TRANSFERS** | |

A motion was made by Director S. Contreras, seconded by Director A. Nguyen, to approve the expenditures in the amount of $1,182,744.54. The motion was approved by the following 4-0 vote:

AYES: T. Diep, A. Nguyen, M. Nguyen, S. Contreras
NAYS:
ABSTAIN:
ABSENT: C. Nguyen

## REPORTS

**Report of President:**
None

**Report of General Manager**
GM R. Housley reported that Costa Mesa Sanitary District visited the district earlier today along with two members of the Youth Southeast Asian Leaders Initiative (YSEALI), a U.S. government's signature program to strengthen partnerships with emerging leaders in Southeast Asia.

GM R. Housley reported that a small group of kids under the age of five will be given a tour of our facility on September 22, 2023. He also reported that the management team will be attending a one-day training offsite at the Costa Mesa Sanitary District office on September 26, 2023.

GM R. Housley reported that the district website has posted the request for proposal (RFP) for the calendar for the years 2025 to 2027. Additionally, he provided an update on the 2024 calendar.

**Report of the Outreach Committee Meeting on September 6, 2023**
Director A. Nguyen and Director C. Nguyen attended the meeting to finalize the last clean-up event of the year, to discuss open house, and to decide the dates for the clean-up events in 2024.

**Report of the AAPI Leadership Summit Conference on September 7, 2023**
President T. Diep requested that this item be moved to the following agenda when Director C. Nguyen is present.

**Report of the Meeting with Peoplespace Inc. offsite on September 7, 2023**
Director A. Nguyen and Director M. Nguyen attended the meeting in Irvine, California and reported there were a lot of furniture and color decisions to be made.

**Report of the Building Project Ad Hoc Committee Meeting on September 12, 2023**
Director M. Nguyen provided a status updated reporting that there was a good probability the project would be finished in 2024.

## CONSENT CALENDAR

A. Approve the Transferring and Reallocating of Funds into the Midway City Sanitary District's Reserve and Investment Accounts

B. Approve the September 6, 2023 Outreach Committee Recommendations

C. Approve and File the Treasurer's Investment Report for August 2023

D. Approve the Engineer Report for August 2023

E. Recognition and Approval of a 5-year Accident and Injury Free Award for Relief Driver/Utility Worker, Shannon Clarke, in the Amount of $200.00

F. Recognition and Approval of a 5-year Accident and Injury Free Award for Sewer Worker, Alejandro Gonzalez, in the Amount of $200.00

A motion was made by Director S. Contreras, seconded by Director A. Nguyen, to approve the Consent Calendar. The motion was approved by the following 4-0 vote:

AYES: T. Diep, A. Nguyen, M. Nguyen, S. Contreras
NAYS:
ABSTAIN:
ABSENT: C. Nguyen

**OLD BUSINESS**

None

**NEW BUSINESS**

A. Consider the Purchase of One (1) Electric Vehicle (EV) in an Amount Not to Exceed a Total of $65,000.00

A staff report and recommendations were provided and considered by the Board. A motion was made by Director A. Nguyen, seconded by Director M. Nguyen, to approve the purchase of one (1) electric vehicle (EV) in an amount not to exceed a total of $65,000. The motion was approved by the following 4-0 call vote:

AYES: A. Nguyen, M. Nguyen, T. Diep, S. Contreras
NAYS:
ABSTAIN:
ABSENT: C. Nguyen

B. RESOLUTION NO. 2023-19

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE MIDWAY CITY SANITARY DISTRICT OF ORANGE COUNTY, CALIFORNIA, APPROVING CHANGES TO THE EMPLOYEE HANDBOOK FOR NON-REPRESENTED EMPLOYEES AND RESCINDING RESOLUTION NO. 2021-12

A staff report and recommendations were provided and considered by the Board. A motion was made by Director A. Nguyen, seconded by Director M. Nguyen, to adopt Resolution No. 2023-19, approving changes to the employee handbook for non-represented employees and rescinding Resolution No. 2021-12. The motion was approved by the following 4-0 roll call vote:

AYES: A. Nguyen, M. Nguyen, T. Diep, S. Contreras
NAYS:
ABSTAIN:
ABSENT: C. Nguyen

## INFORMATIONAL ITEMS

A. Orange County Water District Groundwater Adventure Tour on October 27, 2023

B. Orange County Water Summit on October 13, 2023

Received and file.

## BOARD CONCERNS/COMMENTS

Director A. Nguyen thanked Staff.

Director S. Contreras reminded staff that he has not yet received information on the director of services and program development's workplan or the district's plans for reaching out to communities other than the Vietnamese community.

## GM/STAFF CONCERNS/COMMENT

None

## LEGAL COUNSEL CONCERNS/COMMENTS

None

## CLOSED SESSION

None

CLOSED SESSION: During the course of conducting the business set forth on this agenda as a regular meeting of the Board, the Chair may convene the Board in closed session to consider matters of pending real estate negotiations, pending or potential litigation, or personnel matters, pursuant to Government Code Sections 54956.8, 54956.9, 54957 or 54957.6, as noted.

Reports relating to (a) purchase and sale of property; (b) matters of pending or potential litigation; (c) employment actions or negotiations with employee representatives; or which are exempt from public disclosure under the California Public Records Act, may be reviewed by the Board during a permitted closed session and are not available for public inspection. At such time as the Board takes final action on any of these subjects, the minutes will reflect all required disclosures of information.

## ADJOURNMENT

President T. Diep adjourned the meeting at 6:15 PM to the next Board Meeting to be held at the District on Tuesday, October 3, 2023, at 5:30 PM.

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Andrew Nguyen, Secretary

AGENDA ITEM 5A

Date: October 3, 2023

To: Board of Directors

Prepared by: Siamlu Cox, Director of Finance & Human Resources

Subject: Approval of Demands in the Amount of $120,907.51

**BACKGROUND**

The laws of the State of California governing Special Districts provide that the Midway City Sanitary District Board of Directors shall review for approval all payments made by the District.

A Register of Demands is provided at each regular Midway City Sanitary District Board Meeting describing each payment made or to be made by the district during the specified period. The report is designed to communicate fiscal activity based on adopted and approved budget appropriations.

The Treasurer has duly reviewed the demands on the attached register.

**FISCAL IMPACT**

The total value of demand for this period is $120,907.51. This includes expenses, payroll, and payroll-related disbursements.

Sufficient funds are available to process all payments.

**RECOMMENDATION**

Staff recommends that the Board of Directors review and approve the attached Register of Demands.

**DISBURSEMENTS FOR**
**10 03 2023**

| # | CK # | DATE | AMOUNT | VENDOR CHECKS: | MEMO: |
|---|---|---|---|---|---|
| 1 | 14973 | 9/14 | 1,236.51 | City of Westminster | Plan Check Fee for Solar Project |
| 2 | 14974 | 9/15 | 404.49 | AT&T Mobility (First Net) | August-2023 |
| 3 | 14975 | 9/15 | 620.00 | Ayala's Car Wash | Fleet wash (18) |
| 4 | 14976 | 9/15 | 5,325.93 | Bodyworks Equip. Inc. | Packer Paddle & Actuator Kit (1) |
| 5 | 14977 | 9/15 | 314.61 | Cameron Welding Supply | CO2, Compressed (2), C/O Wheel A-SG Type 27 (10), Gloves (2) |
| 6 | 14978 | 9/15 | 2,022.00 | Daniels Tire Service | Recap Tires (7) |
| 7 | 14979 | 9/15 | 753.91 | Golden Bell Products | Super Butyl (1 x 55gal) (55), Hand Pumps (4) |
| 8 | 14980 | 9/15 | 2,563.42 | Hydraulic Solutions And Supplies | Heil cylinders (8) |
| 9 | 14981 | 9/15 | 1,450.00 | Me Viet Nam Productions | Talk Show 15 minute (5) 08/19/23 - 08/27/23 |
| 10 | 14982 | 9/15 | 828.36 | Merchants Building Maintenance, LLC | Janitorial Services September-2023 |
| 11 | 14983 | 9/15 | 100.00 | Pitney Bowes/Purchase Power | Postage August-2023 |
| 12 | 14984 | 9/15 | 3,463.29 | Plumbers Depot Inc. | Hose Replacement for NG-16 |
| 13 | 14985 | 9/15 | 513.57 | SoCal Auto & Truck Parts, Inc. | Tire Lube (2), Tape (10), 20in ExactFitBlade (10), Fab Loom-Split Poly (50) |
| 14 | 14986 | 9/15 | 46.68 | SoCalGas | Maint. Shop & Wash Rack - Sep 2023 |
| 15 | 14987 | 9/15 | 2,056.88 | Tell Steel | Metal plates (6) Solid Waste trucks |
| 16 | 14988 | 9/15 | 732.29 | UniFirst Corporation | September - 2023 |
| 17 | | | **$ 22,431.94** | **CHECKS SUBTOTAL** | |
| **18** | | | | | |
| 19 | | | | **PAYROLL:** | **MEMO** |
| 20 | ACH | 9/20 | 97,587.12 | Paychex | Employee Payroll - Checks, Taxes, Direct Deposits, & Pass-through Deductions |
| 21 | | | **$ 97,587.12** | **ACH TRANSFERS SUBTOTAL** | |
| **22** | | | | | |
| 23 | | | | **ACH PAYMENTS:** | **MEMO** |
| 24 | | 9/15 | 505.17 | US Bank | Account Fees |
| 25 | | 9/20 | 383.28 | Paychex | Time and Attendance September 2023 |
| 26 | | | **$ 888.45** | **ACH TRANSFERS SUBTOTAL** | |
| **27** | | | | | |
| 28 | | | **$ 120,907.51** | **TOTAL EXPENDITURES (ACCOUNTS PAYABLE CHECKS, PAYROLL, ACH TRANSFERS)** | |
| **29** | | | | | |
| 30 | | | | **BANK TRANSFERS:** | |
| 31 | | 9/22 | 250,000.00 | Funds Transfer from Money Market to Checking | |
| 32 | | | **$ 250,000.00** | **BANK TRANSFERS** | |

AGENDA ITEM 7A

Date: October 03, 2023

To: Board of Directors

Prepared by: Siamlu Cox, Director of Finance and Human Resources

Subject: Approve Request of Solid Waste Driver Robert Mayfield to Receive 40 hours of Vacation Pay in Lieu of Time Off Due to Financial Hardship

**BACKGROUND**

Robert Mayfield began working at the District in November 1996 and currently receives 25 days of vacation per year. Under the 2015 Employees Memorandum of Understanding (MOU) effective July 1, 2015 employees are eligible for vacation payout in lieu of time off under the following requirements:

The MOU States:

> *ARTICLE 5*
>
> *Vacation Leave*
> G. The policy of the DISTRICT is to encourage full utilization of vacation time off by all employees. However, each December, an employee may file an irrevocable request to cash-out up to eighty (80) hours of vacation leave. The DISTRICT shall pay each request in the first paycheck of January of the following year. In order to be eligible for this cash-out, the employee must have a remaining balance of at least forty (40) hours of accrued vacation after cashing-out and must have taken a minimum of forty (40) vacation hours in the prior twelve (12) months. Upon an employee's showing of an unforeseen financial hardship, the Board may grant an additional request that an employee be paid his/her regular rate of pay in lieu of taking up to forty (40) hours of his/her vacation time off in eight (8) hour increments. A decision on such a request is at the sole discretion of the Board of Directors and shall be decided on a case-by-case basis.

**STAFF RECOMMENDATION**

Staff recommends the Board review approve Robert Mayfield's request to receive 40 hours of vacation pay in lieu of time off due to financial hardship.

**FISCAL IMPACT**

Forty (40) hours at the employee's current rate of pay is $1,224.40

*Attachments:*

1. Letter from Robert Mayfield RE: Financial hardship
2. Copy of a Vehicle Registration Renewal Notice for 2022.

AGENDA ITEM 7B

Date: October 3, 2023

To: Board of Directors

Prepared by: Robert Housley, General Manager

Subject: Approval of Amendment No. 2 to Professional Services Agreement with Rengel+CO Architects Incorporated for Additional Services in the Amount of $16,850.49 for The District's Building and Solar Project

**BACKGROUND / DISCUSSION**

On September 1, 2020, the Board approved a Professional Services Agreement (Agreement) with Rengel+CO Architects, Incorporated (Rengel) to provide architectural and engineering design and construction support services for the District's Building Expansion and Occupied Renovation Project. The approved not-to-exceed compensation for the original scope of work under the Agreement that was $243,100.00, which was based on an estimated construction cost of $2,550,000 and a specific scope of work. The actual award for construction exceeded the original estimate. On April 16, 2022, the Board awarded Woodcliff Corporation the construction contract for the Project in the amount of $5,499,483.

After awarding the construction contract for the Project, several unforeseen and District changes occurred. The original scope of work changed to reassigning the solar canopy work, expansion of the guest lobby area, installing computer, and low voltage cables for security and a camera system. In addition, after the project was designed, the City of Westminster required the District to submit a separate Architectural plan for landscape for review and approval. These Project changes resulted in increased costs for related additional architectural, engineering design, and construction support services. Accordingly, on February 7, 2023, the Board approved Amendment No. 1 to the Agreement with Regnel+CO Architects in the amount of $278,702.50, plus approval for the General Manager to approve up to an additional $25,000 in change orders, bringing the total contract amount up to $546,802.50.

On September 27, 2023, Rengel+CO Architects submitted a proposed Authorization for Additional Services in the amount of $16,850.49. The additional services are a result of changes requested by the District for items such as the solar array/carport and IT/Audio Visual architectural planning, as well as additional construction management and inspection services necessitated by project changes and unforeseen circumstances. The proposed Authorization of Additional Services and related backup documentation is attached to this Report.

Unforeseen circumstances and the construction contract amount are the biggest reasons for the additional cost, including an unfavorable soils report that required a major revision to the foundation for the two front buildings to be able to stay connected without separating and sinking. This was a major change to the scope of work and required additional revisions to many other structural components, as well. The construction management / support cost is calculated at 2.5% of the estimated cost of the Project, and changes to the Project have resulted in additional construction management and support costs.

Rengel has provided an authorization for additional services that coordinates with the extra work and necessary changes for the Board's consideration. The additional costs total $16,850.49, bringing the total contract amount to $563,652.99.

Regnel+CO Architects is the architect and provides construction support services and is responsible for oversight of the complete building remodel and solar project. The agreement for their services is separate from the agreement the District has with the General Contractor, Woodcliff Corporation. This authorization covers the costs incurred and associated with Rengel+CO Architects; the Board of Directors have already approved the work and costs associated with Woodcliff Corporation.

**RECOMMENDATION**

Staff recommends that the Board of Directors approve and authorize the General Manager to execute Amendment No. 1 to the Professional Services Agreement with Regnel+CO Architects, Incorporated to provide architectural and engineering design and construction support services for the District's Building Expansion and Occupied Renovation Project.

**FISCAL IMPACT**

| | |
|---|---|
| Original Contract amount was | $243,100.00 |
| Additional services 02.21.2023 | $278,702.50 |
| Additional GM authorized change orders | $ 25,000.00 |
| Additional services 09.27.2023 | $ 16,850.49 |
| New total contract amount is | $563,652.99 |

*Attachments:*

1. Authorization for Additional Services 09.27.23
2. Amendment No. 2

# Authorization for Additional Services

rengel+co. architects

Project: **Midway City Sanitary District, Westminster**

| | | | |
|---|---|---|---|
| Client: | **Robert Housley, General Manager** | Date: | 27-Sep-23 |
| | Midway City Sanitary District | Attention: | Robert Housley |
| | 14451 Cedarwood Ave, Westminster CA 92683 | RCA Job #: | 202041.06 |

We have been directed to make the following changes in this Contract:

A. **Construction Management Services reconcilliation** — 12,437.99

CM Services re-budget from contract construction budget
original proposal: $60,000 (2.25% x $2,550,000)
Updated proposal 1/31: $124,684 (2.25% x $5,541,500)

Updated proposal 9/27:

| | |
|---|---|
| 2.25% x $5,769,828 | 129,821 |
| 2.25% x $73,550 delete roll ups | 1,655 |
| Credit 1/31 Update&base: | (124,684) |
| | $ 6,792 |

Solar array Construction Mgmt 9/1 reconcilliation:

| | |
|---|---|
| 2.25% x $667,377 = | 15,016 |
| Credit from Authorization 05: | (9,370) |
| | $ 5,646 |

D. **Misc Architectural Additional Services**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Audio/Visual architecture and plan draft | | | | | | | 2,000.00 |
| PRIN 1 | 1.0 | hrs x | 300 | /hr | | 300.00 | |
| PRIN 2 | 6.0 | hrs x | 200 | /hr | | 1,200.00 | |
| CAD 1 | 4.0 | hrs x | 125 | /hr | | 500.00 | |

E. **Soils inspections**

Additional soils compaction inspection before concrete flatwork pour. (estimated) — 1,500.00

F. **Proposed revisions: allowance for revision time to approved plans:**

| | | | |
|---|---|---|---|
| Alternate landscape schematic | no charge | | |
| Alternate landscape cstr docs | TBD, may not be necessary | | |
| Furnishing coordination with designer | | 1,200.00 | |
| Structural Engineering | (see attached) | | |
| Auth #5 allowance | 5,000.00 | | 912.50 |
| 2 site vist credit per contract | 800.00 | | |
| Actual (see attached) | 6,712.50 | | |

***Total:*** *$ 16,850.49*

| | | |
|---|---|---|
| The Original Contract Sum was …… | $ | 243,100.00 |
| Net Change by previously authorized Additional Services…… | $ | 278,702.50 |
| The Contract sum prior to this Change Order was…… | $ | 521,802.50 |
| The Contract sum will be increased by this Change Order…… | $ | 16,850.49 |
| The new Contract Sum, including this Change Order will be…… | $ | 538,652.99 |

| Agreed to: | Agreed to: |
|---|---|
| | 09.27.2023 |
| *For Midway City Sanitary District* | *Rengel+Company, Architects* |
| *14451 Cedarwood Ave, Westminster, CA* | *333 El Camino Real, Tustin, CA 92780* |

*Work will not proceed further until a signed approval of this document is received by our office*

X *Work has partially underway. As verbally instructed and in consideration of timing, please expedite signed approval.*

# WA Consulting Engineers

180 S. Prospect Ave., Suite 110 (714) 838-9898 ph. (714) 838-9899 fx.
Tustin, CA 92780

| INVOICE | |
|---|---|
| DATE | NUMBER |
| 5/26/2023 | 23057 |

**Bill To:**

Rengel Architects
3333 ElCamino Real
Tustin CA92780

| DUE DATE |
|---|
| 6/25/2023 |

| | |
|---|---|
| WA Project No.: | **120-0064.CA** |
| Client Project No.: | **202041** |
| Client PM: | **Sadia Syed** |

Project Name: Midway City _ Sanitary
14451 Cedarwood St.

| ITEM | DESCRIPTION | QTY | RATE | AMOUNT |
|---|---|---|---|---|
| 1 | Constructiion administration: Review concrete mix design, CMU submittals, steel submittals | 1 | 1200.00 | 1200.00 |
| 2 | Jobsite visit to review existing framing condition above board room and provided sketches on 8.5x11 | 5.5 | 175.00 | 962.50 |
| 3 | Foundation observation for building extension | 1 | 400.00 | 400.00 |
| 4 | Foundation observation for restroom building | 1 | 400.00 | 400.00 |
| 5 | First floor framing observation for building extension | 1 | 400.00 | 400.00 |
| 6 | Revised shear wall for new window opening | 1 | 1200 | 1200.00 —OK |
| Note | One observation was not charged, GC mistakenly foundation observation was not performed for the building extension. | | | 0.00 |

| ITEM | REIMBURSEABLE | QTY | RATE | AMOUNT |
|---|---|---|---|---|
| | **Payment Chk** 10% Administration Fee | **0** | **0** | 0.00 |

| | |
|---|---|
| TOTAL | **$4,562.50** |
| **Payment/Credit** | **$0.00** |
| **Balance Due** | **$4,562.50** |

**PLEASE MAKE CHECK PAYABLE TO:**

**WA Consulting Engineers**
180 S. Prospect Ave., Suite 110
TUSTIN, CA 92780

**Late charges of 1.5% per month will be added on to any unpaid balance due**

THANK YOU FOR YOUR BUSINESS
WA Consulting Engineers

# WA Consulting Engineers

180 S. Prospect Ave., Suite 110
Tustin, CA 92780

(714) 838-9898 ph. (714) 838-9899 fx.

**INVOICE**

| DATE | NUMBER |
|---|---|
| 7/25/2023 | **23074** |

**Bill To:**

Rengel Architects
3333 ElCamino Real
Tustin CA92780

RMB

| DUE DATE |
|---|
| 8/24/2023 |

| | |
|---|---|
| WA Project No.: | **120-0064.CA** |
| Client Project No.: | **202041** |
| Client PM: | **Sadia Syed** |

Project Name: Midway City _ Sanitary
14451 Cedarwood St.

| ITEM | DESCRIPTION | QTY | RATE | AMOUNT |
|---|---|---|---|---|
| 1 | Constructiion administration: Review concrete mix design, CMU submittals, steel submittals | 1 | 1200.00 | 1200.00 |
| 2 | First floor framing observation for building extension | 1 | 400.00 | 400.00 |

POSTED

| ITEM | **REIMBURSEABLE** | QTY | RATE | AMOUNT |
|---|---|---|---|---|
| | **Payment Chk** 10% Administration Fee | **0** | **0** | 0.00 |

**PLEASE MAKE CHECK PAYABLE TO:**

**WA Consulting Engineers**
180 S. Prospect Ave., Suite 110
TUSTIN, CA 92780

| | |
|---|---|
| TOTAL | **$1,600.00** |
| **Payment/Credit** | **$0.00** |
| **Balance Due** | **$1,600.00** |

**Late charges of 1.5% per month will be added on to any unpaid balance due**

THANK YOU FOR YOUR BUSINESS
WA Consulting Engineers

Inv# 20204138 8/30/23

# WA Consulting Engineers

180 S. Prospect Ave., Suite 110 (714) 838-9898 ph. (714) 838-9899 fx.
Tustin, CA 92780

## INVOICE

| DATE | NUMBER |
|---|---|
| 7/25/2023 | **23072** |

| DUE DATE |
|---|
| 8/24/2023 |

**Bill To:**

Rengel Architects
3333 ElCamino Real
Tustin CA92780

RMB

| | |
|---|---|
| WA Project No.: | **120-0064.CA** |
| Client Project No.: | **202041** |
| Client PM: | **Sadia Syed** |

Project Name: Midway City _ Sanitary
14451 Cedarwood St.

| ITEM | DESCRIPTION | QTY | RATE | AMOUNT |
|---|---|---|---|---|
| 1 | Site observation for wall and roof framing on 7/18/2023 | 1 | 400.00 | 400.00 |
| 2 | Issued a new detail for missing strap for rest room canopy framing attached to CMU wall (signed and stamped) | 1 | 150.00 | 150.00 |
| | | | | 0.00 |

POSTED

| ITEM | **REIMBURSEABLE** | QTY | RATE | AMOUNT |
|---|---|---|---|---|
| | **Payment Chk** | **0** | **0** | |
| | 10% Administration Fee | | | 0.00 |

| | |
|---|---|
| TOTAL | **$550.00** |
| **Payment/Credit** | **$0.00** |
| **Balance Due** | **$550.00** |

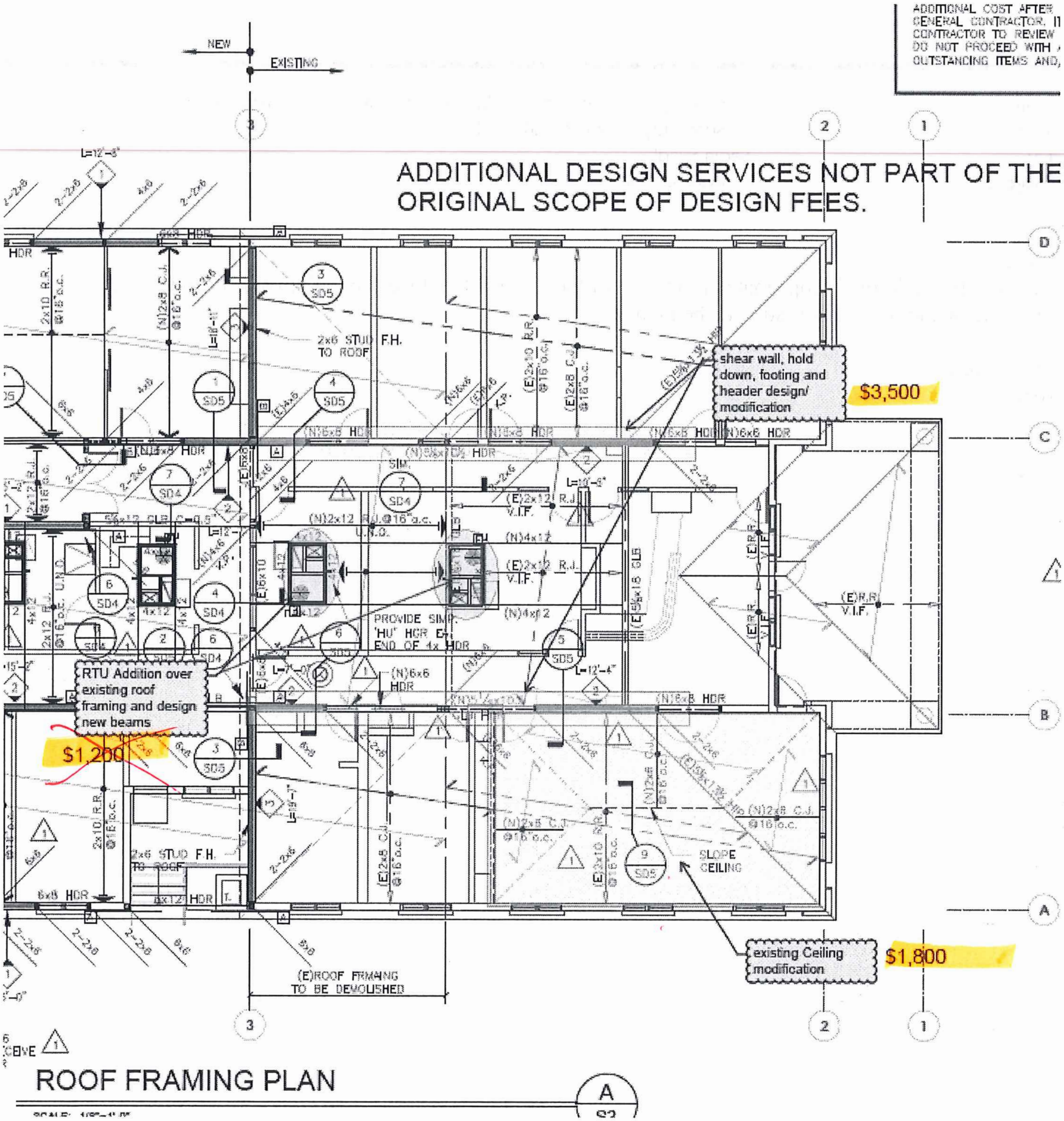
**PLEASE MAKE CHECK PAYABLE TO:**

**WA Consulting Engineers**
180 S. Prospect Ave., Suite 110
TUSTIN, CA 92780

**Late charges of 1.5% per month will be added on to any unpaid balance due**

THANK YOU FOR YOUR BUSINESS
WA Consulting Engineers

original ctrct for struc site visits exceeded bill as RMB
Inv# 20204138 8/30/23


ADDITIONAL DESIGN SERVICES NOT PART OF THE
ORIGINAL SCOPE OF DESIGN FEES.
shear wall, hold down, footing and header design/ modification
$3,500
RTU Addition over existing roof framing and design new beams
$1,200
existing Ceiling modification
$1,800
NEW
EXISTING
PROVIDE SIMP. 'HU' HGR E. END OF 4x HDR
SLOPE CEILING
2x6 STUD F.H. TO ROOF
(E)ROOF FRAMING TO BE DEMOLISHED
ROOF FRAMING PLAN

| | | |
|---|---|---|
| 2.25% | Construction Management option:<br>Rengel+Company, Architects is a licensed California general contractor with a Class B license #480056. The fee is based on award of the Architectural contract and is 2.25% of the estimated construction cost of $2.55M | $ 57,352 |

***NOTES/Qualifications:***

a. *"DAYS" are working days, M-F; 5 DAYS = 1 WEEK*

b. *"Produce Construction Documents" (#2) includes 60 days to produce drawings plus 15 days allowance for corrections. Time budget line does not include time for City Review, estimated at 30 days (6 weeks) with current city workload (#5).*

c. *Consultants/Engineering (#3) will run concurrently with #2 and between themselves in "Engineering Services" #1-5*

d. *Fire Sprinklers are not required in for buildings <9000SF and not included or shall be design-build with the GC.*

e. *Site visits by engineers limited to: Civil/Structural (2), MEP (1). Additional visits $500*

f. *Per the Q&A, it was suggested to provide as-builts of all underground utilities, which would require an underground utility scan. The project can be completed without this, but to provide an underground utility scan is an additional cost of $19,000* rengel+co. architects

# Authorization for Additional Services

Project: **Midway City Sanitary District, Westminster**

| | | | |
|---|---|---|---|
| Client: | **Robert Housley, General Manager** | Date: | 24-Jan-23 |
| | Midway City Sanitary District | Attention: | Robert Housley |
| | 14451 Cedarwood Ave, Westminster CA 92683 | RCA Job #: | 202041.05 |

We have been directed to make the following changes in this Contract:

A. **Architectural/Structural coordination Solar Canopy**

Bid process not effective, assign Solar Canopy to Woodcliff: estimate hourly time to coordinate (final hours may vary):

| | | | | | | |
|---|---|---|---|---|---|---|
| Principal 1 | 15.0 | hrs x | 250 | /hr | 3,750.00 | |
| Principal 2 | 25.0 | hrs x | 200 | /hr | 5,000.00 | |
| Cadd 1 | 35.0 | hrs x | 110 | /hr | 3,850.00 | |
| Clerical | 8.0 | hrs x | 65 | /hr | 520.00 | |
| | | | | | | 9,370.00 |

B. **Construction Management Services reconcilliation** — 64,650.00

CM Services re-budget from contract construction budget
original proposal: $60,000 (2.25% x $2,550,000)
updated proposal: $124,684 (2.25% x $5,541,500)

C. **Revise conventional concrete footing to structural mat foundation** — 74,000.00

Original architectural/structural foundation was to be conventional slab-on-grade with perimeter footing. Following soil report, unstable soil conditions will require a structural mat foundation to (a) support the proposed structure both laterally and bearing and (b) tie the new addition to the existing structure without lateral movement between buildings. Services include architectural services for additional detailing and coordination with engineers, structural engineering for lateral/vertical loading, shear, and foundation design, soils engineer coordination and redesign of interior framing to new structural system.

C. **Soils Engineering construction special inspections (see attached)** — 4,207.50

D. **Misc Additional Services**

City lost landscape plans, resubmittal, general City processing — 3,550.00

| | | | | | |
|---|---|---|---|---|---|
| PRIN 1 | 1.5 | hrs x | 300 | /hr | 300.00 |
| PRIN 2 | 10.0 | hrs x | 200 | /hr | 2,000.00 |
| CAD 1 | 10.0 | hrs x | 125 | /hr | 1,250.00 |

E. **Proposed revisions: allowance for revision time to approved plans:** — 28,000.00

Floor plan, doors, roll-ups, reviews for PM changeover (Ken to Robert), add windows, furnishings, low voltage systems, security, cameras, etc. (allowance only, final hours may vary, not-to-exceed without additional authorization)

Structural Engineering — 5,000.00

***Total:*** *$ 188,777.50*

| | | |
|---|---|---|
| The Original Contract Sum was ...... | $ | 243,100.00 |
| Net Change by previously authorized Additional Services...... | $ | 89,925.00 |
| The Contract sum prior to this Change Order was...... | $ | 333,025.00 |
| The Contract sum will be increased by this Change Order...... | $ | 188,777.50 |
| The new Contract Sum, including this Change Order will be...... | $ | 521,802.50 |

| | |
|---|---|
| Agreed to: | Agreed to: |
| | 01.31.2023 |
| *For Midway City Sanitary District* | *Rengel+Company Architects* |
| *14451 Cedarwood Ave, Westminster, CA* | *333 El Camino Real, Tustin, CA 92780* |

*Work will not proceed further until a signed approval of this document is received by our office*

X *Work has partially underway. As verbally instructed and in consideration of timing, please expedite signed approval.*

## AMENDMENT NO. 2 TO PROFESSIONAL SERVICES AGREEMENT

**THIS AMENDMENT NO. 2 TO PROFESSIONAL SERVICES AGREEMENT** ("Amendment No. 1") is made and entered into by and between **MIDWAY CITY SANITARY DISTRICT**, a public entity ("DISTRICT") and **RENGEL + COMPANY ARCHITECTS, INCORPORATED**, a California corporation. ("CONSULTANT"), effective October 3, 2023.

## RECITALS

A. This Amendment No. 2 is entered into pursuant to authorization of the DISTRICT's Board of Directors dated October 3, 2023.

B. DISTRICT and CONSULTANT are parties to that certain Professional Services Agreement (the "Agreement"), dated September 1, 2020, for CONSULTANT to provide Architectural and Engineering Design and Construction Support Services for the MCSD Expansion & Occupied Renovation Project (the "Project").

C. DISTRICT and CONSULTANT previously entered into that Amendment No. 1 to the Agreement on February 7, 2023 to incorporate additional services of CONSULTANT related to the Project

D. DISTRICT and CONSULTANT desire to further amend the Agreement to incorporate additional services of CONSULTANT related to the Project.

## AGREEMENT

NOW, THEREFORE, in consideration of the promises and mutual covenants contained herein, DISTRICT and CONSULTANT agree as follows:

1. Section 2 (Services to be Provided) of the Agreement is hereby amended to include the additional services described in the Authorization for Additional Services attached as Exhibit "A" to this Amendment No. 2. Exhibit "A" is hereby incorporated into CONSULTANT's Proposal and the Contract Documents.

2. Section 3.1 (Amount) of the Agreement is hereby amended to read as follows:

   3.1 <u>Amount</u>. Compensation for the services performed under this Agreement shall be per the Pricing schedule included in the Proposal. In no case shall total compensation paid to CONSULTANT under this Agreement exceed the amount of Five Hundred Sixty-Three Thousand Six Hundred Two Dollars and Ninety-Nine Cents ($563,652.99).

3. Except as otherwise expressly provided in this Amendment No. 2, all of the terms and conditions of the Agreement remain in full force and effect.

4. This Amendment No. 2 may be executed in counterparts, all of which shall constitute the same Agreement, notwithstanding that all parties to this Amendment No. 2 are not signatory to the same counterpart. Signature and acknowledgement pages may be detached from the counterparts and attached to a single copy of this Amendment No. 2 to physically form one (1) original document. These counterparts may be transmitted by facsimile or Portable Document Format (PDF), with the originals to be thereafter provided by the Parties. Such facsimiles or electronic copies shall be deemed original signatures.

**IN WITNESS THEREOF,** DISTRICT and CONSULTANT have caused this Agreement to be executed by their duly authorized respective officers as of the date first written above.

| **"DISTRICT"**<br>**MIDWAY CITY SANITARY DISTRICT** | **"CONSULTANT"**<br>**RENGEL + COMPANY ARCHITECTS, INCORPORATED** |
|---|---|
| By: ______________________________ | By: ______________________________ |
| Robert Housley,<br>Interim General Manager | Name: ______________________________ |
| | Title: ______________________________ |
| **APPROVED AS TO FORM** | By: ______________________________ |
| ______________________________<br>James H. Eggart, General Counsel | Name: ______________________________ |
| Date: _________________ | Title: ______________________________ |

# EXHIBIT "A"

## AUTHORIZATION FOR ADDITIONAL SERVICES

AGENDA ITEM 9A

Date: October 3, 2023

To: Board of Directors

Prepared by: Siamlu Cox, Director of Finance and Human Resources

Subject: Review, Receive, and File the CalPERS June 30, 2022 Annual Valuation Reports for the District's Pension Plans

**BACKGROUND**

The most recent CalPERS retirement annual valuation reports became available in August 2023.

The Midway City Sanitary District (District) provides a defined benefit pension benefit to its employees through CalPERS, which manages and administers the program. Annually, CalPERS prepares annual actuarial analyses to determine the District's pension liability and annual required contributions for the plans. The actuarial valuations are based on current employees' accrued benefit, former employees who are vested but have yet to retire, and retired employees.

CalPERS program maintains the District's three (3) retirement groups:

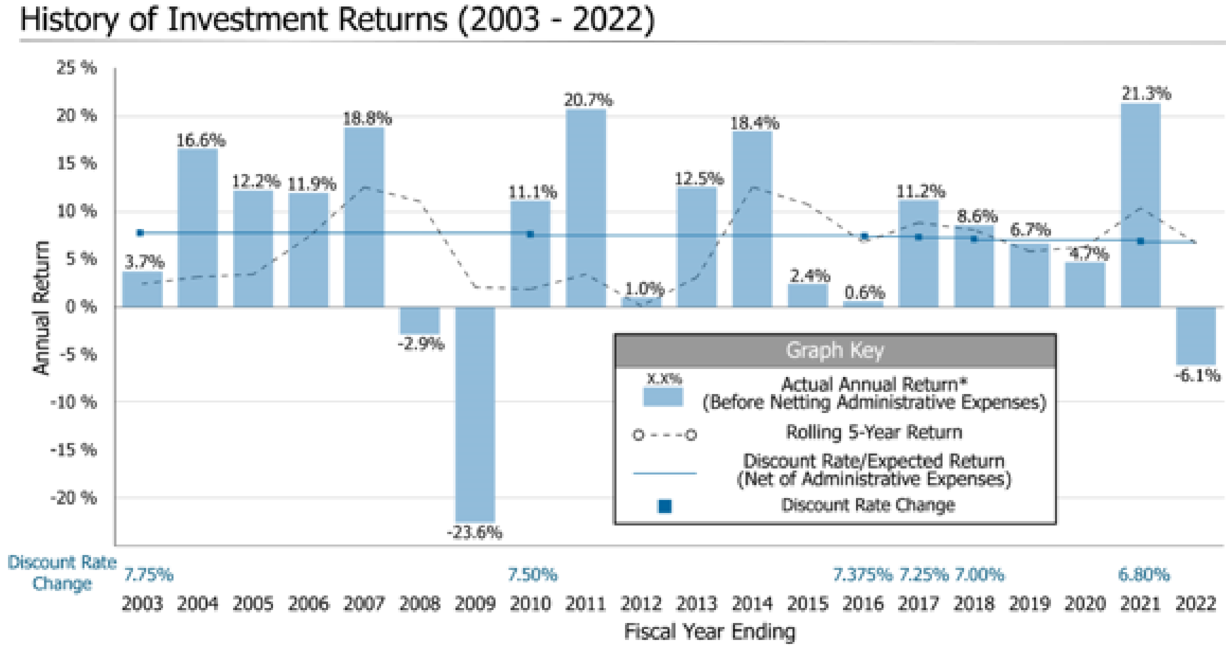
| | | |
|---|---|---|
| Tier 1 | 3%@60 | Hired on or before March 21, 2010 |
| Tier 2 | 2%@55 | Hired on or after March 22, 2010 (classic employees) |
| PEPRA | 2%@62 | Hired on or after January 1, 2013 |

Pension Plan Funding Status

A summary of the District's employer contribution, pension liability, and current funding status for the District's three plans are shown below and can be found in the valuation reports.

| | 2023-24 Employer Contributions | 2023-24 Employee Contributions | June 30, 2022 Funding Ratio | Unfunded Accrued Liability |
|---|---|---|---|---|
| Tier 1 (3%@60) | 17.33% | 8.00% | 93.40% | $1,407,730 |
| Tier 2 (2%@55) | 12.52% | 7.00% | 93.50% | $32,800 |
| PEPRA (2%@62) | 7.87% | 7.75% | 90.90% | $66,296 |
| Total Unfunded Accrued Liability | | | | $1,506,826 |

Changes in unfunded liabilities can emerge due to assumption or method changes, changes in plan provisions, and actuarial experience different than those assumed in the attached valuation reports. A staff report presented in September 2022 showed the plans to be superfunded as a result of a 21.3% investment return in Fiscal Year 2020-2021. The return reflected in the Fiscal Year 2021-22 valuations show an annual return of -6.1%. As a result of the negative return, the District's pension liability now has a shortfall. The chart below shows the 10-year history of investment returns of CalPERS pooled funds.




The District has historically chosen to pay the unfunded liabilities early and in full. The minimum Unfunded Accrued Liability (UAL) for Fiscal Year 2024-25 is $53,981. To be fully funded, the District would have to make a total contribution of $1,506,826. A full payment of the UAL has the potential to save $1,365,235 in interest.

Employer and Employee Normal Cost

The Normal Cost is the minimum required contribution which is calculated as a percentage of earnings. Employees will not have an additional cost of contribution because Classic Tier 1 and Tier 2 employee contributions are fixed by statute, and PEPRA employee contributions are not forecasted to increase. The Normal Cost for the District will increase by 0.24% collectively and will be budgeted in the upcoming FY2024-25 Budget.

Funding Source

In 2018, the District established a 115 CEPPT trust fund to help mitigate pension costs and payments. As of June 30, 2023 the market value of the 115 CEPPT fund was $4,921,960.54. Staff will evaluate the market condition of the 115 CEPPT fund and determine if the additional discretionary payment should be funded through general funds or a drawdown of the 115 CEEPT fund. When the opportunity is available, the District may also continue to contribute to its CEPPT 115 trust fund to mitigate future pension contributions and payments.

**RECOMMENDATION**
Staff recommends that the Board authorize staff to pay $1,506,826 to pay the unfunded liability in full.

**FISCAL IMPACT**
The minimum required UAL portion of the employer contribution for Fiscal Year 2024-25 is $53,981, and it can be made in monthly payments throughout the fiscal year. If the District pays the required UAL on or before July 31, 2024, then there is a potential saving of $1,747. The payment will be proposed in the District's Fiscal Year 2024-25 budget for board approval.

The Fiscal Year 2023-24 budget did not budget for additional discretionary payments because the pension plans were superfunded. In order to fully fund the District's pension plans and potentially to save $1,365,235, the Board must authorize an additional payment of an amount not to exceed $1,506,826 from the current fiscal year budget.

*Attachments:*
1. CalPERS First Tier Annual Valuation Report as of June 30, 2022 (pink)
2. CalPERS Second Tier Annual Valuation Report as of June 30, 2022 (purple)
3. CalPERS PEPRA Plan Annual Valuation Report as of June 30, 2022 (blue)

**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 2023**

**Miscellaneous First Tier Plan of the Midway City Sanitary District (CalPERS ID: 6882866561)**
**Annual Valuation Report as of June 30, 2022**

Dear Employer,

Attached to this letter is the June 30, 2022 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2024-25**. 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, 2022.

Section 2 can be found on the CalPERS website (www.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, 2022.

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 (board) 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 requirements as needed. This valuation is based on an investment return assumption of 6.8%, which was adopted by the board in November 2021. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from November 2021.

**Required Contributions**

The table below shows the minimum required employer contributions for FY 2024-25 along with estimates of the required contributions for FY 2025-26. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

| Fiscal Year | Employer Normal Cost Rate | Employer Amortization of Unfunded Accrued Liability |
|---|---|---|
| 2024-25 | 17.33% | $50,760 |
| *Projected Results* | | |
| *2025-26* | *17.3%* | *$75,000* |

The actual investment return for FY 2022-23 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. ***To the extent the actual investment return for FY 2022-23 differs from 6.8%, the actual contribution requirements for FY 2025-26 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 FY 2029-30.

**Changes from Previous Year's Valuations**

There are no significant changes in actuarial assumptions or policies in the 2022 actuarial valuation. There may be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in "Highlights and Executive Summary" and in Appendix A of the Section 2 report in "Actuarial Methods and Assumptions." The effects of any changes on the required contributions are included in "Reconciliation of Required Employer Contributions," also in the Section 2 report.

**Questions**

A CalPERS actuary is available to answer questions about this report. Other questions may be directed to the Customer Contact Center at (888)-CalPERS or (**888-225-7377**).

Sincerely,

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

RANDALL DZIUBEK, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS

# Actuarial Valuation
# as of June 30, 2022

# for the
# Miscellaneous First Tier Plan
# of the
# Midway City Sanitary District

**(CalPERS ID: 6882866561)**

## Required Contributions
## for Fiscal Year
## July 1, 2024 - June 30, 2025

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# Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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## Plan Specific Information for the Miscellaneous First Tier Plan of the Midway City Sanitary District

**(CalPERS ID: 6882866561)**
**(Rate Plan ID: 8583)**

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# Actuarial Certification

To the best of our knowledge, this report, comprised of Sections 1 and 2, is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the Miscellaneous First Tier Plan of the Midway City Sanitary District and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for Midway City Sanitary District, while Section 2 is based on the corresponding information for all agencies participating in the Miscellaneous Risk Pool to which the plan belongs.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the Miscellaneous Risk Pool has been performed in accordance with generally accepted actuarial principles, in accordance 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 rate plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2022 and employer contribution as of July 1, 2024 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.

KERRY J. WORGAN, MAAA, FSA, FCIA
Supervising Actuary, CalPERS

## Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Contributions**
- **Additional Discretionary Employer Contributions**
- **Funded Status – Funding Policy Basis**
- **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, 2022 actuarial valuation of the Miscellaneous First Tier Plan of the Midway City Sanitary District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2024-25.

# Purpose of Section 1

This Section 1 report for the Miscellaneous First Tier Plan of the Midway City Sanitary District of CalPERS was prepared by the Actuarial Office using data as of June 30, 2022. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2022;
- Determine the minimum required employer contributions for this rate plan for FY July 1, 2024 through June 30, 2025;
- Determine the required member contribution rate for FY July 1, 2024 through June 30, 2025 for employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2022 to the CalPERS Board of Administration (board) 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 (www.calpers.ca.gov).

The measurements shown in this actuarial valuation may not be applicable for other purposes. The agency should contact the plan 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; changes in plan provisions or applicable law; and differences between the required contributions determined by the valuation and the actual contributions made by the agency.

**Assessment and Disclosure of Risk**

This report includes the following risk disclosures consistent with the guidance of Actuarial Standard 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 5.8% and 7.8%.
- 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 2021.
- Plan maturity measures indicating how sensitive a plan may be to the risks noted above.

# Required Contributions

| Required Employer Contributions | Fiscal Year 2024-25 |
|---|---|
| **Employer Normal Cost Rate** | **17.33%** |
| ***Plus*** | |
| **Required Payment on Amortization Bases**[1] | **$50,760** |
| ***Paid either as*** | |
| **1) Monthly Payment** | **$4,230.00** |
| ***Or*** | |
| **2) Annual Prepayment Option*** | **$49,117** |

*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).*

** Only the UAL portion of the employer contribution can be prepaid* ***(which must be received in full no later than July 31)****.*

| | Fiscal Year 2023-24 | Fiscal Year 2024-25 |
|---|---|---|
| **Development of Normal Cost as a Percentage of Payroll** | | |
| Base Total Normal Cost for Formula | 24.25% | 24.32% |
| Surcharge for Class 1 Benefits[2] | | |
| a) FAC 1 | 0.82% | 0.82% |
| Phase out of Normal Cost Difference[3] | 0.00% | 0.00% |
| Plan's Total Normal Cost | 25.07% | 25.14% |
| Offset Due to Employee Contributions | 7.81% | 7.81% |
| Employer Normal Cost Rate | 17.26% | 17.33% |

[1] The required payment on amortization bases does not take into account any additional discretionary payment made after April 28, 2023.

[2] Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges.

[3] When a rate plan joins the pool, the difference in normal cost between the pool and the rate plan 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 FY 2024-25 is $50,760. CalPERS allows agencies 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. Agencies 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 FY 2024-25 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.

Agencies considering making an ADP should contact CalPERS for additional information.

**Minimum Required Employer Contribution for Fiscal Year 2024-25**

| Estimated Normal Cost | Minimum UAL Payment | ADP | Total UAL Contribution | Estimated Total Contribution |
|---|---|---|---|---|
| $170,866 | $50,760 | $0 | $50,760 | $221,626 |

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**. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY **2026-27**, as shown in the "Amortization Schedule and Alternatives" section of the report (see columns labeled "Current Amortization Schedule").

**Fiscal Year 2024-25 Employer Contribution Necessary to Avoid Negative Amortization**

| Estimated Normal Cost | Minimum UAL Payment | ADP[1] | Total UAL Contribution | Estimated Total Contribution |
|---|---|---|---|---|
| $170,866 | $50,760 | $41,868 | $92,628 | $263,494 |

**Alternative Fiscal Year 2024-25 Employer Contributions for Greater UAL Reduction**

| Funding Horizon | Estimated Normal Cost | Minimum UAL Payment | ADP[1] | Total UAL Contribution | Estimated Total Contribution |
|---|---|---|---|---|---|
| 20 years | $170,866 | $50,760 | $75,828 | $126,588 | $297,454 |
| 15 years | $170,866 | $50,760 | $96,916 | $147,676 | $318,542 |
| 10 years | $170,866 | $50,760 | $141,394 | $192,154 | $363,020 |
| 5 years | $170,866 | $50,760 | $279,685 | $330,445 | $501,311 |

[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 UAL as of June 30, 2024 as determined in the June 30, 2022 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.

# Funded Status – Funding Policy Basis

The table below provides information on the current funded status of the plan under the funding policy. The funded status for this purpose is based on the market value of assets relative to the funding target produced by the entry age actuarial cost method and actuarial assumptions adopted by the board. The actuarial cost method allocates the total expected cost of a member's projected benefit (**Present Value of Benefits**) to individual years of service (the **Normal Cost**). The value of the projected benefit that is not allocated to future service is referred to as the **Accrued Liability** and is the plan's funding target on the valuation date. The **Unfunded Accrued Liability** (UAL) equals the funding target minus the assets. The UAL is an absolute measure of funded status and can be viewed as employer debt. The **funded ratio** equals the assets divided by the funding target. The funded ratio is a relative measure of the funded status and allows for comparisons between plans of different sizes.

| | June 30, 2021 | June 30, 2022 |
|---|---|---|
| 1. Present Value of Benefits | $20,137,856 | $20,219,393 |
| 2. Entry Age Accrued Liability | 18,164,306 | 18,689,899 |
| 3. Market Value of Assets (MVA) | 19,836,711 | 17,460,452 |
| 4. Unfunded Accrued Liability (UAL) [(2) – (3)] | ($1,672,405) | $1,229,447 |
| 5. Funded Ratio [(3) / (2)] | 109.2% | 93.4% |

A funded ratio of 100% (UAL of $0) implies that the funding of the plan is on target and that future contributions equal to the normal cost of the active plan members will be sufficient to fully fund all retirement benefits if future experience matches the actuarial assumptions. A funded ratio of less than 100% (positive UAL) implies that in addition to normal costs, payments toward the UAL will be required. Plans with a funded ratio greater than 100% have a negative UAL (or surplus) but are required under current law to continue contributing the normal cost in most cases, preserving the surplus for future contingencies.

Calculations for the funding target reflect the expected long-term investment return of 6.8%. If it were known on the valuation date that future investment returns will average something greater/less than the expected return, calculated normal costs and accrued liabilities provided in this report would be less/greater than the results shown. Therefore, for example, if actual average future returns are less than the expected return, calculated normal costs and UAL contributions will not be sufficient to fully fund all retirement benefits. Under this scenario, required future normal cost contributions will need to increase from those provided in this report, and the plan will develop unfunded liabilities that will also add to required future contributions. For illustrative purposes, funded statuses based on a 1% lower and higher average future investment return (discount rate) are as follows:

| | 1% Lower Average Return | Current Assumption | 1% Higher Average Return |
|---|---|---|---|
| Discount Rate | 5.8% | 6.8% | 7.8% |
| 1. Entry Age Accrued Liability | $20,950,707 | $18,689,899 | $16,790,318 |
| 2. Market Value of Assets (MVA) | 17,460,452 | 17,460,452 | 17,460,452 |
| 3. Unfunded Accrued Liability (UAL) [(1) – (2)] | $3,490,255 | $1,229,447 | ($670,134) |
| 4. Funded Ratio [(2) / (1)] | 83.3% | 93.4% | 104.0% |

The "Risk Analysis" section of the report provides additional information regarding the sensitivity of valuation results to the expected investment return and other factors. Also provided in that section are measures of funded status that are appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities.

# 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. In particular, the investment return beginning with FY 2022-23 is assumed to be 6.80% per year, net of investment and administrative expenses. Future contribution requirements may differ significantly from those shown below. The actual long-term cost of the plan will depend on the actual benefits and expenses paid and the actual investment experience of the fund.

| | Required Contribution | Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23 and Beyond) | | | | |
|---|---|---|---|---|---|---|
| **Fiscal Year** | **2024-25** | **2025-26** | **2026-27** | **2027-28** | **2028-29** | **2029-30** |
| | Rate Plan 8583 Results | | | | | |
| **Normal Cost %** | 17.33% | 17.3% | 17.3% | 17.3% | 17.3% | 17.3% |
| **UAL Payment** | $50,760 | $75,000 | $98,000 | $122,000 | $146,000 | $146,000 |

For ongoing plans, investment gains and losses 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 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 investment loss, the relatively small amortization payments during the ramp up period could result in contributions that are less than interest on the UAL (i.e. negative amortization) while the contribution impact of the increase in the UAL is phased in.

**The required contribution for FY 2024-25 is less than interest on the UAL**, a situation referred to as **negative amortization**, as explained in the “Additional Discretionary Employer Contributions” section earlier in this report. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY 2026-27, as shown in the “Amortization Schedule and Alternatives” section of the report (see columns labelled “Current Amortization Schedule”).

For projected contributions under alternate investment return scenarios, please see the “Future Investment Return Scenarios” in the “Risk Analysis” section. Our online pension plan projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook can help plan and budget pension costs under various scenarios.

# Other Pooled Miscellaneous Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 8583. 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 total employer payroll within the Miscellaneous Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. In a refinement since the prior year's report, Classic members who are projected to terminate employment are assumed to be replaced by PEPRA members.

| | Fiscal Year 2023-24 | Fiscal Year 2024-25 |
|---|---|---|
| **Estimated Combined Employer Contributions for all Pooled Miscellaneous Rate Plans** | | |
| Projected Payroll for the Contribution Year | $2,078,616 | $2,280,727 |
| Estimated Employer Normal Cost | $298,080 | $277,246 |
| Required Payment on Amortization Bases | $0 | $53,981 |
| Estimated Total Employer Contributions | $298,080 | $331,227 |
| Estimated Total Employer Contribution Rate (illustrative only) | 14.34% | 14.52% |

# Cost

**Actuarial Determination of Plan Cost**

Contributions to fund the 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 2015-16, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2015-16, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There is 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 6.9% over the 20 years ending June 30, 2022, yet individual fiscal year returns have ranged from -23.6% to +21.3%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2021.

# 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 amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

In 2022, SB 1168 increased the standard retiree lump sum death benefit from $500 to $2,000 for any death occurring on or after July 1, 2023. For pooled plans this is a Class 3 benefit and there is no normal cost surcharge. The impact on the unfunded liability is included in the pool's (gain)/loss.

**Actuarial Methods and Assumptions**

There are no significant changes to the actuarial methods or assumptions for the June 30, 2022 actuarial valuation.

# Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2022 and statutory/regulatory changes and board actions through January 2023.

During the time period between the valuation date and the publication of this report, inflation has been significantly higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2023 valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists. At this time, we continue to believe the long-term inflation assumption of 2.3% is appropriate.

To the best of our knowledge, there have been no other subsequent events that could materially affect current or future certifications rendered in this report.

## 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 Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

## Breakdown of Entry Age Accrued Liability

| | |
|---|---|
| Active Members | $7,426,462 |
| Transferred Members | 0 |
| Separated Members | 375,067 |
| Members and Beneficiaries Receiving Payments | 10,888,370 |
| Total | $18,689,899 |

## 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 | $18,689,899 |
| 2. | Projected UAL Balance at 6/30/2022 | (1,765,924) |
| 3. | Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.) | 0 |
| 4. | Adjusted UAL Balance at 6/30/2022 for Asset Share | (1,765,924) |
| 5. | Pool's Accrued Liability[1] | 22,021,735,002 |
| 6. | Sum of Pool's Individual Plan UAL Balances at 6/30/2022[1] | 2,453,954,297 |
| 7. | Pool's 2021-22 Investment (Gain)/Loss[1] | 2,614,071,182 |
| 8. | Pool's 2021-22 Non-Investment (Gain)/Loss[1] | 309,490,972 |
| 9. | Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (4)] ÷ [(5) - (6)] × (7) | 2,732,705 |
| 10. | Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (5) × (8) | 262,666 |
| 11. | Plan's New (Gain)/Loss as of 6/30/2022: (9) + (10) | 2,995,371 |
| 12. | Increase in Pool's Accrued Liability due to Change in Assumptions[1] | 0 |
| 13. | Plan's Share of Pool's Change in Assumptions: (1) ÷ (5) × (12) | 0 |
| 14. | Increase in Pool's Accrued Liability due to Funding Risk Mitigation[1] | 0 |
| 15. | Plan's Share of Pool's Change due to Funding Risk Mitigation: (1) ÷ (5) × (14) | 0 |
| 16. | Offset due to Funding Risk Mitigation | 0 |
| 17. | Plan's Investment (Gain)/Loss: (9) – (16) | 2,732,705 |
| 18. | Partial Fresh Start Base: (2) + (17) | 966,781 |

[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

| | | |
|---|---|---|
| 19. | Plan's UAL: (2) + (3) + (11) + (13) + (15) | $1,229,447 |
| 20. | Plan's Share of Pool's MVA: (1) - (19) | $17,460,452 |

## Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-year lag between the valuation date and the start of the contribution year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2022.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: FY 2024-25.

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 2024-25 | Ramp Shape | Escala-tion Rate | Amort. Period | Balance 6/30/22 | Expected Payment 2022-23 | Balance 6/30/23 | Expected Payment 2023-24 | Balance 6/30/24 | Minimum Required Payment 2024-25 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-Investment (Gain)/Loss | 6/30/22 | No Ramp | | 0.00% | 20 | 262,666 | 0 | 280,527 | 0 | 299,603 | 26,941 |
| Partial Fresh Start | 6/30/22 | 20% | Up Only | 0.00% | 20 | 966,781 | (4,886) | 1,037,572 | 0 | 1,108,127 | 23,819 |
| **Total** | | | | | | **1,229,447** | **(4,886)** | **1,318,099** | **0** | **1,407,730** | **50,760** |

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.

The partial fresh start base established June 30, 2022 is the sum of the UAL balance from the June 30, 2021 valuation (projected to June 30, 2022) and the June 30, 2022 investment loss, as shown on the previous page.

# Amortization Schedule and Alternatives

The amortization schedule on the previous page(s) 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 contact the 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 an appropriate 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)

| | Current Amortization Schedule | | Alternate Schedules | | | |
|---|---|---|---|---|---|---|
| | | | 20 Year Amortization | | 15 Year Amortization | |
| Date | Balance | Payment | Balance | Payment | Balance | Payment |
| 6/30/2024 | 1,407,730 | 50,760 | 1,407,730 | 126,588 | 1,407,730 | 147,676 |
| 6/30/2025 | 1,450,998 | 74,579 | 1,372,634 | 126,588 | 1,350,841 | 147,676 |
| 6/30/2026 | 1,472,593 | 98,398 | 1,335,152 | 126,588 | 1,290,084 | 147,676 |
| 6/30/2027 | 1,471,041 | 122,216 | 1,295,121 | 126,588 | 1,225,195 | 147,676 |
| 6/30/2028 | 1,444,768 | 146,035 | 1,252,368 | 126,588 | 1,155,894 | 147,676 |
| 6/30/2029 | 1,392,094 | 146,036 | 1,206,708 | 126,588 | 1,081,880 | 147,676 |
| 6/30/2030 | 1,335,837 | 146,036 | 1,157,943 | 126,588 | 1,002,833 | 147,676 |
| 6/30/2031 | 1,275,754 | 146,035 | 1,105,862 | 126,588 | 918,411 | 147,676 |
| 6/30/2032 | 1,211,586 | 146,035 | 1,050,239 | 126,588 | 828,249 | 147,676 |
| 6/30/2033 | 1,143,055 | 146,035 | 990,834 | 126,588 | 731,956 | 147,676 |
| 6/30/2034 | 1,069,864 | 146,036 | 927,390 | 126,588 | 629,115 | 147,676 |
| 6/30/2035 | 991,696 | 146,036 | 859,631 | 126,588 | 519,280 | 147,676 |
| 6/30/2036 | 908,212 | 146,036 | 787,265 | 126,588 | 401,977 | 147,676 |
| 6/30/2037 | 819,051 | 146,036 | 709,978 | 126,588 | 276,697 | 147,676 |
| 6/30/2038 | 723,827 | 146,036 | 627,435 | 126,588 | 142,898 | 147,677 |
| 6/30/2039 | 622,127 | 146,035 | 539,279 | 126,588 | | |
| 6/30/2040 | 513,513 | 146,036 | 445,129 | 126,589 | | |
| 6/30/2041 | 397,512 | 146,035 | 344,576 | 126,589 | | |
| 6/30/2042 | 273,624 | 146,036 | 237,185 | 126,588 | | |
| 6/30/2043 | 141,311 | 146,037 | 122,492 | 126,588 | | |
| 6/30/2044 | | | | | | |
| 6/30/2045 | | | | | | |
| 6/30/2046 | | | | | | |
| 6/30/2047 | | | | | | |
| 6/30/2048 | | | | | | |
| 6/30/2049 | | | | | | |
| **Total** | | **2,682,524** | | **2,531,762** | | **2,215,141** |
| **Interest Paid** | | **1,274,794** | | **1,124,032** | | **807,411** |
| **Estimated Savings** | | | | **150,762** | | **467,383** |

## Employer Contribution History

The table below provides a recent history of the required and discretionary employer contributions for the plan. The required amounts are based on the actuarial valuation from two years prior without subsequent adjustments, if any. Additional discretionary payments before July 1, 2019 or after April 28, 2023 are not included.

| Fiscal Year | Employer Normal Cost | Unfunded Liability Payment ($) | Additional Discretionary Payments |
|---|---|---|---|
| 2016 - 17 | 12.657% | $73,313 | N/A |
| 2017 - 18 | 12.698% | 82,413 | N/A |
| 2018 - 19 | 13.439% | 84,662 | N/A |
| 2019 - 20 | 14.398% | 0 | 476,320 |
| 2020 - 21 | 15.445% | 9,679 | 150,921 |
| 2021 - 22 | 15.25% | 8,445 | 0 |
| 2022 - 23 | 15.25% | 15,212 | 0 |
| 2023 - 24 | 17.26% | 0 | |
| 2024 - 25 | 17.33% | 50,760 | |

## 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 |
|---|---|---|---|---|---|
| 06/30/2013 | $11,942,703 | $9,467,496 | $2,475,207 | 79.3% | $1,283,649 |
| 06/30/2014 | 12,874,457 | 10,618,477 | 2,255,980 | 82.5% | 1,232,502 |
| 06/30/2015 | 13,627,681 | 12,410,777 | 1,216,904 | 91.1% | 1,265,806 |
| 06/30/2016 | 13,783,162 | 11,604,084 | 2,179,078 | 84.2% | 1,253,529 |
| 06/30/2017 | 14,403,112 | 14,302,562 | 100,550 | 99.3% | 1,295,490 |
| 06/30/2018 | 15,554,722 | 15,079,381 | 475,341 | 96.9% | 1,328,106 |
| 06/30/2019 | 16,192,843 | 15,593,763 | 599,080 | 96.3% | 1,305,487 |
| 06/30/2020 | 16,954,297 | 16,366,215 | 588,082 | 96.5% | 1,272,790 |
| 06/30/2021 | 18,164,306 | 19,836,711 | (1,672,405) | 109.2% | 1,277,362 |
| 06/30/2022 | 18,689,899 | 17,460,452 | 1,229,447 | 93.4% | 1,119,204 |

## Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Funded Status – Termination Basis**

# Future Investment Return Scenarios

Analysis using the investment return scenarios from the Asset Liability Management process completed in 2021 was performed to determine the effects of various future investment returns on required employer contributions. The projections below reflect the impact of the CalPERS Funding Risk Mitigation policy. The projections also assume that all other actuarial assumptions will be realized and that no further changes in assumptions, contributions, benefits, or funding will occur.

The first table shows projected contribution requirements if the fund were to earn either 3.0% or 10.8% annually. These alternate investment returns were chosen because 90% of long-term average returns are expected to fall between them over the 20-year period ending June 30, 2042.

| Assumed Annual Return FY 2022-23 through 2041-42 | Projected Employer Contributions | | | | |
|---|---|---|---|---|---|
| | **2025-26** | **2026-27** | **2027-28** | **2028-29** | **2029-30** |
| **3.0% (5th percentile)** | | | | | |
| Normal Cost Rate | 17.3% | 17.3% | 17.3% | 17.3% | 17.3% |
| UAL Contribution | $91,000 | $147,000 | $221,000 | $312,000 | $397,000 |
| **10.8% (95th percentile)** | | | | | |
| Normal Cost Rate | 17.7% | 18.0% | 18.3% | 18.7% | 19.0% |
| UAL Contribution | $61,000 | $57,000 | $0 | $0 | $0 |

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 3.0% or greater than 10.8% over a 20-year period, the likelihood of a single investment return less than 3.0% or greater than 10.8% in any given year is much greater. The following analysis illustrates the effect of an extreme, single year investment return.

The portfolio has an expected volatility (or standard deviation) of 12.0% per year. Accordingly, in any given year there is a 16% probability that the annual return will be -5.2% or less and a 2.5% probability that the annual return will be -17.2% or less. These returns represent one and two standard deviations below the expected return of 6.8%.

The following table shows the effect of a one or two standard deviation investment loss in FY 2022-23 on the FY 2025-26 contribution requirements. Note that a single-year investment gain or loss decreases or increases the required UAL contribution amount incrementally for each of the next five years, not just one, due to the 5-year ramp in the amortization policy. However, the contribution requirements beyond the first year are also impacted by investment returns beyond the first year. Historically, significant downturns in the market are often followed by higher than average returns. Such investment gains would offset the impact of these single year negative returns in years beyond FY 2025-26.

| Assumed Annual Return for Fiscal Year 2022-23 | Required Employer Contributions | Projected Employer Contributions |
|---|---|---|
| | **2024-25** | **2025-26** |
| **(17.2)% (2 standard deviation loss)** | | |
| Normal Cost Rate | 17.33% | 17.3% |
| UAL Contribution | $50,760 | $177,000 |
| **(5.2)% (1 standard deviation loss)** | | |
| Normal Cost Rate | 17.33% | 17.3% |
| UAL Contribution | $50,760 | $126,000 |

- Without investment gains (returns higher than 6.8%) in FY 2023-24 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2022-23.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2025-26 as well as to model other investment return scenarios.

# 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 4.5% and 2.3%, 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, 2022 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 6.8% as well as alternate discount rates of 5.8% and 7.8%. The rates of 5.8% and 7.8% were selected since they illustrate the impact of a 1.0% increase or decrease to the 6.8% assumption.

**Sensitivity to the Real Rate of Return Assumption**

| As of June 30, 2022 | 1% Lower Real Return Rate | Current Assumptions | 1% Higher Real Return Rate |
|---|---|---|---|
| **Discount Rate** | **5.8%** | **6.8%** | **7.8%** |
| Price Inflation | 2.3% | 2.3% | 2.3% |
| **Real Rate of Return** | **3.5%** | **4.5%** | **5.5%** |
| a) Total Normal Cost | 31.76% | 25.14% | 20.11% |
| b) Accrued Liability | $20,950,707 | $18,689,899 | $16,790,318 |
| c) Market Value of Assets | $17,460,452 | $17,460,452 | $17,460,452 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $3,490,255 | $1,229,447 | ($670,134) |
| e) Funded Ratio | 83.3% | 93.4% | 104.0% |

**Sensitivity to the Price Inflation Assumption**

| As of June 30, 2022 | 1% Lower Price Inflation | Current Assumptions | 1% Higher Price Inflation |
|---|---|---|---|
| **Discount Rate** | **5.8%** | **6.8%** | **7.8%** |
| **Price Inflation** | **1.3%** | **2.3%** | **3.3%** |
| Real Rate of Return | 4.5% | 4.5% | 4.5% |
| a) Total Normal Cost | 26.40% | 25.14% | 22.93% |
| b) Accrued Liability | $19,283,996 | $18,689,899 | $17,291,960 |
| c) Market Value of Assets | $17,460,452 | $17,460,452 | $17,460,452 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $1,823,544 | $1,229,447 | ($168,492) |
| e) Funded Ratio | 90.5% | 93.4% | 101.0% |

# Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2022 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 2021. This type of analysis highlights the impact on the plan of a change in the mortality assumption.

| As of June 30, 2022 | 10% Lower Mortality Rates | Current Assumptions | 10% Higher Mortality Rates |
|---|---|---|---|
| a) Total Normal Cost | 25.55% | 25.14% | 24.76% |
| b) Accrued Liability | $19,136,098 | $18,689,899 | $18,281,336 |
| c) Market Value of Assets | $17,460,452 | $17,460,452 | $17,460,452 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $1,675,646 | $1,229,447 | $820,884 |
| e) Funded Ratio | 91.2% | 93.4% | 95.5% |

# 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, 2021 | June 30, 2022 |
|---|---|---|
| 1. Retired Accrued Liability | $10,441,642 | $10,888,370 |
| 2. Total Accrued Liability | 18,164,306 | 18,689,899 |
| 3. Ratio of Retiree AL to Total AL [(1) / (2)] | 0.57 | 0.58 |

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 declines. A mature plan will often have a ratio near or below one.

To calculate the support ratio for the rate plan, retirees and beneficiaries receiving a continuance are each counted as one, even though they may have only worked a portion of their careers as an active member of this rate plan. For this reason, the support ratio, while intuitive, may be less informative than the ratio of retiree liability to total accrued liability above.

For comparison, the support ratio for all CalPERS public agency plans as of June 30, 2021, was 0.78 and was calculated consistently with how it is for the individual rate plan. Note that to calculate the support ratio for all public agency plans, a retiree with service from more than one CalPERS agency is counted as a retiree more than once.

| Support Ratio | June 30, 2021 | June 30, 2022 |
|---|---|---|
| 1. Number of Actives | 15 | 12 |
| 2. Number of Retirees | 42 | 43 |
| 3. Support Ratio [(1) / (2)] | 0.36 | 0.28 |

# 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, 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**

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 AVR of 8 may experience twice the contribution volatility due to investment return volatility than a plan with AVR 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 a plan matures.

**Liability Volatility Ratio**

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 changes in liability. For example, a plan with LVR 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, since the AVR, described above, will tend to move closer to the LVR as the funded ratio approaches 100%.

| Contribution Volatility | June 30, 2021 | June 30, 2022 |
|---|---|---|
| 1. Market Value of Assets | $19,836,711 | $17,460,452 |
| 2. Payroll | 1,277,362 | 1,119,204 |
| 3. Asset Volatility Ratio (AVR) [(1) / (2)] | 15.5 | 15.6 |
| 4. Accrued Liability | $18,164,306 | $18,689,899 |
| 5. Liability Volatility Ratio (LVR) [(4) / (2)] | 14.2 | 16.7 |

# 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 | 0.55 | 0.49 | 11.0 | 11.1 |
| 06/30/2018 | 0.52 | 0.47 | 11.4 | 11.7 |
| 06/30/2019 | 0.57 | 0.43 | 11.9 | 12.4 |
| 06/30/2020 | 0.60 | 0.39 | 12.9 | 13.3 |
| 06/30/2021 | 0.57 | 0.36 | 15.5 | 14.2 |
| 06/30/2022 | 0.58 | 0.28 | 15.6 | 16.7 |

# Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2022. The accrued liability on a termination basis (termination liability) is calculated differently compared to the plan's ongoing funding liability. For the 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. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

A more conservative investment policy and asset allocation strategy was adopted by the 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 seven months after.

| | Discount Rate: 1.75% Price Inflation: 2.50% | | | Discount Rate: 4.50% Price Inflation: 2.75% | | |
|---|---|---|---|---|---|---|
| **Market Value of Assets (MVA)** | **Termination Liability[1,2]** | **Funded Ratio** | **Unfunded Termination Liability** | **Termination Liability[1,2]** | **Funded Ratio** | **Unfunded Termination Liability** |
| $17,460,452 | $35,942,044 | 48.6% | $18,481,592 | $23,892,971 | 73.1% | $6,432,519 |

[1] The termination liabilities calculated above include a 5% contingency load. The contingency load and other actuarial assumptions can be found in Appendix A of the Section 2 report.

[2] The discount rate used for termination valuations is a w eighted average of the 10-year and 30-year U.S. Treasury yields w here 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 w as 3.38% on June 30, 2022, the valuation date.

In order to terminate the plan, first contact our Pension Contract Services unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to provide a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. Before beginning this process, please consult with the plan actuary.

# Participant Data

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

| | June 30, 2021 | June 30, 2022 |
|---|---|---|
| **Active Members** | | |
| Counts | 15 | 12 |
| Average Attained Age | 52.5 | 53.4 |
| Average Entry Age to Rate Plan | 35.0 | 33.0 |
| Average Years of Credited Service | 17.3 | 19.1 |
| Average Annual Covered Pay | $85,157 | $93,267 |
| Annual Covered Payroll | $1,277,362 | $1,119,204 |
| Present Value of Future Payroll | $8,614,318 | $6,694,654 |
| **Transferred Members** | 0 | 0 |
| **Separated Members** | 9 | 9 |
| **Retired Members and Beneficiaries*** | | |
| Counts | 42 | 43 |
| Average Annual Benefits | $21,810 | $22,683 |
| Total Annual Benefits | $916,004 | $975,357 |

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:

- One Year Final Compensation (FAC 1)

# Plan's Major Benefit Options

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

| | **Benefit Group** | | | |
|---|---|---|---|---|
| **Member Category** | Misc | Misc | Misc | |
| **Demographics** | | | | |
| Actives | No | Yes | No | |
| Transfers/Separated | Yes | Yes | No | |
| Receiving | Yes | Yes | Yes | |
| **Benefit Provision** | | | | |
| Benefit Formula | 2% @ 55 | 3% @ 60 | | |
| Social Security Coverage | No | No | | |
| Full/Modified | Full | Full | | |
| Employee Contribution Rate | | 8.00% | | |
| Final Average Compensation Period | One Year | One Year | | |
| Sick Leave Credit | Yes | Yes | | |
| Non-Industrial Disability | Standard | Standard | | |
| Industrial Disability | No | No | | |
| Pre-Retirement Death Benefits | | | | |
| Optional Settlement 2 | Yes | Yes | | |
| 1959 Survivor Benefit Level | No | No | | |
| Special | No | No | | |
| Alternate (firefighters) | No | No | | |
| Post-Retirement Death Benefits | | | | |
| Lump Sum | $2000 | $2000 | $2000 | |
| Survivor Allowance (PRSA) | No | No | No | |
| COLA | 2% | 2% | 2% | |

# Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

# Risk Pool Actuarial Valuation Information

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

**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 2023**

**Miscellaneous Second Tier Plan of the Midway City Sanitary District (CalPERS ID: 6882866561)**
**Annual Valuation Report as of June 30, 2022**

Dear Employer,

Attached to this letter is the June 30, 2022 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2024-25**. 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, 2022.

Section 2 can be found on the CalPERS website (www.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, 2022.

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 (board) 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 requirements as needed. This valuation is based on an investment return assumption of 6.8%, which was adopted by the board in November 2021. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from November 2021.

**Required Contributions**

The table below shows the minimum required employer contributions for FY 2024-25 along with estimates of the required contributions for FY 2025-26. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

| Fiscal Year | Employer Normal Cost Rate | Employer Amortization of Unfunded Accrued Liability |
|---|---|---|
| 2024-25 | 12.52% | $1,170 |
| *Projected Results* | | |
| *2025-26* | *12.5%* | *$1,700* |

The actual investment return for FY 2022-23 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. ***To the extent the actual investment return for FY 2022-23 differs from 6.8%, the actual contribution requirements for FY 2025-26 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 FY 2029-30.

**Changes from Previous Year's Valuations**

There are no significant changes in actuarial assumptions or policies in the 2022 actuarial valuation. There may be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in "Highlights and Executive Summary" and in Appendix A of the Section 2 report in "Actuarial Methods and Assumptions." The effects of any changes on the required contributions are included in "Reconciliation of Required Employer Contributions," also in the Section 2 report.

**Questions**

A CalPERS actuary is available to answer questions about this report. Other questions may be directed to the Customer Contact Center at (888)-CalPERS or (**888-225-7377**).

Sincerely,

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

RANDALL DZIUBEK, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS

# Actuarial Valuation
# as of June 30, 2022

# for the
# Miscellaneous Second Tier Plan
# of the
# Midway City Sanitary District
**(CalPERS ID: 6882866561)**

## Required Contributions
## for Fiscal Year
## July 1, 2024 - June 30, 2025

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# Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

## Plan Specific Information for the Miscellaneous Second Tier Plan of the Midway City Sanitary District

**(CalPERS ID: 6882866561)**
**(Rate Plan ID: 8584)**

# Table of Contents

# Actuarial Certification

To the best of our knowledge, this report, comprised of Sections 1 and 2, is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the Miscellaneous Second Tier Plan of the Midway City Sanitary District and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for Midway City Sanitary District, while Section 2 is based on the corresponding information for all agencies participating in the Miscellaneous Risk Pool to which the plan belongs.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the Miscellaneous Risk Pool has been performed in accordance with generally accepted actuarial principles, in accordance 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 rate plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2022 and employer contribution as of July 1, 2024 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.

KERRY J. WORGAN, MAAA, FSA, FCIA
Supervising Actuary, CalPERS

## Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Contributions**
- **Additional Discretionary Employer Contributions**
- **Funded Status – Funding Policy Basis**
- **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, 2022 actuarial valuation of the Miscellaneous Second Tier Plan of the Midway City Sanitary District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2024-25.

# Purpose of Section 1

This Section 1 report for the Miscellaneous Second Tier Plan of the Midway City Sanitary District of CalPERS was prepared by the Actuarial Office using data as of June 30, 2022. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2022;
- Determine the minimum required employer contributions for this rate plan for FY July 1, 2024 through June 30, 2025;
- Determine the required member contribution rate for FY July 1, 2024 through June 30, 2025 for employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2022 to the CalPERS Board of Administration (board) 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 (www.calpers.ca.gov).

The measurements shown in this actuarial valuation may not be applicable for other purposes. The agency should contact the plan 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; changes in plan provisions or applicable law; and differences between the required contributions determined by the valuation and the actual contributions made by the agency.

**Assessment and Disclosure of Risk**

This report includes the following risk disclosures consistent with the guidance of Actuarial Standard 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 5.8% and 7.8%.
- 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 2021.
- Plan maturity measures indicating how sensitive a plan may be to the risks noted above.

# Required Contributions

| Required Employer Contributions | Fiscal Year 2024-25 |
|---|---|
| **Employer Normal Cost Rate** | **12.52%** |
| ***Plus*** | |
| **Required Payment on Amortization Bases**[1] | **$1,170** |
| ***Paid either as*** | |
| **1) Monthly Payment** | **$97.50** |
| ***Or*** | |
| **2) Annual Prepayment Option*** | **$1,132** |

*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).*

** Only the UAL portion of the employer contribution can be prepaid* ***(which must be received in full no later than July 31)****.*

| Development of Normal Cost as a Percentage of Payroll | Fiscal Year 2023-24 | Fiscal Year 2024-25 |
|---|---|---|
| Base Total Normal Cost for Formula | 18.76% | 18.81% |
| Surcharge for Class 1 Benefits[2] | | |
| a) FAC 1 | 0.63% | 0.64% |
| Phase out of Normal Cost Difference[3] | 0.00% | 0.00% |
| Plan's Total Normal Cost | 19.39% | 19.45% |
| Offset Due to Employee Contributions | 6.92% | 6.93% |
| Employer Normal Cost Rate | 12.47% | 12.52% |

[1] The required payment on amortization bases does not take into account any additional discretionary payment made after April 28, 2023.

[2] Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges.

[3] When a rate plan joins the pool, the difference in normal cost between the pool and the rate plan 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 FY 2024-25 is $1,170. CalPERS allows agencies 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. Agencies 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 FY 2024-25 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.

Agencies considering making an ADP should contact CalPERS for additional information.

**Minimum Required Employer Contribution for Fiscal Year 2024-25**

| Estimated Normal Cost | Minimum UAL Payment | ADP | Total UAL Contribution | Estimated Total Contribution |
|---|---|---|---|---|
| $12,066 | $1,170 | $0 | $1,170 | $13,236 |

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**. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY **2026-27**, as shown in the "Amortization Schedule and Alternatives" section of the report (see columns labeled "Current Amortization Schedule").

**Fiscal Year 2024-25 Employer Contribution Necessary to Avoid Negative Amortization**

| Estimated Normal Cost | Minimum UAL Payment | ADP[1] | Total UAL Contribution | Estimated Total Contribution |
|---|---|---|---|---|
| $12,066 | $1,170 | $988 | $2,158 | $14,224 |

**Alternative Fiscal Year 2024-25 Employer Contributions for Greater UAL Reduction**

| Funding Horizon | Estimated Normal Cost | Minimum UAL Payment | ADP[1] | Total UAL Contribution | Estimated Total Contribution |
|---|---|---|---|---|---|
| 20 years | $12,066 | $1,170 | $1,779 | $2,949 | $15,015 |
| 15 years | $12,066 | $1,170 | $2,271 | $3,441 | $15,507 |
| 10 years | $12,066 | $1,170 | $3,307 | $4,477 | $16,543 |
| 5 years | $12,066 | $1,170 | $6,529 | $7,699 | $19,765 |

[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 UAL as of June 30, 2024 as determined in the June 30, 2022 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.

# Funded Status – Funding Policy Basis

The table below provides information on the current funded status of the plan under the funding policy. The funded status for this purpose is based on the market value of assets relative to the funding target produced by the entry age actuarial cost method and actuarial assumptions adopted by the board. The actuarial cost method allocates the total expected cost of a member's projected benefit (**Present Value of Benefits**) to individual years of service (the **Normal Cost**). The value of the projected benefit that is not allocated to future service is referred to as the **Accrued Liability** and is the plan's funding target on the valuation date. The **Unfunded Accrued Liability** (UAL) equals the funding target minus the assets. The UAL is an absolute measure of funded status and can be viewed as employer debt. The **funded ratio** equals the assets divided by the funding target. The funded ratio is a relative measure of the funded status and allows for comparisons between plans of different sizes.

| | June 30, 2021 | June 30, 2022 |
|---|---|---|
| 1. Present Value of Benefits | $587,613 | $595,383 |
| 2. Entry Age Accrued Liability | 413,940 | 423,909 |
| 3. Market Value of Assets (MVA) | 453,486 | 396,465 |
| 4. Unfunded Accrued Liability (UAL) [(2) – (3)] | ($39,546) | $27,444 |
| 5. Funded Ratio [(3) / (2)] | 109.6% | 93.5% |

A funded ratio of 100% (UAL of $0) implies that the funding of the plan is on target and that future contributions equal to the normal cost of the active plan members will be sufficient to fully fund all retirement benefits if future experience matches the actuarial assumptions. A funded ratio of less than 100% (positive UAL) implies that in addition to normal costs, payments toward the UAL will be required. Plans with a funded ratio greater than 100% have a negative UAL (or surplus) but are required under current law to continue contributing the normal cost in most cases, preserving the surplus for future contingencies.

Calculations for the funding target reflect the expected long-term investment return of 6.8%. If it were known on the valuation date that future investment returns will average something greater/less than the expected return, calculated normal costs and accrued liabilities provided in this report would be less/greater than the results shown. Therefore, for example, if actual average future returns are less than the expected return, calculated normal costs and UAL contributions will not be sufficient to fully fund all retirement benefits. Under this scenario, required future normal cost contributions will need to increase from those provided in this report, and the plan will develop unfunded liabilities that will also add to required future contributions. For illustrative purposes, funded statuses based on a 1% lower and higher average future investment return (discount rate) are as follows:

| | 1% Lower Average Return | Current Assumption | 1% Higher Average Return |
|---|---|---|---|
| Discount Rate | 5.8% | 6.8% | 7.8% |
| 1. Entry Age Accrued Liability | $491,085 | $423,909 | $368,301 |
| 2. Market Value of Assets (MVA) | 396,465 | 396,465 | 396,465 |
| 3. Unfunded Accrued Liability (UAL) [(1) – (2)] | $94,620 | $27,444 | ($28,164) |
| 4. Funded Ratio [(2) / (1)] | 80.7% | 93.5% | 107.6% |

The "Risk Analysis" section of the report provides additional information regarding the sensitivity of valuation results to the expected investment return and other factors. Also provided in that section are measures of funded status that are appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities.

# 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. In particular, the investment return beginning with FY 2022-23 is assumed to be 6.80% per year, net of investment and administrative expenses. Future contribution requirements may differ significantly from those shown below. The actual long-term cost of the plan will depend on the actual benefits and expenses paid and the actual investment experience of the fund.

| | **Required Contribution** | **Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23 and Beyond)** | | | | |
|---|---|---|---|---|---|---|
| **Fiscal Year** | **2024-25** | **2025-26** | **2026-27** | **2027-28** | **2028-29** | **2029-30** |
| | Rate Plan 8584 Results | | | | | |
| **Normal Cost %** | 12.52% | 12.5% | 12.5% | 12.5% | 12.5% | 12.5% |
| **UAL Payment** | $1,170 | $1,700 | $2,300 | $2,800 | $3,400 | $3,400 |

For ongoing plans, investment gains and losses 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 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 investment loss, the relatively small amortization payments during the ramp up period could result in contributions that are less than interest on the UAL (i.e. negative amortization) while the contribution impact of the increase in the UAL is phased in.

**The required contribution for FY 2024-25 is less than interest on the UAL**, a situation referred to as **negative amortization**, as explained in the “Additional Discretionary Employer Contributions” section earlier in this report. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY 2026-27, as shown in the “Amortization Schedule and Alternatives” section of the report (see columns labelled “Current Amortization Schedule”).

For projected contributions under alternate investment return scenarios, please see the “Future Investment Return Scenarios” in the “Risk Analysis” section. Our online pension plan projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook can help plan and budget pension costs under various scenarios.

# Other Pooled Miscellaneous Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 8584. 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 total employer payroll within the Miscellaneous Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. In a refinement since the prior year's report, Classic members who are projected to terminate employment are assumed to be replaced by PEPRA members.

| | Fiscal Year 2023-24 | Fiscal Year 2024-25 |
|---|---|---|
| **Estimated Combined Employer Contributions for all Pooled Miscellaneous Rate Plans** | | |
| Projected Payroll for the Contribution Year | $2,078,616 | $2,280,727 |
| Estimated Employer Normal Cost | $298,080 | $277,246 |
| Required Payment on Amortization Bases | $0 | $53,981 |
| Estimated Total Employer Contributions | $298,080 | $331,227 |
| Estimated Total Employer Contribution Rate (illustrative only) | 14.34% | 14.52% |

# Cost

**Actuarial Determination of Plan Cost**

Contributions to fund the 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 2015-16, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2015-16, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There is 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 6.9% over the 20 years ending June 30, 2022, yet individual fiscal year returns have ranged from -23.6% to +21.3%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2021.

# 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 amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

In 2022, SB 1168 increased the standard retiree lump sum death benefit from $500 to $2,000 for any death occurring on or after July 1, 2023. For pooled plans this is a Class 3 benefit and there is no normal cost surcharge. The impact on the unfunded liability is included in the pool's (gain)/loss.

**Actuarial Methods and Assumptions**

There are no significant changes to the actuarial methods or assumptions for the June 30, 2022 actuarial valuation.

# Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2022 and statutory/regulatory changes and board actions through January 2023.

During the time period between the valuation date and the publication of this report, inflation has been significantly higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2023 valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists. At this time, we continue to believe the long-term inflation assumption of 2.3% is appropriate.

To the best of our knowledge, there have been no other subsequent events that could materially affect current or future certifications rendered in this report.

## 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 Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

# Breakdown of Entry Age Accrued Liability

| | |
|---|---|
| Active Members | $423,909 |
| Transferred Members | 0 |
| Separated Members | 0 |
| Members and Beneficiaries Receiving Payments | 0 |
| Total | $423,909 |

# 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 | $423,909 |
| 2. | Projected UAL Balance at 6/30/2022 | (40,563) |
| 3. | Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.) | 0 |
| 4. | Adjusted UAL Balance at 6/30/2022 for Asset Share | (40,563) |
| 5. | Pool's Accrued Liability[1] | 22,021,735,002 |
| 6. | Sum of Pool's Individual Plan UAL Balances at 6/30/2022[1] | 2,453,954,297 |
| 7. | Pool's 2021-22 Investment (Gain)/Loss[1] | 2,614,071,182 |
| 8. | Pool's 2021-22 Non-Investment (Gain)/Loss[1] | 309,490,972 |
| 9. | Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (4)] ÷ [(5) - (6)] × (7) | 62,049 |
| 10. | Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (5) × (8) | 5,958 |
| 11. | Plan's New (Gain)/Loss as of 6/30/2022: (9) + (10) | 68,007 |
| 12. | Increase in Pool's Accrued Liability due to Change in Assumptions[1] | 0 |
| 13. | Plan's Share of Pool's Change in Assumptions: (1) ÷ (5) × (12) | 0 |
| 14. | Increase in Pool's Accrued Liability due to Funding Risk Mitigation[1] | 0 |
| 15. | Plan's Share of Pool's Change due to Funding Risk Mitigation: (1) ÷ (5) × (14) | 0 |
| 16. | Offset due to Funding Risk Mitigation | 0 |
| 17. | Plan's Investment (Gain)/Loss: (9) – (16) | 62,049 |
| 18. | Partial Fresh Start Base: (2) + (17) | 21,486 |

[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

| | | |
|---|---|---|
| 19. | Plan's UAL: (2) + (3) + (11) + (13) + (15) | $27,444 |
| 20. | Plan's Share of Pool's MVA: (1) - (19) | $396,465 |

# Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-year lag between the valuation date and the start of the contribution year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2022.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: FY 2024-25.

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 2024-25 | Ramp Shape | Escala-tion Rate | Amort. Period | Balance 6/30/22 | Expected Payment 2022-23 | Balance 6/30/23 | Expected Payment 2023-24 | Balance 6/30/24 | Minimum Required Payment 2024-25 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-Investment (Gain)/Loss | 6/30/22 | No Ramp | | 0.00% | 20 | 5,958 | 0 | 6,363 | 0 | 6,796 | 611 |
| Partial Fresh Start | 6/30/22 | 20% | Up Only | 0.00% | 20 | 21,486 | (1,356) | 24,348 | 0 | 26,004 | 559 |
| **Total** | | | | | | **27,444** | **(1,356)** | **30,711** | **0** | **32,800** | **1,170** |

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.

The partial fresh start base established June 30, 2022 is the sum of the UAL balance from the June 30, 2021 valuation (projected to June 30, 2022) and the June 30, 2022 investment loss, as shown on the previous page.

# Amortization Schedule and Alternatives

The amortization schedule on the previous page(s) 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 contact the 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 an appropriate 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)

| | Current Amortization Schedule | | Alternate Schedules | | | |
|---|---|---|---|---|---|---|
| | | | 20 Year Amortization | | 15 Year Amortization | |
| Date | Balance | Payment | Balance | Payment | Balance | Payment |
| 6/30/2024 | 32,800 | 1,170 | 32,800 | 2,949 | 32,800 | 3,441 |
| 6/30/2025 | 33,822 | 1,729 | 31,983 | 2,950 | 31,474 | 3,441 |
| 6/30/2026 | 34,335 | 2,288 | 31,109 | 2,949 | 30,058 | 3,441 |
| 6/30/2027 | 34,305 | 2,847 | 30,177 | 2,950 | 28,546 | 3,441 |
| 6/30/2028 | 33,696 | 3,406 | 29,180 | 2,949 | 26,931 | 3,441 |
| 6/30/2029 | 32,468 | 3,406 | 28,117 | 2,950 | 25,206 | 3,441 |
| 6/30/2030 | 31,156 | 3,406 | 26,980 | 2,949 | 23,364 | 3,441 |
| 6/30/2031 | 29,755 | 3,406 | 25,767 | 2,950 | 21,397 | 3,441 |
| 6/30/2032 | 28,259 | 3,406 | 24,471 | 2,950 | 19,296 | 3,440 |
| 6/30/2033 | 26,661 | 3,407 | 23,086 | 2,949 | 17,053 | 3,441 |
| 6/30/2034 | 24,953 | 3,407 | 21,608 | 2,949 | 14,657 | 3,441 |
| 6/30/2035 | 23,129 | 3,406 | 20,030 | 2,950 | 12,098 | 3,441 |
| 6/30/2036 | 21,182 | 3,406 | 18,343 | 2,949 | 9,365 | 3,440 |
| 6/30/2037 | 19,102 | 3,405 | 16,543 | 2,950 | 6,447 | 3,441 |
| 6/30/2038 | 16,882 | 3,407 | 14,619 | 2,949 | 3,329 | 3,440 |
| 6/30/2039 | 14,509 | 3,405 | 12,565 | 2,949 | | |
| 6/30/2040 | 11,977 | 3,406 | 10,372 | 2,950 | | |
| 6/30/2041 | 9,272 | 3,407 | 8,029 | 2,950 | | |
| 6/30/2042 | 6,382 | 3,407 | 5,526 | 2,949 | | |
| 6/30/2043 | 3,295 | 3,405 | 2,854 | 2,949 | | |
| 6/30/2044 | | | | | | |
| 6/30/2045 | | | | | | |
| 6/30/2046 | | | | | | |
| 6/30/2047 | | | | | | |
| 6/30/2048 | | | | | | |
| 6/30/2049 | | | | | | |
| **Total** | | **62,532** | | **58,989** | | **51,612** |
| **Interest Paid** | | **29,732** | | **26,189** | | **18,812** |
| **Estimated Savings** | | | | **3,543** | | **10,920** |

# Employer Contribution History

The table below provides a recent history of the required and discretionary employer contributions for the plan. The required amounts are based on the actuarial valuation from two years prior without subsequent adjustments, if any. Additional discretionary payments before July 1, 2019 or after April 28, 2023 are not included.

| Fiscal Year | Employer Normal Cost | Unfunded Liability Payment ($) | Additional Discretionary Payments |
|---|---|---|---|
| 2016 - 17 | 8.880% | $194 | N/A |
| 2017 - 18 | 8.921% | 298 | N/A |
| 2018 - 19 | 9.409% | 1,709 | N/A |
| 2019 - 20 | 10.221% | 1,771 | 11,584 |
| 2020 - 21 | 11.031% | 2,739 | 3,307 |
| 2021 - 22 | 10.88% | 822 | 0 |
| 2022 - 23 | 10.87% | 307 | 0 |
| 2023 - 24 | 12.47% | 0 | |
| 2024 - 25 | 12.52% | 1,170 | |

# 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 |
|---|---|---|---|---|---|
| 06/30/2013 | $51,274 | $41,669 | $9,605 | 81.3% | $137,093 |
| 06/30/2014 | 84,154 | 80,250 | 3,904 | 95.4% | 144,962 |
| 06/30/2015 | 124,708 | 118,784 | 5,924 | 95.2% | 157,933 |
| 06/30/2016 | 167,169 | 148,285 | 18,884 | 88.7% | 165,629 |
| 06/30/2017 | 223,385 | 206,236 | 17,149 | 92.3% | 174,615 |
| 06/30/2018 | 288,653 | 260,347 | 28,306 | 90.2% | 182,040 |
| 06/30/2019 | 354,745 | 341,630 | 13,115 | 96.3% | 193,480 |
| 06/30/2020 | 341,405 | 329,304 | 12,101 | 96.5% | 106,784 |
| 06/30/2021 | 413,940 | 453,486 | (39,546) | 109.6% | 105,721 |
| 06/30/2022 | 423,909 | 396,465 | 27,444 | 93.5% | 109,190 |

## Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Funded Status – Termination Basis**

# Future Investment Return Scenarios

Analysis using the investment return scenarios from the Asset Liability Management process completed in 2021 was performed to determine the effects of various future investment returns on required employer contributions. The projections below reflect the impact of the CalPERS Funding Risk Mitigation policy. The projections also assume that all other actuarial assumptions will be realized and that no further changes in assumptions, contributions, benefits, or funding will occur.

The first table shows projected contribution requirements if the fund were to earn either 3.0% or 10.8% annually. These alternate investment returns were chosen because 90% of long-term average returns are expected to fall between them over the 20-year period ending June 30, 2042.

| Assumed Annual Return FY 2022-23 through 2041-42 | Projected Employer Contributions | | | | |
|---|---|---|---|---|---|
| | **2025-26** | **2026-27** | **2027-28** | **2028-29** | **2029-30** |
| **3.0% (5th percentile)** | | | | | |
| Normal Cost Rate | 12.5% | 12.5% | 12.5% | 12.5% | 12.5% |
| UAL Contribution | $2,100 | $3,400 | $5,100 | $7,200 | $9,100 |
| **10.8% (95th percentile)** | | | | | |
| Normal Cost Rate | 12.8% | 13.0% | 13.3% | 13.5% | 13.8% |
| UAL Contribution | $1,400 | $1,300 | $0 | $0 | $0 |

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 3.0% or greater than 10.8% over a 20-year period, the likelihood of a single investment return less than 3.0% or greater than 10.8% in any given year is much greater. The following analysis illustrates the effect of an extreme, single year investment return.

The portfolio has an expected volatility (or standard deviation) of 12.0% per year. Accordingly, in any given year there is a 16% probability that the annual return will be -5.2% or less and a 2.5% probability that the annual return will be -17.2% or less. These returns represent one and two standard deviations below the expected return of 6.8%.

The following table shows the effect of a one or two standard deviation investment loss in FY 2022-23 on the FY 2025-26 contribution requirements. Note that a single-year investment gain or loss decreases or increases the required UAL contribution amount incrementally for each of the next five years, not just one, due to the 5-year ramp in the amortization policy. However, the contribution requirements beyond the first year are also impacted by investment returns beyond the first year. Historically, significant downturns in the market are often followed by higher than average returns. Such investment gains would offset the impact of these single year negative returns in years beyond FY 2025-26.

| Assumed Annual Return for Fiscal Year 2022-23 | Required Employer Contributions | Projected Employer Contributions |
|---|---|---|
| | **2024-25** | **2025-26** |
| **(17.2)% (2 standard deviation loss)** | | |
| Normal Cost Rate | 12.52% | 12.5% |
| UAL Contribution | $1,170 | $4,100 |
| **(5.2)% (1 standard deviation loss)** | | |
| Normal Cost Rate | 12.52% | 12.5% |
| UAL Contribution | $1,170 | $2,900 |

- Without investment gains (returns higher than 6.8%) in FY 2023-24 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2022-23.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2025-26 as well as to model other investment return scenarios.

# 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 4.5% and 2.3%, 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, 2022 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 6.8% as well as alternate discount rates of 5.8% and 7.8%. The rates of 5.8% and 7.8% were selected since they illustrate the impact of a 1.0% increase or decrease to the 6.8% assumption.

**Sensitivity to the Real Rate of Return Assumption**

| As of June 30, 2022 | 1% Lower Real Return Rate | Current Assumptions | 1% Higher Real Return Rate |
|---|---|---|---|
| **Discount Rate** | **5.8%** | **6.8%** | **7.8%** |
| Price Inflation | 2.3% | 2.3% | 2.3% |
| **Real Rate of Return** | **3.5%** | **4.5%** | **5.5%** |
| a) Total Normal Cost | 24.48% | 19.45% | 15.62% |
| b) Accrued Liability | $491,085 | $423,909 | $368,301 |
| c) Market Value of Assets | $396,465 | $396,465 | $396,465 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $94,620 | $27,444 | ($28,164) |
| e) Funded Ratio | 80.7% | 93.5% | 107.6% |

**Sensitivity to the Price Inflation Assumption**

| As of June 30, 2022 | 1% Lower Price Inflation | Current Assumptions | 1% Higher Price Inflation |
|---|---|---|---|
| **Discount Rate** | **5.8%** | **6.8%** | **7.8%** |
| **Price Inflation** | **1.3%** | **2.3%** | **3.3%** |
| Real Rate of Return | 4.5% | 4.5% | 4.5% |
| a) Total Normal Cost | 20.42% | 19.45% | 17.74% |
| b) Accrued Liability | $438,302 | $423,909 | $390,766 |
| c) Market Value of Assets | $396,465 | $396,465 | $396,465 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $41,837 | $27,444 | ($5,699) |
| e) Funded Ratio | 90.5% | 93.5% | 101.5% |

# Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2022 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 2021. This type of analysis highlights the impact on the plan of a change in the mortality assumption.

| As of June 30, 2022 | 10% Lower Mortality Rates | Current Assumptions | 10% Higher Mortality Rates |
|---|---|---|---|
| a) Total Normal Cost | 19.78% | 19.45% | 19.14% |
| b) Accrued Liability | $433,082 | $423,909 | $415,462 |
| c) Market Value of Assets | $396,465 | $396,465 | $396,465 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $36,617 | $27,444 | $18,997 |
| e) Funded Ratio | 91.5% | 93.5% | 95.4% |

# 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, 2021 | June 30, 2022 |
|---|---|---|
| 1. Retired Accrued Liability | $0 | $0 |
| 2. Total Accrued Liability | 413,940 | 423,909 |
| 3. Ratio of Retiree AL to Total AL [(1) / (2)] | 0.00 | 0.00 |

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 declines. A mature plan will often have a ratio near or below one.

To calculate the support ratio for the rate plan, retirees and beneficiaries receiving a continuance are each counted as one, even though they may have only worked a portion of their careers as an active member of this rate plan. For this reason, the support ratio, while intuitive, may be less informative than the ratio of retiree liability to total accrued liability above.

For comparison, the support ratio for all CalPERS public agency plans as of June 30, 2021, was 0.78 and was calculated consistently with how it is for the individual rate plan. Note that to calculate the support ratio for all public agency plans, a retiree with service from more than one CalPERS agency is counted as a retiree more than once.

| Support Ratio | June 30, 2021 | June 30, 2022 |
|---|---|---|
| 1. Number of Actives | 2 | 2 |
| 2. Number of Retirees | 0 | 0 |
| 3. Support Ratio [(1) / (2)] | N/A | N/A |

# 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, 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**

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 AVR of 8 may experience twice the contribution volatility due to investment return volatility than a plan with AVR 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 a plan matures.

**Liability Volatility Ratio**

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 changes in liability. For example, a plan with LVR 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, since the AVR, described above, will tend to move closer to the LVR as the funded ratio approaches 100%.

| Contribution Volatility | June 30, 2021 | June 30, 2022 |
|---|---|---|
| 1. Market Value of Assets | $453,486 | $396,465 |
| 2. Payroll | 105,721 | 109,190 |
| 3. Asset Volatility Ratio (AVR) [(1) / (2)] | 4.3 | 3.6 |
| 4. Accrued Liability | $413,940 | $423,909 |
| 5. Liability Volatility Ratio (LVR) [(4) / (2)] | 3.9 | 3.9 |

# 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 | 0.00 | N/A | 1.2 | 1.3 |
| 06/30/2018 | 0.00 | N/A | 1.4 | 1.6 |
| 06/30/2019 | 0.00 | N/A | 1.8 | 1.8 |
| 06/30/2020 | 0.00 | N/A | 3.1 | 3.2 |
| 06/30/2021 | 0.00 | N/A | 4.3 | 3.9 |
| 06/30/2022 | 0.00 | N/A | 3.6 | 3.9 |

# Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2022. The accrued liability on a termination basis (termination liability) is calculated differently compared to the plan's ongoing funding liability. For the 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. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

A more conservative investment policy and asset allocation strategy was adopted by the 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 seven months after.

| | Discount Rate: 1.75%<br>Price Inflation: 2.50% | | | Discount Rate: 4.50%<br>Price Inflation: 2.75% | | |
|---|---|---|---|---|---|---|
| **Market Value of Assets (MVA)** | **Termination Liability[1,2]** | **Funded Ratio** | **Unfunded Termination Liability** | **Termination Liability[1,2]** | **Funded Ratio** | **Unfunded Termination Liability** |
| $396,465 | $948,125 | 41.8% | $551,660 | $596,219 | 66.5% | $199,754 |

[1] The termination liabilities calculated above include a 5% contingency load. The contingency load and other actuarial assumptions can be found in Appendix A of the Section 2 report.

[2] The discount rate 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 3.38% on June 30, 2022, the valuation date.

In order to terminate the plan, first contact our Pension Contract Services unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to provide a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. Before beginning this process, please consult with the plan actuary.

# Participant Data

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

| | June 30, 2021 | June 30, 2022 |
|---|---|---|
| **Active Members** | | |
| Counts | 2 | 2 |
| Average Attained Age | 53.1 | 54.1 |
| Average Entry Age to Rate Plan | 43.1 | 43.1 |
| Average Years of Credited Service | 9.7 | 10.5 |
| Average Annual Covered Pay | $52,861 | $54,595 |
| Annual Covered Payroll | $105,721 | $109,190 |
| Present Value of Future Payroll | $855,888 | $852,391 |
| **Transferred Members** | 0 | 0 |
| **Separated Members** | 1 | 0 |
| **Retired Members and Beneficiaries*** | | |
| Counts | 0 | 0 |
| Average Annual Benefits | $0 | $0 |
| Total Annual Benefits | $0 | $0 |

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:

- One Year Final Compensation (FAC 1)

# Plan's Major Benefit Options

Shown below is a summary of the major optional benefits for which the 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 | No | |
| Receiving | No | |
| **Benefit Provision** | | |
| Benefit Formula | 2% @ 55 | |
| Social Security Coverage | No | |
| Full/Modified | Full | |
| Employee Contribution Rate | 7.00% | |
| Final Average Compensation Period | One 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 | $2000 | |
| 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 (www.calpers.ca.gov)
in the Forms and Publications section

**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 2023**

**PEPRA Miscellaneous Plan of the Midway City Sanitary District (CalPERS ID: 6882866561)**
**Annual Valuation Report as of June 30, 2022**

Dear Employer,

Attached to this letter is the June 30, 2022 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2024-25**. 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, 2022.

Section 2 can be found on the CalPERS website (www.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, 2022.

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 (board) 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 requirements as needed. This valuation is based on an investment return assumption of 6.8%, which was adopted by the board in November 2021. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from November 2021.

**Required Contributions**

The table below shows the minimum required employer contributions and the PEPRA member contribution rate for FY 2024-25 along with estimates of the required contributions for FY 2025-26. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

| Fiscal Year | Employer Normal Cost Rate | Employer Amortization of Unfunded Accrued Liability | PEPRA Member Contribution Rate |
|---|---|---|---|
| 2024-25 | 7.87% | $2,051 | 7.75% |
| *Projected Results* | | | |
| *2025-26* | *7.9%* | *$3,300* | *TBD* |

The actual investment return for FY 2022-23 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. ***To the extent the actual investment return for FY 2022-23 differs from 6.8%, the actual contribution requirements for FY 2025-26 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 FY 2029-30.

**Changes from Previous Year's Valuations**

There are no significant changes in actuarial assumptions or policies in the 2022 actuarial valuation. There may be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in "Highlights and Executive Summary" and in Appendix A of the Section 2 report in "Actuarial Methods and Assumptions." The effects of any changes on the required contributions are included in "Reconciliation of Required Employer Contributions," also in the Section 2 report.

**Questions**

A CalPERS actuary is available to answer questions about this report. Other questions may be directed to the Customer Contact Center at (888)-CalPERS or (**888-225-7377**).

Sincerely,

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

RANDALL DZIUBEK, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS

# Actuarial Valuation as of June 30, 2022

# for the PEPRA Miscellaneous Plan of the Midway City Sanitary District

**(CalPERS ID: 6882866561)**

## Required Contributions for Fiscal Year July 1, 2024 - June 30, 2025

# Table of Contents

# Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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## Plan Specific Information for the PEPRA Miscellaneous Plan of the Midway City Sanitary District

**(CalPERS ID: 6882866561)**
**(Rate Plan ID: 26759)**

# Table of Contents

# Actuarial Certification

To the best of our knowledge, this report, comprised of Sections 1 and 2, is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the PEPRA Miscellaneous Plan of the Midway City Sanitary District and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for Midway City Sanitary District, while Section 2 is based on the corresponding information for all agencies participating in the Miscellaneous Risk Pool to which the plan belongs.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the Miscellaneous Risk Pool has been performed in accordance with generally accepted actuarial principles, in accordance 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 rate plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2022 and employer contribution as of July 1, 2024 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.

KERRY J. WORGAN, MAAA, FSA, FCIA
Supervising Actuary, CalPERS

# Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Contributions**
- **Additional Discretionary Employer Contributions**
- **Funded Status – Funding Policy Basis**
- **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, 2022 actuarial valuation of the PEPRA Miscellaneous Plan of the Midway City Sanitary District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2024-25.

# Purpose of Section 1

This Section 1 report for the PEPRA Miscellaneous Plan of the Midway City Sanitary District of CalPERS was prepared by the Actuarial Office using data as of June 30, 2022. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2022;
- Determine the minimum required employer contributions for this rate plan for FY July 1, 2024 through June 30, 2025;
- Determine the required member contribution rate for FY July 1, 2024 through June 30, 2025 for employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2022 to the CalPERS Board of Administration (board) 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 (www.calpers.ca.gov).

The measurements shown in this actuarial valuation may not be applicable for other purposes. The agency should contact the plan 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; changes in plan provisions or applicable law; and differences between the required contributions determined by the valuation and the actual contributions made by the agency.

**Assessment and Disclosure of Risk**

This report includes the following risk disclosures consistent with the guidance of Actuarial Standard 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 5.8% and 7.8%.
- 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 2021.
- Plan maturity measures indicating how sensitive a plan may be to the risks noted above.

# Required Contributions

| Required Employer Contributions | Fiscal Year 2024-25 |
|---|---|
| **Employer Normal Cost Rate** | **7.87%** |
| ***Plus*** | |
| **Required Payment on Amortization Bases**[1] | **$2,051** |
| ***Paid either as*** | |
| **1) Monthly Payment** | **$170.92** |
| ***Or*** | |
| **2) Annual Prepayment Option*** | **$1,985** |
| **Required PEPRA Member Contribution Rate** | **7.75%** |

*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).*

** Only the UAL portion of the employer contribution can be prepaid* ***(which must be received in full no later than July 31)****.*

*For additional detail regarding the determination of the required contribution rate for PEPRA members, see "PEPRA Member Contribution Rates" section.*

| Development of Normal Cost as a Percentage of Payroll | Fiscal Year 2023-24 | Fiscal Year 2024-25 |
|---|---|---|
| Base Total Normal Cost for Formula | 15.43% | 15.62% |
| 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 | 15.43% | 15.62% |
| Offset Due to Employee Contributions | 7.75% | 7.75% |
| Employer Normal Cost Rate | 7.68% | 7.87% |

1 The required payment on amortization bases does not take into account any additional discretionary payment made after April 28, 2023.

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

3 When a rate plan joins the pool, the difference in normal cost between the pool and the rate plan 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 FY 2024-25 is $2,051. CalPERS allows agencies 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. Agencies 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 FY 2024-25 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.

Agencies considering making an ADP should contact CalPERS for additional information.

**Minimum Required Employer Contribution for Fiscal Year 2024-25**

| Estimated Normal Cost | Minimum UAL Payment | ADP | Total UAL Contribution | Estimated Total Contribution |
|---|---|---|---|---|
| $94,314 | $2,051 | $0 | $2,051 | $96,365 |

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**. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY **2027-28**, as shown in the “Amortization Schedule and Alternatives” section of the report (see columns labeled “Current Amortization Schedule”).

**Fiscal Year 2024-25 Employer Contribution Necessary to Avoid Negative Amortization**

| Estimated Normal Cost | Minimum UAL Payment | ADP[1] | Total UAL Contribution | Estimated Total Contribution |
|---|---|---|---|---|
| $94,314 | $2,051 | $2,311 | $4,362 | $98,676 |

**Alternative Fiscal Year 2024-25 Employer Contributions for Greater UAL Reduction**

| Funding Horizon | Estimated Normal Cost | Minimum UAL Payment | ADP[1] | Total UAL Contribution | Estimated Total Contribution |
|---|---|---|---|---|---|
| 20 years | $94,314 | $2,051 | $3,911 | $5,962 | $100,276 |
| 15 years | $94,314 | $2,051 | $4,904 | $6,955 | $101,269 |
| 10 years | $94,314 | $2,051 | $6,998 | $9,049 | $103,363 |
| 5 years | $94,314 | $2,051 | $13,511 | $15,562 | $109,876 |

[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 UAL as of June 30, 2024 as determined in the June 30, 2022 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.

# Funded Status – Funding Policy Basis

The table below provides information on the current funded status of the plan under the funding policy. The funded status for this purpose is based on the market value of assets relative to the funding target produced by the entry age actuarial cost method and actuarial assumptions adopted by the board. The actuarial cost method allocates the total expected cost of a member's projected benefit (**Present Value of Benefits**) to individual years of service (the **Normal Cost**). The value of the projected benefit that is not allocated to future service is referred to as the **Accrued Liability** and is the plan's funding target on the valuation date. The **Unfunded Accrued Liability** (UAL) equals the funding target minus the assets. The UAL is an absolute measure of funded status and can be viewed as employer debt. The **funded ratio** equals the assets divided by the funding target. The funded ratio is a relative measure of the funded status and allows for comparisons between plans of different sizes.

| | June 30, 2021 | June 30, 2022 |
|---|---|---|
| 1. Present Value of Benefits | $1,382,073 | $2,119,333 |
| 2. Entry Age Accrued Liability | 425,527 | 571,194 |
| 3. Market Value of Assets (MVA) | 468,372 | 519,239 |
| 4. Unfunded Accrued Liability (UAL) [(2) – (3)] | ($42,845) | $51,955 |
| 5. Funded Ratio [(3) / (2)] | 110.1% | 90.9% |

A funded ratio of 100% (UAL of $0) implies that the funding of the plan is on target and that future contributions equal to the normal cost of the active plan members will be sufficient to fully fund all retirement benefits if future experience matches the actuarial assumptions. A funded ratio of less than 100% (positive UAL) implies that in addition to normal costs, payments toward the UAL will be required. Plans with a funded ratio greater than 100% have a negative UAL (or surplus) but are required under current law to continue contributing the normal cost in most cases, preserving the surplus for future contingencies.

Calculations for the funding target reflect the expected long-term investment return of 6.8%. If it were known on the valuation date that future investment returns will average something greater/less than the expected return, calculated normal costs and accrued liabilities provided in this report would be less/greater than the results shown. Therefore, for example, if actual average future returns are less than the expected return, calculated normal costs and UAL contributions will not be sufficient to fully fund all retirement benefits. Under this scenario, required future normal cost contributions will need to increase from those provided in this report, and the plan will develop unfunded liabilities that will also add to required future contributions. For illustrative purposes, funded statuses based on a 1% lower and higher average future investment return (discount rate) are as follows:

| | 1% Lower Average Return | Current Assumption | 1% Higher Average Return |
|---|---|---|---|
| Discount Rate | 5.8% | 6.8% | 7.8% |
| 1. Entry Age Accrued Liability | $706,466 | $571,194 | $464,996 |
| 2. Market Value of Assets (MVA) | 519,239 | 519,239 | 519,239 |
| 3. Unfunded Accrued Liability (UAL) [(1) – (2)] | $187,227 | $51,955 | ($54,243) |
| 4. Funded Ratio [(2) / (1)] | 73.5% | 90.9% | 111.7% |

The "Risk Analysis" section of the report provides additional information regarding the sensitivity of valuation results to the expected investment return and other factors. Also provided in that section are measures of funded status that are appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities.

# 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. In particular, the investment return beginning with FY 2022-23 is assumed to be 6.80% per year, net of investment and administrative expenses. Future contribution requirements may differ significantly from those shown below. The actual long-term cost of the plan will depend on the actual benefits and expenses paid and the actual investment experience of the fund.

| | **Required Contribution** | **Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23 and Beyond)** | | | | |
|---|---|---|---|---|---|---|
| **Fiscal Year** | **2024-25** | **2025-26** | **2026-27** | **2027-28** | **2028-29** | **2029-30** |
| | Rate Plan 26759 Results | | | | | |
| **Normal Cost %** | 7.87% | 7.9% | 7.9% | 7.9% | 7.9% | 7.9% |
| **UAL Payment** | $2,051 | $3,300 | $4,500 | $5,700 | $7,000 | $7,000 |

For ongoing plans, investment gains and losses 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 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 investment loss, the relatively small amortization payments during the ramp up period could result in contributions that are less than interest on the UAL (i.e. negative amortization) while the contribution impact of the increase in the UAL is phased in.

**The required contribution for FY 2024-25 is less than interest on the UAL**, a situation referred to as **negative amortization**, as explained in the “Additional Discretionary Employer Contributions” section earlier in this report. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY 2027-28, as shown in the “Amortization Schedule and Alternatives” section of the report (see columns labelled “Current Amortization Schedule”).

For projected contributions under alternate investment return scenarios, please see the “Future Investment Return Scenarios” in the “Risk Analysis” section. Our online pension plan projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook can help plan and budget pension costs under various scenarios.

# Other Pooled Miscellaneous Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 26759. 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 total employer payroll within the Miscellaneous Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. In a refinement since the prior year's report, Classic members who are projected to terminate employment are assumed to be replaced by PEPRA members.

| | Fiscal Year 2023-24 | Fiscal Year 2024-25 |
|---|---|---|
| **Estimated Combined Employer Contributions for all Pooled Miscellaneous Rate Plans** | | |
| Projected Payroll for the Contribution Year | $2,078,616 | $2,280,727 |
| Estimated Employer Normal Cost | $298,080 | $277,246 |
| Required Payment on Amortization Bases | $0 | $53,981 |
| Estimated Total Employer Contributions | $298,080 | $331,227 |
| Estimated Total Employer Contribution Rate (illustrative only) | 14.34% | 14.52% |

# Cost

**Actuarial Determination of Plan Cost**

Contributions to fund the 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 2015-16, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2015-16, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There is 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 6.9% over the 20 years ending June 30, 2022, yet individual fiscal year returns have ranged from -23.6% to +21.3%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2021.

# 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 amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

In 2022, SB 1168 increased the standard retiree lump sum death benefit from $500 to $2,000 for any death occurring on or after July 1, 2023. For pooled plans this is a Class 3 benefit and there is no normal cost surcharge. The impact on the unfunded liability is included in the pool's (gain)/loss.

**Actuarial Methods and Assumptions**

There are no significant changes to the actuarial methods or assumptions for the June 30, 2022 actuarial valuation.

# Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2022 and statutory/regulatory changes and board actions through January 2023.

During the time period between the valuation date and the publication of this report, inflation has been significantly higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2023 valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists. At this time, we continue to believe the long-term inflation assumption of 2.3% is appropriate.

To the best of our knowledge, there have been no other subsequent events that could materially affect current or future certifications rendered in this report.

## 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 Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

## Breakdown of Entry Age Accrued Liability

| | |
|---|---|
| Active Members | $566,702 |
| Transferred Members | 0 |
| Separated Members | 4,492 |
| Members and Beneficiaries Receiving Payments | 0 |
| Total | $571,194 |

## 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 | $571,194 |
| 2. | Projected UAL Balance at 6/30/2022 | (37,371) |
| 3. | Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.) | 0 |
| 4. | Adjusted UAL Balance at 6/30/2022 for Asset Share | (37,371) |
| 5. | Pool's Accrued Liability[1] | 22,021,735,002 |
| 6. | Sum of Pool's Individual Plan UAL Balances at 6/30/2022[1] | 2,453,954,297 |
| 7. | Pool's 2021-22 Investment (Gain)/Loss[1] | 2,614,071,182 |
| 8. | Pool's 2021-22 Non-Investment (Gain)/Loss[1] | 309,490,972 |
| 9. | Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (4)] ÷ [(5) - (6)] × (7) | 81,299 |
| 10. | Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (5) × (8) | 8,027 |
| 11. | Plan's New (Gain)/Loss as of 6/30/2022: (9) + (10) | 89,326 |
| 12. | Increase in Pool's Accrued Liability due to Change in Assumptions[1] | 0 |
| 13. | Plan's Share of Pool's Change in Assumptions: (1) ÷ (5) × (12) | 0 |
| 14. | Increase in Pool's Accrued Liability due to Funding Risk Mitigation[1] | 0 |
| 15. | Plan's Share of Pool's Change due to Funding Risk Mitigation: (1) ÷ (5) × (14) | 0 |
| 16. | Offset due to Funding Risk Mitigation | 0 |
| 17. | Plan's Investment (Gain)/Loss: (9) – (16) | 81,299 |
| 18. | Partial Fresh Start Base: (2) + (17) | 43,928 |

[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

| | | |
|---|---|---|
| 19. | Plan's UAL: (2) + (3) + (11) + (13) + (15) | $51,955 |
| 20. | Plan's Share of Pool's MVA: (1) - (19) | $519,239 |

## Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-year lag between the valuation date and the start of the contribution year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2022.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: FY 2024-25.

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 2024-25 | Ramp Shape | Escala-tion Rate | Amort. Period | Balance 6/30/22 | Expected Payment 2022-23 | Balance 6/30/23 | Expected Payment 2023-24 | Balance 6/30/24 | Minimum Required Payment 2024-25 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-Investment (Gain)/Loss | 6/30/22 | No Ramp | | 0.00% | 20 | 8,027 | 0 | 8,573 | 0 | 9,156 | 823 |
| Partial Fresh Start | 6/30/22 | 20% | Up Only | 0.00% | 20 | 43,928 | (6,374) | 53,502 | 0 | 57,140 | 1,228 |
| **Total** | | | | | | **51,955** | **(6,374)** | **62,075** | **0** | **66,296** | **2,051** |

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.

The partial fresh start base established June 30, 2022 is the sum of the UAL balance from the June 30, 2021 valuation (projected to June 30, 2022) and the June 30, 2022 investment loss, as shown on the previous page.

# Amortization Schedule and Alternatives

The amortization schedule on the previous page(s) 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 contact the 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 an appropriate 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)

| | Current Amortization Schedule | | Alternate Schedules: 20 Year Amortization | | Alternate Schedules: 15 Year Amortization | |
|---|---|---|---|---|---|---|
| **Date** | **Balance** | **Payment** | **Balance** | **Payment** | **Balance** | **Payment** |
| 6/30/2024 | 66,296 | 2,051 | 66,296 | 5,962 | 66,296 | 6,955 |
| 6/30/2025 | 68,684 | 3,279 | 64,643 | 5,962 | 63,617 | 6,955 |
| 6/30/2026 | 69,966 | 4,508 | 62,877 | 5,961 | 60,755 | 6,955 |
| 6/30/2027 | 70,065 | 5,736 | 60,992 | 5,961 | 57,699 | 6,955 |
| 6/30/2028 | 68,901 | 6,964 | 58,979 | 5,962 | 54,435 | 6,955 |
| 6/30/2029 | 66,389 | 6,964 | 56,828 | 5,961 | 50,949 | 6,955 |
| 6/30/2030 | 63,706 | 6,965 | 54,532 | 5,962 | 47,226 | 6,954 |
| 6/30/2031 | 60,840 | 6,964 | 52,079 | 5,961 | 43,251 | 6,955 |
| 6/30/2032 | 57,781 | 6,965 | 49,460 | 5,962 | 39,004 | 6,954 |
| 6/30/2033 | 54,512 | 6,965 | 46,662 | 5,961 | 34,470 | 6,955 |
| 6/30/2034 | 51,021 | 6,965 | 43,675 | 5,962 | 29,626 | 6,954 |
| 6/30/2035 | 47,293 | 6,964 | 40,484 | 5,962 | 24,454 | 6,954 |
| 6/30/2036 | 43,312 | 6,965 | 37,076 | 5,962 | 18,930 | 6,954 |
| 6/30/2037 | 39,060 | 6,965 | 33,436 | 5,962 | 13,031 | 6,955 |
| 6/30/2038 | 34,519 | 6,965 | 29,548 | 5,961 | 6,730 | 6,955 |
| 6/30/2039 | 29,668 | 6,964 | 25,397 | 5,962 | | |
| 6/30/2040 | 24,489 | 6,965 | 20,963 | 5,962 | | |
| 6/30/2041 | 18,956 | 6,964 | 16,227 | 5,961 | | |
| 6/30/2042 | 13,048 | 6,964 | 11,170 | 5,962 | | |
| 6/30/2043 | 6,738 | 6,963 | 5,768 | 5,961 | | |
| 6/30/2044 | | | | | | |
| 6/30/2045 | | | | | | |
| 6/30/2046 | | | | | | |
| 6/30/2047 | | | | | | |
| 6/30/2048 | | | | | | |
| 6/30/2049 | | | | | | |
| **Total** | | **127,005** | | **119,232** | | **104,320** |
| **Interest Paid** | | **60,709** | | **52,936** | | **38,024** |
| **Estimated Savings** | | | | **7,773** | | **22,685** |

## Employer Contribution History

The table below provides a recent history of the required and discretionary employer contributions for the plan. The required amounts are based on the actuarial valuation from two years prior without subsequent adjustments, if any. Additional discretionary payments before July 1, 2019 or after April 28, 2023 are not included.

| Fiscal Year | Employer Normal Cost | Unfunded Liability Payment ($) | Additional Discretionary Payments |
|---|---|---|---|
| 2016 - 17 | 6.555% | $123 | N/A |
| 2017 - 18 | 6.533% | 147 | N/A |
| 2018 - 19 | 6.842% | 406 | N/A |
| 2019 - 20 | 6.985% | 1,520 | 6,874 |
| 2020 - 21 | 7.732% | 1,626 | 1,775 |
| 2021 - 22 | 7.59% | 441 | 0 |
| 2022 - 23 | 7.47% | 1,970 | 0 |
| 2023 - 24 | 7.68% | 0 | |
| 2024 - 25 | 7.87% | 2,051 | |

## 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 |
|---|---|---|---|---|---|
| 06/30/2014 | $6,335 | $6,617 | ($282) | 104.5% | $81,266 |
| 06/30/2015 | 25,603 | 24,257 | 1,346 | 94.7% | 124,439 |
| 06/30/2016 | 50,234 | 44,756 | 5,478 | 89.1% | 131,935 |
| 06/30/2017 | 79,977 | 76,926 | 3,051 | 96.2% | 185,131 |
| 06/30/2018 | 126,858 | 118,010 | 8,848 | 93.0% | 197,780 |
| 06/30/2019 | 190,504 | 183,563 | 6,941 | 96.4% | 382,828 |
| 06/30/2020 | 281,022 | 271,974 | 9,048 | 96.8% | 523,974 |
| 06/30/2021 | 425,527 | 468,372 | (42,845) | 110.1% | 530,269 |
| 06/30/2022 | 571,194 | 519,239 | 51,955 | 90.9% | 871,001 |

# Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Funded Status – Termination Basis**

# Future Investment Return Scenarios

Analysis using the investment return scenarios from the Asset Liability Management process completed in 2021 was performed to determine the effects of various future investment returns on required employer contributions. The projections below reflect the impact of the CalPERS Funding Risk Mitigation policy. The projections also assume that all other actuarial assumptions will be realized and that no further changes in assumptions, contributions, benefits, or funding will occur.

The first table shows projected contribution requirements if the fund were to earn either 3.0% or 10.8% annually. These alternate investment returns were chosen because 90% of long-term average returns are expected to fall between them over the 20-year period ending June 30, 2042.

| Assumed Annual Return FY 2022-23 through 2041-42 | Projected Employer Contributions | | | | |
|---|---|---|---|---|---|
| | 2025-26 | 2026-27 | 2027-28 | 2028-29 | 2029-30 |
| **3.0% (5th percentile)** | | | | | |
| Normal Cost Rate | 7.9% | 7.9% | 7.9% | 7.9% | 7.9% |
| UAL Contribution | $3,800 | $6,000 | $8,700 | $12,000 | $14,000 |
| **10.8% (95th percentile)** | | | | | |
| Normal Cost Rate | 8.1% | 8.3% | 8.5% | 8.7% | 8.4% |
| UAL Contribution | $2,900 | $3,300 | $3,100 | $0 | $0 |

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 3.0% or greater than 10.8% over a 20-year period, the likelihood of a single investment return less than 3.0% or greater than 10.8% in any given year is much greater. The following analysis illustrates the effect of an extreme, single year investment return.

The portfolio has an expected volatility (or standard deviation) of 12.0% per year. Accordingly, in any given year there is a 16% probability that the annual return will be -5.2% or less and a 2.5% probability that the annual return will be -17.2% or less. These returns represent one and two standard deviations below the expected return of 6.8%.

The following table shows the effect of a one or two standard deviation investment loss in FY 2022-23 on the FY 2025-26 contribution requirements. Note that a single-year investment gain or loss decreases or increases the required UAL contribution amount incrementally for each of the next five years, not just one, due to the 5-year ramp in the amortization policy. However, the contribution requirements beyond the first year are also impacted by investment returns beyond the first year. Historically, significant downturns in the market are often followed by higher than average returns. Such investment gains would offset the impact of these single year negative returns in years beyond FY 2025-26.

| Assumed Annual Return for Fiscal Year 2022-23 | Required Employer Contributions | Projected Employer Contributions |
|---|---|---|
| | 2024-25 | 2025-26 |
| **(17.2)% (2 standard deviation loss)** | | |
| Normal Cost Rate | 7.87% | 7.9% |
| UAL Contribution | $2,051 | $6,300 |
| **(5.2)% (1 standard deviation loss)** | | |
| Normal Cost Rate | 7.87% | 7.9% |
| UAL Contribution | $2,051 | $4,800 |

- Without investment gains (returns higher than 6.8%) in FY 2023-24 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2022-23.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2025-26 as well as to model other investment return scenarios.

# 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 4.5% and 2.3%, 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, 2022 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 6.8% as well as alternate discount rates of 5.8% and 7.8%. The rates of 5.8% and 7.8% were selected since they illustrate the impact of a 1.0% increase or decrease to the 6.8% assumption.

**Sensitivity to the Real Rate of Return Assumption**

| As of June 30, 2022 | 1% Lower Real Return Rate | Current Assumptions | 1% Higher Real Return Rate |
|---|---|---|---|
| **Discount Rate** | **5.8%** | **6.8%** | **7.8%** |
| Price Inflation | 2.3% | 2.3% | 2.3% |
| **Real Rate of Return** | **3.5%** | **4.5%** | **5.5%** |
| a) Total Normal Cost | 19.53% | 15.62% | 12.65% |
| b) Accrued Liability | $706,466 | $571,194 | $464,996 |
| c) Market Value of Assets | $519,239 | $519,239 | $519,239 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $187,227 | $51,955 | ($54,243) |
| e) Funded Ratio | 73.5% | 90.9% | 111.7% |

**Sensitivity to the Price Inflation Assumption**

| As of June 30, 2022 | 1% Lower Price Inflation | Current Assumptions | 1% Higher Price Inflation |
|---|---|---|---|
| **Discount Rate** | **5.8%** | **6.8%** | **7.8%** |
| **Price Inflation** | **1.3%** | **2.3%** | **3.3%** |
| Real Rate of Return | 4.5% | 4.5% | 4.5% |
| a) Total Normal Cost | 16.48% | 15.62% | 14.20% |
| b) Accrued Liability | $599,352 | $571,194 | $518,460 |
| c) Market Value of Assets | $519,239 | $519,239 | $519,239 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $80,113 | $51,955 | ($779) |
| e) Funded Ratio | 86.6% | 90.9% | 100.2% |

# Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2022 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 2021. This type of analysis highlights the impact on the plan of a change in the mortality assumption.

| As of June 30, 2022 | 10% Lower Mortality Rates | Current Assumptions | 10% Higher Mortality Rates |
|---|---|---|---|
| a) Total Normal Cost | 15.89% | 15.62% | 15.37% |
| b) Accrued Liability | $582,614 | $571,194 | $560,636 |
| c) Market Value of Assets | $519,239 | $519,239 | $519,239 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $63,375 | $51,955 | $41,397 |
| e) Funded Ratio | 89.1% | 90.9% | 92.6% |

# 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, 2021** | **June 30, 2022** |
|---|---|---|
| 1. Retired Accrued Liability | $0 | $0 |
| 2. Total Accrued Liability | 425,527 | 571,194 |
| 3. Ratio of Retiree AL to Total AL [(1) / (2)] | 0.00 | 0.00 |

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 declines. A mature plan will often have a ratio near or below one.

To calculate the support ratio for the rate plan, retirees and beneficiaries receiving a continuance are each counted as one, even though they may have only worked a portion of their careers as an active member of this rate plan. For this reason, the support ratio, while intuitive, may be less informative than the ratio of retiree liability to total accrued liability above.

For comparison, the support ratio for all CalPERS public agency plans as of June 30, 2021, was 0.78 and was calculated consistently with how it is for the individual rate plan. Note that to calculate the support ratio for all public agency plans, a retiree with service from more than one CalPERS agency is counted as a retiree more than once.

| **Support Ratio** | **June 30, 2021** | **June 30, 2022** |
|---|---|---|
| 1. Number of Actives | 10 | 16 |
| 2. Number of Retirees | 0 | 0 |
| 3. Support Ratio [(1) / (2)] | N/A | N/A |

# 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, 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**

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 AVR of 8 may experience twice the contribution volatility due to investment return volatility than a plan with AVR 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 a plan matures.

**Liability Volatility Ratio**

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 changes in liability. For example, a plan with LVR 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, since the AVR, described above, will tend to move closer to the LVR as the funded ratio approaches 100%.

| Contribution Volatility | June 30, 2021 | June 30, 2022 |
|---|---|---|
| 1. Market Value of Assets | $468,372 | $519,239 |
| 2. Payroll | 530,269 | 871,001 |
| 3. Asset Volatility Ratio (AVR) [(1) / (2)] | 0.9 | 0.6 |
| 4. Accrued Liability | $425,527 | $571,194 |
| 5. Liability Volatility Ratio (LVR) [(4) / (2)] | 0.8 | 0.7 |

# 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 | 0.00 | N/A | 0.4 | 0.4 |
| 06/30/2018 | 0.00 | N/A | 0.6 | 0.6 |
| 06/30/2019 | 0.00 | N/A | 0.5 | 0.5 |
| 06/30/2020 | 0.00 | N/A | 0.5 | 0.5 |
| 06/30/2021 | 0.00 | N/A | 0.9 | 0.8 |
| 06/30/2022 | 0.00 | N/A | 0.6 | 0.7 |

# Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2022. The accrued liability on a termination basis (termination liability) is calculated differently compared to the plan's ongoing funding liability. For the 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. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

A more conservative investment policy and asset allocation strategy was adopted by the 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 seven months after.

| | Discount Rate: 1.75%<br>Price Inflation: 2.50% | | | Discount Rate: 4.50%<br>Price Inflation: 2.75% | | |
|---|---|---|---|---|---|---|
| **Market Value of Assets (MVA)** | **Termination Liability[1,2]** | **Funded Ratio** | **Unfunded Termination Liability** | **Termination Liability[1,2]** | **Funded Ratio** | **Unfunded Termination Liability** |
| $519,239 | $1,180,698 | 44.0% | $661,459 | $566,491 | 91.7% | $47,252 |

[1] The termination liabilities calculated above include a 5% contingency load. The contingency load and other actuarial assumptions can be found in Appendix A of the Section 2 report.

[2] The discount rate 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 3.38% on June 30, 2022, the valuation date.

In order to terminate the plan, first contact our Pension Contract Services unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to provide a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. Before beginning this process, please consult with the plan actuary.

## Participant Data

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

| | June 30, 2021 | June 30, 2022 |
|---|---|---|
| **Active Members** | | |
| Counts | 10 | 16 |
| Average Attained Age | 39.8 | 40.8 |
| Average Entry Age to Rate Plan | 35.8 | 37.5 |
| Average Years of Credited Service | 4.0 | 3.3 |
| Average Annual Covered Pay | $53,027 | $54,438 |
| Annual Covered Payroll | $530,269 | $871,001 |
| Present Value of Future Payroll | $6,303,585 | $9,700,281 |
| **Transferred Members** | 0 | 0 |
| **Separated Members** | 1 | 1 |
| **Retired Members and Beneficiaries*** | | |
| Counts | 0 | 0 |
| Average Annual Benefits | $0 | $0 |
| Total Annual Benefits | $0 | $0 |

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 the 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 | No | |
| **Benefit Provision** | | |
| Benefit Formula | 2% @ 62 | |
| Social Security Coverage | No | |
| Full/Modified | Full | |
| Employee Contribution Rate | 7.75% | |
| 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 | $2000 | |
| Survivor Allowance (PRSA) | No | |
| COLA | 2% | |

# PEPRA Member Contribution Rates

The California Public Employees' Pension Reform Act of 2013 (PEPRA) established new benefit formulas, final compensation period, and contribution requirements for "new" employees (generally those first hired into a CalPERS-covered position on or after January 1, 2013). In accordance with Government Code Section 7522.30(b), "new members ... shall have an initial contribution rate of at least 50% of the normal cost rate." The normal cost for the plan is dependent on the benefit levels, actuarial assumptions, and demographics of the risk pool, particularly members' entry age. Should the total normal cost rate change by more than 1% from the base total normal cost rate, the new member rate shall be 50% of the new normal cost rate rounded to the nearest quarter percent.

The table below shows the determination of the PEPRA member contribution rates effective July 1, 2024, based on 50% of the total normal cost rate as of the June 30, 2022 valuation.

| | | Basis for Current Rate | | Rates Effective July 1, 2024 | | | |
|---|---|---|---|---|---|---|---|
| **Rate Plan Identifier** | **Benefit Group Name** | **Total Normal Cost** | **Member Rate** | **Total Normal Cost** | **Change** | **Change Needed** | **Member Rate** |
| 26759 | Miscellaneous PEPRA Level | 15.43% | 7.75% | 15.62% | 0.19% | No | 7.75% |

# Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

## Risk Pool Actuarial Valuation Information

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