NOTICE & AGENDA

November 22, 2024, 9:00 a.m.

Regular Meeting of the Board of Directors
ReGen Monterey is the public name of Monterey Regional Waste Management District.
In-Person: 14201 Del Monte Blvd, Salinas CA 93908 - Bales Board Room
Virtually: https://us02web.zoom.us/j/87059476917
Webinar ID: 870 5947 6917
Teleconference Location: 1004 Saga St, Glendora CA 91741 - Vice Chair Delgado and 300 East Green Street, Pasadena CA 91101 (Pasadena Convention Center) - Director Askew

Board Members will be attending this meeting In-Person: Bales Board Room (or otherwise virtually via applicable teleconferencing provisions set forth in the Brown Act). The public may attend this meeting under either option of a hybrid format: in-person, as noted above, or virtually. Please see the meeting information notice at the end of this agenda for more details.

Pages

1. **Call to Order**
   Just Cause Notifications and Emergency Circumstance Requests (AB 2449)

2. **Roll Call & Establishment of Quorum**
   Chair: Kim Shirley, City of Del Rey Oaks
   Vice Chair: Bruce Delgado, City of Marina

   Directors: Jerry Blackwelder, City of Sand City
   Wendy Root Askew, County of Monterey
   Bill Peake, City of Pacific Grove
   Kim Barber, City of Monterey
   Karen Ferlito, City of Carmel-by-the-Sea
   Alexis Garcia-Arrazola, City of Seaside
   Peter McKee, Pebble Beach Community Services District

3. **Pledge of Allegiance**

4. **Public Communications**
   Anyone wishing to address the Board on matters not appearing on the agenda may do so now. Please limit comments to a maximum of three (3) minutes. The public may comment on any other matter listed on the agenda at the time the matter is being considered by the Board. For information about submitting public comments in writing in advance of the meeting, please see the Meeting Information section of this agenda.

5. **Consent**
   These matters include routine financial and administrative actions, which are usually approved by a single majority vote. Individual items may be removed from consent for discussion and action.

   5.a Approve Minutes of October 18, 2024 Regular Board Meeting. 4

   5.b Approve Report of Disbursements, and Board & Employee Reimbursements for October 2024. 8

   5.c Receive Draft Minutes of the November 6, 2024 Finance Committee Meeting. 15

Recommended Motion:
Approve Consent Agenda.

6. Recognition/Presentations

7. Discussion/Action

Recommended Motion:
Discuss the $19.7 million CalPERS Unfunded Actuarial Pension Liability (UAL) and approve accelerating UAL payments.

8. Staff Reports

9. Other Correspondence

10. Election of Officers for Calendar Year 2025

12. Board Communications

13. Adjournment
Next Meeting Date: January 24, 2025

Meeting Information:
Virtual & Regular Meeting Notice: The meeting will be held (1) as a regular in-person meeting and (2) virtually via Zoom.

To join the Zoom webinar: Click on this link: https://us02web.zoom.us/j/87059476917copy/paste the link into your browser or type the link into your browser. If your computer does not have audio, you will also need to join the meeting via phone. To participate via phone, please call: 1-669-900-9128; Webinar ID: 87059476917

Please note the meeting will proceed as normal even if there are technical difficulties accessing Zoom. ReGen Monterey will do its best to resolve any technical issues as quickly as possible.

Public Comments: If you are unable to participate virtually or via telephone, you may also submit your comments by e-mailing the board clerk at IGonzales@ReGenMonterey.org with one of the following subject lines "Public

Comment Item #" (insert the item number relevant to your comment). Comments must be received by 4 p.m. on the day prior to the scheduled meeting. All submitted comments will be provided to the Board and may be read into the record or compiled as part of the record. In an effort to ensure the virtual process closely follows our normal process, public comment will not be accepted in writing during the meeting. During the Meeting via Oral Comments: When the Chair calls for public comment, attendees can queue to speak with the “Raise Hand” feature. On the Zoom application, click the “Raise Hand” button. On the phone, press *9. The Board Clerk will call speaker names and unmute speaker mics. You will have 3 minutes to provide your comments.

Posting Information
This agenda was posted at the ReGen Monterey administrative offices at 14201 Del Monte Blvd, Salinas, CA, 93908. The agenda, including staff reports and additional information regarding these items, are available on our website at ReGenMonterey.org and our administrative office during regular business hours (additional fee may apply for copying). This agenda is subject to revision and may be amended prior to the scheduled meeting. If amended, a final agenda will be reposted.

Accessibility
All meetings are open to the public. ReGen Monterey does not discriminate against persons with disabilities and the boardroom is wheelchair accessible. In compliance with the Americans Disabilities Act, if you need special assistance to participate, please contact Board Clerk, Ida Gonzales at 831-264-6388 or email IGonzales@ReGenMonterey.org. Notification 48 hours prior to the meeting will enable us to make reasonable arrangements to ensure accessibility to this meeting. Later requests will be accommodated to the extent feasible. Recordings of meetings can be provided upon request.

Draft Regular Meeting of the Board of Directors

Minutes

October 18, 2024, 9:00 a.m.
14201 Del Monte Blvd, Salinas CA 93908
Bales Board Room

Members Present:	Chair: Kim Shirley, City of Del Rey Oaks Vice Chair: Bruce Delgado, City of Marina
Directors:	Jerry Blackwelder, City of Sand City Wendy Root Askew, County of Monterey Bill Peake, City of Pacific Grove Karen Ferlito, City of Carmel-by-the-Sea Kim Barber, City of Monterey Peter McKee, Pebble Beach Community Services District Alexis Garcia-Arrazola, City of Seaside Peter McKee, Pebble Beach Community Services District
Members Absent:	None
Staff Present:	Felipe Melchor, General Manager Rob Wellington, Legal Counsel Jay Ramos, Director of Operations Helen Rodriguez, Director of Finance and Administration Berta Torres, Director of Human Resources David Ramirez, Director of Engineering and Compliance Garth Gregson, Finance Manager Kristin O'Hara, Communications Manager Ida Gonzales, Executive Assistant/Board Clerk Ana Quiroz, Administrative Support Specialist II

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1. Call to Order

2. Roll Call & Establishment of Quorum

Notice duly given and presence of a quorum established, the October 18, 2024 Regular Meeting of the Monterey Regional Waste Management District dba ReGen Monterey Board of Directors was called to order by Chair Shirley at 9:00 a.m.

3. Pledge of Allegiance

4. Public Communications

Anyone wishing to address the Board on matters not appearing on the agenda may do so now. Please limit comments to a maximum of three (3) minutes. The public may comment on any other matter listed on the agenda at the time the matter is being considered by the Board. For information about submitting public comments in writing in advance of the meeting, please see the Meeting Information section of this agenda.

There were no Public Comments.

5. Consent

These matters include routine financial and administrative actions, which are usually approved by a single majority vote. Individual items may be removed from consent for discussion and action.

5.a Approve Regular Board Meeting Minutes - September 20, 2024

5.b Approve Report of Disbursements, and Board & Employee Reimbursements for September 2024.

5.c Receive Draft Finance Committee Minutes - October 2, 2024

5.d Approve 2025 Board Meeting and Other Events Calendar.

There were no Public Comments.

Motion: To Approve the Consent Agenda.

Moved by: Director Blackwelder
Seconded by: Director Peake

Roll Call Vote

Approved Unanimously

6. Recognition/Presentations

6.a Recognition of Javier Ayala, Sorter II for 25 Years of Service.

Javier Ayala, Sorter II was recognized by the Board and Staff for his 25 Years of Service to ReGen Monterey.

7. Discussion/Action

7.a Authorize the General Manager to Negotiate a Reimbursement Agreement with California-American Water Company for Staff Time Related to Monterey Peninsula Water Supply Project

The General Manager and the Director of Engineering and Compliance, David Ramirez, presented on the terms of the agreement and answered questions from the Board.

The Board discussed the reimbursement agreement with California-American Water Company, for staff time related to Monterey Peninsula Water Supply Project.

There were no public comments.

Motion: To Defer this item until the California Public Utilities Commission (CPUC) meeting is completed.

Moved by: Director Delgado

Seconded by: Director Ferlito

Roll Call Vote

Motion Approved Yes -7/No-2

Substitute Motion: That the Board authorize the General Manager to negotiate a reimbursement agreement with California-American Water Company (Cal-Am) for staff time related to Monterey Peninsula Water Supply Project (MPWSP).

Moved by: Director Peake
Seconded by**:** Peter McKee

Roll Call Vote

Motion Defeated -Yes-2/No-7

7.b Authorize the General Manager to Execute a 15-Year Base Term Compost Operations and Lease Agreement with Keith Day Company, Inc. of Monterey County, CA Subject to Approval of Form by District Legal Counsel.

The General Manager and Director of Engineering and Compliance, David Ramirez presented the terms of the Composting agreement to the Board. discussion followed on the terms of the agreement.

Keith Day was present and answered questions from the Board regarding composting operations.

Public Comments were made by Lane Long, City Manager City of Marina and Rene Ortega, City of Marina Legal Counsel

Motion: To Authorize the General Manager to Execute a 15-Year Base Term Compost Operations and Lease Agreement with Keith Day Company, Inc. of Monterey County, CA Subject to Approval of Form by District Legal Counsel.

Moved by: Director Peake
Seconded by: Peter McKee

Roll Call Vote

Absent - Vice Chair Delgado

Motion Approved Unanimously with those Present

8. Staff Reports

8.a Report on Technical Advisory Committee (TAC) September 11, 2024, Meeting.

Senior Communications Assistant, Eric Palmer provided a summary of the September 11 TAC meeting.

8.b Review September Finance, Operating and Recycling Reports.

Accounting Manager Garth Gregson provided the October financial review to the Board.

9. Other Correspondence

10. General Manager Communications

10.a General Manager Communications

11. Board Communications

11.a Appoint Ad Hoc Nomination Committee to Consider Board Chair and Vice Chair Appointments.

Chair Shirley appointed Director Root-Askew and Director Peake to serve on the Ad-hoc Nomination Committee to consider the Board Chair and Vice Chair for 2025.

12. Adjournment

There being no further business to come before the Board at this time, the October 18, 2024 Regular Board meeting of the Monterey Regional Waste Management District dba ReGen Monterey Board of Directors was adjourned by Chair Shirley at 10:38 a.m.

Executive Assistant/Board Clerk	General Manager/Board Secretary

MEMO

Meeting Date: November 22, 2024

To: Board of Directors
From: Garth Gregson
Approved by: Felipe Melchor

Subject: Approve Report of Disbursements, and Board & Employee Reimbursements for October 2024

RECOMMENDATION
Information only

/ /

Monterey Regional Waste Management District
Checks Issued
For the Month of October 2024

Check Date	Check No	Payee	Transaction Description	Amount
10/4/2024	96791	ACE HARDWARE	OPERATING SUPPLIES	596.34
10/4/2024	96792	AFLAC	AFLAC SEP 2024	3,477.82
10/4/2024	96793	REBECCA AGUILAR	RETIREE HEALTH INSURANCE REIMBURSEME	1,666.84
10/4/2024	96794	APTIM CORP.	LFGCS REPAIRS	143,701.45
10/4/2024	96795	AZTEC TECHNOLOGY CORPORATION	40' HC CONTAINER W/4 CARGO	12,323.37
10/4/2024	96796	BARNES WELDING SUPPLY	MMT REPAIR PARTS/MAINTENANCE	86.60
10/4/2024	96797	BUSINESS CREDIT INFORMATION	A/R CREDIT REPORTS	106.56
10/4/2024	96798	GREGORIO CIMIENTO CANADA	WELLNESS FAIR TENT RENTAL	120.00
10/4/2024	96799	CINTAS CORPORATION	EQUIP TRAINING	8,596.38
10/4/2024	96800	CLARK PEST CONTROL	PEST CONTROL	566.00
10/4/2024	96801	ENDEAVOR MORE INC	SEP-24 PREVENTATIVE MAINT	598.69
10/4/2024	96802	COAST COUNTIES TRUCK & EQUIPMENT	SHOP REPAIR PARTS/MAINTENANCE	90.40
10/4/2024	96803	DATAFLOW BUSINESS SYSTEMS INC.	CONT INV KYOCERA 3551CI/4501I	111.55
10/4/2024	96804	KEITH DAY COMPANY, INC.	CONTRACT RECYCLING	134,879.26
10/4/2024	96805	GRANITE ROCK	AGGREGATE/ASPHALT	32,505.13
10/4/2024	96806	KIMBERLE HERRING	RETIREE HEALTH INSURANCE REIMBURSEME	773.89
10/4/2024	96807	KENNEDY/JENKS CONSULTANTS, INC	VOLTAGE PROJECT THRU 8.23.24	1,541.80
10/4/2024	96808	LIEBERT CASSIDY WHITMORE	LEGAL FEES	2,542.50
10/4/2024	96809	LIVEVIEW TECHNOLOGIES, INC	MONITORG SOFTWARE SUBSCRIPTION	2,617.63
10/4/2024	96810	MONTEREY BAY TECHNOLOGIES, INC.	RETAINER OCT 2024	7,500.00
10/4/2024	96811	MOGO URGENT CARE	MEDICAL SERVICES	542.00
10/4/2024	96812	RON MOONEYHAM	RETIREE HEALTH INSURANCE REIMBURSEME	394.44
10/4/2024	96813	LYNETTE MOONEYHAM	RETIREE HEALTH INSURANCE REIMBURSEME	366.89
10/4/2024	96814	OPERATING ENG. LOCAL UNION #3	OE3 UNION DUES	5,328.00
10/4/2024	96815	OPER.ENG.PUBLIC & MISC EE'S	OE HEALTH INSURANCE NOV 2024	285,166.00
10/4/2024	96816	OFFICE DEPOT CREDIT PLAN	OFFICE SUPPLIES SEP 2024	1,317.84
10/4/2024	96817	JEANETTE PAGAN	RETIREE HEALTH INSURANCE REIMBURSEME	1,131.00
10/4/2024	96818	PENINSULA MESSENGER LLC	MAIL SERVICE P/U	372.00
10/4/2024	96819	PRUDENTIAL GROUP INSURANCE	PRUDENTIAL SEPTEMBER 2024	14,675.61
10/4/2024	96820	PRUDENTIAL GROUP INSURANCE	PRUDENTIAL OCTOBER 2024	14,136.39
10/4/2024	96821	TINA REID	RETIREE HEALTH INSURANCE REIMBURSEME	1,845.43
10/4/2024	96822	RUSTY JONES	BIRD ABATEMENT WK END 9/21/24	5,170.00
10/4/2024	96823	SCS ENGINEERS	AIR QUAL COMPLIANCE AUG 2024	9,800.00
10/4/2024	96824	STURDY OIL COMPANY	FUELS	25,520.44
10/4/2024	96825	MONTEREY COUNTY COURIERS, INC	COURIER SERVICE AUG-24	393.04
10/4/2024	96826	TORO PETROLEUM CORP	FUELS	513.26
10/11/2024	96827	FIRST ALARM	MONITORING SERVICE	2,701.18
10/11/2024	96828	CRYSTAL MARAVILLA	SIGNS FOR MRF	4,511.40
10/11/2024	96829	ACE HARDWARE	OPERATING SUPPLIES	136.39
10/11/2024	96830	AGUILAR TIRE SERVICE	TIRE REPAIRS	4,609.47
10/11/2024	96831	ALHAMBRA & SIERRA SPRINGS	COFFEE CRMR/HOT CHOC/CUPS	350.94
10/11/2024	96832	ALHAMBRA & SIERRA SPRINGS	WATER SERVICE SEP-24	3,187.17
10/11/2024	96833	AMERICAN SUPPLY CO	SITEWIDE OP SUPPLIES	3,454.25
10/11/2024	96834	AT&T	UTILITIES	1,845.17
10/11/2024	96835	BALANCE STAFFING	TEMP STAFF WK END 9/15/24	4,239.28
10/11/2024	96836	BECKS SHOE STORE, INC	SAFETY BOOTS	2,597.58
10/11/2024	96837	BULK HANDLING SYSTEMS	MMT REPAIR PARTS/MAINTENANCE	820.41
10/11/2024	96838	BLUE SKY ENVIRONMENTAL, INC.	AIR QUAL COMPL TESTING`	1,975.00
10/11/2024	96839	C & N TRACTORS	SHOP REPAIR PARTS/MAINTENANCE	897.33
10/11/2024	96840	CALIFORNIANS AGAINST WASTE	12M SUBSCRIPTION CAWF	6,000.00
10/11/2024	96841	CAMPOS BROTHERS RECOVERY, INC	APPLIANCE DISPOSAL	3,496.00
10/11/2024	96842	CASTROVILLE AUTO PARTS	SHOP REPAIR PARTS/MAINTENANCE	17.01
10/11/2024	96843	CENTRAL COAST TIRE, LLC	TIRE REPAIRS	981.93
10/11/2024	96844	CINTAS CORPORATION #630	UNIFORM SERVICE 9/13/24	12,308.80
10/11/2024	96845	CLARK PEST CONTROL	PEST CONTROL	566.00
10/11/2024	96846	COAST COUNTIES TRUCK & EQUIPMENT	SHOP REPAIR PARTS/MAINTENANCE	1,595.00
10/11/2024	96847	COMMERCIAL TRUCK CO	SHOP REPAIR PARTS/MAINTENANCE	140.82
10/11/2024	96848	CORNERSTONE ENVIRONMENTAL GROUP, LLC	GCCS IMPROVEMENTS	5,407.50
10/11/2024	96849	CRUZ UPHOLSTERY	SHOP REPAIR PARTS/MAINTENANCE	131.01
10/11/2024	96850	CSC OF SALINAS	OPERATING SUPPLIES	289.88
10/11/2024	96851	CYPRESS COAST FORD	SHOP REPAIR PARTS/MAINTENANCE	266.67

Monterey Regional Waste Management District
Checks Issued
For the Month of October 2024

Check Date	Check No	Payee	Transaction Description	Amount
10/11/2024	96852	DARE CAPITAL PARTNERS, LLC	CONTRACT RECYCLING	10,708.55
10/11/2024	96853	DATAFLOW BUSINESS SYSTEMS INC.	CONT INV KYOCERA 6053CI	622.23
10/11/2024	96854	KEITH DAY COMPANY, INC.	CONTRACT RECYCLING	121,911.59
10/11/2024	96855	DELL MARKETING L.P.	DELL TECH SUPPORT/WARRANTY	1,511.99
10/11/2024	96856	JOHN EASTON	LUMBER RACK PURCHASE	500.00
10/11/2024	96857	FARMBER BROTHERS CO	COFFEE SERVICE	413.63
10/11/2024	96858	FERRELLGAS	FUELS	3,772.67
10/11/2024	96859	GOLD STAR BUICK GMC, INC	SHOP REPAIR PARTS/MAINTENANCE	39.39
10/11/2024	96860	GRAINGER	OPERATING SUPPLIES	345.26
10/11/2024	96861	GREEN WILLOW GROUP, LLC	KIPTRAQ SUBSCRIPTION	2,500.00
10/11/2024	96862	GRANITEROCK	MOD 7	1,439,569.82
10/11/2024	96863	AIS INTERNATIONAL, LLC	GP MONTHLY SUBSCRIPTION	699.00
10/11/2024	96864	HOFFMEYER COMPANY, INC.	MMT REPAIR PARTS/MAINTENANCE	871.83
10/11/2024	96865	GLENN JOHNSON DBA SPRINGBOARD	REGEN WEBSITE DESIGN	7,070.00
10/11/2024	96866	KLEIN PRODUCTS	SHOP REPAIR PARTS/MAINTENANCE	610.50
10/11/2024	96867	LOCI CONTROLS, INC	AUTOMATED WELLS PILOT STUDY	7,975.25
10/11/2024	96868	MARINA PLUMBING & HEATING	MRF PLUMBING REPAIRS	353.75
10/11/2024	96869	PEDRO MONTEJANO	CLEANING SERVICE SEP 2024	14,500.00
10/11/2024	96870	MOTION INDUSTRIES INC	MMT REPAIR PARTS/MAINTENANCE	228.14
10/11/2024	96871	PACIFIC TRUCK PARTS, INC.	SHOP REPAIR PARTS/MAINTENANCE	94.65
10/11/2024	96872	PACIFIC GAS & ELECTRIC	UTILITIES	13.42
10/11/2024	96873	NATIONAL RECOVERY TECHNOLOGIES, LLC	**VOIDED CHECK**	35,433.00
10/11/2024	96874	POWER SYSTEMS TESTING CO.	LFG REPAIR PARTS/MAINTENANCE	1,980.00
10/11/2024	96875	QUALITY WATER ENTERPRISES INC	C&I RENTAL OCT 2024	90.00
10/11/2024	96876	QUINN COMPANY, INC.	SHOP REPAIR PARTS/MAINTENANCE	8,512.90
10/11/2024	96877	RUSTY JONES	BIRD ABATEMENT WK END 10/5/24	2,585.00
10/11/2024	96878	TROMAINE ELECTRIC CORP	LFG REPAIR PARTS/MAINTENANCE	17,887.50
10/11/2024	96879	SAFETEQUIP, INC	MRF SAFETY SUPPLIES	1,293.27
10/11/2024	96880	SSB CONTRACTING, INC	ROOF REPAIRS VARIOUS SITES	13,447.00
10/11/2024	96881	REGINA SANTA CRUZ	EE REIMBURSEMENT	247.81
10/11/2024	96882	THE SPECIAL DISTRICTS ASSOCIATION OF MONTEREY C	SDAMC QTR MEETING 10152024	40.00
10/11/2024	96883	SELECT STAFFING	TEMP STAFF WK END 9/15/24	5,415.15
10/11/2024	96884	SILICON ROADWAYS	CONTRACT RECYCLING	4,172.00
10/11/2024	96885	SILKE COMMUNICATIONS, INC.	RADIO PROGRAMMING/PARTS	1,674.26
10/11/2024	96886	SILVER POINT PROTECTION, INC	SECURITY SERVICES SEP-24	12,245.00
10/11/2024	96887	SOUTHERN TIRE MART	TIRE REPAIRS	743.80
10/11/2024	96888	STAPLES ADVANTAGE	OFFICE SUPPLIES SEP 2024	967.40
10/11/2024	96889	STRATEGIC MATERIALS, INC.	CONTRACT RECYCLING	1,555.21
10/11/2024	96890	STURDY OIL COMPANY	FUELS	28,698.08
10/11/2024	96891	SUPERIOR AUTO DETAIL	POWER WASHING LF36	3,080.00
10/11/2024	96892	SONIA FLORES	LUNCH TRUCK VOUCHERS	140.00
10/11/2024	96893	TARPOMATIC, INC.	SHOP REPAIR PARTS/MAINTENANCE	1,296.93
10/11/2024	96894	JOSE TAVARES	RETIREE HLTH INS REIM 10/2024	773.89
10/11/2024	96895	TOTAL COMPENSATION SYSTEMS, INC	GASB 75 FULL VALUATION	2,250.00
10/11/2024	96896	TOM'S SITE SERVICES	PORTABLE TOILETS 9/22-10/19/24	4,377.53
10/11/2024	96897	ULINE SHIPPING SUPPLY SPECIAL	EFR INDUST PLATFORM SCALE	7,700.31
10/11/2024	96898	VIASYN, INC.	SCHED COORD/SETTLMNT SEP2024	3,895.00
10/11/2024	96899	WASTE MANAGEMENT INC.	TRASH SERVICE	983.34
10/18/2024	96900	ACE HARDWARE	OPERATING SUPPLIES	67.66
10/18/2024	96901	AGUILAR TIRE SERVICE	TIRE REPAIRS	674.09
10/18/2024	96902	ALTIUS MEDICAL	MEDICAL WASTE DISPOSAL	239.00
10/18/2024	96903	AMERICAN SUPPLY CO	SITEWIDE OP SUPPLIES	54.31
10/18/2024	96904	BALANCE STAFFING	TEMP STAFF WK END 9/29/24	1,097.42
10/18/2024	96905	BECKS SHOE STORE, INC	SAFETY BOOTS	204.57
10/18/2024	96906	BULK HANDLING SYSTEMS	MMT REPAIR PARTS/MAINTENANCE	2,602.66
10/18/2024	96907	EDGAR & ASSOCIATES, INC	COMPOST COALITION OCT-24	500.00
10/18/2024	96908	LANDSCAPE MAINTENANCE OF AMERICA	CA COMPOST COALITION OCT-24	675.00
10/18/2024	96909	CAMPOS BROTHERS RECOVERY, INC	APPLIANCE DISPOSAL	1,890.00
10/18/2024	96910	CINTAS CORPORATION #630	UNIFORM SERVICE WK END 10/4/24	2,967.35
10/18/2024	96911	CLAREMONT BEHAVIORAL SERVICES	OCT 2024 EAP PREMIUM	589.00
10/18/2024	96912	CLEAN EARTH ENVIRONMENTAL SOLUTIONS, INC	HW DISPOSAL	36,131.73

Monterey Regional Waste Management District
Checks Issued
For the Month of October 2024

Check Date	Check No	Payee	Transaction Description	Amount
10/18/2024	96913	COAST COUNTIES TRUCK & EQUIPMENT	SHOP REPAIR PARTS/MAINTENANCE	96.71
10/18/2024	96914	CSC OF SALINAS	OPERATING SUPPLIES	859.66
10/18/2024	96915	CYPRESS COAST FORD	SHOP REPAIR PARTS/MAINTENANCE	204.88
10/18/2024	96916	DARE CAPITAL PARTNERS, LLC	CONTRACT RECYCLING	5,343.51
10/18/2024	96917	KEITH DAY COMPANY, INC.	CONTRACT RECYCLING	3,137.12
10/18/2024	96918	SAULO DELGADO	RETIREE HLTH INS REIM 10/2024	776.30
10/18/2024	96919	EDWARDS TRUCK CENTER, INC	SHOP REPAIR PARTS/MAINTENANCE	91.05
10/18/2024	96920	ENERGY DYMAMICS, LLC	LFG REPAIR PARTS/MAINTENANCE	126,994.75
10/18/2024	96921	GEO-LOGIC ASSOCIATES	MPL 2024 MONITORING	8,325.00
10/18/2024	96922	GOLD STAR BUICK GMC, INC	SHOP REPAIR PARTS/MAINTENANCE	152.08
10/18/2024	96923	GOLDEN GATE TRUCK CENTER	SHOP REPAIR PARTS/MAINTENANCE	47.30
10/18/2024	96924	IDA GONZALES	PER DIEM BOARD CLERK CONF 2024	167.00
10/18/2024	96925	GRAINGER	OPERATING SUPPLIES	688.40
10/18/2024	96926	HOFFMEYER COMPANY, INC.	MMT REPAIR PARTS/MAINTENANCE	1,503.59
10/18/2024	96927	HYDRO ENGINEERING, INC	PREVENTATIVE MAINTENANCE	801.66
10/18/2024	96928	KEYCAFE US INC	KEY STORAGE/PLATFORM SUBSCRIPT	7,926.31
10/18/2024	96929	LAWSON PRODUCTS, NC	OPERATING SUPPLIES	1,126.86
10/18/2024	96930	LINDE GAS & EQUIPMENT, INC	OPERATING SUPPLIES	505.43
10/18/2024	96931	MCLELLAN INDUSTRIES, INC.	SHOP REPAIR PARTS/MAINTENANCE	120.71
10/18/2024	96932	McMASTER-CARR SUPPLY CO	LFG REPAIR PARTS/MAINTENANCE	302.99
10/18/2024	96933	MOTION INDUSTRIES INC	MMT REPAIR PARTS/MAINTENANCE	6,602.81
10/18/2024	96934	MONTEREY ONE WATER	WATER STMT 9.1.24-10.31.24	3,752.09
10/18/2024	96935	NVB EQUIPMENT, INC.	FIRE SUPPRESSION SERVICE	1,043.58
10/18/2024	96936	PACIFIC TRUCK PARTS, INC.	SHOP REPAIR PARTS/MAINTENANCE	389.38
10/18/2024	96937	PACIFIC GAS & ELECTRIC	UTILITIES	6,446.81
10/18/2024	96938	POTENTIAL INDUSTRIES, INC.	RECYCLING BROKER FEES AUG 2024	4,977.63
10/18/2024	96939	QUALITY SCALE INC.	SCALES REPAIRS/SERVICE	3,023.00
10/18/2024	96940	QUINN COMPANY, INC.	SHOP REPAIR PARTS/MAINTENANCE	3,171.39
10/18/2024	96941	ANA QUIROZ	EE MILEAGE REIMBURSEMENT AUG-24	96.01
10/18/2024	96942	RAIN FOR RENT	LOD PUMP RENTAL	3,962.08
10/18/2024	96943	RUSTY JONES	BIRD ABATEMENT WK END 10/12/24	2,200.00
10/18/2024	96944	R&R LABOR, INC	TEMP STAFF WK END 9/11/24	9,161.60
10/18/2024	96945	SAFETEQUIP, INC	SIGNS	2,175.02
10/18/2024	96946	SELECT STAFFING	TEMP STAFF WK END 9/29/24	3,540.83
10/18/2024	96947	SILICON ROADWAYS	CONTRACT RECYCLING	3,129.00
10/18/2024	96948	STRATEGIC MATERIALS, INC.	CONTRACT RECYCLING	773.87
10/18/2024	96949	STURDY OIL COMPANY	FUELS	476.29
10/18/2024	96950	SUPERIOR AUTO DETAIL	POWER WASHING DOZER	660.00
10/18/2024	96951	SWANA	SWANA ARF MEMBERSHIP	4,479.74
10/18/2024	96952	TORO PETROLEUM CORP	FUELS	594.71
10/18/2024	96953	TRILLIUM CNG	CNG FUEL PURCHASES	41,693.24
10/18/2024	96954	ULINE SHIPPING SUPPLY SPECIAL	OPERATING SUPPLIES	2,099.94
10/18/2024	96955	UNITED PARCEL SERVICE	SHIPPING FEES	78.19
10/18/2024	96956	WEST COAST RUBBER RECYCLING, INC	TIRE DISPOSAL	2,200.00
10/18/2024	96957	WSP USA INC	MOD 7	4,108.80
10/22/2024	96958	NATIONAL RECOVERY TECHNOLOGIES, LLC	50% DOWN PMT - REFIT MMT EQUIP	56,692.80
10/25/2024	96959	MONTEREY COUNTY TREASURE TAX	JUL-24-JUN-25 PROPERTY TAX	3,387.22
10/25/2024	96960	MONTEREY COUNTY TREASURE TAX	JUL-24-JUN-25 PROPERTY TAX	70.66
10/25/2024	96961	MONTEREY COUNTY TREASURE TAX	JUL-24-JUN-25 PROPERTY TAX	10,017.98
10/25/2024	96962	MONTEREY COUNTY TREASURE TAX	JUL-24-JUN-25 PROPERTY TAX	434.92
10/25/2024	96963	MONTEREY COUNTY TREASURE TAX	JUL-24-JUN-25 PROPERTY TAX	873.34
10/25/2024	96964	MONTEREY COUNTY TREASURE TAX	JUL-24-JUN-25 PROPERTY TAX	834.10
10/25/2024	96965	MONTEREY COUNTY TREASURE TAX	JUL-24-JUN-25 PROPERTY TAX	1,297.42
10/25/2024	96966	MONTEREY COUNTY TREASURE TAX	JUL-24-JUN-25 PROPERTY TAX	6,001.42
10/25/2024	96967	MONTEREY COUNTY TREASURE TAX	JUL-24-JUN-25 PROPERTY TAX	7,353.26
10/25/2024	96968	ACE HARDWARE	OPERATING SUPPLIES	823.59
10/25/2024	96969	ACME RIGGING & SUPPLY CO.	SHOP REPAIR PARTS/MAINTENANCE	72.91
10/25/2024	96970	AGUILAR TIRE SERVICE	TIRE REPAIRS	1,614.10
10/25/2024	96971	AT&T	UTILITIES	1.30
10/25/2024	96972	AT&T	UTILITIES	1.30
10/25/2024	96973	AT&T	UTILITIES	1.32

Monterey Regional Waste Management District

Checks Issued

For the Month of October 2024

Check Date	Check No	Payee	Transaction Description	Amount
10/25/2024	96974	AT&T	UTILITIES	16.90
10/25/2024	96975	AT&T	UTILITIES	1.30
10/25/2024	96976	AT&T	UTILITIES	2,652.30
10/25/2024	96977	BALANCE STAFFING	TEMP STAFF WK END 10/06/24	1,091.34
10/25/2024	96978	BARNES WELDING SUPPLY	OPERATING SUPPLIES	135.43
10/25/2024	96979	BECKS SHOE STORE, INC	SAFETY BOOTS	241.44
10/25/2024	96980	BLUE SKY ENVIRONMENTAL, INC.	AIR PERMIT COMPLIANCE	23,920.00
10/25/2024	96981	BLUE STRIKE ENVIRONMENTAL	EDIBLE FOOD RECOVERY PLAN	19,665.14
10/25/2024	96982	CALL2RECYCLE, INC.	HW DISPOSAL	1,867.50
10/25/2024	96983	CAMPOS BROTHERS RECOVERY, INC	APPLIANCE DISPOSAL	2,041.00
10/25/2024	96984	CASTROVILLE AUTO PARTS	SHOP REPAIR PARTS/MAINTENANCE	6.89
10/25/2024	96985	DON CHAPIN COMPANY INC	3/4" CLASS II BASEROCK	111,775.99
10/25/2024	96986	CINTAS CORPORATION	1ST AID SUPPLIES	260.55
10/25/2024	96987	COAST COUNTIES TRUCK & EQUIPMENT	SHOP REPAIR PARTS/MAINTENANCE	121.12
10/25/2024	96988	COMMERCIAL TRUCK CO	SHOP REPAIR PARTS/MAINTENANCE	210.57
10/25/2024	96989	CSC OF SALINAS	OPERATING SUPPLIES	467.70
10/25/2024	96990	CYPRESS WATER SERVICE, INC	FAULTY TANK/ADAPTER REPLACEMNT	575.00
10/25/2024	96991	DARE CAPITAL PARTNERS, LLC	CONTRACT RECYCLING	5,322.00
10/25/2024	96992	DELLA MORA HEATING SHEET METAL & AC INC	ADMIN RE-PAINT PROJECT	41,936.17
10/25/2024	96993	EDGES ELECTRICAL GROUP LLC	LFG REPAIR PARTS/MAINTENANCE	19.75
10/25/2024	96994	ENERGY DYMAMICS, LLC	LFG REPAIR PARTS/MAINTENANCE	4,194.61
10/25/2024	96995	RANDY EVANGER	RETIREE HEALTH INS REIM SEP-24	144.01
10/25/2024	96996	FASTENAL COMPANY	OPERATING SUPPLIES	5,794.89
10/25/2024	96997	FIRE PROTECTION MANAGEMENT INC	QRTRLY SPRINKLER INSPECTION	1,450.00
10/25/2024	96998	ACCENT CLEAN & SWEEP, INC.	STREET SWEEPING SEP 2024	19,459.18
10/25/2024	96999	JOSE GALLARDO C/O GALLARDO'S ORGANIC FARM	VEGGIES FOR WELLNESS FAIR	1,260.00
10/25/2024	97000	GEO-LOGIC ASSOCIATES	MOD 7	111,006.77
10/25/2024	97001	GOLD STAR BUICK GMC, INC	SHOP REPAIR PARTS/MAINTENANCE	1,827.49
10/25/2024	97002	GRAINGER	OPERATING SUPPLIES	1,199.83
10/25/2024	97003	GRANITE ROCK	AGGREGATE/ASPHALT	43,525.75
10/25/2024	97004	GREEN VALLEY INDUSTRIAL SUPPLY, INC	OPERATING SUPPLIES	95.35
10/25/2024	97005	HOFFMEYER COMPANY, INC.	MMT REPAIR PARTS/MAINTENANCE	5,594.44
10/25/2024	97006	MOTION INDUSTRIES INC	OPERATING SUPPLIES	321.76
10/25/2024	97007	JOHNSON ASSOCIATES	SHOP REPAIR PARTS/MAINTENANCE	68.66
10/25/2024	97008	KENNEDY/JENKS CONSULTANTS, INC	VOLTAGE PROJECT	2,470.50
10/25/2024	97009	L.A. HEARNE CO	OPERATING SUPPLIES	1,558.50
10/25/2024	97010	LINDE GAS & EQUIPMENT, INC	OPERATING SUPPLIES	225.74
10/25/2024	97011	MARINA PLUMBING & HEATING	MRF PLUMBING REPAIRS	698.28
10/25/2024	97012	MONTEREY FIRE EXTINGUISHER	FIRE EXTINGUISHERS	2,938.83
10/25/2024	97013	PACIFIC TRUCK PARTS, INC.	SHOP REPAIR PARTS/MAINTENANCE	394.25
10/25/2024	97014	QUINN COMPANY, INC.	SHOP REPAIR PARTS/MAINTENANCE	21,455.31
10/25/2024	97015	R&S ERECTION OF MONTEREY BAY	FRONT GATE REPAIRS	661.00
10/25/2024	97016	RAIN FOR RENT	LOD PUMP RENTAL	5,787.99
10/25/2024	97017	PITNEY BOWES RESERVE ACCOUNT	POSTAGE REFILL 082324	500.00
10/25/2024	97018	RUSTY JONES	BIRD ABATEMENT WK END 10/16/24	2,585.00
10/25/2024	97019	BFS GROUP OF CALIFORNIA LLC	SCALEHOUSE REMODEL PROJECT	814.93
10/25/2024	97020	REGINA SANTA CRUZ	EE REIMB EE RECOGNITION	163.45
10/25/2024	97021	SCS ENGINEERS	ROUTINE OM&M AUG 2024	9,440.00
10/25/2024	97022	SILICON ROADWAYS	CONTRACT RECYCLING	2,041.00
10/25/2024	97023	STRATEGIC MATERIALS, INC.	CONTRACT RECYCLING	903.55
10/25/2024	97024	STURDY OIL COMPANY	FUELS	26,709.75
10/25/2024	97025	SONIA FLORES	14 LUNCH VOUCHERS WELLNSS FAIR	140.00
10/25/2024	97026	TORO PETROLEUM CORP	FUELS	420.18
10/25/2024	97027	ULINE SHIPPING SUPPLY SPECIAL	OPERATING SUPPLIES	514.06
10/25/2024	97028	WSP USA INC	TITLE V REPORT COMPLIANCE	3,804.00
				$ 3,459,071.69

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT
Employee Cash Disbursements
October 2024

Check Date	Check Number	Payee	Description	Amount	Purpose	Location
10/11/2024	96881	Regina Santa Cruz	EE Reimbursement	247.81	EE Recognition/Safety Supplies	Marina CA
10/25/2024	97020	Regina Santa Cruz	EE Reimb EE Recognition	163.45	EE Recognition	Marina CA
				$ 411.26		

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT
Employee Credit Card Activity
October 2024

Purpose	Amount
Communications Deferred Grant Revenue	1,397.28
Conferences/Meetings	133.34
Memberships/Subscriptions	1,227.39
Travel Expense	614.11
Social Committee Expense	295.20
Office Supplies	967.24
Info Sys Supplies/Services	2,057.23
Ee Recognition/Goodwill	2,123.45
Employee Wellness	655.11
Medical Services	11.12
Professional Services	480.00
Governmental Fees	401.66
Equipment R&M	3,651.84
Operating Supplies	2,990.97
Safety Supplies	304.80
	$ 17,310.74

Draft Finance Committee Meeting

Minutes

November 6, 2024, 9:00 a.m.
14201 Del Monte Blvd, Salinas CA 93908
Bales Board Room

Committee Members Present:	Director Peake Chair Shirley
Absent:	Director McKee
Staff Present:	Felipe Melchor, General Manager Rob Wellington, Legal Counsel Jay Ramos, Director of Operations Helen Rodriguez, Director of Finance and Administration Zoe Shoats, Director of Communications and Public Education Berta Torres, Director of Human Resources David Ramirez, Director of Engineering and Compliance Garth Gregson, Finance Manager Kristin O'Hara, Communications Manager Ida Gonzales, Executive Assistant/Board Clerk Ana Quiroz, Administrative Support Specialist II

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1. Call to Order

Just Cause Notifications and Emergency Circumstance Requests (AB 2449)

2. Roll Call & Establishment of Quorum

Chair: Kim Shirley, City of Del Rey Oaks
Vice Chair: Bill Peake, City of Pacific Grove
Absent Director: Peter McKee. Pebble Beach Community Service District

Notice duly given and presence of a quorum established, the November 6, 2024 Finance Committee Meeting of the Monterey Regional Waste Management District dba ReGen Monterey was called to order by Chair Shirley at 9:00 a.m.

3. Public Communications

Anyone wishing to address the Board on matters not appearing on the agenda may do so now. Please limit comments to a maximum of three (3) minutes. The public may comment on any other matter listed on the agenda at the time the matter is being considered by the Board. For information about submitting public comments in writing in advance of the meeting, please see the Meeting Information section of this agenda.

4. Discussion/Action

4.a Approve Finance Committee Meeting Minutes - October 2, 2024

Moved by: Director Peake
Seconded by: Vice Chair Shirley

Approved

4.b Discuss LoCi Pilot Program Progress.

There was a presentation about the LoCi landfill gas extraction system from David Ramirez and a representative from LoCi. This system of gas collection will increase the volume of gas that is collected, provide better quality data and allow the ability to monitor and adjust each well remotely. There have been 18 units installed and both ReGen and LoCi are monitoring the activity and results. There are a several ownership options for the equipment and these are being considered as part of the overall evaluation of the system. There was discussion and questions from the Committee. This item will be presented at the November 22 Board meeting.

4.c Discuss CalPERS Unfunded Actuarial Pension Liability.

<u>CalPERS Unfunded Actuarial Pension Liability</u>

Staff gave a presentation on the current state of the CalPERS unfunded liability and options to pay down the liability at a fast rate than just making the annual unfunded liability payment as mandated by CalPERS. The current unfunded liability is $19.7 million as at June 30, 2023. ReGen staff has considered four options to pay the unfunded liability.

- Continue paying only the minimum required UAL
- Create a cash reserve
- Create a Section 115 Trust
- Reduce amortization schedule by making UAL Payments in addition to the minimum UAL payment

There are pros and cons to each option and these were reviewed with the Committee. There was discussion and questions about the funding options. This item will be presented at the November 22 Board meeting.

4.d Discuss the Purchase of Three (3) New 2024 Caterpillar 3EP6000 Electric Forklift From Quinn Company of Salinas, California in the amount of $309,093.90 and electrical work by Collins Electrical Company from Stockton, California in the amount of $ 43,055.

Efrain Lopez, Shop Manager presented on the need to purchase of the three new Caterpillar Electric Forklifts. The Finance Committee is supportive of this item and recommends this item to be placed on the November Board agenda.

4.e Discuss the Purchase of One (1) Used 2018 Caterpillar TL1055D with a Tier 4 Engine Telehandler from Quinn Company of Salinas, California in the amount of $106,000.

Efrain Lopez, Shop Manager presented on the need to purchase of a Caterpillar TL1055D with Tier 4 Engine Thelehandler. The Finance Committee is supportive of this item and recommends this item to be placed on the November Board agenda.

4.f Discuss Declaration of Surplus Equipment: MR20 2003 John Deere 230CLC Excavator, AD09 2005 Ford Expedition 4X4, MR18 1998 Pacifictek PV500 Vacuum Trailer.

The Finance Committee is supportive of this item and recommends this item to be placed on the November Board agenda.

5. General Manager Communications

6. Discuss Future Agenda Items

7. Adjournment

Next Meeting Date: TBD

Meeting Information:
Virtual & Regular Meeting Notice: The meeting will be held (1) as a regular in-person meeting and (2) virtually via Zoom.

To join the Zoom webinar: Click on this https://us02web.zoom.us/j/85787306400 copy/paste the link into your browser or type the link into your browser. If your computer does not have audio, you will also need to join the meeting via phone. To participate via phone, please call: 1-669-900-9128; 857 8730 6400 Please note the meeting will proceed as normal even if there are technical difficulties accessing Zoom. ReGen Monterey will do its best to resolve any technical issues as quickly as possible.

Public Comments: If you are unable to participate virtually or via telephone, you may also submit your comments by e-mailing the board clerk at IGonzales@ReGenMonterey.org with one of the following subject lines "Public Comment Item #" (insert the item number relevant to your comment). Comments must be received by 4 p.m. on the day prior to the scheduled meeting. All submitted comments will be provided to the Board and may be read into the record or compiled as part of the record. In an effort to ensure the virtual process closely follows our normal process, public comment will not be accepted in writing during the meeting. During the Meeting via Oral Comments: When the Chair calls for public comment, attendees can queue to speak with the "Raise Hand" feature. On the Zoom application, click the "Raise Hand" button. On the phone, press *9. The Board Clerk will call speaker names and unmute speaker mics. You will have 3 minutes to provide your comments.

Posting Information
This agenda was posted at the ReGen Monterey administrative offices at 14201 Del Monte Blvd, Salinas, CA, 93908. The agenda, including staff reports and additional information regarding these items, are available on our website at ReGenMonterey.org and our administrative office during regular business hours (additional fee may apply for copying). This agenda is subject to revision and may be amended prior to the scheduled meeting. If amended, a final agenda will be reposted.

Accessibility
All meetings are open to the public. ReGen Monterey does not discriminate against persons with disabilities and the boardroom is wheelchair accessible. In compliance with the Americans Disabilities Act, if you need special assistance to participate, please contact Board Clerk, Ida Gonzales at 831-264-6388 or email IGonzales@ReGenMonterey.org. Notification 48 hours prior to the meeting will enable us to make reasonable arrangements to ensure accessibility to this meeting. Later requests will be accommodated to the extent feasible. Recordings of meetings can be provided upon request.

MEMO

5.d
Meeting Date: November 22, 2024

To: Board of Directors
From: Director of Operations, Jay Ramos
Approved by: General Manager, Felipe Melchor

Subject: Adopt Resolution 2024-12 authorizing the purchase of One (1) Used 2018 Caterpillar TL1055D with a Tier 4 Engine Telehandler from Quinn Company of Salinas, California in the amount of $106,000

RECOMMENDATION

That the Board adopt Resolution 2024-12 authorizing the purchase of One (1) Used 2018 Caterpillar TL1055D with a Tier 4 engine Telehandler, using the cooperative purchasing process for public entities and preferential competitive pricing offered through Sourcewell (formally known as National Joint Powers Alliance, NJPA); and Accept the proposal (attached) by Quinn Company of Salinas, CA, dated August 29, 2024, to provide One (1) Used 2018 Caterpillar TL1055D Telehandler for the total price of $106,000 including sales tax, freight. The purchase price is protected once the attached sales quote is signed, and the equipment order is completed.

BACKGROUND AND DISCUSSION

The staff is requesting to replace MR06 a forklift, an older piece of equipment used in the daily Material Recovery Facility (MRF) operation. The District operates a small fleet of forklifts at the MRF for various activities throughout the facility. The maintenance team will benefit from the transition from a forklift to a telehandler for getting objects to those hard-to-reach areas in the plant. Phasing out of the Off-Road equipment not powered by a Tier 4 final diesel engine is required to meet emission standards set forth by the California Air Resources Board (CARB) by the year 2026.

MR06 is a 1999 Caterpillar DP45 forklift with a Tier 2 engine. This forklift with 8,270 hours has reached its useful life for the district.

FISCAL IMPACT

Funds totaling $150,000 are included in the FY 2024/25 Capital outlay portion of the budget for this purchase.

CONCLUSION

It is therefore recommended that the Board of Directors authorize the purchase of One (1) Used 2018 Caterpillar TL1055D Telehandler for the total price of $106,000 without competitive bidding using the Sourcewell public entity cooperative purchasing program as presented in the attached proposal by Quinn Company of Salinas, CA. Estimated delivery of equipment is currently anticipated by December 2024.

//

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+1 831 594 8115
justinbrown@quinncompany.com

2018
TL1055D
TELEHANDLER

PRICE
$106,000 USD

SALES INFORMATION

SMU / Hours	2,586	Status	Used
Availability	Available		

FEATURES

General

- ALARM, BACK-UP, STANDARD
- AXLE, STANDARD
- BELT, SEAT, 3" RETRACTABLE
- CANOPY, OPEN
- CARRIAGE, STANDARD 72"
- CLIMATE PACK, STANDARD
- COUPLER, MANUAL, IT
- FENDER, FRONT
- FORK, PALLET 2.36" X 4" X 48"
- INSTRUCTIONS, ANSI
- LANE 3 ORDER
- LEVER, MANUAL, FNR/WIPERS/IND
- LIGHTS, ROADING, RH
- LOADCHART, NACD, TL1055D
- MANUAL, OPER. MAINT. ENGLISH
- MONITOR, NONE
- PACK, ROLL ON/ROLL OFF, TL
- PRODUCT LINK READY
- RIDE CONTROL, NONE
- STEERING, STANDARD
- SUN SCREEN, ROOF, NONE
- TIRES, 14.00-24, FS, G2
- TL1055D NORTH AMERICAN ORDER

PHOTOS (8)


QUINN COMPANY


QUINN COMPANY


QUINN COMPANY


QUINN COMPANY


QUINN COMPANY


CAT CATERPILLAR
CAT
CANADA ICES-002
NMB-002
QUINN COMPANY


QUINN COMPANY


QUINN COMPANY


CAT
XU5N85
MR06
QUINN CAT
CATERPILLAR


CAT


CAT
CAT
50

BOARD OF DIRECTORS

Resolution

RESOLUTION
2024-12

Purchase of One (1) Used 2018 Caterpillar TL1055D Telehandler with Tier 4 Final Engine, using the cooperative purchasing process for public entities and preferential competitive pricing offered through Sourcewell (formally known as National Joint Powers Alliance, NJPA

WHEREAS, the Monterey Regional Waste Management District has a requirement for new heavy equipment purchases of One (1) Used 2018 Caterpillar TL1055D Telehandler with Tier 4 Final Engine: and

WHEREAS NJPA establishes and provides nationally leveraged and competitively solicited purchasing contracts under the guidance of the Uniform Municipal Contracting Law (M.S. 471.345 Subd. 15). The Joint Exercise of Powers Laws (M.S. 471.59) allows its members to legally purchase through its contracts without duplicating their own competitive bidding process and requirements. The result of this cooperative effort is a high-quality selection of nationally leveraged, competitively bid contract solutions to help meet the challenging needs of current and future member agencies; and

WHEREAS, when the competitive bidding requirement is satisfied through the NJPA contracts, therefore, such duplication of our own competitive bidding process is not required.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Monterey Regional Waste Management District, as follows: That the Board does hereby authorize the purchases from Sourcewell through Quinn Company of Salinas, CA approving the proposal by Quinn Company of Salinas, CA, dated August 24,2024, to provide One (1) Used 2018 Caterpillar TL1055D Telehandler with Tier 4 Final Engine for the total price to be $ 106,000. including sales tax and freight.

PASSED AND ADOPTED at a regular meeting by the Board of Directors of the Monterey Regional Waste Management District duly held on November 22,2024.

Kim Shirley
Board Chair

ReGen MONTEREY

Monterey Regional
Waste Management District,
dba ReGen Monterey

Felipe Melchor
General Manager
Board Secretary

MEMO

Meeting Date: November 22, 2024

To: Board of Directors
From: Director of Operations, Jay Ramos
Approved by: General Manager, Felipe Melchor

Subject: Adopt Resolution (2024-13) Approving the Purchase of Three (3) New 2024 Caterpillar 3EP6000 Electric Forklift From Quinn Company of Salinas, California in the amount of $309,093.90 and electrical work by Collins Electrical Company from Stockton, California in the amount of $43,055.00

RECOMMENDATION

That the Board of Directors 1) Adopt Resolution Operations 2024-13 (attached) authorizing the purchase of Three (3) New 2024 Caterpillar 3EP6000 Electric Forklifts, using the cooperative purchasing process for public entities and preferential competitive pricing offered through Sourcewell (formally known as National Joint Powers Alliance, NJPA) and required electrical work to support the chargers ; and 2) Accept the proposal (attached) by Quinn Company of Salinas, CA, dated September 24, 2024, to provide Three (3) New 2024 Caterpillar 3EP6000 Electric Forklifts for the total price of $309,093.90 including sales tax and freight ; and 3) accept the proposal (attached) by Collins Electrical Company dated October 29, 2024 for the required electrical work for the chargers for the total price of $43,055.00. The total project cost is $ 352,148.90. The purchase price is protected once the attached sales quote is signed, and the equipment order is completed.

BACKGROUND AND DISCUSSION

Staff are requesting the replacement of the following units, LC17 a 2016 Caterpillar GP25N forklift, MR 50 a 2017 Caterpillar GP30N forklift and MR49 a 2016 Caterpillar GPC50N forklift, are older pieces of equipment used in the daily Material Recovery Facility (MRF) operation. The District operates a small fleet of forklifts at the MRF for various activities throughout the facility. The movement of bales is part of the MRF daily routine. Phasing out of the Off-Road equipment not powered by a Tier 4 final diesel engine is required to meet emission standards set forth by the California Air Resources Board (CARB) by the year 2026.

FISCAL IMPACT

Funds totaling $ 400,000 are included in the FY 2024/25 Capital outlay portion of the budget for this purchase.

CONCLUSION

It is therefore recommended that the Board of Directors authorize the purchase of Three (3) New 2024 Caterpillar 3EP6000 Electric Forklift for the total price of $ 309,093.90 without competitive bidding using the Sourcewell public entity cooperative purchasing program as presented in the attached proposal by Quinn Company of Salinas, CA. and the required electrical work for the chargers by Collins Electric of Stockton, California for a total price of $ 43,055.00. The project total is $352, 148.90. Estimated delivery of equipment is currently anticipated by December 2024.


MR 50 2017 CAT GP30N
CAT
MR50
CAT


DANGER
DANGER
HIGH VOLTAGE
CAT
QUINN LIFT
RP6D47


CAT
JS3M94
CAT
QUINN CAT
LC17
RESTRICTED AREA
AUTHORIZED EMPLOYEES ONLY

QUINN LIFT

CAT 3EP6000 with Rightline Bale Clamp

For

Effrain Lopez

of

Since 1951
REDUCE REUSE RECYCLE
MRWMD

QUINN LIFT

3 X Caterpillar 3EP6000

CONFIGURATION		
CHASSIS	3	6,000 lb. Capacity 80 Volt Electric 4-Wheel Pneumatic Tire Lift Truck
MAST	3	185.0" MFH / 86.0" OAL / 58.0" FFH Triplex
FORKS	3	1.80" X 4.90" X 47" Hook Type - Pallet
BATTERY PREPARATION	3	80V Lead Acid Battery Prep
BATTERY EXTRACTION	3	Rolling Battery Tray With Underside Lift Bar-Maint
SIDESHIFTER	3	44.1" Hook-On Sideshifter With Quick Disconnect Coupling
DRIVE & STEER TIRES	3	Solid Pneumatic Tires
LOAD BACKREST	3	48" High Load Backrest Extension
ADDITIONAL HYDRAULIC FUNCTIONS	3	2 Additional Hydraulic Functions With Quick Disconnect Coupling 2X
HYDRAULIC ACTIVATION	3	4-Section Valve Included With Additional Hydraulic Functions
OVERHEAD GUARD	3	Standard Overhead Guard
PRODUCTIVITY OPTIONS	3	High PERFORMANCE PACKAGE
WARNING / LIGHT OPTIONS	3	LED Front And Rear Lights With Plastic Lenses - OHG Mounted
WARNING / LIGHT OPTIONS	3	Strobe Light Flush With Overhead Guard
SEAT	3	Full Suspension Vinyl Seat
ACCESSORIES	3	Orange Seat Belt And Hip Restraint
ACCESSORIES	3	Panoramic Rear View Mirror - Inside Right
LANGUAGE MARKINGS	3	English Language Markings North/South America
	3	Lithium Battery
	3	Zivan HF Charger
FREIGHT SURCHARGE	3	Additional Freight Charge

3EP6000 WARRANTY	
3EP6000	Standard Warranty - 12 Months, 2000 Hours Full Coverage; 24 Months, 4000 Hours Powertrain

3EP6000 INVESTMENT SUMMARY				
QTY	**DESCRIPTION**	**UNIT PRICE**	**EXTENDED PRICE**	**ACCEPTED**
3	CAT 6,000 lb. Capacity 80 Volt Electric 4-Wheel Pneumatic Tire Lift Truck	$87,158.00	$261,474.00	
	SPECIFIED INVESTMENT TOTAL:		$261,474.00	

BATTERY WEIGHT			COMPARTMENT DIMENSIONS				LEAD LENGTH	CONNECTOR	
	MIN	MAX		LENGTH	WIDTH	HEIGHT		TYPE:	Schaltbau 320
LB:	3902	4436	IN:	33.66	40.47	30.87	16.00	COLOR:	Black
KG:	1770	2012	MM:	855	1028	784	406	POSITION:	B

SOURCEWELL BREAKDOWN

Truck Package List Price $111,550.80 + Tax

Std Cat Discount Price$100,395.72 + Tax

Sourcewell Additional Discount Price $87,158.00 + Tax

Sales Tax $6,754.75

Total Sale`$93,912.75

QUINN LIFT

2 X Rightline SwitchRib Bale Clamp

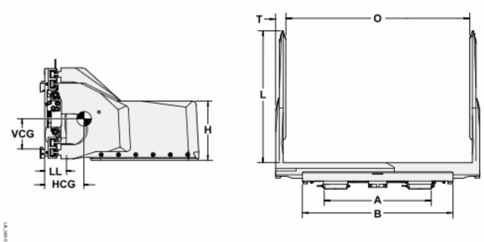
RIGHTLINE™
WORLD CLASS LIFT TRUCK ATTACHMENTS

QUOTATION# 1062-240829-3W8B

August 29, 2024

CUSTOMER COPY

Paul Lavis
QUINN LIFT
1300 Abbott
Salinas, CA 93901
paul.lavis@quinnlift.com



LB50H-05-SR-3C SWITCH RIB SIDE SHIFTING BALE CLAMP

B	FRAME WIDTH	41 in.	
H	ARM HEIGHT	18 in.	
L	ARM LENGTH	47 in.	
T	ARM THICKNESS	2.75 in.	
O	OPENING RANGE	22.6 - 75.3 in.	
	HYDRAULICS	two function	
	RECOMMENDED HYDRAULIC FLOW	16.0 gpm	
	RECOMMENDED HYDRAULIC PRESSURE	2250 psi	
	MOUNTING	ITA II	
A	HOOK SPREAD	29 in.	
	CAPACITY	5000 lbs. @ 24 in. load center	
	WEIGHT	1630 lbs.	
LL	LOST LOAD	7 in.	
HCG	HORIZONTAL CENTER OF GRAVITY	14.5 in.	
VCG	VERTICAL CENTER OF GRAVITY	9.9 in.	
	LATERAL CENTER OF GRAVITY @ MAX OFFSET	9.52 in.	
	MAX OFFSET PER SIDE	13.16 in.	

Includes Rightline exclusive "SwitchRib" configuration with replaceable hardened steel lower wear ribs.

$12,230.00 + Tax includes installation

QUINN LIFT

QUINN LIFT, INC. • P.O. BOX 11156 • FRESNO, CALIFORNIA 93771

BAKERSFIELD - 16	FRESNO - 15	OXNARD - 11	SALINAS - 12	SANTA MARIA - 13	CITY OF INDUSTRY - 52	YUMA - 53
(661) 393-5800	(559) 896-4040	(805) 485-2171	(831) 758-8461	(805) 925-8611	(562) 463-4000	(928) 341-9000

CUSTOMER ACCOUNT #	440600L			CONTACT NAME & PHONE	EFRAIN LOPEZ 831 901 7246		
INVOICE TO:	MONTEREY REGIONAL WASTE			SHIP TO:	MONTEREY REGIONAL WASTE		
ADDRESS:	PO BOX 1760			SITE:	14201 Del Monte Blvd		
CITY	MARINA	STATE CA	ZIP 93933	CITY	MARINA	STATE CA	ZIP 93933
CUSTOMER P.O. #				SHIP VIA		COUNTY:	
CUSTOMER EMAIL:	elopez@mrwmd.org			DELIVERY DATE		Salesman:	

1. Customer does hereby order the following equipment:

QTY	MAKE, MODEL	ID #	SERIAL NUMBER	PRICE
3	CAT 3EP6000			$261,474.00
2	Rightline SwitchRiob Bale Clamp			$24,460.00

WARRANTY

☒ New Machines sold are subject to the manufacturer's warranty statement. The purchaser, by signing the order, acknowledges receipt of the warranty statement.

☐ New Additional Warranty Options (Additional charges apply) 3 yr/6000 hr | 4 yr/8000 hr | 5 yr/10,000 hr

☐ Used 90 Day Warranty ($100 Deductible per instance applies)

☐ Used Extended Warranty (As quoted)

☐ NO WARRANTY (AS-IS)

2. BILL OF SALE FOR EQUIPMENT TAKEN IN TRADE

By my signature affixed to this document, and for the value designated herein as Trade Allowance, I hereby sell, grant and deliver unto QUINN LIFT, INC. the equipment described below:

QTY	MAKE, MODEL	SERIAL NUMBER

TOTAL BEFORE SALES TAX	$285,934.00
SALES TAX	$22,159.89
TOTAL SALE	$308,093.90
CASH DOWN PAYMENT	
CA. TIRE FEE ($1.75 ea.)	
LESS TRADE-IN	
NET BALANCE	$308,093.90

****Must Sign**** I, We hereby certify that there is no lien, claim, debt, mortgage or incumbrance of any kind, nature or description against this property now existing, of record or otherwise, and that same if free and clear and is my/our sole and absolute property.

SIGNED: ______________________________

3. TERMS DESIRED (SUBJECT TO CREDIT APPROVAL): NET 10

4. Seller makes no warranties of any kind, expressed or implied, including buy not limited to the warranties of merchantability or fitness of purpose, except those which shall be offered in writing by Seller and accepted in writing by Customer.

5. Customer agrees that this order is subject to all the terms and conditions set forth above and on the reverse hereof.

QUINN LIFT, INC. ACCEPTS ORDER
By: ______________________ **Date: 9/24/24**

CUSTOMER
By: ______________________ **Date: 9/24/24**

FOR OFFICE USE ONLY

SALES AGREEMENT # ______________________

CREDIT APPROVAL #

QUINN LIFT

ADDITIONAL TERMS AND CONDITIONS

6. Seller reserves the right to accept or reject this order and shall not be required to give any reason for non-acceptance.

7. This order when accepted by Seller shall become a binding contract but shall be subject to delays in delivery caused by strikes, lockouts, accidents, fire, manufacture, transportation, acts of God, embargoes, or government action or any other cause beyond the control of Seller whether the same as or different from the matters and things hereinbefore specifically enumerated, and any of said causes shall absolutely absolve Seller from any liability to Customer under the terms hereof.

   This order when accepted by Seller shall be further subject to such changes in price, terms, delivery date, delivery priorities, and other conditions varying from the terms hereof, as may be current when the within ordered machinery, equipment, attachment, and parts are ready for delivery.

8. Title to and right of possession of said equipment shall remain vested in Seller until all indebtedness and all sums due or to become due from the Customer, whether evidenced by note, book account, judgment, or otherwise, shall have been fully paid, at which time ownership shall pass to Customer.

9. Seller's responsibility for shipments ceases upon delivery to transportation company, and any claims for shortages, delays, or damages occurring thereafter shall be made by Customer direct to transportation company. Any claims for shortages in shipments against Seller shall be made within fifteen days after receipt of shipments.

10. Customer agrees that this order shall not be countermanded by him, and that when it is accepted (and until the execution and delivery of the contract or contracts and note or notes required to consummate the transaction as herein specified) it will cover all agreements between the parties relative to this transaction, and that Seller is not bound by any representations or terms made by any agent relative to this transaction which are not embodied herein.

11. When equipment necessary to fill this order is available, Customer agrees to execute and deliver to Seller such contracts and notes as may be required by seller to evidence the transaction. In the event that Customer fails to execute and deliver said contracts and notes to Seller, the entire balance o the purchase price shall at the Seller's option become immediately due and payable.

12. It is expressly agreed that Seller shall not in any case or under any circumstances be liable or responsible for any damage to property or death or injuries to persons suffered or sustained in the use operation and/or handling of said equipment or otherwise in connection therewith, no matter how caused or occasioned, nor for loss of profits, expenses, or damages resulting to Customer by reason of any delay in delivery, or other delay, or non-performance of said equipment, or from any other causes whatsoever, and all such claims are hereby specifically waived by customer. Customer assumes all risk and liability for and in connection with said equipment during the term of this Agreement, and Customer agrees to and does hereby indemnify and hold Seller harmless of, from, and against all claims, losses, damage, and expense whatsoever and howsoever arising in connection with said equipment.

13. No warrant of any kind, either expressed or implied, including the warranty of merchantability or fitness for a particular purpose is made or authorized by QUINN LIFT, INC. except as may be made in writing by an officer of Seller and a copy of same is received and acknowledged in writing by Customer. Abbreviations- (CPW) Customer Protection Warranty, (TOEP) Time of Equipment Purchase, (TOWP) Time of Warranty Purchase.

14. This agreement is made and entered into in the state of California and it is expressly agreed that the law of California shall be applicable hereto. This agreement shall be binding upon and inure to the benefit of heirs, executors, administrators, successors, and assigns of the parties hereto. This agreement shall not be considered in full force and effect until accepted in writing by Seller.

Electrical Contractors Since 1928
3412 Metro Drive, Stockton, CA 95215 • Tel (209) 466-3691 • Fax (209) 466-3146

PROPOSAL

October 29, 2024

Attention: Estimating
Project: #25MAR019S ReGen Monterey Material Sorting – EV Charger Plug
Bid Date: 10-29-24

Dear Estimator:

Collins Electrical Company, Inc. is pleased to provide an Electrical Work proposal for the above referenced project. We acknowledge the following bid documents:

- Drawings: Job walk
- Specification Sections: N/A
- Addenda #s: N/a

BASE BID $ 13,610.00

Please note the following inclusions, exclusions and clarifications as qualifications to this proposal.

Inclusions:

- Provide and install necessary labor, materials, and equipment required for an electrical systems per the bid documents acknowledged above.
- Provide and Install Conduit, Wire, Boxes for (2) 50A 480V receptacle (to use for EV charger).
- Provide and Install (2) 50A 3P Breaker.
- Install (2) EV Charger (FBO).

Exclusions:

- Bonding. If a bond is required, please add 1% to bid.
- Any allowances, and/or contingencies not specifically noted in this proposal.
- Hazardous materials abatement, disposal, and/or working in or around.
- Providing EV Charger.
- Finger printing fees, parking fees, badge-identification fees, and/or drug testing costs.
- Spoils and/or trash removal from site.
- Painting other than electrical touch-up.
- Overtime, shift work, and/or premium time labor.
- Costs incurred due to unforeseen conditions.

Clarifications:

- This proposal is based on a normal (40) hour work week and our Standard Terms and Conditions.
- This proposal is valid for 30 days.
- This proposal is based upon use of industry standard, code compliant materials and methods.

- This proposal letter shall be incorporated in its entirety into the Subcontract Agreement and is based upon a mutually accepted construction schedule.

Should you have any questions or if we may be of further assistance, please do not hesitate to call (831)384-0114.

Sincerely,

Matt Furrer

Branch Manager
Collins Electrical Co., Inc.
jfurrer@collinselectric.com

Electrical Contractors Since 1928

3412 Metro Drive, Stockton, CA 95215 • Tel (209) 466-3691 • Fax (209) 466-3146

PROPOSAL

October 29, 2024

Attention: Estimating
Project: #25MAR020S ReGen Monterey Paint Shop – EV Charger Plug
Bid Date: 10-29-24

Dear Estimator:

Collins Electrical Company, Inc. is pleased to provide an Electrical Work proposal for the above referenced project. We acknowledge the following bid documents:

- Drawings: Jobwalk
- Specification Sections: N/A
- Addenda #s: N/a

BASE BID $ 29,445.00

Please note the following inclusions, exclusions and clarifications as qualifications to this proposal.

Inclusions:

- Provide and install necessary labor, materials, and equipment required for an electrical systems per the bid documents acknowledged above.
- Provide and Install Conduit, Wire, Boxes for (1) 50A 480V receptacle (to use for EV charger).
- Provide and Install (1) 50A 3P Breaker.
- Provide and Install (1) 200A 208V Disconnect with 125A Fuses.
- Provide and Install (1) 45KVA Transformer 208V Primary to 480V Secondary.
- Provide and Install (1) 60A 600V Disconnect with 50A Fuses.
- Install (1) EV Charger (FBO).

Exclusions:

- Bonding. If a bond is required, please add 1% to bid.
- Any allowances, and/or contingencies not specifically noted in this proposal.
- Hazardous materials abatement, disposal, and/or working in or around.
- Providing EV Charger.
- Finger printing fees, parking fees, badge-identification fees, and/or drug testing costs.
- Spoils and/or trash removal from site.
- Painting other than electrical touch-up.
- Overtime, shift work, and/or premium time labor.
- Costs incurred due to unforeseen conditions.

Clarifications:

- This proposal is based on a normal (40) hour work week and our Standard Terms and Conditions.
- This proposal is valid for 30 days.
- This proposal is based upon use of industry standard, code compliant materials and methods.
- This proposal letter shall be incorporated in its entirety into the Subcontract Agreement and is based upon a mutually accepted construction schedule.

Should you have any questions or if we may be of further assistance, please do not hesitate to call (831)384-0114.

Sincerely,

Matt Furrer

Branch Manager
Collins Electrical Co., Inc.
jfurrer@collinselectric.com

BOARD OF DIRECTORS

Resolution

RESOLUTION
2024-13

Authorizing the purchase of Three (3) New 2024 Caterpillar 3EP6000 Electric Forklifts, using the cooperative purchasing process for public entities and preferential competitive pricing offered through Sourcewell (formally known as National Joint Powers Alliance, NJPA) and required electrical work to support the chargers ; and 2) Accept the proposal (attached) by Quinn Company of Salinas, CA, dated September 24, 2024.

WHEREAS, the Monterey Regional Waste Management District has a requirement for new equipment purchase of Three (3) New 2024 Caterpillar 3EP6000 Electric Forklifts: and electrical work required for the chargers; and

WHEREAS NJPA establishes and provides nationally leveraged and competitively solicited purchasing contracts under the guidance of the Uniform Municipal Contracting Law (M.S. 471.345 Subd. 15). The Joint Exercise of Powers Laws (M.S. 471.59) allows its members to legally purchase through its contracts without duplicating their own competitive bidding process and requirements. The result of this cooperative effort is a high-quality selection of nationally leveraged, competitively bid contract solutions to help meet the challenging needs of current and future member agencies; and

WHEREAS, when the competitive bidding requirement is satisfied through the NJPA contracts, therefore, such duplication of our own competitive bidding process is not required.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Monterey Regional Waste Management District, as follows: 1) That the Board does hereby authorize the purchases from Sourcewell through Quinn Company of Salinas, CA approving the proposal by Quinn Company of Salinas, CA, dated September 24, 2024, to provide Three (3) New 2024 Caterpillar 3EP6000 Forklifts for the total price to be $ 308,093.90. including sales tax and freight; and 2) accept the proposal (at by Collins Electrical Company dated October 29, 2024, for the required electrical work for the chargers for the total price of $43,055.00. The total project cost is $ 352,148.90.

PASSED AND ADOPTED at a regular meeting by the Board of Directors of the Monterey Regional Waste Management District duly held on November 22, 2024.

Kim Shirley
Board Chair

Monterey Regional
Waste Management District,
dba ReGen Monterey

Felipe Melchor
General Manager
Board Secretary

Board of Directors
Monterey Regional Waste Management District dba ReGen Monterey

RESOLUTION NO. 2024-14
A RESOLUTION ADOPTING AN AMENDED CONFLICT OF INTEREST CODE
OF THE MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT
-oOo-

WHEREAS, the District, pursuant to the California Fair Political Practices Act, has adopted a Conflict of Interest Code (hereinafter referred to as "Code") which has been amended from time to time; and

WHEREAS, the Code was last amended in 2020; and

WHEREAS, since 2020 the District has added, deleted and renamed staff positions covered by the Code.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Monterey Regional Waste Management District dba ReGen Monterey that the attached Conflict of Interest Code is hereby adopted.

PASSED AND ADOPTED by the Directors of the Monterey Regional Waste Management District at a regular meeting duly held on November 22, 2024 by the following vote:

AYES:

NOES:

ABSENT:

Kim Shirley, Chair

ATTEST:

Felipe Melchor
General Manager/Secretary of the Board

CONFLICT OF INTEREST CODE
OF THE MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT
dba REGEN MONTEREY

1. **Adoption by Incorporation.** The District, pursuant to The Political Reform Act of 1974, Government Code §§81000, *et seq.*, requires state and local government agencies to adopt and promulgate Conflict of Interest Codes. The Fair Political Practices Commission had adopted a regulation, 2 California Code of Regulation §18730, which contains the terms of a standard model Conflict of Interest Code, which may be incorporated by reference, and which may be amended by the Fair Political Practices Commission to conform to amendments in the Political Reform Act after public notice and hearings. Therefore, the terms of 2 California Code of Regulations §18730 and any amendments to it duly adopted by the Fair Political Practices Commission, along with the following Exhibit A and Exhibit B, in which officials and employees are designated and disclosure categories are set forth, are hereby incorporated by reference and constitute the Conflict of Interest Code of the Monterey Regional Waste Management District ("District").

2. **Filing of Statements**. Pursuant to 2 California Code of Regulations §18730(b)(4), all designated employees shall file statements of economic interests with the District which will make the statements available for public inspection and reproduction pursuant to Government Code § 81008. Upon adoption of this Conflict of Interest Code, the Board Secretary shall advise all persons holding designated positions who have not previously been required to file disclosure statements that an initial statement must be filed within thirty days of this Conflict of Interest Code. Upon receipt of the statements of the District Board of Directors, the District shall make and retain a copy and forward the original of each statement to the code reviewing body (Monterey County Board of Supervisors). Statements for all other designated employees will be retained by the District.

Attachments: Exhibit A
Exhibit B

Adopted: November 1984
Amended: November 2024 Resolution 2024-14

EXHIBIT A: Designated Positions

List of Designated Positions	Assigned Disclosure Category
District Board of Directors	1
General Manager	1
Director of Engineering & Compliance/District Engineer	1
Director of Finance & Administration	1
Director of Communications	1
Director of Operations	1
Director of Human Resources	1
Assistant Director of Operations	1
Equipment Maintenance Manager	2
Accounting Manager	1
Assistant Accounting Manager	1
Materials Recovery Facility Manager	2
Safety Manager	2
Senior Engineer	2
Landfill Operations & LFG Systems Manager	2
Legal Counsel	1
Consultants*	1

*For purposes of this Code "Consultant" has the same meaning as set forth in 2 Cal. Code or Regs. section 18700(a)(1), as follows:

"Consultant" means an individual who, pursuant to a contract with a state or local government agency:

(A) Makes a governmental decision whether to:

1. Approve a rate, rule or regulations;
2. Adopt or enforce a law;
3. Issue, deny, suspend, or revoke any permit, license, application, certificate, approval, order or similar authorization or entitlement;
4. Authorize the agency to enter into, modify, or renew a contract provided it is the type of contract which requires agency approval;
5. Grant agency approval to a contract which requires agency approval and in which the agency is a part or to the specifications for such a contract;
6. Grant agency approval to a plan, design, report, study, or similar item;
7. Adopt, or grant agency approval of, policies, standards, or guidelines for the agency, or for any subdivision thereof; or

(B) Serves in a staff capacity with the agency and in that capacity performs the same or substantially all the same duties for the agency that would otherwise be performed by an individual holding a position specified in the agency's Conflict of Interest Code.

Consultants to the District shall be subject to disclosure under Category 1, subject to the following limitation:

The District General Manager may determine in writing that a particular consultant, although a "Designated Employee" is hired to perform a range of duties that is limited in scope and thus not required to fully comply with the disclosure requirements of Category 1. In such cases, the District General Manager may designate a different disclosure requirement. Such designation must be made in writing and shall include a description of the consultant's duties and, based upon that description, a statement of the extent of the consultant's disclosure requirements. The District General Manager's designation must be filed, in advance of disclosure by the consultant, with the District's conflict of interest code and also filed with the code reviewing body and must be delivered to the consultant along with a copy of the Conflict of Interest Code and the manual and forms for disclosure (FPPC Form 700).

EXHIBIT B: Disclosure Categories

General Provisions:

When a member, officer, or employee who holds a designated position is required to disclose investments, sources of income, or financial interests, he or she shall disclose such investments, sources of income, or financial interests, in business entities which do business in the jurisdiction, plan to do business in the jurisdiction, or have done business in the jurisdiction within the past two years. In addition to other activities, a business entity is doing business with the jurisdiction if it owns real property within the jurisdiction.

When a designated member, officer, or employee who holds a designated position is required to disclose sources of income, he or she shall disclose gifts received from donors located inside, as well as outside, the jurisdiction.

When a designated member, officer, or employee who holds a designated position is required to disclose interests in real property, he or she shall disclose the type of real property described below, if it is located in whole, or in part, within or not more than two miles outside of the boundaries of the jurisdiction, or within two miles of any land owned or used by the District.

When a designated member, officer, or employee who holds a designated position is required to disclose business position, he or she shall disclose positions in business entities that do business in California, plan to do business in California, or have done business in California within the past two years.

For purpose of this Conflict of Interest Code, the jurisdiction of the District is that area within the boundaries of the member entities of the Monterey Regional Waste Management District. The District operates entirely within the geographical boundaries of the County of Monterey.

Disclosure Category 1:

A designated position in this category must report all investments, business positions, interest in real property, and sources of income, including gifts, loans, and travel payments.

Disclosure Category 2:

A designated position in this category must report all investments, business positions, and sources of income, including gifts, loans, and travel payments.

MEMO

Meeting Date: November 22, 2024

To: Board of Directors
From: Director of Operations – Jay Ramos
Approved by: General Manager – Felipe Melchor

Subject: Approve Declaration of Surplus Equipment: MR20 2003 John Deere 230CLC Excavator, AD09 2005 Ford Expedition 4X4, MR18 1998 Pacifictek PV500 Vacuum Trailer.

RECOMMENDATION

That the Board declare: MR20 2003 John Deere 230CLC, Excavator, AD09 2005 Ford Expedition 4X4 MR18 1998 Pacifictek PV500 Vacuum Trailer as surplus and authorize the disposition of this specific ReGen Monterey asset by selling it for sealed bid solicitation, third-party auction, or scrap market.

BACKGROUND AND DISCUSSION

As in past practice, the request to declare certain ReGen Monterey assets as surplus generally consists of identifying those assets that have reached the end of their useful life cycle service to ReGen operations. The assets defined below have been determined to meet the criteria (see pictures of the assets in an attached file). For those equipment or vehicles that are governed by the local Air District (MBARD) or the Air Board (CARB) program requirements, the disposition shall be for sealed bid, third-party auction, or scrap market.

ASSET #	Unit #	Description	Purchase Date	Purchase Cost	Accumulated Depreciation	Net Book Value	Est. Market Value
808	MR20	230 CLC John Deere Excavator	1/15/2004	$211,818.75		$	$10,000.00
851	2005	2005 Ford Expedition XLT	9/212005	$33,687.61		0	Scrap
628	MR18	Portable Trash Pump PV500	9/10/1998	$24,868.60		0	Scrap

FISCAL IMPACT

There is negligible financial impact associated with declaring this asset as surplus. There will be several hundred dollars in resale or scrap value and some minor avoided costs associated with maintenance and fuel by not using this vehicle any longer.

CONCLUSION

Staff requests that the Financial Committee consider this recommendation to declare the above-listed asset as surplus and authorize the disposition of ReGen Monterey's surplus equipment for resale or scrap market value; and provide guidance to staff for the delivery of this request to the November 22 Board meeting.


DEERE
GB9Y86
230C LC


A
MUSTER ZONE
MRWMD


MR 16

ReGen MONTEREY

sitos GROUP

Sitos Monterey 1, LLC

Pilot Plant

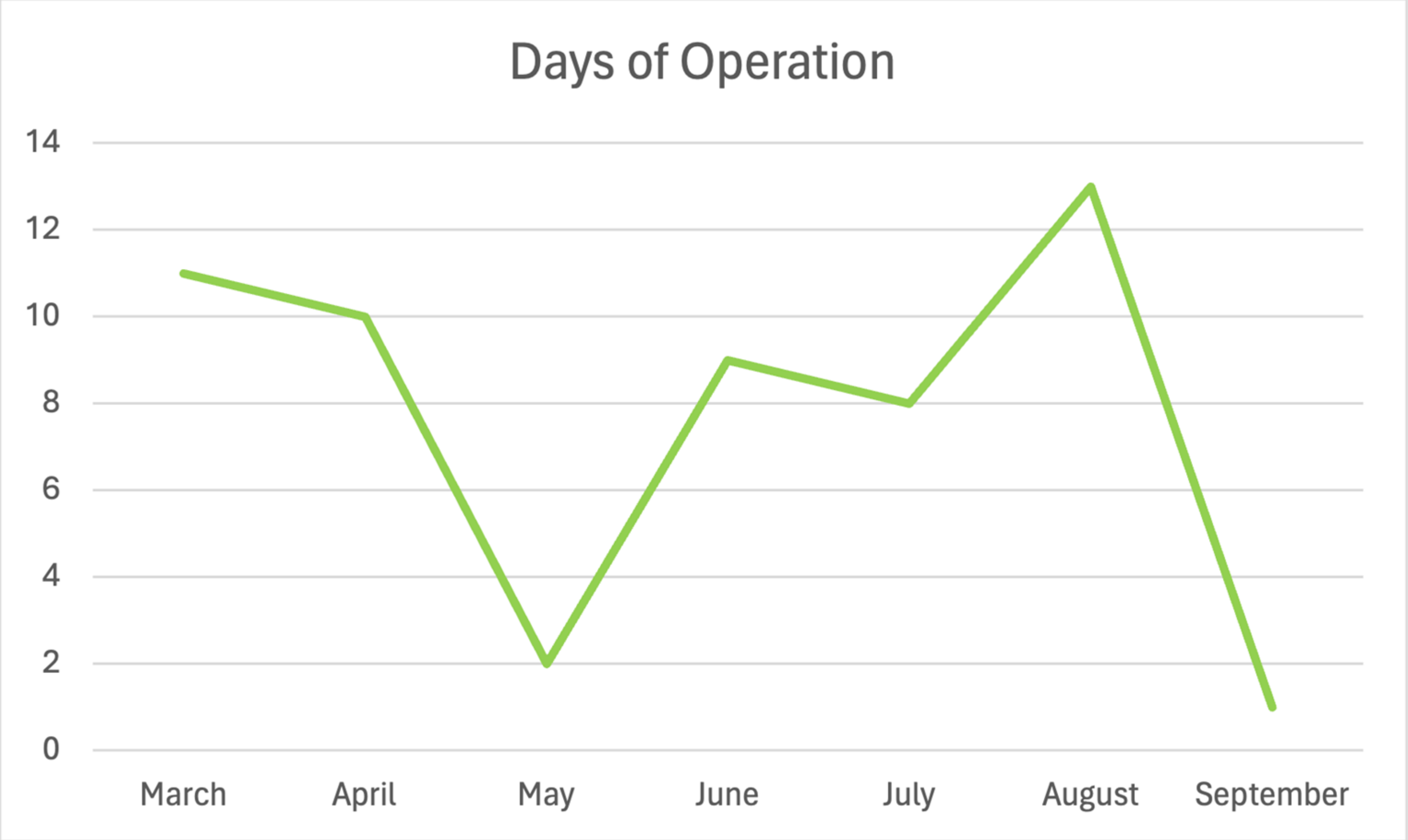
Quarterly Report

Pilot Plant Goals

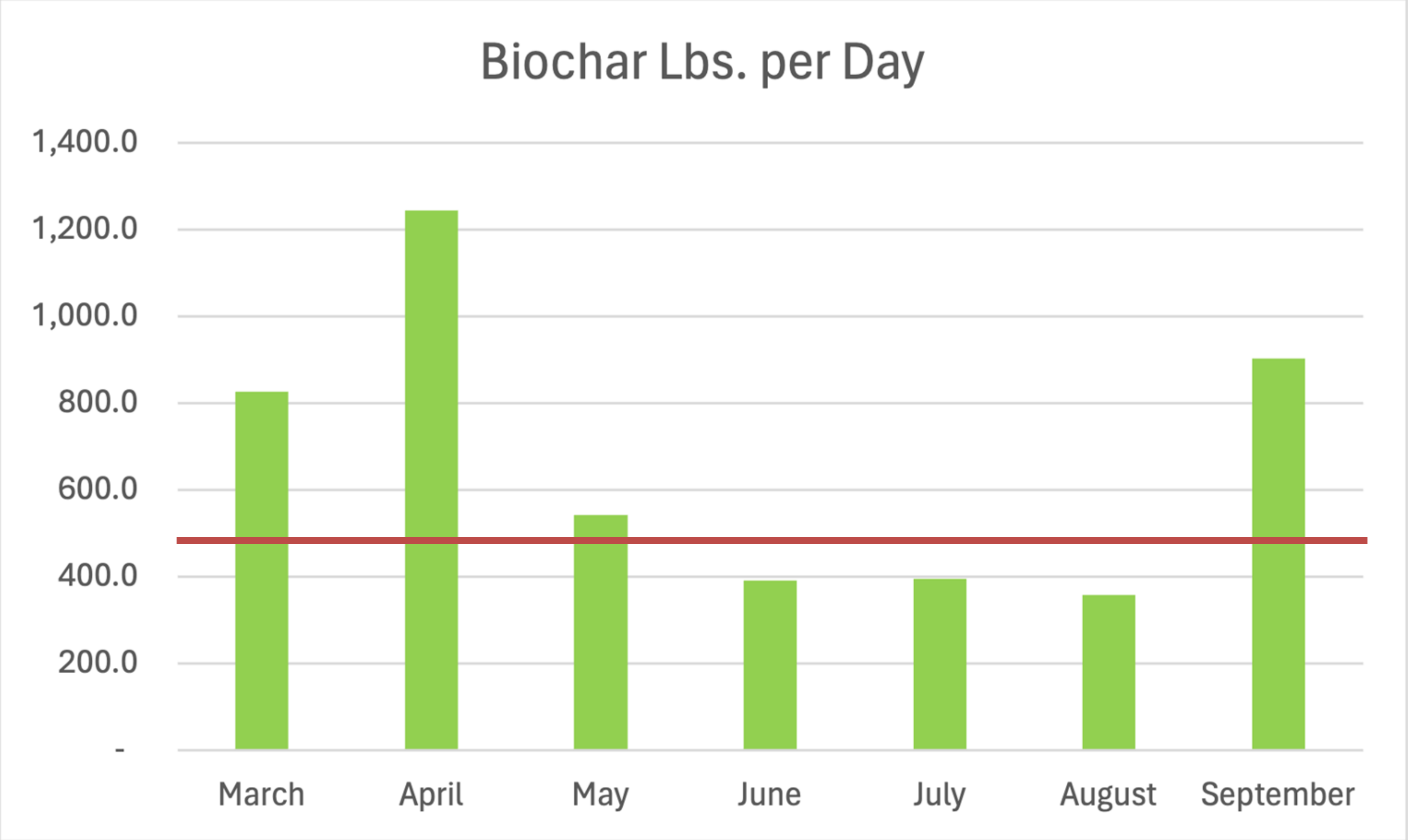
- Test New Generation Slow Pyrolysis Equipment
- Demonstrate Municipal Wood Waste as a Viable Feedstock
- Establish Methodology for High Quality / Customizable Biochar
- Promote Slow Pyrolysis and Biochar in a Physical Plant Setting
- Pave the Way for Air Quality Permitting Favorable to Pyrolysis
- Train & Educate Operators and Potential Operators
- Prepare for Full Commercialization of Three-Machine Plant Operation

sitos GROUP

Monthly Performance 2024



Operational Days



Production : Biochar in Lbs.

Max. Production = 198 Lbs. per Hour or 1,188 Lbs. per Shift

Max. Expected Production = 475 Lbs. With 6 Hour Shift @ 40% Capacity

Biochar Quality

sitos GROUP

Issues:

- 2023 biochar tests were high quality
  - High carbon content, minimal ash, high hydrogen to carbon ratio
- Addition of emissions stack in April for EPA testing results in high-ash biochar production
- No tests were taken through Summer due to obvious physical characteristics

Solutions:

- Paul Kerr, pyrolysis expert from Australia, visited early November to assist with quality improvement
- Expanding Gabilan lab to include biochar testing with Frank Shields using Sitos-provided equipment

Permitting (EPA)

Advanced Notice of Rule Change (2020)

- Pyrolysis is NOT combustion or incineration
- EPA and MBARD classified us under OSWI rules: CAA 40 CFR 129 Subpart EEEE

Significant Education and Policy Change Effort Led by Sitos Group and USBC

EPA Releases New Guidelines Late September 2024

- Pyrolysis is NOT incineration nor combustion and NOT subject to CAA as an Other Solid Waste Incinerator under Section 129

EPA

Office of Resource Conservation and Recovery
EPA 530-F-24-013
September 2024
www.epa.gov/rcra/nhsm

Fact Sheet on Clean Cellulosic Biomass and Non-Hazardous Secondary Materials Determinations[1]

sitos GROUP

Permitting (MBARD)

Air Quality Permit

- Authority to Construct – Granted 4/23
- Monterey County Building Permit Granted
- Conducted Long-term Emissions Test ($110,000+) April 2024
    - Despite no emissions control equipment or baghouse, unit passed particulate matter and all gases - failed on lead present in feedstock
- Pending Request Through MBARD for Exemption at Temporary Pilot Plant
- Awaiting Reconsideration of ATC and Air Permit Application Based on New EPA Guidelines
- Organizing Educational Session with EPA Region 9, MBARD, and

  San Joaquin Valley Air District on Pyrolysis.

Equipment Development

ReGen Pilot Plant Machine – Applied Gaia #1

- Early-stage manufacturer
- Significant operational issues
    - Insulation, observation, fugitive air input, OEM bearings, burner(s)
- Riello burner – installation and operational issues
    - Replaced burner three times – no domestic source available

Lack of Feedstock Dryer: A Significant Impediment

- No feedstock moisture consistency
- Unit never operated over 50% of capacity due to moisture

Major Developments in New Equipment Design to Address Key Issues

sitos GROUP

3 Machines

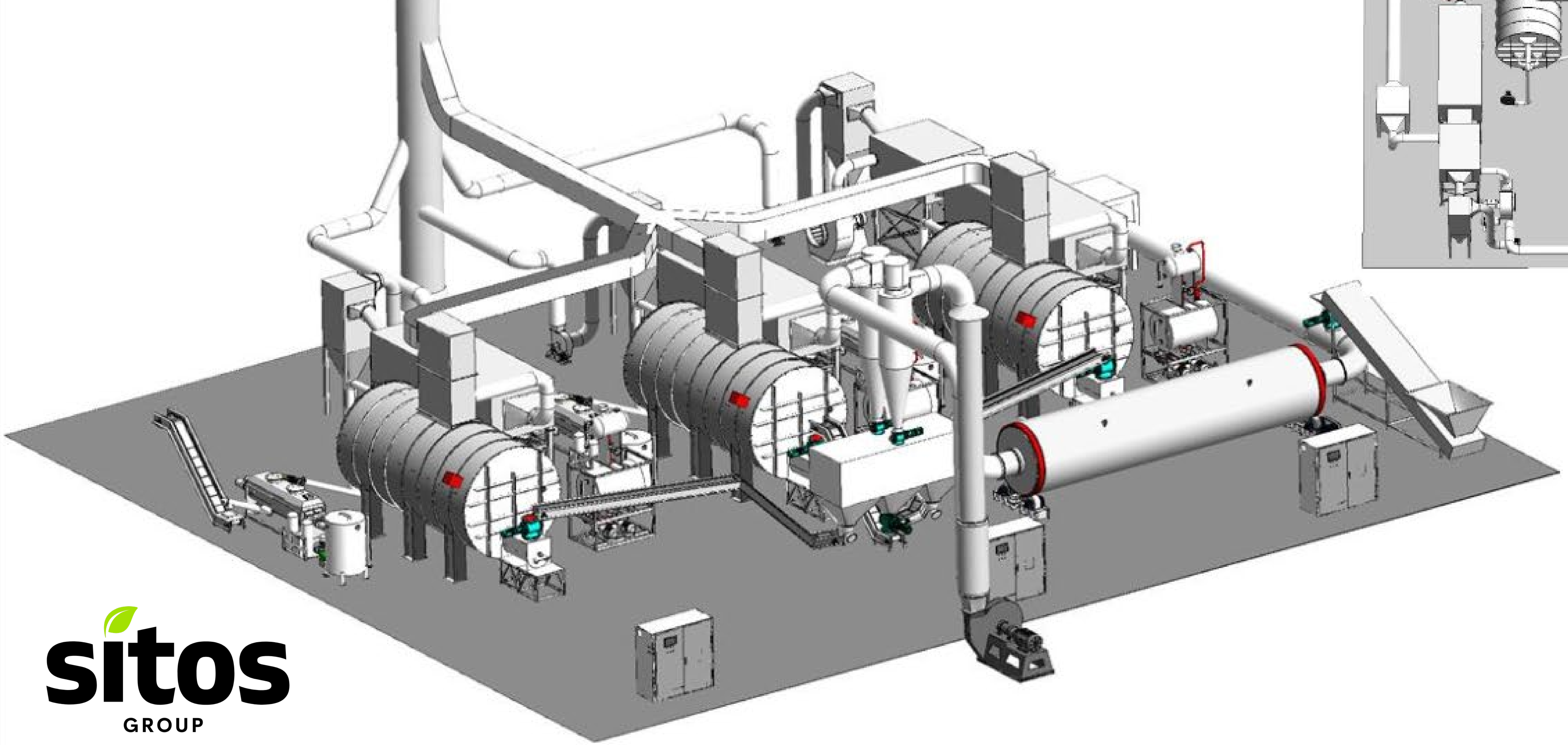
26,000 Input Tons/Yr.

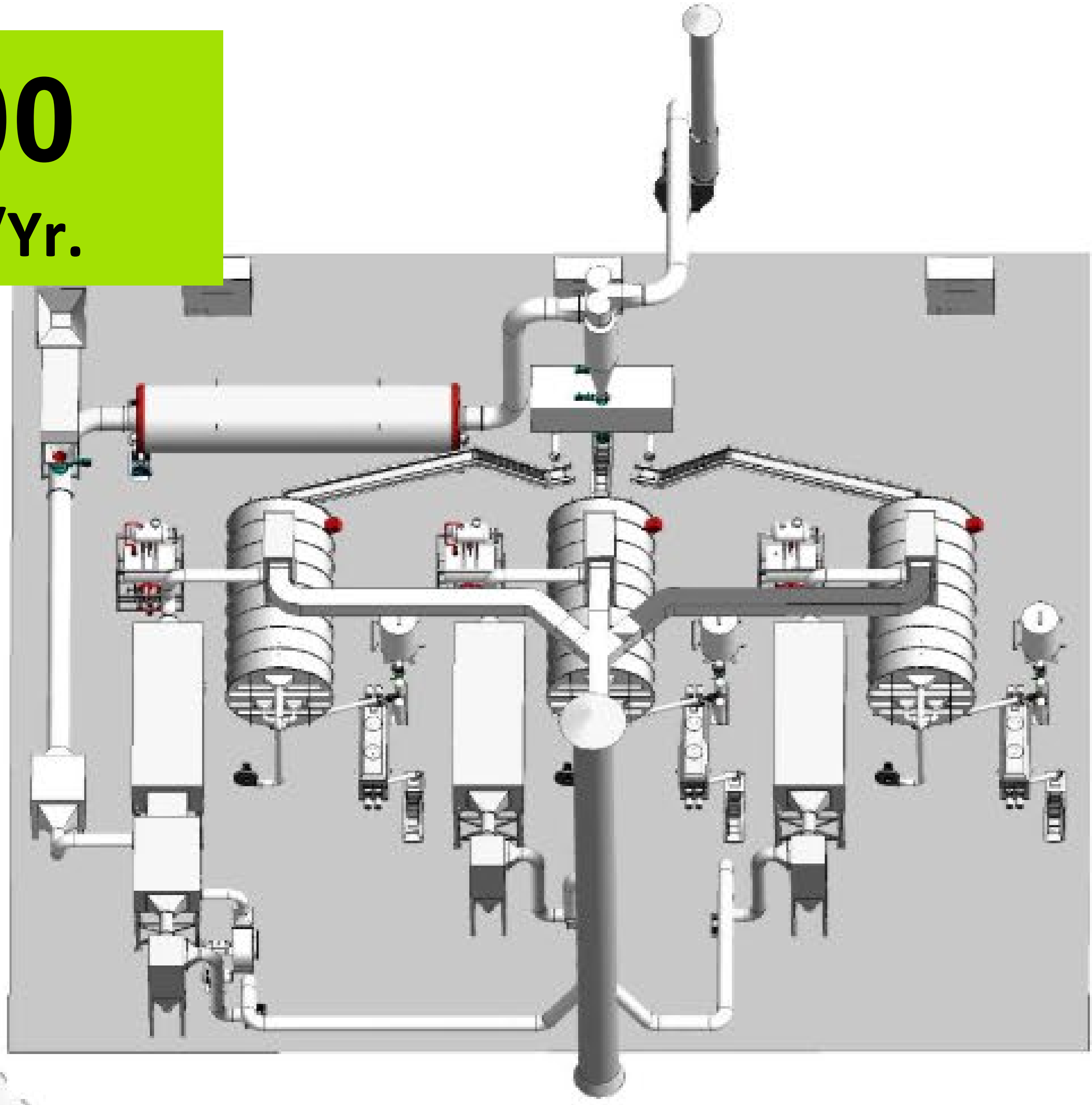
7,800 Biochar Tons/Yr.

20,000 CDR Tons/Yr.

Fully Integrated Slow Pyrolysis System

Includes Drying Capacity and Full Emissions Controls





sitos GROUP

Equipment Development

sitos GROUP

sitos
GROUP

THANK YOU

mayor@sitos.earth

(559) 288-4986

www.sitos.earth

MEMO

Meeting Date: November 22, 2024

To: Board of Directors
From: Director of Finance & Administration, Helen Rodriguez
Approved by: General Manager, Felipe Melchor

Subject: Discuss $19.7 million CalPERS Unfunded Actuarial Pension Liability and Approve Accelerating UAL Payments.

RECOMMENDATION
Discuss the $19.7 million CalPERS Unfunded Actuarial Pension Liability (UAL) and approve accelerating UAL payments.

BACKGROUND
The CalPERS actuarial valuation as of June 30, 2023, issued on July 2024 – Attachment 1, reports that ReGen Monterey's Unfunded Actuarial Pension Liability (UAL) is $19,668,750 and is 67.8% funded. The Accrued Liability, Unfunded Accrued Liability, and the Present Value of Benefits provided in the June 30, 2023 annual valuation report are calculated assuming annual inflation growth of 2.3% over the long term. For salary, the report estimates that current employees will get an annual inflation adjustment of 2.3%, plus a productivity increase of .5%, plus a seniority, merit, and promotion increase that varies for each member and is based on their employment category, age, and the amount of service they've accrued as of the valuation date.

ReGen's current and past practice has been to fund the minimum UAL payment required that is calculated based on a 23-year amortization period of the liability and accrues interest. Continuing the minimum UAL payment required for the 23-year amortization period would be approximately $33.5M, or an additional $14.1M of interest in addition to the UAL of $19.7M – see page 22 of Attachment 1.

DISCUSSION

ReGen has 4 funding options to consider as follows:

1. Continue to pay the minimum UAL
2. Create a reserve policy
3. Create a Section 115 Trust
4. Reduce the amortization period from 23 years to 15 or 10 years by making additional UAL payments annually

The first option to continue paying only the required annual minimum UAL would incur $14.1M in interest and take 23 years for the liability to be 100% funded. Please note that the Actuarial Report is two years in arrears, so the actual liability may be greater than the current reported valuation.

The second option is to create a reserve which will be used to pay the liability when ReGen no longer generates revenue (at closure). ReGen currently have five reserves: 1) Operating Reserve of 20%; 2) Capital Equipment Reserve; 3) Capital Infrastructure Reserve; 4) Closure Reserve; and 5) Post-Closure Reserve. Additionally, ReGen has restricted cash for the CalRecycle Financial Assurance as part of the Closure cost of $2.5M. These reserves reduce the amount of cash available for operations and debt payments and do not reduce the UAL liability or reduce the amount of interest accruing on the UAL. As of September 30, 2024, ReGen's cash is approximately $39.8M, of which $6.8M is either restricted or has been reserved by the Board.

The third option is the creation of a Section 115 Trust, a qualified trust that allows a government entity to set aside money to pay for post-retirement employee benefits. This trust would be handled by a third-party administrator. Once the cash has been transferred to the administrator, that cash is no longer available for ReGen's use, nor can the Board un-restrict or un-reserve the cash. While the cash is restricted only for paying the UAL, it does not reduce the ReGen's UAL and interest continues accruing.

The fourth option is to reduce the amortization from 23 years to 15 or 10 years. Reduction of the amortization means to increase payment for the UAL, thereby not only reducing ReGen's liability, but also reducing the interest expense. For example, by paying an additional $467K annually to the minimum required UAL payment, the amortization period is reduced to 15 years and saves ReGen approximately $3M in interest. Further reduction to 10 years would require an additional $1.1M plus the minimum required UAL and reduce interest cost by approximately $7.0M. Reduction of the amortization period requires coordination with CalPERS to determine how much is required above the minimum UAL payment annually. See page 22 of Attachment 1 for an example. Based on the amortization schedule provided by CalPERS with an additional $500K payment made annually on January subsequent to the July minimum UAL payment is made thru 2036, interest saved is estimated at $6.0M.

RECCOMENDATION

Of the four options, staff recommends the fourth option and rounding the additional UAL payment of $500K to be made in January, 2025. Thereafter, Staff will coordinate with CalPERS annually to reduce the liability to fund the liability by 2036. The amount of additional UAL payment to be made each January subsequent will be dependent on various factors as investment earnings, retiree withdrawals, CPI, and other factors that CalPERS will take into consideration every valuation year.

FISCAL IMPACT

The fiscal impact is $500,000 to FY 2024/2025 Budget which will be funded by careful monitoring of expenses. As of October, 2025, ReGen is under budget by $558K in expenditures. Roughly $260K of savings is in wages and benefits, i.e. positions waiting to be filled and full staffing lowering overtime cost. Staff will continue to monitor expenses as the year progresses.

CONCLUSION

Staff requests the Board to approve accelerating the UAL payment and the first payment of $500,00 on January, 2025. Subsequently, in January of the preceding years, to coordinate with CalPERS to determine how much the additional payment will be with the goal to funding the UAL by 2036.

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California Public Employees' Retirement System
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July 2024

Miscellaneous Plan of the Monterey Regional Waste Management District (CalPERS ID: 7676557366)
Annual Valuation Report as of June 30, 2023

Dear Employer,

Attached to this letter is the June 30, 2023, 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) 2025-26.** 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.

Required Contributions

The table below shows the minimum required employer contributions and the PEPRA member contribution rates for FY 2025-26 along with an estimate of the employer contribution requirements for FY 2026-27. 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 and member 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
2025-26	8.79%	$1,572,630	8.25%
Projected Results			
2026-27	*8.8%*	*$1,687,000*	*TBD*

The actual investment return for FY 2023-24 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 2023-24 differs from 6.8%, the actual contribution requirements for FY 2026-27 will differ from those shown above. For additional details regarding the assumptions and methods used for these projections, please refer to Projected Employer Contributions. This section also contains projected required contributions through FY 2030-31.

Report Enhancements

A number of enhancements were made to the report this year to ease navigation and allow the reader to find specific information more quickly. The tables of contents are now "clickable." This is true for the main table of contents that follows the title page and the intermediate tables of contents at the beginning of sections. The Adobe navigation pane on the left can also be used to skip to specific exhibits.

There are a number of links throughout the document in blue text. Links that are internal to the document are not underlined, while underlined links will take you to the CalPERS website. Examples are shown below.

Internal Bookmarks	**CalPERS Website Links**
Required Employer Contributions	Required Employer Contribution Search Tool
Member Contribution Rates	Public Agency PEPRA Member Contribution Rates
Summary of Key Valuation Results	Pension Outlook Overview
Funded Status – Funding Policy Basis	Interactive Summary of Public Agency Valuation Results
Projected Employer Contributions	Public Agency Actuarial Valuation Reports

Further descriptions of general changes are included in the Highlights and Executive Summary section and in Appendix A - Actuarial Methods and Assumptions. The effects of any changes on the required contributions are included in the Reconciliation of Required Employer Contributions section.

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,

Nate Jensen

Nathan Jensen, ASA, MAAA
Senior Actuary, CalPERS

Randall Dziubek, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS

Scott Terando, ASA, EA, MAAA, FCA, CFA
Chief Actuary, CalPERS

California Public Employees’ Retirement System

Actuarial Valuation for the Miscellaneous Plan of the Monterey Regional Waste Management District

as of June 30, 2023

(CalPERS ID: 7676557366)
(Rate Plan ID: 964)

Required Contributions for Fiscal Year

July 1, 2025 — June 30, 2026

CalPERS

Table of Contents

Actuarial Certification

It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles as well as the applicable Standards of Practice promulgated by the Actuarial Standards Board. While this report is intended to be complete, our office is available to answer questions as needed. All of the undersigned are actuaries who satisfy the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* of the American Academy of Actuaries with regard to pensions.

Actuarial Methods and Assumptions

It is our opinion that the assumptions and methods, as recommended by the Chief Actuary and adopted by the CalPERS Board of Administration, are internally consistent and reasonable for this plan.

Randall Dziubek, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS

Scott Terando, ASA, EA, MAAA, FCA, CFA
Chief Actuary, CalPERS

Actuarial Data and Rate Plan Results

To the best of my knowledge and having relied upon the attestation above that the actuarial methods and assumptions are reasonable, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the Miscellaneous Plan of the Monterey Regional Waste Management District and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation and related validation work was performed by the CalPERS Actuarial Office. The valuation was based on the member and financial data as of June 30, 2023, provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced.

Nate Jensen

Nathan Jensen, ASA, MAAA
Senior Actuary, CalPERS

Highlights and Executive Summary

Introduction

This report presents the results of the June 30, 2023, actuarial valuation of the Miscellaneous Plan of the Monterey Regional Waste Management District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2025-26.

Purpose

This report documents the results of the actuarial valuation prepared by the CalPERS Actuarial Office using data as of June 30, 2023. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2023;
- Determine the minimum required employer contributions for this rate plan for FY July 1, 2025, through June 30, 2026;
- Determine the required member contribution rate for FY July 1, 2025, through June 30, 2026, for employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2023, 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 an Agent Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available from CalPERS and details for ordering are 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 a CalPERS 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 Standards of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 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.

Summary of Key Valuation Results

Below is a brief summary of key valuation results along with page references where more detailed information can be found .

Required Employer Contributions — page 13

	Fiscal Year 2024-25	Fiscal Year 2025-26
Employer Normal Cost Rate	9.33%	8.79%
Unfunded Accrued Liability (UAL) Contribution Amount	$1,509,584	$1,572,630
Paid either as		
Option 1) 12 Monthly Payments of	$125,799	$131,053
Option 2) Annual Prepayment in July	$1,460,736	$1,521,742

Member Contribution Rates — page 14

	Fiscal Year 2024-25	Fiscal Year 2025-26
Classic Member Contribution Rate	7.00%	7.00%
PEPRA Member Contribution Rate	7.50%	8.25%

Projected Employer Contributions — page 17

Fiscal Year	Normal Cost (% of payroll)	Annual UAL Payment
2026-27	8.8%	$1,687,000
2027-28	8.7%	$1,779,000
2028-29	8.7%	$1,975,000
2029-30	8.7%	$2,019,000
2030-31	8.6%	$2,058,000

Funded Status — Funding Policy Basis — page 15

	June 30, 2022	June 30, 2023
Entry Age Accrued Liability (AL)	$58,057,967	$61,109,881
Market Value of Assets (MVA)	39,090,075	41,441,131
Unfunded Accrued Liability (UAL) [AL – MVA]	$18,967,892	$19,668,750
Funded Ratio [MVA ÷ AL]	67.3%	67.8%

Summary of Valuation Data — Page 73

	June 30, 2022	June 30, 2023
Active Member Count	120	122
Annual Covered Payroll	$9,034,836	$9,220,843
Transferred Member Count	11	14
Separated Member Count	74	79
Retired Members and Beneficiaries Count	98	99

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. For rate plans that are not in a risk pool (non-pooled), benefit changes by contract amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the effective date of the amendment is after the valuation date.

Please refer to the Plan's Major Benefit Options and Appendix B - Principal Plan Provisions for a summary of the plan provisions used in this valuation. The effect of any mandated benefit changes or plan amendments on the unfunded liability is shown in the (Gain)/Loss Analysis 6/30/22 – 6/30/23 and the effect on the employer contribution is shown in the Reconciliation of Required Employer Contributions. It should be noted that no change in liability or contribution is shown for any plan changes which were already included in the prior year's valuation.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2023, actuarial valuation.

New Disclosure Items

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) requiring actuaries to disclose a low-default-risk obligation measure (LDROM) of the benefits earned. This information is shown in a new exhibit, Funded Status – Low-Default-Risk Basis.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2023, as well as statutory changes, regulatory changes and board actions through January 2024.

During the time period between the valuation date and the publication of this report, inflation has been 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, 2024, valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists.

The 2023 annual benefit limit under Internal Revenue Code (IRS) section 415(b) and annual compensation limits under IRS section 401(a)(17) and Government Code section 7522.10 were used for this valuation and are assumed to increase 2.3% per year based on the price inflation assumption. The actual 2024 limits, determined in October 2023, are not reflected.

On April 16, 2024, the board took action to modify the Funding Risk Mitigation Policy to remove the automatic change to the discount rate when the investment return exceeds various thresholds. Rather than an automatic change to the discount rate, a board discussion would be placed on the calendar. The 95th percentile return in the Future Investment Return Scenarios exhibit in this report has not been modified and still reflects the projected contribution requirements associated with a reduction in the discount rate.

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

Reconciliation of the Market Value of Assets

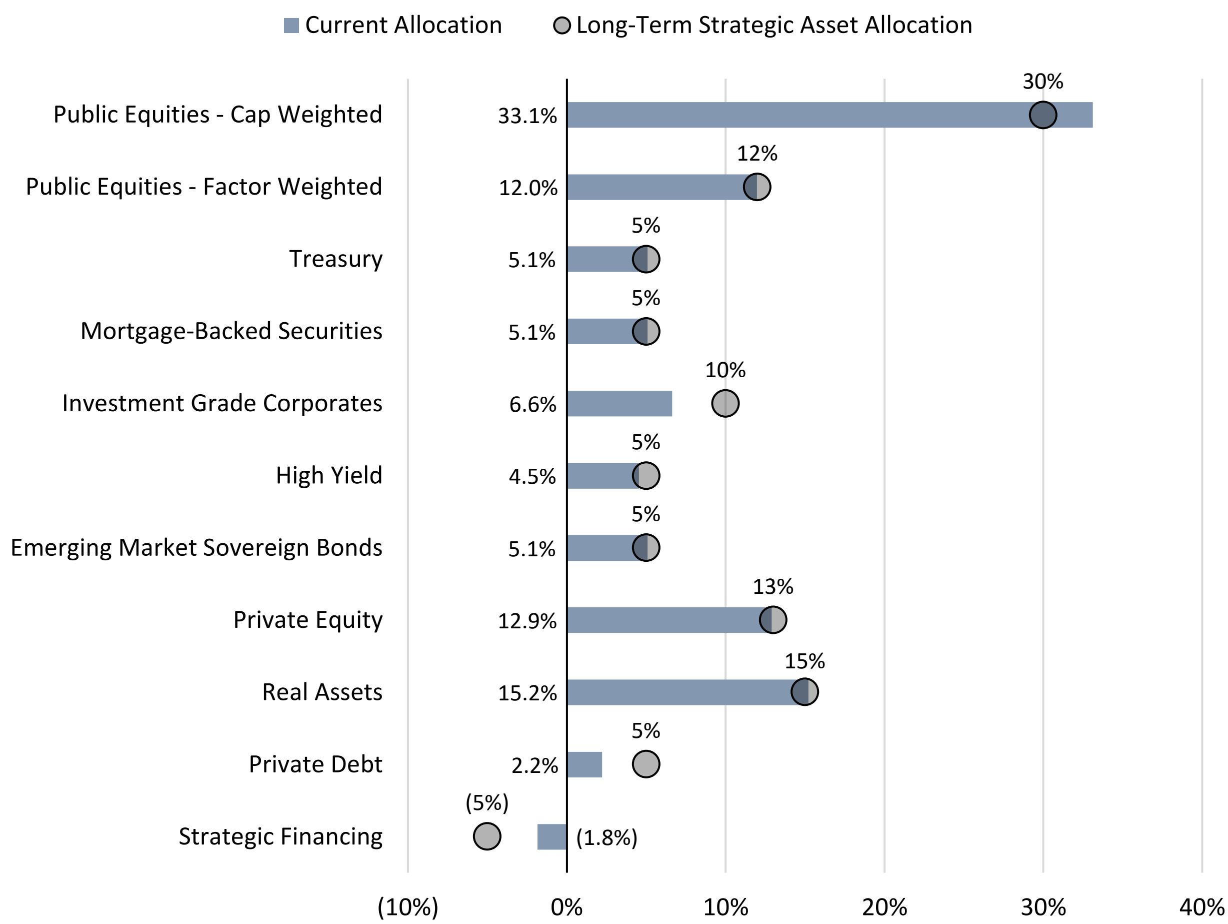
1.	Market Value of Assets as of 6/30/22 including Receivables	$39,090,075
2.	Change in Receivables for Service Buybacks	0
3.	Employer Contributions	2,091,361
4.	Employee Contributions	690,501
5.	Benefit Payments to Retirees and Beneficiaries	(2,799,558)
6.	Refunds	(27,741)
7.	Transfers	0
8.	Service Credit Purchase (SCP) Payments and Interest	0
9.	Administrative Expenses	(23,251)
10.	Miscellaneous Adjustments	0
11.	Investment Return (Net of Investment Expenses)	2,419,744
12.	Market Value of Assets as of 6/30/23 including Receivables	$41,441,131

Asset Allocation

CalPERS adheres to an Asset Allocation Strategy which establishes asset class allocation policy targets and ranges and manages those asset class allocations within their policy ranges. CalPERS recognizes that over 90% of the variation in investment returns of a large, well-diversified pool of assets can typically be attributed to asset allocation decisions.

The asset allocation shown below reflects the allocation of the Public Employees' Retirement Fund (PERF) in its entirety. The assets for Monterey Regional Waste Management District Miscellaneous Plan are a subset of the PERF and are invested accordingly.

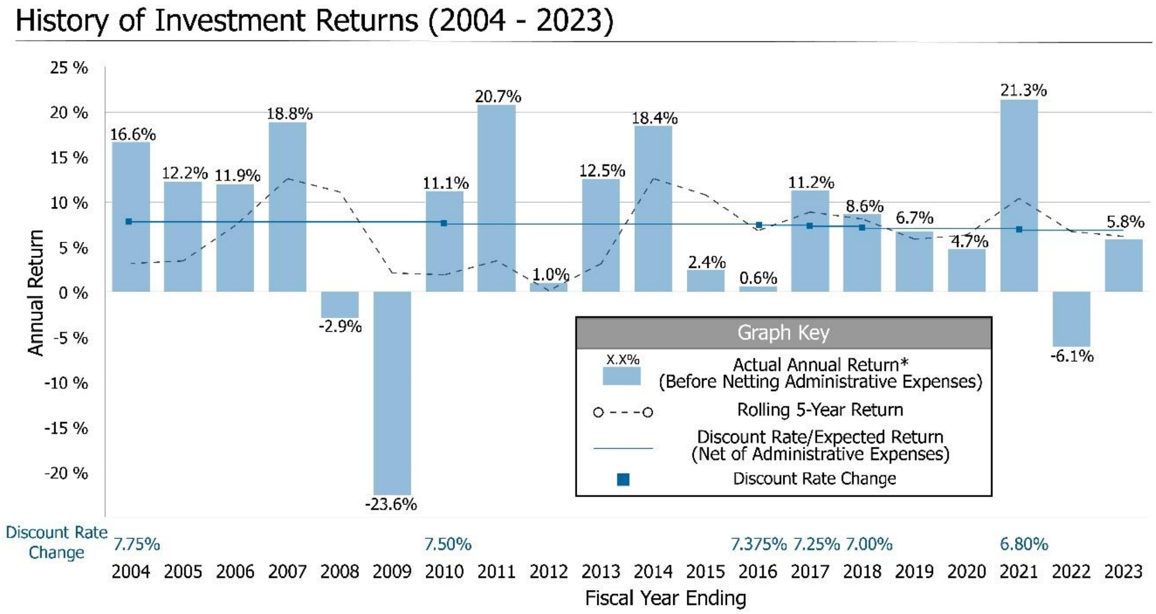
On November 17, 2021, the board adopted changes to the strategic asset allocation. The new allocation was effective July 1, 2022. The asset allocation as of June 30, 2023, is shown below, along with the long-term strategic asset allocations.



For more information see the Trust Level Review as of June 30, 2023, which is available on the CalPERS website.

CalPERS History of Investment Returns

The following is a chart with the 20-year historical annual returns of the PERF for each fiscal year ending on June 30 as reported by the Investment Office. Investment returns reported are net of investment expenses but without reduction for administrative expenses. The assumed rate of return, however, is net of both investment and administrative expenses. Also, the Investment Office uses a three-month lag on private equity and real assets for investment performance reporting purposes. This can lead to a timing difference in the returns below and those used for financial reporting purposes. The investment gain or loss calculation in this report relies on final assets that have been audited and are appropriate for financial reporting. Because of these differences, the effective investment return for funding purposes in a single year can be higher or lower than the return reported by the Investment Office shown here.



* As reported by the Investment Office with a 3-month lag on private equity and real assets and without any reduction for administrative expenses.

The table below shows annualized investment returns of the PERF for various time periods ending on June 30, 2023. Figures reported are net of investment expenses but without reduction for administrative expenses. These returns are the annual rates that if compounded over the indicated number of years would equate to the actual time-weighted investment performance of the PERF. It should be recognized that in any given year the rate of return is volatile. The portfolio has an expected volatility of 12.0% per year based on the most recent Asset Liability Management study. The realized volatility is a measure of the risk of the portfolio expressed as the standard deviation of the fund's total monthly return distribution, expressed as an annual percentage. Due to their volatile nature, when looking at investment returns, it is more instructive to look at returns over longer time horizons.

History of CalPERS Compound Annual Rates of Return and Volatilities

	1 year	5 year	10 year	20 year	30 year
Compound Annual Return	5.8%	6.1%	7.1%	7.0%	7.5%
Realized Volatility	–	9.5%	7.8%	8.4%	8.8%

Liabilities and Contributions

Determination of Required Contributions

Contributions to fund the plan are determined by an actuarial valuation performed each year. The valuation employs complex calculations based on a set of actuarial assumptions and methods. See Appendix A for information on the assumptions and methods used in this valuation. The valuation incorporates all plan experience through the valuation date and sets required contributions for the fiscal year that begins two years after the valuation date.

Contribution Components

Two components comprise required contributions:

- Normal Cost — expressed as a percentage of pensionable payroll
- Unfunded Accrued Liability (UAL) Contribution — expressed as a dollar amount

Normal Cost represents the value of benefits allocated to the upcoming year for active employees. If all plan experience exactly matched the actuarial assumptions, normal cost would be sufficient to fully fund all benefits. The employer and employees each pay a share of the normal cost with contributions payable as part of the regular payroll reporting process. The contribution rate for Classic members is set by statute based on benefit formula whereas for PEPRA members it is based on 50% of the total normal cost.

When plan experience differs from the actuarial assumptions, unfunded accrued liability (UAL) emerges. The new UAL may be positive or negative. If the total UAL is positive (i.e., accrued liability exceeds assets), the employer is required to make contributions to pay off the UAL over time. This is called the Unfunded Accrued Liability Contribution component. There is an option to prepay this amount during July of each fiscal year, otherwise it is paid monthly.

In measuring the UAL each year, plan experience is split by source. Common sources of UAL include investment experience different than expected, non-investment experience different than expected, assumption changes, and benefit changes. Each source of UAL (positive or negative) forms a base that is amortized, or paid off, over a specified period of time in accordance with the CalPERS Actuarial Amortization Policy. The Unfunded Accrued Liability Contribution is the sum of the payments on all bases. See the Schedule of Amortization Bases section of this report for an inventory of existing bases and Appendix A for more information on the amortization policy.

Development of Accrued and Unfunded Liabilities

		June 30, 2022	June 30, 2023
1.	Present Value of Projected Benefits		
	a) Active Members	$35,186,880	$36,627,903
	b) Transferred Members	307,622	486,432
	c) Separated Members	1,998,547	1,973,358
	d) Members and Beneficiaries Receiving Payments	34,133,117	35,990,911
	e) Total	$71,626,166	$75,078,604
2.	Present Value of Future Employer Normal Costs	$7,272,866	$7,500,699
3.	Present Value of Future Employee Contributions	$6,295,333	$6,468,024
4.	Entry Age Accrued Liability		
	a) Active Members [(1a) - (2) - (3)]	$21,618,681	$22,659,180
	b) Transferred Members (1b)	307,622	486,432
	c) Separated Members (1c)	1,998,547	1,973,358
	d) Members and Beneficiaries Receiving Payments (1d)	34,133,117	35,990,911
	e) Total	$58,057,967	$61,109,881
5.	Market Value of Assets (MVA)	$39,090,075	$41,441,131
6.	Unfunded Accrued Liability (UAL) [(4e) - (5)]	$18,967,892	$19,668,750
7.	Funded Ratio [(5) ÷ (4e)]	67.3%	67.8%

Required Employer Contributions

The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.

	Fiscal Year
Required Employer Contributions	**2025-26**
Employer Normal Cost Rate	**8.79%**
Plus	
Unfunded Accrued Liability (UAL) Contribution Amount	**$1,572,630**
Paid either as	
1) Monthly Payment	**$131,053**
Or	
2) Annual Prepayment Option*	**$1,521,742**

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) and the 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 Member Contribution Rates see the following page.

	Fiscal Year 2024-25	Fiscal Year 2025-26
Normal Cost Contribution as a Percentage of Payroll		
Total Normal Cost[1]	16.64%	16.61%
Offset due to Employee Contributions[2]	7.31%	7.82%
Employer Normal Cost	9.33%	8.79%
Projected Annual Payroll for Contribution Year	$9,815,211	$10,017,283
Estimated Employer Contributions Based on Projected Payroll		
Total Normal Cost	$1,633,251	$1,663,871
Expected Employee Contributions	717,492	783,352
Employer Normal Cost	915,759	880,519
Unfunded Liability Contribution	1,509,584	1,572,630
% of Projected Payroll (illustrative only)	15.38%	15.70%
Estimated Total Employer Contribution	$2,425,343	$2,453,149
% of Projected Payroll (illustrative only)	24.71%	24.49%

[1] The Total Normal Cost is a blended rate for all benefit groups in the plan. For a breakout of normal cost by benefit group, see Normal Cost by Benefit Group.

[2] This is the expected employee contributions, taking into account individual benefit formula and any offset from the use of a modified formula, divided by projected annual payroll. For member contribution rates above the breakpoint for each benefit formula, see Member Contribution Rates.

Member Contribution Rates

The required member contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.

Classic Members

Each member contributes toward their retirement based upon the retirement formula. The standard Classic member contribution rate above the breakpoint, if any, is as described below.

Benefit Formula	Percent Contributed above the Breakpoint
Miscellaneous, 1.5% at age 65	2%
Miscellaneous, 2% at age 60	7%
Miscellaneous, 2% at age 55	7%
Miscellaneous, 2.5% at age 55	8%
Miscellaneous, 2.7% at age 55	8%
Miscellaneous, 3% at age 60	8%

Auxiliary organizations of the CSU system may elect reduced contribution rates for Miscellaneous members, in which case the contribution rate above the breakpoint is 6% if members are not covered by Social Security and 5% if they are.

PEPRA Members

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 rate for the plan is dependent on the benefit levels, actuarial assumptions, and demographics of the plan, particularly members' entry age into the plan. Should the total normal cost rate of the plan change by more than 1% from the base total normal cost rate established for the plan, 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, 2025, based on 50% of the total normal cost rate for each respective plan as of the June 30, 2023, valuation.

		Basis for Current Rate		Rates Effective July 1, 2025			
Plan Identifier	Benefit Group Name	Total Normal Cost	Member Rate	Total Normal Cost	Change	Change Needed	Member Rate
27455	Miscellaneous PEPRA Level	15.080%	7.50%	16.40%	1.320%	Yes	8.25%

For a description of the methodology used to determine the Total Normal Cost for this purpose, see PEPRA Normal Cost Rate Methodology in Appendix A.

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 diffe rent sizes.

	June 30, 2022	**June 30, 2023**
1. Present Value of Benefits	$71,626,166	$75,078,604
2. Entry Age Accrued Liability	58,057,967	61,109,881
3. Market Value of Assets (MVA)	39,090,075	41,441,131
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	$18,967,892	$19,668,750
5. Funded Ratio [(3) ÷ (2)]	67.3%	67.8%

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. Present Value of Benefits	$88,659,387	$75,078,604	$64,577,912
2. Entry Age Accrued Liability	69,442,103	61,109,881	54,232,637
3. Market Value of Assets (MVA)	41,441,131	41,441,131	41,441,131
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	$28,000,972	$19,668,750	$12,791,506
5. Funded Ratio [(3) ÷ (2)]	59.7%	67.8%	76.4%

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.

Additional Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for FY 2025-26 is $1,572,630. 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 2025-26 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 Amortization Schedule and Alternatives. Agencies considering making an ADP should contact CalPERS for additional information.

Fiscal Year 2025-26 Employer Contributions — Illustrative Scenarios

Funding Approach	Estimated Normal Cost	Minimum UAL Contribution	ADP[1]	Total UAL Contribution	Estimated Total Contribution
Minimum required only	$880,519	$1,572,630	0	$1,572,630	$2,453,149
20 year funding horizon	$880,519	$1,572,630	$175,963	$1,748,593	$2,629,112
15 year funding horizon	$880,519	$1,572,630	$467,256	$2,039,886	$2,920,405
10 year funding horizon	$880,519	$1,572,630	$1,081,646	$2,654,276	$3,534,795
5 year funding horizon	$880,519	$1,572,630	$2,991,895	$4,564,525	$5,445,044

[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.

The calculations above are based on the projected UAL as of June 30, 2025, as determined in the June 30, 2023, 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.

Additional Discretionary Payment History

The following table provides a recent history of actual ADPs made to the plan.

Fiscal Year	ADP	Fiscal Year	ADP
2018-19	$0	2021-22	$0
2019-20	$0	2022-23	$0
2020-21	$0	2023-24	$0

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 2023-24 is assumed to be 6.80% per year, net of investment and administrative expenses. The projected normal cost percentages below reflect that the normal cost is expected to continue to decline over time as new employees are hired in to lower cost benefit tiers. 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 2023-24 and Beyond)**				
Fiscal Year	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Normal Cost %	8.79%	8.8%	8.7%	8.7%	8.7%	8.6%
UAL Payment	$1,572,630	$1,687,000	$1,779,000	$1,975,000	$2,019,000	$2,058,000
Total as a % of Payroll*	24.49%	25.1%	25.5%	26.8%	26.7%	26.5%
Projected Payroll	$10,017,283	$10,297,767	$10,586,105	$10,882,515	$11,187,226	$11,500,469

*Illustrative only and based on the projected payroll shown.

For ongoing plans, investment gains and losses are amortized using a 5-year ramp up. For more information, please see Amortization of Unfunded Actuarial Accrued Liability in Appendix A. 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.

For projected contributions under alternate investment return scenarios, please see the Future Investment Return Scenarios exhibit. 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.

(Gain)/Loss Analysis 6/30/22 – 6/30/23

To calculate the cost requirements of the plan, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year, actual experience is compared to the expected experience based on the actuarial assumptions. This results in actuarial gains or losses, as shown below.

1.	Total (Gain)/Loss for the Year	
a)	Unfunded Accrued Liability (UAL) as of 6/30/22	$18,967,892
b)	Expected payment on the UAL during 2022-23	1,161,426
c)	Interest through 6/30/23 [.068 x (1a) - ((1.068)^{½} - 1) x (1b)]	1,250,980
d)	Expected UAL before all other changes [(1a) - (1b) + (1c)]	19,057,446
e)	Change due to plan changes	0
f)	Change due to AL Significant Increase	0
g)	Change due to assumption changes	0
h)	Change due to method changes	0
i)	Change due to discount rate change with Funding Risk Mitigation	0
j)	Expected UAL after all other changes [(1d) + (1e) + (1f) + (1g) + (1h) + (1i)]	19,057,446
k)	Actual UAL as of 6/30/23	19,668,750
l)	Total (Gain)/Loss for 2022-23 [(1k) - (1j)]	$611,304
2.	Investment (Gain)/Loss for the Year	
a)	Market Value of Assets as of 6/30/22	$39,090,075
b)	Prior fiscal year receivables	0
c)	Current fiscal year receivables	0
d)	Contributions received	2,781,861
e)	Benefits and refunds paid	(2,827,299)
f)	Transfers, SCP payments and interest, and miscellaneous adjustments	0
g)	Expected return at 6.8% per year	2,699,337
h)	Expected assets as of 6/30/23 [(2a) + (2b) + (2c) + (2d) + (2e) + (2f) + (2g)]	41,743,974
i)	Actual Market Value of Assets as of 6/30/23	41,441,131
j)	Investment (Gain)/Loss [(2h) - (2i)]	$302,843
3.	Non-Investment (Gain)/Loss for the Year	
a)	Total (Gain)/Loss (1l)	$611,304
b)	Investment (Gain)/Loss (2j)	302,843
c)	Non-Investment (Gain)/Loss [(3a) - (3b)]	$308,461

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, 2023.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: FY 2025-26.

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 on the UAL for FY 2023-24 is based on the actuarial valuation two years ago, adjusted for additional discretionary payments, if necessary, and the expected payment for FY 2024-25 is based on the actuarial valuation one year ago.

Reason for Base	Date Est.	Ramp Level 2025-26	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Expected Payment 2024-25	Balance 6/30/25	Minimum Required Payment 2025-26
Assets Change	6/30/03	No Ramp		2.80%	0	(1,832)	(965)	(959)	(991)	0	0
Assumption Change	6/30/03	No Ramp		2.80%	0	149,613	78,783	78,369	80,990	0	0
Method Change	6/30/04	No Ramp		2.80%	1	(14,150)	(5,062)	(9,881)	(5,203)	(5,176)	(5,349)
Assumption Change	6/30/09	No Ramp		2.80%	6	381,600	56,126	349,546	57,698	313,688	59,314
Special (Gain)/Loss	6/30/09	No Ramp		2.80%	16	555,416	43,258	548,480	44,469	539,821	45,714
Special (Gain)/Loss	6/30/10	No Ramp		2.80%	17	181,325	13,606	179,594	13,987	177,352	14,379
Assumption Change	6/30/11	No Ramp		2.80%	8	418,045	50,992	393,775	52,420	366,379	53,888
Special (Gain)/Loss	6/30/11	No Ramp		2.80%	18	70,481	5,109	69,994	5,252	69,326	5,399
(Gain)/Loss	6/30/12	No Ramp		2.80%	19	1,257,695	88,284	1,251,982	90,756	1,243,326	93,297
Payment (Gain)/Loss	6/30/12	No Ramp		2.80%	19	122,134	8,573	121,579	8,813	120,739	9,060
(Gain)/Loss	6/30/13	100%	Up/Dn	2.80%	20	3,197,827	232,106	3,175,411	238,605	3,144,755	245,286
(Gain)/Loss	6/30/14	100%	Up/Dn	2.80%	21	(2,224,690)	(156,348)	(2,214,393)	(160,726)	(2,198,871)	(165,226)
Assumption Change	6/30/14	100%	Up/Dn	2.80%	11	1,613,237	182,615	1,534,215	187,729	1,444,535	192,985
(Gain)/Loss	6/30/15	100%	Up/Dn	2.80%	22	2,881,903	196,532	2,874,768	202,035	2,861,461	207,691
(Gain)/Loss	6/30/16	100%	Up/Dn	2.80%	23	2,482,828	164,619	2,481,536	169,229	2,475,392	173,967
Assumption Change	6/30/16	100%	Up/Dn	2.80%	13	754,388	74,812	728,373	76,907	698,424	79,060
(Gain)/Loss	6/30/17	100%	Up/Dn	2.80%	24	(898,905)	(58,050)	(900,039)	(59,675)	(899,571)	(61,346)
Assumption Change	6/30/17	100%	Up/Dn	2.80%	14	973,923	91,245	945,853	93,799	913,235	96,426
Assumption Change	6/30/18	100%	Up/Dn	2.80%	15	1,617,934	117,156	1,606,880	150,545	1,560,568	154,760
Method Change	6/30/18	100%	Up/Dn	2.80%	15	287,299	20,804	285,336	26,733	277,112	27,481

Schedule of Amortization Bases (continued)

Reason for Base	Date Est.	Ramp Level 2025-26	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Expected Payment 2024-25	Balance 6/30/25	Minimum Required Payment 2025-26
(Gain)/Loss	6/30/18	100%	Up/Dn	2.80%	25	(39,619)	(2,021)	(40,225)	(2,598)	(40,275)	(2,670)
Investment (Gain)/Loss	6/30/19	100%	Up Only	0.00%	16	189,565	11,398	190,676	15,197	187,937	18,996
Non-Investment (Gain)/Loss	6/30/19	No Ramp		0.00%	16	339,813	32,218	329,625	32,218	318,744	32,218
Investment (Gain)/Loss	6/30/20	80%	Up Only	0.00%	17	850,536	34,963	872,240	52,445	877,354	69,926
Non-Investment (Gain)/Loss	6/30/20	No Ramp		0.00%	17	713,438	65,795	693,957	65,795	673,151	65,795
Assumption Change	6/30/21	No Ramp		0.00%	18	573,384	51,561	559,089	51,561	543,822	51,561
Net Investment (Gain)	6/30/21	60%	Up Only	0.00%	18	(4,770,213)	(102,534)	(4,988,625)	(205,069)	(5,115,925)	(307,603)
Non-Investment (Gain)/Loss	6/30/21	No Ramp		0.00%	18	3,685	331	3,594	331	3,496	331
Risk Mitigation	6/30/21	No Ramp		0.00%	0	1,611,270	1,665,152	0	0	0	0
Risk Mitigation Offset	6/30/21	No Ramp		0.00%	0	(1,611,270)	(1,665,152)	0	0	0	0
Benefit Change	6/30/22	No Ramp		0.00%	19	63,548	(956)	68,857	6,192	67,140	6,192
Investment (Gain)/Loss	6/30/22	40%	Up Only	0.00%	19	6,616,616	0	7,066,546	151,893	7,390,099	303,787
Non-Investment (Gain)/Loss	6/30/22	No Ramp		0.00%	19	710,622	0	758,944	68,247	740,023	68,247
Investment (Gain)/Loss	6/30/23	20%	Up Only	0.00%	20	302,843	0	323,436	0	345,430	7,425
Non-Investment (Gain)/Loss	6/30/23	No Ramp		0.00%	20	308,461	0	329,436	0	351,838	31,639
Total						**19,668,750**	**1,294,950**	**19,667,969**	**1,509,584**	**19,445,329**	**1,572,630**

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 a CalPERS 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 Actuarial Amortization Policy.

Amortization Schedule and Alternatives (continued)

			Alternative Schedules			
	Current Amortization Schedule		15 Year Amortization		10 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2025	19,445,329	1,572,630	19,445,329	2,039,886	19,445,329	2,654,276
6/30/2026	19,142,392	1,686,672	18,659,510	2,039,886	18,024,574	2,654,276
6/30/2027	18,701,001	1,778,845	17,820,255	2,039,886	16,507,208	2,654,276
6/30/2028	18,134,338	1,974,543	16,923,931	2,039,886	14,886,661	2,654,276
6/30/2029	17,326,897	2,019,365	15,966,657	2,039,887	13,155,917	2,654,276
6/30/2030	16,418,231	2,057,810	14,944,287	2,039,887	11,307,482	2,654,276
6/30/2031	15,408,045	2,027,325	13,852,396	2,039,886	9,333,354	2,654,277
6/30/2032	14,360,670	2,019,169	12,686,257	2,039,886	7,224,984	2,654,277
6/30/2033	13,250,503	1,942,257	11,440,821	2,039,887	4,973,245	2,654,277
6/30/2034	12,144,329	1,908,785	10,110,694	2,039,886	2,568,387	2,654,276
6/30/2035	10,997,529	1,847,005	8,690,120	2,039,887		
6/30/2036	9,836,592	1,731,384	7,172,946	2,039,887		
6/30/2037	8,716,198	1,662,110	5,552,604	2,039,887		
6/30/2038	7,591,209	1,588,109	3,822,079	2,039,887		
6/30/2039	6,466,196	1,532,442	1,973,878	2,039,886		
6/30/2040	5,322,209	1,502,099				
6/30/2041	4,131,788	1,327,421				
6/30/2042	3,040,939	1,146,128				
6/30/2043	2,063,266	1,523,140				
6/30/2044	629,493	377,582				
6/30/2045	282,090	178,355				
6/30/2046	116,953	120,864				
6/30/2047						
6/30/2048						
6/30/2049						
Total		**33,524,040**		**30,598,297**		**26,542,763**
Interest Paid		**14,078,711**		**11,152,968**		**7,097,434**
Estimated Savings				**2,925,743**		**6,981,277**

Reconciliation of Required Employer Contributions

Normal Cost (% of Payroll)

1.	For Period 7/1/24 – 6/30/25	
	a) Employer Normal Cost	9.33%
	b) Employee contribution	7.31%
	c) Total Normal Cost	16.64%
2.	Changes since the prior year annual valuation	
	a) Effect of demographic experience	(0.03%)
	b) Effect of plan changes	0.00%
	c) Effect of discount rate change due to Funding Risk Mitigation	0.00%
	d) Effect of assumption changes	0.00%
	e) Effect of method changes	0.00%
	f) Net effect of the changes above [sum of (a) through (e)]	(0.03%)
3.	For Period 7/1/25 – 6/30/26	
	a) Employer Normal Cost	8.79%
	b) Employee contribution	7.82%
	c) Total Normal Cost	16.61%
Employer Normal Cost Change [(3a) – (1a)]		(0.54%)
Employee Contribution Change [(3b) – (1b)]		0.51%

Unfunded Liability Contribution ($)

1.	For Period 7/1/24 – 6/30/25	1,509,584
2.	Changes since the prior year annual valuation	
	a) Effect of adjustments to prior year's amortization schedule	0
	b) Effect of elimination of amortization bases	(79,999)
	c) Effect of progression of amortization bases [1]	103,981
	d) Effect of investment (gain)/loss during prior year [2]	7,425
	e) Effect of non-investment (gain)/loss during prior year	31,639
	f) Effect of re-amortizing existing bases due to Funding Risk Mitigation	0
	g) Effect of Golden Handshake	0
	h) Effect of plan changes	0
	i) Effect of AL Significant Increase (Government Code section 20791)	0
	j) Effect of assumption changes	0
	k) Effect of adjustments to the amortization schedule (e.g., Fresh Start)	0
	l) Effect of method change	0
	m Net effect of the changes above [sum of (a) through (l)]	63,046
3.	For Period 7/1/25 – 6/30/26 [(1) + (2m)]	1,572,630

The amounts shown for the period 7/1/24 – 6/30/25 may be different if a prepayment of unfunded actuarial liability is made or a plan change became effective after the prior year's actuarial valuation was performed.

[1] Includes scheduled escalation in individual amortization base payments due to the 5-year ramp and payroll growth assumption used in the pre-2019 amortization policy.

[2] The unfunded liability contribution for the investment (gain)/loss during the year prior to the valuation date is 20% of the "full" annual requirement due to the 5-year ramp. Increases to this amount that occur during the ramp period will be included in line c) for each of the next four years.

Employer Contribution History

The table below provides a 10-year history of the employer contribution requirements for the plan, as determined by the annual actuarial valuation. Changes due to prepayments or plan amendments after the valuation report was finalized are not reflected.

Valuation Date	Contribution Year	Employer Normal Cost Rate	Unfunded Liability Rate	Unfunded Liability Payment
06/30/2014	2016 - 17	8.518%	5.831%	N/A
06/30/2015	2017 - 18	8.275%	N/A	467,569
06/30/2016	2018 - 19	8.475%	N/A	601,629
06/30/2017	2019 - 20	9.114%	N/A	753,279
06/30/2018	2020 - 21	9.611%	N/A	888,905
06/30/2019	2021 - 22	9.36%	N/A	1,073,835
06/30/2020	2022 - 23	9.05%	N/A	1,279,012
06/30/2021	2023 - 24	9.41%	N/A	1,295,906
06/30/2022	2024 - 25	9.33%	N/A	1,509,584
06/30/2023	2025 - 26	8.79%	N/A	1,572,630

Funding History

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

Valuation Date	Accrued Liability (AL)	Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
6/30/2014	$29,708,546	$23,726,271	$5,982,275	79.9%	$5,889,921
6/30/2015	33,024,847	24,606,555	8,418,292	74.5%	6,337,314
6/30/2016	36,089,326	24,928,622	11,160,704	69.1%	6,611,229
6/30/2017	39,520,379	27,953,926	11,566,453	70.7%	7,307,640
6/30/2018	43,864,178	30,499,729	13,364,449	69.5%	8,157,916
6/30/2019	47,135,436	32,869,487	14,265,949	69.7%	8,941,939
6/30/2020	50,597,616	34,689,300	15,908,316	68.6%	9,006,891
6/30/2021	54,697,653	42,486,932	12,210,721	77.7%	8,057,556
6/30/2022	58,057,967	39,090,075	18,967,892	67.3%	9,034,836
6/30/2023	61,109,881	41,441,131	19,668,750	67.8%	9,220,843

Normal Cost by Benefit Group

The table below displays the Total Normal Cost broken out by benefit group for FY 2025-26. The Total Normal Cost is the annual cost of service accrual for the fiscal year for active employees and can be viewed as the long-term contribution rate for the benefits contracted. Generally, the normal cost for a benefit group subject to more generous benefit provisions will exceed the normal cost for a group with less generous benefits. However, based on the characteristics of the members (particularly when the number of actives is small), this may not be the case. Future measurements of the Total Normal Cost for each group may differ significantly from the current values due to such factors as: changes in the demographics of the group, changes in economic and demographic assumptions, changes in plan benefits or applicable law.

Plan Identifier	Benefit Group Name	Total Normal Cost FY 2025-26	Number of Actives	Payroll on 6/30/2023
964	Miscellaneous First Level	16.91%	36	$3,151,309
27455	Miscellaneous PEPRA Level	16.40%	85	$5,995,485
30564	Miscellaneous Second Level	21.36%	1	$74,049
	Plan Total	**16.61%**	**122**	**$9,220,843**

Note that if a Benefit Group above has multiple bargaining units, each of which has separately contracted for different benefits such as Employer Paid Member Contributions, then the Normal Cost shown for the respective benefit level does not reflect those differences. Additionally, if a Second Level Benefit Group amended to the same benefit formula as a First Level Benefit Group, their Normal Costs may be dissimilar due to demographic or other population differences. For questions in these situations, please contact a CalPERS actuary.

Risk Analysis

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 projected normal cost rates reflect that the rates are anticipated to decline over time as new employees are hired into lower-cost benefit tiers. 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, 2043.

Assumed Annual Return FY 2023-24 through FY 2042-43	Projected Employer Contributions				
	2026-27	2027-28	2028-29	2029-30	2030-31
3.0% (5th percentile)					
Discount Rate	6.80%	6.80%	6.80%	6.80%	6.80%
Normal Cost Rate	8.8%	8.7%	8.7%	8.7%	8.6%
UAL Contribution	$1,725,000	$1,896,000	$2,211,000	$2,418,000	$2,664,000
10.8% (95th percentile)					
Discount Rate	6.75%	6.70%	6.65%	6.60%	6.55%
Normal Cost Rate	9.0%	9.2%	9.3%	9.5%	9.7%
UAL Contribution	$1,650,000	$1,671,000	$1,756,000	$1,649,000	$1,486,000

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 one and two standard deviation investment losses in FY 2023-24 on the FY 2026-27 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 2026-27.

Assumed Annual Return for Fiscal Year 2023-24	Required Employer Contributions	Projected Employer Contributions
	2025-26	2026-27
(17.2%) (2 standard deviation loss)		
Discount Rate	6.80%	6.80%
Normal Cost Rate	8.79%	8.8%
UAL Contribution	$1,572,630	$1,930,000
(5.2%) (1 standard deviation loss)		
Discount Rate	6.80%	6.80%
Normal Cost Rate	8.79%	8.8%
UAL Contribution	$1,572,630	$1,809,000

- Without investment gains (returns higher than 6.8%) in FY 2024-25 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 2023-24.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2026-27 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, 2023, 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, 2023	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	20.92%	16.61%	13.36%
b) Accrued Liability	$69,442,103	$61,109,881	$54,232,637
c) Market Value of Assets	$41,441,131	$41,441,131	$41,441,131
d) Unfunded Liability/(Surplus) [(b) - (c)]	$28,000,972	$19,668,750	$12,791,506
e) Funded Ratio	59.7%	67.8%	76.4%

Sensitivity to the Price Inflation Assumption

As of June 30, 2023	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	17.49%	16.61%	15.11%
b) Accrued Liability	$63,147,809	$61,109,881	$56,771,512
c) Market Value of Assets	$41,441,131	$41,441,131	$41,441,131
d) Unfunded Liability/(Surplus) [(b) - (c)]	$21,706,678	$19,668,750	$15,330,381
e) Funded Ratio	65.6%	67.8%	73.0%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2023, plan costs and funded status under two different longevity scenarios, namely assuming rates of post-retirement 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, 2023	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	16.92%	16.61%	16.33%
b) Accrued Liability	$62,406,014	$61,109,881	$59,917,503
c) Market Value of Assets	$41,441,131	$41,441,131	$41,441,131
d) Unfunded Liability/(Surplus) [(b) - (c)]	$20,964,883	$19,668,750	$18,476,372
e) Funded Ratio	66.4%	67.8%	69.2%

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.

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 increases. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2022	June 30, 2023
1. Retiree Accrued Liability	$34,133,117	$35,990,911
2. Total Accrued Liability	$58,057,967	$61,109,881
3. Ratio of Retiree AL to Total AL [(1) ÷ (2)]	59%	59%

Another measure of the maturity level of CalPERS and its plans is 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, 2022, was 0.77 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, 2022	June 30, 2023
1. Number of Actives	120	122
2. Number of Retirees	98	99
3. Support Ratio [(1) ÷ (2)]	1.22	1.23

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 increases, 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 a higher AVR experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an AVR of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an 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 an LVR of 8 is expected to have twice the contribution volatility of a plan with an LVR of 4 when there is a change in accrued liability, such as when there is a change in actuarial assumptions. 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, 2022	June 30, 2023
1. Market Value of Assets without Receivables	$39,090,075	$41,441,131
2. Payroll	9,034,836	9,220,843
3. Asset Volatility Ratio (AVR) [(1) ÷ (2)]	4.3	4.5
4. Accrued Liability	$58,057,967	$61,109,881
5. Liability Volatility Ratio (LVR) [(4) ÷ (2)]	6.4	6.6

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
6/30/2017	45%	2.02	3.8	5.4
6/30/2018	45%	2.05	3.7	5.4
6/30/2019	46%	2.04	3.7	5.3
6/30/2020	53%	1.71	3.9	5.6
6/30/2021	59%	1.27	5.3	6.8
6/30/2022	59%	1.22	4.3	6.4
6/30/2023	59%	1.23	4.5	6.6

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, 2023. The accrued liability on a termination basis (termination liability) is calculated differently from 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 remainder of the PERF and consequently, a lower discount rate assumption. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The discount rate used for actual termination valuations is a weighted average of the 10-year and 30-year Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the following analysis is based on 20-year Treasury bonds, which is a good proxy for most plans. The discount rate upon contract termination will depend on actual Treasury rates on the date of termination, which varies over time, as shown below.

Valuation Date	20-Year Treasury Rate	Valuation Date	20-Year Treasury Rate
06/30/2014	3.08%	06/30/2019	2.31%
06/30/2015	2.83%	06/30/2020	1.18%
06/30/2016	1.86%	06/30/2021	2.00%
06/30/2017	2.61%	06/30/2022	3.38%
06/30/2018	2.91%	06/30/2023	4.06%

As Treasury rates are variable, the table below shows a range for the termination liability using discount rates 1% below and above the 20-year Treasury rate on the valuation date. The price inflation assumption is the 20-year Treasury breakeven inflation rate, that is, the difference between the 20-year inflation indexed bond and the 20-year fixed-rate bond.

The Market Value of Assets (MVA) also varies with interest rates and will fluctuate depending on other market conditions on the date of termination. Since it is not possible to approximate how the MVA will change in different interest rate environments, the results below use the MVA as of the valuation date.

	Discount Rate: 3.06% Price Inflation: 2.50%	Discount Rate: 5.06% Price Inflation: 2.50%
1. Termination Liability[1]	$96,776,196	$72,008,358
2. Market Value of Assets (MVA)	41,441,131	41,441,131
3. Unfunded Termination Liability [(1) – (2)]	$55,335,065	$30,567,227
4. Funded Ratio [(2) ÷ (1)]	42.8%	57.6%

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

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 a CalPERS actuary to provide a preliminary termination valuation with a more up-to-date estimate of the plan's assets and liabilities. Before beginning this process, please consult with a CalPERS actuary.

Funded Status – Low-Default-Risk Basis

Actuarial Standard of Practice (ASOP) No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*, requires the disclosure of a low-default-risk obligation measure (LDROM) of benefit costs accrued as of the valuation date using a discount rate based on the yields of high quality fixed income securities with cash flows that replicate expected benefit payments. Conceptually, this measure represents the level at which financial markets would value the accrued plan costs, and would be approximately equal to the cost of a portfolio of low-default-risk bonds with similar financial characteristics to accrued plan costs.

As permitted in ASOP No. 4, the Actuarial Office uses the Entry Age Actuarial Cost Method to calculate the LDROM. This methodology is in line with the measure of "benefit entitlements" calculated by the Bureau of Economic Analysis and used by the Federal Reserve to report the indebtedness due to pensions of plan sponsors and, conversely, the household wealth due to pensions of plan members.

As shown below, the discount rate used for the LDROM is 4.82%, which is the Standard FTSE Pension Liability Index[1] discount rate as of June 30, 2023, net of assumed administrative expenses.

Selected Measures on a Low-Default-Risk Basis	June 30, 2023
Discount Rate	4.82%
1. Accrued Liability[2] – Low-Default-Risk Basis (LDROM)	
a) Active Members	$32,202,165
b) Transferred Members	764,154
c) Separated Members	2,663,690
d) Members and Beneficiaries Receiving Payments	43,768,395
e) Total	$79,398,404
2. Market Value of Assets (MVA)	41,441,131
3. Unfunded Accrued Liability – Low-Default-Risk Basis [(1e) – (2)]	$37,957,273
4. Unfunded Accrued Liability – Funding Policy Basis	19,668,750
5. Present Value of Unearned Investment Risk Premium [(3) – (4)]	$18,288,523

The difference between the unfunded liabilities on a low-default-risk basis and on the funding policy basis represents the present value of the investment risk premium that must be earned in future years to keep future contributions for currently accrued plan costs at the levels anticipated by the funding policy.

Benefit security for members of the plan relies on a combination of the assets in the plan, the investment income generated from those assets, and the ability of the plan sponsor to make necessary future contributions. If future returns fall short of 6.8%, benefit security could be at risk without higher than currently anticipated future contributions.

The funded status on a low-default-risk basis is not appropriate for assessing the sufficiency of plan assets to cover the cost of settling the plan's benefit obligations (see Funded Status – Termination Basis), nor is it appropriate for assessing the need for future contributions (see Funded Status – Funding Policy Basis).

1 This index is based on a yield curve of hypothetical AA-rated zero coupon corporate bonds whose maturities range from 6 months to 30 years. The index represents the single discount rate that would produce the same present value as discounting a standardized set of liability cash flows for a fully open pension plan using the yield curve. The liability cash flows are reasonably consistent with the pattern of benefits expected to be paid from the entire Public Employees' Retirement Fund for current and former plan members. A different index, hence a different discount rate, may be needed to measure the LDROM for a subset of the fund, such as a single rate plan or a group of retirees.

2 If plan assets were invested entirely in the AA fixed income securities used to determine the discount rate of 4.82%, the CalPERS discount rate could, at various times, be below 4.5% or 5.25%, and some automatic annual retiree COLAs could be suspended (Gov. Code sections 21329 and 21335). Since there is currently no proposal to adopt an asset allocation entirely comprised of fixed income securities, the automatic COLAs have been fully valued in the measures above based on the assumptions used for plan funding. Removing future COLAs from the measurement would understate the statutory obligation.

Plan's Major Benefit Options

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 Appendix B.

	Benefit Group						
Member Category	**Misc**	**Misc**	**Misc**	**Misc**	**Misc**	**Misc**	
Demographics							
Actives	Yes	Yes	Yes	No	No	No	
Transfers/Separated	Yes	Yes	No	No	No	No	
Receiving	Yes	Yes	No	Yes	Yes	Yes	
Benefit Provision							
Benefit Formula	2% @ 55	2% @ 62	2% @ 60				
Social Security Coverage	No	No	No				
Full/Modified	Full	Full	Full				
Employee Contribution Rate	7.00%	7.50%	7.00%				
Final Average Compensation Period	One Year	Three Year	Three Year				
Sick Leave Credit	Yes	Yes	Yes				
Non-Industrial Disability	Improved	Improved	Improved				
Industrial Disability	No	No	No				
Pre-Retirement Death Benefits							
Optional Settlement 2	No	No	No				
1959 Survivor Benefit Level	Level 3	Level 3	Level 3				
Special	No	No	No				
Alternate (firefighters)	No	No	No				
Post-Retirement Death Benefits							
Lump Sum	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	
Survivor Allowance (PRSA)	No	No	No	No	No	No	
COLA	2%	2%	2%	2%	2%	2%	

Appendices

- **Appendix A – Actuarial Methods and Assumptions**
- **Appendix B – Principal Plan Provisions**
- **Appendix C – Participant Data**
- **Appendix D – Glossary**

Appendix A - Actuarial Methods and Assumptions

Actuarial Data

As stated in the Actuarial Certification, the data which serves as the basis of this valuation has been obtained from the various CalPERS databases. We have reviewed the valuation data and believe that it is reasonable and appropriate in aggregate. We are unaware of any potential data issues that would have a material effect on the results of this valuation, except that data does not always contain the latest salary information for former members now in reciprocal systems and does not recognize the potential for unusually large salary deviation in certain cases such as elected officials. Therefore, salary information in these cases may not be accurate. These situations are relatively infrequent, however, and generally do not have a material impact on the required employer contributions.

Actuarial Methods

Actuarial Cost Method

With one exception, the actuarial cost method used in this valuation is the Entry Age Actuarial Cost Method. This method is used to calculate the required employer contributions and the PEPRA member contribution rate. Under this method, the cost of the projected benefits is allocated on an individual basis as a level percent of earnings for the individual between entry age and retirement age. The portion allocated to the year following the valuation date is the normal cost. This method yields a total normal cost rate, expressed as a percentage of payroll, which is designed to remain level throughout the member's career.

The actuarial accrued liability for active members is then calculated as the present value of benefits minus the present value of future normal cost, or the portion of the total present value of benefits allocated to prior years. The actuarial accrued liability for members currently receiving benefits and for members entitled to deferred benefits is equal to the present value of the benefits expected to be paid. No normal costs are applicable for these participants.

To calculate the accrued liability on termination basis, this valuation used the Traditional Unit Credit Actuarial Cost Method. This method differs from the entry age method only for active members where the accrued liability is the present value of benefits assuming no future pay increases or service accruals.

Amortization of Unfunded Actuarial Accrued Liability

The excess of the total actuarial accrued liability over the market value of plan assets is called the unfunded actuarial accrued liability (UAL). Funding requirements are determined by adding the normal cost and a payment toward the UAL. The UAL payment is equal to the sum of individual amortization payments, each representing a different source of UAL for a given measurement period.

Amortization payments are determined according to the CalPERS Actuarial Amortization Policy. The board adopted a new policy effective for the June 30, 2019, actuarial valuation. The new policy applies prospectively only; amortization bases (sources of UAL) established prior to the June 30, 2019, valuation will continue to be amortized according to the prior policy.

Prior Policy (Bases Established prior to June 30, 2019)

Amortization payments are determined as a level percentage of payroll whereby the payment increases each year at an escalation rate. Gains or losses are amortized over a fixed 30-year period with a 5-year ramp up at the beginning and a 5-year ramp down at the end of the amortization period. All changes in liability due to plan amendments (other than golden handshakes) are amortized over a 20-year period with no ramp. Changes in actuarial assumptions or changes in actuarial methodology are amortized over a 20-year period with a 5-year ramp up at the beginning and a 5-year ramp down at the end of the amortization period. Changes in unfunded accrued liability due to a Golden Handshake will be amortized over a period of five years. Bases established prior to June 30, 2013, may be amortized differently. A summary is provided in the following table:

	Source				
	(Gain)/Loss				
Driver	**Investment**	**Non-investment**	**Assumption/Method Change**	**Benefit Change**	**Golden Handshake**
Amortization Period	30 Years	30 Years	20 Years	20 Years	5 Years
Escalation Rate - Active Plans - Inactive Plans	 2.80% 0%	 2.80% 0%	 2.80% 0%	 2.80% 0%	 2.80% 0%
Ramp Up	5	5	5	0	0
Ramp Down	5	5	5	0	0

The 5-year ramp up means that the payments in the first four years of the amortization period are 20%, 40%, 60% and 80% of the “full” payment which begins in year five. The 5-year ramp down means that the reverse is true in the final four years of the amortization period.

Current Policy (Bases Established on or after June 30, 2019)

Amortization payments are determined as a level dollar amount. Investment gains or losses are amortized over a fixed 20-year period with a 5-year ramp up at the beginning of the amortization period. Non-investment gains or losses are amortized over a fixed 20-year period with no ramps. All changes in liability due to plan amendments (other than golden handshakes) are amortized over a 20-year period with no ramps. Changes in actuarial assumptions or changes in actuarial methodology are amortized over a 20-year period with no ramps. Changes in unfunded accrued liability due to a Golden Handshake are amortized over a period of five years. A summary is provided in the table below:

	Source				
	(Gain)/Loss				
Driver	**Investment**	**Non-investment**	**Assumption/ Method Change**	**Benefit Change**	**Golden Handshake**
Amortization Period	20 Years	20 Years	20 Years	20 Years	5 Years
Escalation Rate	0%	0%	0%	0%	0%
Ramp Up	5	0	0	0	0
Ramp Down	0	0	0	0	0

Exceptions for Inconsistencies

An exception to the amortization rules above is used whenever their application results in inconsistencies. In these cases, a “fresh start” approach is used. This means that the current unfunded actuarial liability is projected and amortized over a set number of years. For example, a fresh start is needed in the following situations:

- 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.

It should be noted that the actuary may determine that a fresh start is necessary under other circumstances. In all cases of a fresh start, the period is set by the actuary at what is deemed appropriate; however, the period will not be greater than 20 years.

Exceptions for Plans in Surplus

If a surplus exists (i.e., the Market Value of Assets exceeds the plan's accrued liability) any prior amortization layers shall be considered fully amortized, and the surplus shall not be amortized.

In the event of any subsequent unfunded liability, a Fresh Start shall be used with an amortization period of 20 years or less.

Exceptions for Small Amounts

Where small unfunded liabilities are identified in annual valuations which result in small payment amounts, the actuary may shorten the remaining period for these bases.

- When the balance of a single amortization base has an absolute value less than $250, the amortization period is reduced to one year.
- When the entire unfunded liability is a small amount, the actuary may perform a Fresh Start and use an appropriate amortization period.

Exceptions for Inactive Plans

The following exceptions apply to plans classified as Inactive. These plans have no active members and no expectation to have active members in the future.

- Amortization of the unfunded liability is on a "level dollar" basis rather than a "level percent of pay" basis. For amortization layers, which utilize a ramp up and ramp down, the "ultimate" payment is constant.
- Actuarial judgment will be used to shorten amortization periods for Inactive plans with existing periods that are deemed too long given the duration of the liability. The specific demographics of the plan will be used to determine if shorter periods may be more appropriate.

Exceptions for Inactive Agencies

For a public agency with no active members in any CalPERS rate plan, the unfunded liability shall be amortized over a closed amortization period of no more than 15 years.

Asset Valuation Method

The Actuarial Value of Assets is set equal to the market value of assets. Asset values include accounts receivable.

PEPRA Normal Cost Rate Methodology

Per Government Code section 7522.30(b), the "normal cost rate" shall mean the annual actuarially determined normal cost for the plan of retirement benefits provided to the new member and shall be established based on actuarial assumptions used to determine the liabilities and costs as part of the annual actuarial valuation. The plan of retirement benefits shall include any elements that would impact the actuarial determination of the normal cost, including, but not limited to, the retirement formula, eligibility and vesting criteria, ancillary benefit provisions, and any automatic cost-of-living adjustments as determined by the public retirement system.

For purposes of setting member rates, it is preferable to determine total normal cost using a large active population so that the rate remains relatively stable. While each CalPERS non-pooled plan has a sufficiently large active population for this purpose, the PEPRA active population by itself may not be sufficiently large enough yet. The total PEPRA normal cost for each PEPRA benefit tier will be determined based on the entire active plan population (both PEPRA and Classic) only until the number of members covered under the PEPRA formula meets either:

1. 50% of the active population, or
2. 25% of the active population and 100 or more PEPRA members

Once one of these conditions is met, the total PEPRA normal cost for each PEPRA benefit tier will be determined using the entire active PEPRA population.

Actuarial Assumptions

In 2021, CalPERS completed its most recent asset liability management study incorporating actuarial assumptions and strategic asset allocation. In November 2021, the board adopted changes to the asset allocation that increased the expected volatility of returns. The adopted asset allocation was expected to have a long-term blended return that continued to support a discount rate assumption of 6.80%. The board also approved several changes to the demographic assumptions that more closely aligned with actual experience.

For more details and additional rationale for the selection of the actuarial assumptions, please refer to the 2021 CalPERS Experience Study and Review of Actuarial Assumptions that can be found on the CalPERS website under: Forms and Publications. Click on "View All" and search for Experience Study.

All actuarial assumptions (except the discount rates and price inflation assumption used for the accrued liability on a termination basis) represent an estimate of future experience rather than observations of the estimates inherent in market data.

Economic Assumptions

Discount Rate

The prescribed discount rate assumption, adopted by the board on November 17, 2021, is 6.80% compounded annually (net of investment and administrative expenses) as of June 30, 2023. The discount rate is based on the long-term expected rate of return on assets using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. The current assumption, originally based on capital market assumptions developed by the Investment Office in 2021, has been reviewed for this valuation based on capital market assumptions developed by the Investment Office in 2023.

Termination Liability Discount Rate

The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The accrued liabilities on a termination basis in this report use discount rates that are based on the 20-year Treasury rate on the valuation date.

To illustrate the impact of the variability of interest rates, the accrued liabilities on a termination basis in this report use discount rates 1% below and 1% above the 20-year Treasury rate on the valuation date. The 20-year Treasury rate was 4.06% on June 30, 2023.

Salary Increases

Annual increases vary by category, entry age, and duration of service. A sample of assumed increases due to seniority, merit and promotion are shown below. Assumed wage inflation is combined with these factors to develop the total expected salary increases.

Public Agency Miscellaneous

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.0764	0.0621	0.0521
1	0.0663	0.0528	0.0424
2	0.0576	0.0449	0.0346
3	0.0501	0.0381	0.0282
4	0.0435	0.0324	0.0229
5	0.0378	0.0276	0.0187
10	0.0201	0.0126	0.0108
15	0.0155	0.0102	0.0071
20	0.0119	0.0083	0.0047
25	0.0091	0.0067	0.0031
30	0.0070	0.0054	0.0020

Public Agency Fire

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.1517	0.1549	0.0631
1	0.1191	0.1138	0.0517
2	0.0936	0.0835	0.0423
3	0.0735	0.0613	0.0346
4	0.0577	0.0451	0.0284
5	0.0453	0.0331	0.0232
10	0.0188	0.0143	0.0077
15	0.0165	0.0124	0.0088
20	0.0145	0.0108	0.0101
25	0.0127	0.0094	0.0115
30	0.0112	0.0082	0.0132

Public Agency Police

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.1181	0.1051	0.0653
1	0.0934	0.0812	0.0532
2	0.0738	0.0628	0.0434
3	0.0584	0.0485	0.0353
4	0.0462	0.0375	0.0288
5	0.0365	0.0290	0.0235
10	0.0185	0.0155	0.0118
15	0.0183	0.0150	0.0131
20	0.0181	0.0145	0.0145
25	0.0179	0.0141	0.0161
30	0.0178	0.0136	0.0179

Salary Increases (continued)

Public Agency County Peace Officers

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.1238	0.1053	0.0890
1	0.0941	0.0805	0.0674
2	0.0715	0.0616	0.0510
3	0.0544	0.0471	0.0387
4	0.0413	0.0360	0.0293
5	0.0314	0.0276	0.0222
10	0.0184	0.0142	0.0072
15	0.0174	0.0124	0.0073
20	0.0164	0.0108	0.0074
25	0.0155	0.0094	0.0075
30	0.0147	0.0083	0.0077

Schools

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.0275	0.0275	0.0200
1	0.0422	0.0373	0.0298
2	0.0422	0.0373	0.0298
3	0.0422	0.0373	0.0298
4	0.0388	0.0314	0.0245
5	0.0308	0.0239	0.0179
10	0.0236	0.0160	0.0121
15	0.0182	0.0135	0.0103
20	0.0145	0.0109	0.0085
25	0.0124	0.0102	0.0058
30	0.0075	0.0053	0.0019

- The Miscellaneous salary scale is used for Local Prosecutors.
- The Police salary scale is used for Other Safety, Local Sheriff, and School Police.

Price Inflation
2.30% compounded annually.

Termination Liability Price Inflation
The breakeven inflation rate for 20-year Treasuries on the valuation date, 2.50%.

Wage Inflation
2.80% compounded annually. This is used in projecting individual salary increases.

Payroll Growth
2.80% compounded annually. This is used as the escalation rate of the amortization payments on level percent of payroll amortization bases, that is, on any amortization bases established prior to 2019 for plans that currently have active members.

Non-valued Potential Additional Liabilities
The potential liability loss for a cost-of-living increase exceeding the 2.30% price inflation assumption and any potential liability loss from future member service purchases that are not reflected in the valuation.

Miscellaneous Loading Factors

Credit for Unused Sick Leave
Total years of service is increased by 1% for those plans that have adopted the provision of providing Credit for Unused Sick Leave.

Conversion of Employer Paid Member Contributions (EPMC)
Total years of service is increased by the Employee Contribution Rate for those plans with the provision providing for the Conversion of Employer Paid Member Contributions (EPMC) during the final compensation period.

Norris Decision (Best Factors)
Employees hired prior to July 1, 1982 have projected benefit amounts increased in order to reflect the use of "Best Factors" in the calculation of optional benefit forms. This is due to a 1983 Supreme Court decision, known as the Norris decision, which required males and females to be treated equally in the determination of benefit amounts. Consequently, anyone already employed at that time is given the best possible conversion factor when optional benefits are determined. No loading is necessary for employees hired after July 1, 1982.

Termination Liability
The termination liabilities include a 5% contingency load. This load is for unforeseen improvements in mortality.

Demographic Assumptions

Pre-Retirement Mortality
The mortality assumptions are based on mortality rates resulting from the most recent CalPERS Experience Study adopted by the CalPERS Board in November 2021. For purposes of the mortality rates, the rates incorporate generational mortality to capture ongoing mortality improvement. Generational mortality explicitly assumes that members born more recently will live longer than the members born before them thereby capturing the mortality improvement seen in the past and expected continued improvement. For more details, please refer to the 2021 CalPERS Experience Study and Review of Actuarial Assumptions report that can be found on the CalPERS website.

Rates vary by age and gender. This table only contains a sample of the 2017 base table rates for illustrative purposes. The non-industrial death rates are used for all plans. The industrial death rates are used for Safety plans (except for local Safety members described in Government Code section 20423.6 where the agency has not specifically contracted for industrial death benefits.)

	Miscellaneous Non-Industrial Death (Not Job-Related)		Safety Non-Industrial Death (Not Job-Related)		Safety Industrial Death (Job-Related)	
Age	Male	Female	Male	Female	Male	Female
20	0.00039	0.00014	0.00038	0.00014	0.00004	0.00002
25	0.00033	0.00013	0.00034	0.00018	0.00004	0.00002
30	0.00044	0.00019	0.00042	0.00025	0.00005	0.00003
35	0.00058	0.00029	0.00048	0.00034	0.00005	0.00004
40	0.00075	0.00039	0.00055	0.00042	0.00006	0.00005
45	0.00093	0.00054	0.00066	0.00053	0.00007	0.00006
50	0.00134	0.00081	0.00092	0.00073	0.00010	0.00008
55	0.00198	0.00123	0.00138	0.00106	0.00015	0.00012
60	0.00287	0.00179	0.00221	0.00151	0.00025	0.00017
65	0.00403	0.00250	0.00346	0.00194	0.00038	0.00022
70	0.00594	0.00404	0.00606	0.00358	0.00067	0.00040
75	0.00933	0.00688	0.01099	0.00699	0.00122	0.00078
80	0.01515	0.01149	0.02027	0.01410	0.00225	0.00157

- The pre-retirement mortality rates above are for 2017 and are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.
- Miscellaneous plans usually have industrial death rates set to zero unless the agency has specifically contracted for industrial death benefits. If so, each non-industrial death rate shown above will be split into two components: 99% will become the non-industrial death rate and 1% will become the industrial death rate.

Post-Retirement Mortality
Rates vary by age, type of retirement, and gender. See sample rates in table below. These rates are used for all plans.

	Service Retirement		Non-Industrial Disability (Not Job-Related)		Industrial Disability (Job-Related)	
Age	Male	Female	Male	Female	Male	Female
50	0.00267	0.00199	0.01701	0.01439	0.00430	0.00311
55	0.00390	0.00325	0.02210	0.01734	0.00621	0.00550
60	0.00578	0.00455	0.02708	0.01962	0.00944	0.00868
65	0.00857	0.00612	0.03334	0.02276	0.01394	0.01190
70	0.01333	0.00996	0.04001	0.02910	0.02163	0.01858
75	0.02391	0.01783	0.05376	0.04160	0.03446	0.03134
80	0.04371	0.03403	0.07936	0.06112	0.05853	0.05183
85	0.08274	0.06166	0.11561	0.09385	0.10137	0.08045
90	0.14539	0.11086	0.16608	0.14396	0.16584	0.12434
95	0.24665	0.20364	0.24665	0.20364	0.24665	0.20364
100	0.36198	0.31582	0.36198	0.31582	0.36198	0.31582
105	0.52229	0.44679	0.52229	0.44679	0.52229	0.44679
110	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

- The post-retirement mortality rates above are for 2017 and are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

Marital Status
For active members, a percentage who are married upon retirement is assumed according to the member category as shown in the following table.

Member Category	Percent Married
Miscellaneous Member	70%
Local Police	85%
Local Fire	85%
Other Local Safety	70%
School Police	85%
Local County Peace Officers	75%

Age of Spouse
It is assumed that female spouses are 3 years younger than male spouses. This assumption is used for all plans.

Separated Members
It is assumed that separated members refund immediately if non-vested. Separated members who are vested are assumed to retire at age 59 for Miscellaneous members and age 54 for Safety members.

Termination with Refund
Rates vary by entry age and service for Miscellaneous plans. Rates vary by service for Safety plans. See sample rates in tables below.

Public Agency Miscellaneous

Duration of Service	Entry Age 20		Entry Age 25		Entry Age 30		Entry Age 35		Entry Age 40		Entry Age 45	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0	0.1851	0.1944	0.1769	0.1899	0.1631	0.1824	0.1493	0.1749	0.1490	0.1731	0.1487	0.1713
1	0.1531	0.1673	0.1432	0.1602	0.1266	0.1484	0.1101	0.1366	0.1069	0.1323	0.1037	0.1280
2	0.1218	0.1381	0.1125	0.1307	0.0970	0.1183	0.0815	0.1058	0.0771	0.0998	0.0726	0.0938
3	0.0927	0.1085	0.0852	0.1020	0.0727	0.0912	0.0601	0.0804	0.0556	0.0737	0.0511	0.0669
4	0.0672	0.0801	0.0616	0.0752	0.0524	0.0670	0.0431	0.0587	0.0392	0.0523	0.0352	0.0459
5	0.0463	0.0551	0.0423	0.0517	0.0358	0.0461	0.0292	0.0404	0.0261	0.0350	0.0230	0.0296
10	0.0112	0.0140	0.0101	0.0129	0.0083	0.0112	0.0064	0.0094	0.0048	0.0071	0.0033	0.0049
15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Public Agency Safety

Duration of Service	Fire		Police		County Peace Officer	
	Male	Female	Male	Female	Male	Female
0	0.1022	0.1317	0.1298	0.1389	0.1086	0.1284
1	0.0686	0.1007	0.0789	0.0904	0.0777	0.0998
2	0.0441	0.0743	0.0464	0.0566	0.0549	0.0759
3	0.0272	0.0524	0.0274	0.0343	0.0385	0.0562
4	0.0161	0.0349	0.0170	0.0206	0.0268	0.0402
5	0.0092	0.0214	0.0113	0.0128	0.0186	0.0276
10	0.0015	0.0000	0.0032	0.0047	0.0046	0.0038
15	0.0000	0.0000	0.0000	0.0000	0.0023	0.0036
20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

- The police termination and refund rates are also used for Public Agency Local Prosecutors, Other Safety, Local Sheriff, and School Police.

Termination with Refund (continued)

Schools

Duration of Service	Entry Age 20		Entry Age 25		Entry Age 30		Entry Age 35		Entry Age 40		Entry Age 45	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0	0.2054	0.2120	0.1933	0.1952	0.1730	0.1672	0.1527	0.1392	0.1423	0.1212	0.1318	0.1032
1	0.1922	0.2069	0.1778	0.1883	0.1539	0.1573	0.1300	0.1264	0.1191	0.1087	0.1083	0.0910
2	0.1678	0.1859	0.1536	0.1681	0.1298	0.1383	0.1060	0.1086	0.0957	0.0934	0.0853	0.0782
3	0.1384	0.1575	0.1256	0.1417	0.1042	0.1155	0.0829	0.0893	0.0736	0.0774	0.0643	0.0656
4	0.1085	0.1274	0.0978	0.1143	0.0800	0.0925	0.0622	0.0707	0.0542	0.0620	0.0462	0.0533
5	0.0816	0.0991	0.0732	0.0887	0.0590	0.0713	0.0449	0.0539	0.0383	0.0476	0.0317	0.0413
10	0.0222	0.0248	0.0200	0.0221	0.0163	0.0174	0.0125	0.0128	0.0094	0.0100	0.0063	0.0072
15	0.0106	0.0132	0.0095	0.0113	0.0077	0.0083	0.0058	0.0052	0.0040	0.0039	0.0021	0.0026
20	0.0059	0.0065	0.0050	0.0054	0.0035	0.0036	0.0021	0.0019	0.0010	0.0009	0.0000	0.0000
25	0.0029	0.0034	0.0025	0.0029	0.0018	0.0020	0.0010	0.0012	0.0005	0.0006	0.0000	0.0000
30	0.0012	0.0015	0.0011	0.0013	0.0011	0.0011	0.0010	0.0009	0.0005	0.0005	0.0000	0.0000
35	0.0006	0.0007	0.0006	0.0007	0.0005	0.0006	0.0005	0.0005	0.0003	0.0002	0.0000	0.0000

Termination with Vested Benefits
Rates vary by entry age and service for Miscellaneous plans. Rates vary by service for Safety plans. See sample rates in tables below.

Public Agency Miscellaneous

Duration of Service	Entry Age 20		Entry Age 25		Entry Age 30		Entry Age 35		Entry Age 40	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
5	0.0381	0.0524	0.0381	0.0524	0.0358	0.0464	0.0334	0.0405	0.0301	0.0380
10	0.0265	0.0362	0.0265	0.0362	0.0254	0.0334	0.0244	0.0307	0.0197	0.0236
15	0.0180	0.0252	0.0180	0.0252	0.0166	0.0213	0.0152	0.0174	0.0119	0.0132
20	0.0141	0.0175	0.0141	0.0175	0.0110	0.0131	0.0079	0.0087	0.0000	0.0000
25	0.0084	0.0108	0.0084	0.0108	0.0064	0.0076	0.0000	0.0000	0.0000	0.0000
30	0.0047	0.0056	0.0047	0.0056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0038	0.0041	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Public Agency Safety

Duration of Service	Fire		Police		County Peace Officer	
	Male	Female	Male	Female	Male	Female
5	0.0089	0.0224	0.0156	0.0272	0.0177	0.0266
10	0.0066	0.0164	0.0113	0.0198	0.0126	0.0189
15	0.0048	0.0120	0.0083	0.0144	0.0089	0.0134
20	0.0035	0.0088	0.0060	0.0105	0.0063	0.0095
25	0.0024	0.0061	0.0042	0.0073	0.0042	0.0063
30	0.0012	0.0031	0.0021	0.0037	0.0021	0.0031
35	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

- After termination with vested benefits, a Miscellaneous member is assumed to retire at age 59 and a Safety member at age 54.
- The Police termination with vested benefits rates are also used for Public Agency Local Prosecutors, Other Safety, Local Sheriff, and School Police.

Schools

Duration of Service	Entry Age 20		Entry Age 25		Entry Age 30		Entry Age 35		Entry Age 40	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
5	0.0359	0.0501	0.0359	0.0501	0.0332	0.0402	0.0305	0.0304	0.0266	0.0272
10	0.0311	0.0417	0.0311	0.0417	0.0269	0.0341	0.0228	0.0265	0.0193	0.0233
15	0.0193	0.0264	0.0193	0.0264	0.0172	0.0220	0.0151	0.0175	0.0123	0.0142
20	0.0145	0.0185	0.0145	0.0185	0.0113	0.0141	0.0080	0.0097	0.0000	0.0000
25	0.0089	0.0123	0.0089	0.0123	0.0074	0.0093	0.0000	0.0000	0.0000	0.0000
30	0.0057	0.0064	0.0057	0.0064	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0040	0.0049	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Non-Industrial (Not Job-Related) Disability
Rates vary by age and gender for Miscellaneous plans. Rates vary by age and category for Safety plans.

	Miscellaneous		**Fire**	**Police**	**County Peace Officer**	**Schools**	
Age	Male	Female	All	All	All	Male	Female
20	0.0001	0.0000	0.0001	0.0001	0.0001	0.0000	0.0002
25	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0002
30	0.0002	0.0003	0.0001	0.0001	0.0001	0.0002	0.0002
35	0.0004	0.0007	0.0001	0.0002	0.0003	0.0005	0.0004
40	0.0009	0.0012	0.0001	0.0002	0.0006	0.0010	0.0008
45	0.0015	0.0019	0.0002	0.0003	0.0011	0.0019	0.0015
50	0.0015	0.0019	0.0004	0.0005	0.0016	0.0027	0.0021
55	0.0014	0.0013	0.0006	0.0007	0.0009	0.0024	0.0017
60	0.0012	0.0009	0.0006	0.0011	0.0005	0.0020	0.0010

- The Miscellaneous non-industrial disability rates are used for Local Prosecutors.
- The police non-industrial disability rates are also used for Other Safety, Local Sheriff, and School Police.

Industrial (Job-Related) Disability
Rates vary by age and category.

Age	**Fire**	**Police**	**County Peace Officer**
20	0.0001	0.0000	0.0004
25	0.0002	0.0017	0.0013
30	0.0006	0.0048	0.0025
35	0.0012	0.0079	0.0037
40	0.0023	0.0110	0.0051
45	0.0040	0.0141	0.0067
50	0.0208	0.0185	0.0092
55	0.0307	0.0479	0.0151
60	0.0438	0.0602	0.0174

- The police industrial disability rates are also used for Local Sheriff and Other Safety.
- 50% of the police industrial disability rates are used for School Police.
- 1% of the police industrial disability rates are used for Local Prosecutors.
- Normally, rates are zero for Miscellaneous plans unless the agency has specifically contracted for industrial disability benefits. If so, each Miscellaneous non-industrial disability rate will be split into two components: 50% will become the non-industrial disability rate and 50% will become the industrial disability rate.

Service Retirement

Retirement rates vary by age, service, and formula, except for the Safety Half Pay at 55 and 2% at 55 formulas, where retirement rates vary by age only.

Public Agency Miscellaneous 1.5% at age 65

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.008	0.011	0.013	0.015	0.017	0.019
51	0.007	0.010	0.012	0.013	0.015	0.017
52	0.010	0.014	0.017	0.019	0.021	0.024
53	0.008	0.012	0.015	0.017	0.019	0.022
54	0.012	0.016	0.019	0.022	0.025	0.028
55	0.018	0.025	0.031	0.035	0.038	0.043
56	0.015	0.021	0.025	0.029	0.032	0.036
57	0.020	0.028	0.033	0.038	0.043	0.048
58	0.024	0.033	0.040	0.046	0.052	0.058
59	0.028	0.039	0.048	0.054	0.060	0.067
60	0.049	0.069	0.083	0.094	0.105	0.118
61	0.062	0.087	0.106	0.120	0.133	0.150
62	0.104	0.146	0.177	0.200	0.223	0.251
63	0.099	0.139	0.169	0.191	0.213	0.239
64	0.097	0.136	0.165	0.186	0.209	0.233
65	0.140	0.197	0.240	0.271	0.302	0.339
66	0.092	0.130	0.157	0.177	0.198	0.222
67	0.129	0.181	0.220	0.249	0.277	0.311
68	0.092	0.129	0.156	0.177	0.197	0.221
69	0.092	0.130	0.158	0.178	0.199	0.224
70	0.103	0.144	0.175	0.198	0.221	0.248

Public Agency Miscellaneous 2% at age 60

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.010	0.011	0.014	0.014	0.017	0.017
51	0.017	0.013	0.014	0.010	0.010	0.010
52	0.014	0.014	0.018	0.015	0.016	0.016
53	0.015	0.012	0.013	0.010	0.011	0.011
54	0.006	0.010	0.017	0.016	0.018	0.018
55	0.012	0.016	0.024	0.032	0.036	0.036
56	0.010	0.014	0.023	0.030	0.034	0.034
57	0.006	0.018	0.030	0.040	0.044	0.044
58	0.022	0.023	0.033	0.042	0.046	0.046
59	0.039	0.033	0.040	0.047	0.050	0.050
60	0.063	0.069	0.074	0.090	0.137	0.116
61	0.044	0.058	0.066	0.083	0.131	0.113
62	0.084	0.107	0.121	0.153	0.238	0.205
63	0.173	0.166	0.165	0.191	0.283	0.235
64	0.120	0.145	0.164	0.147	0.160	0.172
65	0.138	0.160	0.214	0.216	0.237	0.283
66	0.198	0.228	0.249	0.216	0.228	0.239
67	0.207	0.242	0.230	0.233	0.233	0.233
68	0.201	0.234	0.225	0.231	0.231	0.231
69	0.152	0.173	0.164	0.166	0.166	0.166
70	0.200	0.200	0.200	0.200	0.200	0.200

Service Retirement (continued)

Public Agency Miscellaneous 2% at age 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.014	0.014	0.017	0.021	0.023	0.024
51	0.013	0.017	0.017	0.018	0.018	0.019
52	0.013	0.018	0.018	0.020	0.020	0.021
53	0.013	0.019	0.021	0.024	0.025	0.026
54	0.017	0.025	0.028	0.032	0.033	0.035
55	0.045	0.042	0.053	0.086	0.098	0.123
56	0.018	0.036	0.056	0.086	0.102	0.119
57	0.041	0.046	0.056	0.076	0.094	0.120
58	0.052	0.044	0.048	0.074	0.106	0.123
59	0.043	0.058	0.073	0.092	0.105	0.126
60	0.059	0.064	0.083	0.115	0.154	0.170
61	0.087	0.074	0.087	0.107	0.147	0.168
62	0.115	0.123	0.151	0.180	0.227	0.237
63	0.116	0.127	0.164	0.202	0.252	0.261
64	0.084	0.138	0.153	0.190	0.227	0.228
65	0.167	0.187	0.210	0.262	0.288	0.291
66	0.187	0.258	0.280	0.308	0.318	0.319
67	0.195	0.235	0.244	0.277	0.269	0.280
68	0.228	0.248	0.250	0.241	0.245	0.245
69	0.188	0.201	0.209	0.219	0.231	0.231
70	0.229	0.229	0.229	0.229	0.229	0.229

Public Agency Miscellaneous 2.5% at age 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.014	0.017	0.027	0.035	0.046	0.050
51	0.019	0.021	0.025	0.030	0.038	0.040
52	0.018	0.020	0.026	0.034	0.038	0.037
53	0.013	0.021	0.031	0.045	0.052	0.053
54	0.025	0.025	0.030	0.046	0.057	0.068
55	0.029	0.042	0.064	0.109	0.150	0.225
56	0.036	0.047	0.068	0.106	0.134	0.194
57	0.051	0.047	0.060	0.092	0.116	0.166
58	0.035	0.046	0.062	0.093	0.119	0.170
59	0.029	0.053	0.072	0.112	0.139	0.165
60	0.039	0.069	0.094	0.157	0.177	0.221
61	0.080	0.077	0.086	0.140	0.167	0.205
62	0.086	0.131	0.149	0.220	0.244	0.284
63	0.135	0.135	0.147	0.214	0.222	0.262
64	0.114	0.128	0.158	0.177	0.233	0.229
65	0.112	0.174	0.222	0.209	0.268	0.273
66	0.235	0.254	0.297	0.289	0.321	0.337
67	0.237	0.240	0.267	0.249	0.267	0.277
68	0.258	0.271	0.275	0.207	0.210	0.212
69	0.117	0.208	0.266	0.219	0.250	0.270
70	0.229	0.229	0.229	0.229	0.229	0.229

Service Retirement (continued)

Public Agency Miscellaneous 2.7% at age 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.011	0.016	0.022	0.033	0.034	0.038
51	0.018	0.019	0.023	0.032	0.031	0.031
52	0.019	0.020	0.026	0.035	0.034	0.037
53	0.020	0.020	0.025	0.043	0.048	0.053
54	0.018	0.030	0.040	0.052	0.053	0.070
55	0.045	0.058	0.082	0.138	0.208	0.278
56	0.057	0.062	0.080	0.121	0.178	0.222
57	0.045	0.052	0.071	0.106	0.147	0.182
58	0.074	0.060	0.074	0.118	0.163	0.182
59	0.058	0.067	0.086	0.123	0.158	0.187
60	0.087	0.084	0.096	0.142	0.165	0.198
61	0.073	0.084	0.101	0.138	0.173	0.218
62	0.130	0.133	0.146	0.187	0.214	0.249
63	0.122	0.140	0.160	0.204	0.209	0.243
64	0.104	0.124	0.154	0.202	0.214	0.230
65	0.182	0.201	0.242	0.264	0.293	0.293
66	0.272	0.249	0.273	0.285	0.312	0.312
67	0.182	0.217	0.254	0.249	0.264	0.264
68	0.223	0.197	0.218	0.242	0.273	0.273
69	0.217	0.217	0.217	0.217	0.217	0.217
70	0.227	0.227	0.227	0.227	0.227	0.227

Public Agency Miscellaneous 3% at age 60

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.015	0.020	0.025	0.039	0.040	0.044
51	0.041	0.034	0.032	0.041	0.036	0.037
52	0.024	0.020	0.022	0.039	0.040	0.041
53	0.018	0.024	0.032	0.047	0.048	0.057
54	0.033	0.033	0.035	0.051	0.049	0.052
55	0.137	0.043	0.051	0.065	0.076	0.108
56	0.173	0.038	0.054	0.075	0.085	0.117
57	0.019	0.035	0.059	0.088	0.111	0.134
58	0.011	0.040	0.070	0.105	0.133	0.162
59	0.194	0.056	0.064	0.081	0.113	0.163
60	0.081	0.085	0.133	0.215	0.280	0.333
61	0.080	0.090	0.134	0.170	0.223	0.292
62	0.137	0.153	0.201	0.250	0.278	0.288
63	0.128	0.140	0.183	0.227	0.251	0.260
64	0.174	0.147	0.173	0.224	0.239	0.264
65	0.152	0.201	0.262	0.299	0.323	0.323
66	0.272	0.273	0.317	0.355	0.380	0.380
67	0.218	0.237	0.268	0.274	0.284	0.284
68	0.200	0.228	0.269	0.285	0.299	0.299
69	0.250	0.250	0.250	0.250	0.250	0.250
70	0.245	0.245	0.245	0.245	0.245	0.245

Service Retirement (continued)

Public Agency Miscellaneous 2% at age 62

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.000	0.000	0.000	0.000	0.000	0.000
51	0.000	0.000	0.000	0.000	0.000	0.000
52	0.005	0.008	0.012	0.015	0.019	0.031
53	0.007	0.011	0.014	0.018	0.021	0.032
54	0.007	0.011	0.015	0.019	0.023	0.034
55	0.010	0.019	0.028	0.036	0.061	0.096
56	0.014	0.026	0.038	0.050	0.075	0.108
57	0.018	0.029	0.039	0.050	0.074	0.107
58	0.023	0.035	0.048	0.060	0.073	0.099
59	0.025	0.038	0.051	0.065	0.092	0.128
60	0.031	0.051	0.071	0.091	0.111	0.138
61	0.038	0.058	0.079	0.100	0.121	0.167
62	0.044	0.074	0.104	0.134	0.164	0.214
63	0.077	0.105	0.134	0.163	0.192	0.237
64	0.072	0.101	0.129	0.158	0.187	0.242
65	0.108	0.141	0.173	0.206	0.239	0.300
66	0.132	0.172	0.212	0.252	0.292	0.366
67	0.132	0.172	0.212	0.252	0.292	0.366
68	0.120	0.156	0.193	0.229	0.265	0.333
69	0.120	0.156	0.193	0.229	0.265	0.333
70	0.120	0.156	0.193	0.229	0.265	0.333

Public Agency Fire Half Pay at age 55 and 2% at age 55

Age	Rate	Age	Rate
50	0.016	56	0.111
51	0.000	57	0.000
52	0.034	58	0.095
53	0.020	59	0.044
54	0.041	60	1.000
55	0.075		

Public Agency Police Half Pay at age 55 and 2% at age 55

Age	Rate	Age	Rate
50	0.026	56	0.069
51	0.000	57	0.051
52	0.016	58	0.072
53	0.027	59	0.070
54	0.010	60	0.300
55	0.167		

Service Retirement (continued)

Public Agency Police 2% at age 50

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.018	0.077	0.056	0.046	0.043	0.046
51	0.022	0.087	0.060	0.048	0.044	0.047
52	0.020	0.102	0.081	0.071	0.069	0.075
53	0.016	0.072	0.053	0.045	0.042	0.046
54	0.006	0.071	0.071	0.069	0.072	0.080
55	0.009	0.040	0.099	0.157	0.186	0.186
56	0.020	0.051	0.108	0.165	0.194	0.194
57	0.036	0.072	0.106	0.139	0.156	0.156
58	0.001	0.046	0.089	0.130	0.152	0.152
59	0.066	0.094	0.119	0.143	0.155	0.155
60	0.177	0.177	0.177	0.177	0.177	0.177
61	0.134	0.134	0.134	0.134	0.134	0.134
62	0.184	0.184	0.184	0.184	0.184	0.184
63	0.250	0.250	0.250	0.250	0.250	0.250
64	0.177	0.177	0.177	0.177	0.177	0.177
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 2% at age 50

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.054	0.054	0.056	0.080	0.064	0.066
51	0.020	0.020	0.021	0.030	0.024	0.024
52	0.037	0.037	0.038	0.054	0.043	0.045
53	0.051	0.051	0.053	0.076	0.061	0.063
54	0.082	0.082	0.085	0.121	0.097	0.100
55	0.139	0.139	0.139	0.139	0.139	0.139
56	0.129	0.129	0.129	0.129	0.129	0.129
57	0.085	0.085	0.085	0.085	0.085	0.085
58	0.119	0.119	0.119	0.119	0.119	0.119
59	0.167	0.167	0.167	0.167	0.167	0.167
60	0.152	0.152	0.152	0.152	0.152	0.152
61	0.179	0.179	0.179	0.179	0.179	0.179
62	0.179	0.179	0.179	0.179	0.179	0.179
63	0.179	0.179	0.179	0.179	0.179	0.179
64	0.179	0.179	0.179	0.179	0.179	0.179
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Public Agency Police 3% at age 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.019	0.053	0.045	0.054	0.057	0.061
51	0.002	0.017	0.028	0.044	0.053	0.060
52	0.002	0.031	0.037	0.051	0.059	0.066
53	0.026	0.049	0.049	0.080	0.099	0.114
54	0.019	0.034	0.047	0.091	0.121	0.142
55	0.006	0.115	0.141	0.199	0.231	0.259
56	0.017	0.188	0.121	0.173	0.199	0.199
57	0.008	0.137	0.093	0.136	0.157	0.157
58	0.017	0.126	0.105	0.164	0.194	0.194
59	0.026	0.146	0.110	0.167	0.195	0.195
60	0.155	0.155	0.155	0.155	0.155	0.155
61	0.210	0.210	0.210	0.210	0.210	0.210
62	0.262	0.262	0.262	0.262	0.262	0.262
63	0.172	0.172	0.172	0.172	0.172	0.172
64	0.227	0.227	0.227	0.227	0.227	0.227
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 3% at age 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.003	0.006	0.013	0.019	0.025	0.028
51	0.004	0.008	0.017	0.026	0.034	0.038
52	0.005	0.011	0.022	0.033	0.044	0.049
53	0.005	0.034	0.024	0.038	0.069	0.138
54	0.007	0.047	0.032	0.051	0.094	0.187
55	0.010	0.067	0.046	0.073	0.134	0.266
56	0.010	0.063	0.044	0.069	0.127	0.253
57	0.135	0.100	0.148	0.196	0.220	0.220
58	0.083	0.062	0.091	0.120	0.135	0.135
59	0.137	0.053	0.084	0.146	0.177	0.177
60	0.162	0.063	0.099	0.172	0.208	0.208
61	0.598	0.231	0.231	0.231	0.231	0.231
62	0.621	0.240	0.240	0.240	0.240	0.240
63	0.236	0.236	0.236	0.236	0.236	0.236
64	0.236	0.236	0.236	0.236	0.236	0.236
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Public Agency Police 3% at age 50

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.124	0.103	0.113	0.143	0.244	0.376
51	0.060	0.081	0.087	0.125	0.207	0.294
52	0.016	0.055	0.111	0.148	0.192	0.235
53	0.072	0.074	0.098	0.142	0.189	0.237
54	0.018	0.049	0.105	0.123	0.187	0.271
55	0.069	0.074	0.081	0.113	0.209	0.305
56	0.064	0.108	0.113	0.125	0.190	0.288
57	0.056	0.109	0.160	0.182	0.210	0.210
58	0.108	0.129	0.173	0.189	0.214	0.214
59	0.093	0.144	0.204	0.229	0.262	0.262
60	0.343	0.180	0.159	0.188	0.247	0.247
61	0.221	0.221	0.221	0.221	0.221	0.221
62	0.213	0.213	0.213	0.213	0.213	0.213
63	0.233	0.233	0.233	0.233	0.233	0.233
64	0.234	0.234	0.234	0.234	0.234	0.234
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 3% at age 50

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.095	0.048	0.053	0.093	0.134	0.175
51	0.016	0.032	0.053	0.085	0.117	0.149
52	0.013	0.032	0.054	0.087	0.120	0.154
53	0.085	0.044	0.049	0.089	0.129	0.170
54	0.038	0.065	0.074	0.105	0.136	0.167
55	0.042	0.043	0.049	0.085	0.132	0.215
56	0.133	0.103	0.075	0.113	0.151	0.209
57	0.062	0.048	0.060	0.124	0.172	0.213
58	0.124	0.097	0.092	0.153	0.194	0.227
59	0.092	0.071	0.078	0.144	0.192	0.233
60	0.056	0.044	0.061	0.131	0.186	0.233
61	0.282	0.219	0.158	0.198	0.233	0.260
62	0.292	0.227	0.164	0.205	0.241	0.269
63	0.196	0.196	0.196	0.196	0.196	0.196
64	0.197	0.197	0.197	0.197	0.197	0.197
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Public Agency Police 2% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.040	0.040	0.040	0.040	0.040	0.080
51	0.028	0.028	0.028	0.028	0.040	0.066
52	0.028	0.028	0.028	0.028	0.043	0.061
53	0.028	0.028	0.028	0.028	0.057	0.086
54	0.028	0.028	0.028	0.032	0.069	0.110
55	0.050	0.050	0.050	0.067	0.099	0.179
56	0.046	0.046	0.046	0.062	0.090	0.160
57	0.054	0.054	0.054	0.072	0.106	0.191
58	0.060	0.060	0.060	0.066	0.103	0.171
59	0.060	0.060	0.060	0.069	0.105	0.171
60	0.113	0.113	0.113	0.113	0.113	0.171
61	0.108	0.108	0.108	0.108	0.108	0.128
62	0.113	0.113	0.113	0.113	0.113	0.159
63	0.113	0.113	0.113	0.113	0.113	0.159
64	0.113	0.113	0.113	0.113	0.113	0.239
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 2% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.005	0.005	0.005	0.005	0.008	0.012
51	0.006	0.006	0.006	0.006	0.009	0.013
52	0.012	0.012	0.012	0.012	0.019	0.028
53	0.033	0.033	0.033	0.033	0.050	0.075
54	0.045	0.045	0.045	0.045	0.069	0.103
55	0.061	0.061	0.061	0.061	0.094	0.140
56	0.055	0.055	0.055	0.055	0.084	0.126
57	0.081	0.081	0.081	0.081	0.125	0.187
58	0.059	0.059	0.059	0.059	0.091	0.137
59	0.055	0.055	0.055	0.055	0.084	0.126
60	0.085	0.085	0.085	0.085	0.131	0.196
61	0.085	0.085	0.085	0.085	0.131	0.196
62	0.085	0.085	0.085	0.085	0.131	0.196
63	0.085	0.085	0.085	0.085	0.131	0.196
64	0.085	0.085	0.085	0.085	0.131	0.196
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Public Agency Police 2.5% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.050	0.050	0.050	0.050	0.050	0.100
51	0.038	0.038	0.038	0.038	0.055	0.089
52	0.038	0.038	0.038	0.038	0.058	0.082
53	0.036	0.036	0.036	0.036	0.073	0.111
54	0.036	0.036	0.036	0.041	0.088	0.142
55	0.061	0.061	0.061	0.082	0.120	0.217
56	0.056	0.056	0.056	0.075	0.110	0.194
57	0.060	0.060	0.060	0.080	0.118	0.213
58	0.072	0.072	0.072	0.079	0.124	0.205
59	0.072	0.072	0.072	0.083	0.126	0.205
60	0.135	0.135	0.135	0.135	0.135	0.205
61	0.130	0.130	0.130	0.130	0.130	0.153
62	0.135	0.135	0.135	0.135	0.135	0.191
63	0.135	0.135	0.135	0.135	0.135	0.191
64	0.135	0.135	0.135	0.135	0.135	0.287
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 2.5% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.007	0.007	0.007	0.007	0.010	0.015
51	0.008	0.008	0.008	0.008	0.012	0.018
52	0.016	0.016	0.016	0.016	0.025	0.038
53	0.042	0.042	0.042	0.042	0.064	0.096
54	0.057	0.057	0.057	0.057	0.088	0.132
55	0.074	0.074	0.074	0.074	0.114	0.170
56	0.066	0.066	0.066	0.066	0.102	0.153
57	0.090	0.090	0.090	0.090	0.139	0.208
58	0.071	0.071	0.071	0.071	0.110	0.164
59	0.066	0.066	0.066	0.066	0.101	0.151
60	0.102	0.102	0.102	0.102	0.157	0.235
61	0.102	0.102	0.102	0.102	0.157	0.236
62	0.102	0.102	0.102	0.102	0.157	0.236
63	0.102	0.102	0.102	0.102	0.157	0.236
64	0.102	0.102	0.102	0.102	0.157	0.236
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Public Agency Police 2.7% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.050	0.050	0.050	0.050	0.050	0.100
51	0.040	0.040	0.040	0.040	0.058	0.094
52	0.038	0.038	0.038	0.038	0.058	0.083
53	0.038	0.038	0.038	0.038	0.077	0.117
54	0.038	0.038	0.038	0.044	0.093	0.150
55	0.068	0.068	0.068	0.091	0.134	0.242
56	0.063	0.063	0.063	0.084	0.123	0.217
57	0.060	0.060	0.060	0.080	0.118	0.213
58	0.080	0.080	0.080	0.088	0.138	0.228
59	0.080	0.080	0.080	0.092	0.140	0.228
60	0.150	0.150	0.150	0.150	0.150	0.228
61	0.144	0.144	0.144	0.144	0.144	0.170
62	0.150	0.150	0.150	0.150	0.150	0.213
63	0.150	0.150	0.150	0.150	0.150	0.213
64	0.150	0.150	0.150	0.150	0.150	0.319
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 2.7% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.007	0.007	0.007	0.007	0.010	0.015
51	0.008	0.008	0.008	0.008	0.013	0.019
52	0.016	0.016	0.016	0.016	0.025	0.038
53	0.044	0.044	0.044	0.044	0.068	0.102
54	0.061	0.061	0.061	0.061	0.093	0.140
55	0.083	0.083	0.083	0.083	0.127	0.190
56	0.074	0.074	0.074	0.074	0.114	0.171
57	0.090	0.090	0.090	0.090	0.139	0.208
58	0.079	0.079	0.079	0.079	0.122	0.182
59	0.073	0.073	0.073	0.073	0.112	0.168
60	0.114	0.114	0.114	0.114	0.175	0.262
61	0.114	0.114	0.114	0.114	0.175	0.262
62	0.114	0.114	0.114	0.114	0.175	0.262
63	0.114	0.114	0.114	0.114	0.175	0.262
64	0.114	0.114	0.114	0.114	0.175	0.262
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Schools 2% at age 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.003	0.004	0.006	0.007	0.010	0.010
51	0.004	0.005	0.007	0.008	0.011	0.011
52	0.005	0.007	0.008	0.009	0.012	0.012
53	0.007	0.008	0.010	0.012	0.015	0.015
54	0.006	0.009	0.012	0.015	0.020	0.021
55	0.011	0.023	0.034	0.057	0.070	0.090
56	0.012	0.027	0.036	0.056	0.073	0.095
57	0.016	0.027	0.036	0.055	0.068	0.087
58	0.019	0.030	0.040	0.062	0.078	0.103
59	0.023	0.034	0.046	0.070	0.085	0.109
60	0.022	0.043	0.062	0.095	0.113	0.141
61	0.030	0.051	0.071	0.103	0.124	0.154
62	0.065	0.098	0.128	0.188	0.216	0.248
63	0.075	0.112	0.144	0.197	0.222	0.268
64	0.091	0.116	0.138	0.180	0.196	0.231
65	0.163	0.164	0.197	0.232	0.250	0.271
66	0.208	0.204	0.243	0.282	0.301	0.315
67	0.189	0.185	0.221	0.257	0.274	0.287
68	0.127	0.158	0.200	0.227	0.241	0.244
69	0.168	0.162	0.189	0.217	0.229	0.238
70	0.191	0.190	0.237	0.250	0.246	0.254

Schools 2% at age 62

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.000	0.000	0.000	0.000	0.000	0.000
51	0.000	0.000	0.000	0.000	0.000	0.000
52	0.004	0.007	0.010	0.011	0.013	0.015
53	0.004	0.008	0.010	0.013	0.014	0.016
54	0.005	0.011	0.015	0.018	0.020	0.022
55	0.014	0.027	0.038	0.045	0.050	0.056
56	0.013	0.026	0.037	0.043	0.048	0.055
57	0.013	0.027	0.038	0.045	0.050	0.055
58	0.017	0.034	0.047	0.056	0.062	0.069
59	0.019	0.037	0.052	0.062	0.068	0.076
60	0.026	0.053	0.074	0.087	0.097	0.108
61	0.030	0.058	0.081	0.095	0.106	0.119
62	0.053	0.105	0.147	0.174	0.194	0.217
63	0.054	0.107	0.151	0.178	0.198	0.222
64	0.053	0.105	0.147	0.174	0.194	0.216
65	0.072	0.142	0.199	0.235	0.262	0.293
66	0.077	0.152	0.213	0.252	0.281	0.314
67	0.070	0.139	0.194	0.229	0.255	0.286
68	0.063	0.124	0.173	0.205	0.228	0.255
69	0.066	0.130	0.183	0.216	0.241	0.270
70	0.071	0.140	0.196	0.231	0.258	0.289

Miscellaneous

Models

The valuation results are based on proprietary actuarial valuation models. The models are centralized and maintained by a specialized team to achieve a high degree of accuracy and consistency. The Actuarial Office is responsible for confirming the appropriateness of the inputs (such as participant data, actuarial methods and assumptions, and plan provisions) as well as performing tests and validating the reasonableness of the output. The results of our models are independently confirmed by parallel valuations performed by outside actuaries on a periodic basis using their models. In our professional judgment, our actuarial valuation models produce comprehensive pension funding information consistent with the purposes of the valuation and have no material limitations or known weaknesses.

Internal Revenue Code Section 415(b)

The limitations on benefits imposed by Internal Revenue Code section 415(b) are taken into account in this valuation. Each year the impact of any changes in this limitation other than assumed since the prior valuation is included and amortized as part of the non-investment gain or loss base. This results in lower contributions for those employers contributing to the Replacement Benefit Fund and protects CalPERS from prefunding expected benefits in excess of limits imposed by federal tax law. The Section 415(b) dollar limit for the 2023 calendar year is $265,000.

Internal Revenue Code Section 401(a)(17)

The limitations on compensation imposed by Internal Revenue Code section 401(a)(17) are taken into account in this valuation. Each year, the impact of any changes in the compensation limitation other than assumed since the prior valuation is included and amortized as part of the non-investment gain or loss base. The compensation limit for classic members for the 2023 calendar year is $330,000.

PEPRA Compensation Limits

The limitations on compensation for PEPRA members imposed by Government Code section 7522.10 are taken into account in this valuation. Each year, the impact of any changes in the compensation limitation other than assumed since the prior valuation is included and amortized as part of the non-investment gain or loss base. The PEPRA compensation limit for 2023 is $146,042 for members who participate in Social Security and $175,250 for those who do not. The limits are adjusted annually based on changes to the CPI for all urban consumers.

Appendix B - Principal Plan Provisions

The following is a description of the principal plan provisions used in calculating costs and liabilities. We have indicated whether a plan provision is standard or optional. Standard benefits are applicable to all members while optional benefits vary among employers. Optional benefits that apply to a single period of time, such as Golden Handshakes, have not been included. Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the Public Employees' Retirement Law and the California Public Employees' Pension Reform Act of 2013. The law itself governs in all situations.

Service Retirement

Eligibility

A classic CalPERS member or PEPRA Safety member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other retirement systems with which CalPERS has reciprocity agreements). For employees hired into a plan with the 1.5% at age 65 formula, eligibility for service retirement is age 55 with at least 5 years of service. PEPRA Miscellaneous members become eligible for service retirement upon attainment of age 52 with at least 5 years of service.

Benefit

The service retirement benefit is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation.* The *benefit factor* depends on the benefit formula specified in the agency's contract. The table below shows the factors for each of the available formulas. Factors vary by the member's age at retirement. Listed are the factors for retirement at whole year ages:

<u>Miscellaneous Plan Formulas</u>

Retirement Age	1.5% at age 65	2% at age 60	2% at age 55	2.5% at age 55	2.7% at age 55	3% at age 60	PEPRA 2% at age 62
50	0.5000%	1.092%	1.426%	2.000%	2.000%	2.000%	N/A
51	0.5667%	1.156%	1.522%	2.100%	2.140%	2.100%	N/A
52	0.6334%	1.224%	1.628%	2.200%	2.280%	2.200%	1.000%
53	0.7000%	1.296%	1.742%	2.300%	2.420%	2.300%	1.100%
54	0.7667%	1.376%	1.866%	2.400%	2.560%	2.400%	1.200%
55	0.8334%	1.460%	2.000%	2.500%	2.700%	2.500%	1.300%
56	0.9000%	1.552%	2.052%	2.500%	2.700%	2.600%	1.400%
57	0.9667%	1.650%	2.104%	2.500%	2.700%	2.700%	1.500%
58	1.0334%	1.758%	2.156%	2.500%	2.700%	2.800%	1.600%
59	1.1000%	1.874%	2.210%	2.500%	2.700%	2.900%	1.700%
60	1.1667%	2.000%	2.262%	2.500%	2.700%	3.000%	1.800%
61	1.2334%	2.134%	2.314%	2.500%	2.700%	3.000%	1.900%
62	1.3000%	2.272%	2.366%	2.500%	2.700%	3.000%	2.000%
63	1.3667%	2.418%	2.418%	2.500%	2.700%	3.000%	2.100%
64	1.4334%	2.418%	2.418%	2.500%	2.700%	3.000%	2.200%
65	1.5000%	2.418%	2.418%	2.500%	2.700%	3.000%	2.300%
66	1.5000%	2.418%	2.418%	2.500%	2.700%	3.000%	2.400%
67 & up	1.5000%	2.418%	2.418%	2.500%	2.700%	3.000%	2.500%

Classic Safety Plan Formulas

Retirement Age	Half Pay at age 55*	2% at age 55	2% at age 50	3% at age 55	3% at age 50
50	1.783%	1.426%	2.000%	2.400%	3.000%
51	1.903%	1.522%	2.140%	2.520%	3.000%
52	2.035%	1.628%	2.280%	2.640%	3.000%
53	2.178%	1.742%	2.420%	2.760%	3.000%
54	2.333%	1.866%	2.560%	2.880%	3.000%
55 & Up	2.500%	2.000%	2.700%	3.000%	3.000%

* For this formula, the benefit factor also varies by entry age. The factors shown are for members with an entry age of 35 or greater. If entry age is less than 35, then the age 55 benefit factor is 50% divided by the difference between age 55 and entry age. The benefit factor for ages prior to age 55 is the same proportion of the age 55 benefit factor as in the above table.

PEPRA Safety Plan Formulas

Retirement Age	2% at age 57	2.5% at age 57	2.7% at age 57
50	1.426%	2.000%	2.000%
51	1.508%	2.071%	2.100%
52	1.590%	2.143%	2.200%
53	1.672%	2.214%	2.300%
54	1.754%	2.286%	2.400%
55	1.836%	2.357%	2.500%
56	1.918%	2.429%	2.600%
57 & Up	2.000%	2.500%	2.700%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. An agency may contract for an optional benefit where any unused sick leave accumulated at the time of retirement will be converted to credited service at a rate of 0.004 years of service for each day of sick leave.

- The *final compensation* is the monthly average of the member's highest 36 or 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). The standard benefit is 36 months. Employers had the option of providing a final compensation equal to the highest 12 consecutive months for classic plans only. Final compensation must be defined by the highest 36 consecutive months' pay under the 1.5% at age 65 formula. PEPRA members have a limit on the annual compensation that can be used to calculate final compensation. The limits are adjusted annually based on changes to the CPI for all urban consumers.

- PEPRA benefit formulas have no Social Security offsets and Social Security coverage is optional. For Classic benefit formulas, employees must be covered by Social Security with the 1.5% at age 65 formula. Social Security is optional for all other Classic benefit formulas. For employees covered by Social Security, the modified formula is the standard benefit. Under this type of formula, the final compensation is offset by $133.33 (or by one third if the final compensation is less than $400). Employers may contract for the full benefit with Social Security that will eliminate the offset applicable to the final compensation. For employees not covered by Social Security, the full benefit is paid with no offsets. Auxiliary organizations of the CSUC system may elect reduced contribution rates, in which case the offset is $317 if members are not covered by Social Security or $513 if members are covered by Social Security.

- The Miscellaneous and PEPRA Safety service retirement benefit is not capped. The Classic Safety service retirement benefit is capped at 90% of final compensation.

Vested Deferred Retirement

Eligibility for Deferred Status

CalPERS members becomes eligible for a deferred vested retirement benefit when they leave employment, keep their contribution account balance on deposit with CalPERS, **and** have earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other retirement systems with which CalPERS has reciprocity agreements).

Eligibility to Start Receiving Benefits

The CalPERS classic members and PEPRA Safety members become eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for deferred status and upon attainment of age 50 (55 for employees hired into a 1.5% at age 65 plan). PEPRA Miscellaneous members become eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for deferred status and upon attainment of age 52.

Benefit

The vested deferred retirement benefit is the same as the service retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

Non-Industrial Disability Retirement

Eligibility

A CalPERS member is eligible for Non-Industrial (non-job related) Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all CalPERS employers, and with certain other retirement systems with which CalPERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform their job because of an illness or injury, which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively employed by any CalPERS employer at the time of disability in order to be eligible for this benefit.

Standard Benefit

The standard Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8% of final compensation, multiplied by *service*, which is determined as follows:

- *Service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or
- *Service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33⅓% of final compensation.

Improved Benefit

Employers have the option of providing the improved Non-Industrial Disability Retirement benefit. This benefit provides a monthly allowance equal to 30% of final compensation for the first 5 years of service, plus 1% for each additional year of service to a maximum of 50% of final compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

Industrial Disability Retirement

This is a standard benefit for Safety members except those described in Section 20423.6. For excluded Safety members and all Miscellaneous members, employers have the option of providing this benefit. An employer may choose to provide the increased benefit option or the improved benefit option.

Eligibility

An employee is eligible for Industrial (job related) Disability Retirement if he or she becomes disabled while working, where disabled means the member is unable to perform the duties of the job because of a work-related illness or injury, which is expected to be permanent or to last indefinitely. A CalPERS member who has left active employment within this group is not eligible for this benefit, except to the extent described below.

Standard Benefit

The standard Industrial Disability Retirement benefit is a monthly allowance equal to 50% of final compensation.

Increased Benefit (75% of Final Compensation)

The increased Industrial Disability Retirement benefit is a monthly allowance equal to 75% of final compensation for total disability.

Improved Benefit (50% to 90% of Final Compensation)

The improved Industrial Disability Retirement benefit is a monthly allowance equal to the Workman's Compensation Appeals Board permanent disability rate percentage (if 50% or greater, with a maximum of 90%) times the final compensation.

For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return of accumulated member contributions with respect to employment in this group. With the standard or increased benefit, a member may also choose to receive the annuitization of the accumulated member contributions.

If a member is eligible for service retirement and if the service retirement benefit is more than the industrial disability retirement benefit, the member may choose to receive the larger benefit.

Post-Retirement Death Benefit

Standard Lump Sum Payment

Upon the death of a retiree, a one-time lump sum payment of $500 will be made to the retiree's designated survivor(s), or to the retiree's estate. The lump sum payment amount increases to $2,000 for any death occurring on or after July 1, 2023 due to SB 1168.

Optional Lump Sum Payment

In lieu of the standard lump sum death benefit, employers have the option of providing a lump sum death benefit of $600, $3,000, $4,000 or $5,000.

Form of Payment for Retirement Allowance

Standard Form of Payment

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of their allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in their retirement allowance. Such reduction takes into account the amount to be provided to the beneficiary and the probable duration of payments (based on the ages of the member and beneficiary) made subsequent to the member's death.

Improved Form of Payment (Post-Retirement Survivor Allowance)

Employers have the option to contract for the post-retirement survivor allowance.

For retirement allowances with respect to service subject to a modified Classic formula, 25% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, without a reduction in the retiree's allowance. For retirement allowances with respect to service subject to a PEPRA formula or a full or supplemental Classic formula, 50% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, without a reduction in the retiree's allowance. This additional benefit is referred to as post-retirement survivor allowance (PRSA) or simply as survivor continuance.

In other words, 25% or 50% of the allowance, the continuance portion, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to unmarried child(ren) until they attain age 18; or, if no eligible child(ren), to a qualifying dependent parent) for the rest of their lifetime. This benefit will not be discontinued in the event the spouse remarries.

The remaining 75% or 50% of the retirement allowance, which may be referred to as the option portion of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. Or, the retiree may choose to provide for some of this option portion to be paid to any designated beneficiary after the retiree's death. Benefit options applicable to the option portion are the same as those offered with the standard form. The reduction is calculated in the same manner but is applied only to the option portion.

Pre-Retirement Death Benefits

Basic Death Benefit

This is a standard benefit.

Eligibility

An employee's beneficiary (or estate) may receive the basic death benefit if the member dies while actively employed. A CalPERS member must be actively employed with the CalPERS employer providing this benefit to be eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit may choose to receive that death benefit instead of this basic death benefit.

Benefit

The basic death benefit is a lump sum in the amount of the member's accumulated contributions, where interest is credited annually at the greater of 6% or the prevailing discount rate through the date of death, plus a lump sum in the amount of one month's salary for each completed year of current service, up to a maximum of six months' salary. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

1957 Survivor Benefit

This is a standard benefit.

Eligibility

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50 for classic and PEPRA Safety members and age 52 for PEPRA Miscellaneous members, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other retirement systems with which CalPERS has reciprocity agreements). A CalPERS member must be actively employed with the CalPERS employer providing this benefit to be eligible for this benefit. An eligible survivor means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried child(ren) under age 18. A member's survivor who is eligible for any other pre-retirement death benefit may choose to receive that death benefit instead of this 1957 Survivor benefit.

Benefit

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified service retirement benefit that the member would have been entitled to receive if the member had retired on the date of their death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to dependent child(ren), the benefit will be discontinued upon death or attainment of age 18, unless the child(ren) is disabled. The total amount paid will be at least equal to the basic death benefit.

Optional Settlement 2 Death Benefit

This is an optional benefit.

Eligibility

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed, has attained at least age 50 for classic and PEPRA Safety members and age 52 for PEPRA Miscellaneous members, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other retirement systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death. A member's survivor who is eligible for any other pre-retirement death benefit may choose to receive that death benefit instead of this Optional Settlement 2 Death benefit.

Benefit

The Optional Settlement 2 Death benefit is a monthly allowance equal to the service retirement benefit that the member would have received had the member retired on the date of their death and elected 100% to continue to the eligible survivor after the member's death. The allowance is payable to the surviving spouse until death, at which time it is continued to any unmarried child(ren), if applicable. The total amount paid will be at least equal to the basic death benefit.

Special Death Benefit

This is a standard benefit for Safety members except those described in Section 20423.6. For excluded Safety members and all Miscellaneous members, employers have the option of providing this benefit.

Eligibility

An employee's *eligible survivor(s)* may receive the special death benefit if the member dies while actively employed and the death is job-related. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried child(ren) under age 22. An eligible survivor who chooses to receive this benefit will not receive any other death benefit.

Benefit

The special death benefit is a monthly allowance equal to 50% of final compensation and will be increased whenever the compensation paid to active employees is increased but ceasing to increase when the member would have attained age 50. The allowance is payable to the surviving spouse until death, at which time the allowance is continued to any unmarried child(ren) under age 22. There is a guarantee that the total amount paid will at least equal the basic death benefit.

If the member's death is the result of an accident or injury caused by external violence or physical force incurred in the performance of the member's duty, and there are *eligible* surviving child(ren) (*eligible* means unmarried child(ren) under age 22) in addition to an eligible spouse, then an **additional monthly allowance** is paid equal to the following:

- if 1 eligible child: 12.5% of final compensation
- if 2 eligible children: 20.0% of final compensation
- if 3 or more eligible children: 25.0% of final compensation

Alternate Death Benefit for Local Fire Members

This is an optional benefit available only to local fire members.

Eligibility

An employee's *eligible survivor(s)* may receive the alternate death benefit in lieu of the basic death benefit or the 1957 Survivor benefit if the member dies while actively employed and has at least 20 years of total CalPERS service. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried child(ren) under age 18.

Benefit

The Alternate Death benefit is a monthly allowance equal to the service retirement benefit that the member would have received had the member retired on the date of their death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance that has been reduced so that it will continue to be paid after their death to a surviving beneficiary.) If the member has not yet attained age 50, the benefit is equal to that which would be payable if the member had retired at age 50, based on service credited at the time of death. The allowance is payable to the surviving spouse until death, at which time it is continued to any unmarried child(ren), if applicable. The total amount paid will be at least equal to the basic death benefit.

Cost-of-Living Adjustments (COLA)

Standard Benefit

Retirement and survivor allowances are adjusted each year in May for cost of living, beginning the second calendar year after the year of retirement. The standard cost-of-living adjustment (COLA) is 2%. Annual adjustments are calculated by first determining the lesser of 1) 2% compounded from the end of the year of retirement or 2) actual rate of price inflation. The resulting increase is divided by the total increase provided in prior years. For any given year, the COLA adjustment may be less than 2% (when the rate of price inflation is low), may be greater than the rate of price inflation (when the rate of price inflation is low after several years of high price inflation) or may even be greater than 2% (when price inflation is high after several years of low price inflation).

Improved Benefit

Employers have the option of providing a COLA of 3%, 4%, or 5%, determined in the same manner as described above for the standard 2% COLA. An improved COLA is not available with the 1.5% at age 65 formula.

Purchasing Power Protection Allowance (PPPA)

Retirement and survivor allowances are protected against price inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 80% of the initial allowance at retirement adjusted for price inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan.

Employee Contributions

Each employee contributes toward their retirement based upon the retirement formula. The standard employee contribution is as described below.

- The percent contributed below the monthly compensation breakpoint is 0%.
- The monthly compensation breakpoint is $0 for all PEPRA members and Classic members covered by a full or supplemental formula and $133.33 for Classic members covered by a modified formula.
- The percent contributed above the monthly compensation breakpoint depends upon the benefit formula, as shown in the table below.

Benefit Formula	Percent Contributed above the Breakpoint
Miscellaneous, 1.5% at age 65	2%
Miscellaneous, 2% at age 60	7%
Miscellaneous, 2% at age 55	7%
Miscellaneous, 2.5% at age 55	8%
Miscellaneous, 2.7% at age 55	8%
Miscellaneous, 3% at age 60	8%
Miscellaneous, 2% at age 62	50% of the Total Normal Cost
Miscellaneous, 1.5% at age 65	50% of the Total Normal Cost
Safety, Half Pay at age 55	Varies by entry age
Safety, 2% at age 55	7%
Safety, 2% at age 50	9%
Safety, 3% at age 55	9%
Safety, 3% at age 50	9%
Safety, 2% at age 57	50% of the Total Normal Cost
Safety, 2.5% at age 57	50% of the Total Normal Cost
Safety, 2.7% at age 57	50% of the Total Normal Cost

The employer may choose to “pick-up” these contributions for classic members (Employer Paid Member Contributions or EPMC). EPMC is prohibited for new PEPRA members.

An employer may also include Employee Cost Sharing in the contract, where employees agree to share the cost of the employer contribution. These contributions are paid in addition to the member contribution.

Auxiliary organizations of the CSU system may elect reduced contribution rates, in which case the offset is $317 and the contribution rate is 6% if members are not covered by Social Security. If members are covered by Social Security, the offset is $513 and the contribution rate is 5%.

Refund of Employee Contributions

If the member’s service with the employer ends, and if the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of their employee contributions, which are credited with 6% interest compounded annually.

1959 Survivor Benefit

This is a pre-retirement death benefit available only to members not covered by Social Security. Any agency joining CalPERS subsequent to 1993 is required to provide this benefit if the members are not covered by Social Security. The benefit is optional for agencies joining CalPERS prior to 1994. Levels 1, 2, and 3 are now closed. Any new agency or any agency wishing to add this benefit or increase the current level may only choose the 4th or Indexed Level.

This benefit is not included in the results presented in this valuation. More information on this benefit is available on the CalPERS website.

Appendix C - Participant Data

Summary of Valuation Data

	June 30, 2022	June 30, 2023
1. **Active Members**		
a) Counts	120	122
b) Average Attained Age	44.98	45.18
c) Average Entry Age to Rate Plan	36.44	36.38
d) Average Years of Credited Service	8.67	8.89
e) Average Annual Covered Pay	$75,290	$75,581
f) Annual Covered Payroll	9,034,836	9,220,843
g) Projected Annual Payroll for Contribution Year	9,815,211	10,017,283
h) Present Value of Future Payroll	85,751,717	87,970,569
2. **Transferred Members**		
a) Counts	11	14
b) Average Attained Age	41.77	43.67
c) Average Years of Credited Service	1.84	2.01
d) Average Annual Covered Pay	$60,318	$76,792
3. **Separated Members**		
a) Counts	74	79
b) Average Attained Age	47.05	47.17
c) Average Years of Credited Service	3.28	3.03
d) Average Annual Covered Pay	$45,499	$45,509
4. **Retired Members and Beneficiaries**		
a) Counts	98	99
b) Average Attained Age	67.94	68.52
c) Average Annual Benefits	$26,973	$28,663
d) Total Annual Benefits	$2,643,326	$2,837,670
5. **Active to Retired Ratio** [(1a) ÷ (4a)]	1.22	1.23

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.

Average Annual Benefits represents benefit amounts payable by this plan only. Some members may have service with another agency and would therefore have a larger total benefit than would be included as part of the average shown here.

Active Members

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.

Distribution of Active Members by Age and Service

	Years of Service at Valuation Date						
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25+**	**Total**
15-24	3	1	0	0	0	0	4
25-29	7	0	0	0	0	0	7
30-34	14	4	0	0	0	0	18
35-39	7	2	0	1	1	0	11
40-44	8	7	3	2	3	0	23
45-49	4	4	2	3	3	0	16
50-54	5	5	0	1	4	3	18
55-59	3	1	0	1	3	3	11
60-64	4	1	1	1	1	0	8
65 and Over	2	2	1	0	1	0	6
All Ages	**57**	**27**	**7**	**9**	**16**	**6**	**122**

Distribution of Average Annual Salaries by Age and Service

	Years of Service at Valuation Date						
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25+**	**Average Salary**
15-24	$36,259	$53,892	$0	$0	$0	$0	$40,668
25-29	57,383	0	0	0	0	0	57,383
30-34	60,828	76,178	0	0	0	0	64,239
35-39	58,659	66,334	0	94,394	101,866	0	67,231
40-44	68,565	86,450	91,126	82,163	93,823	0	81,428
45-49	91,280	95,337	92,241	72,225	96,174	0	89,759
50-54	60,198	75,163	0	73,698	86,663	91,882	76,267
55-59	48,844	49,985	0	44,813	76,975	125,179	77,072
60-64	81,817	173,280	47,615	50,992	123,819	0	90,372
65 and Over	103,924	88,060	80,947	0	43,175	0	84,682
Average	**$64,367**	**$83,443**	**$83,774**	**$71,655**	**$88,527**	**$108,530**	**$75,581**

Transferred and Separated Members

Distribution of Transfers to Other CalPERS Plans by Age, Service, and average Salary

	Years of Service at Valuation Date							
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25+**	**Total**	**Average Salary**
15-24	0	0	0	0	0	0	0	$0
25-29	0	0	0	0	0	0	0	0
30-34	2	0	0	0	0	0	2	80,415
35-39	3	0	0	0	0	0	3	88,039
40-44	4	0	0	0	0	0	4	83,547
45-49	2	1	0	0	0	0	3	56,504
50-54	1	0	0	0	0	0	1	29,765
55-59	0	0	0	0	0	0	0	0
60-64	1	0	0	0	0	0	1	116,677
65 and Over	0	0	0	0	0	0	0	0
All Ages	**13**	**1**	**0**	**0**	**0**	**0**	**14**	**$76,792**

Distribution of Separated Participants with Funds on Deposit by Age, Service, and average Salary

	Years of Service at Valuation Date							
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25+**	**Total**	**Average Salary**
15-24	2	0	0	0	0	0	2	$35,046
25-29	6	0	0	0	0	0	6	36,418
30-34	2	0	0	0	0	0	2	54,309
35-39	10	1	0	0	0	0	11	36,881
40-44	7	3	0	1	1	0	12	42,779
45-49	8	3	1	0	0	0	12	39,899
50-54	8	4	0	0	0	0	12	49,676
55-59	11	0	0	0	0	0	11	39,229
60-64	3	3	0	0	0	0	6	83,763
65 and Over	5	0	0	0	0	0	5	53,988
All Ages	**62**	**14**	**1**	**1**	**1**	**0**	**79**	**$45,509**

Retired Members and Beneficiaries

Distribution of Retirees and Beneficiaries by Age and Retirement Type*

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 30	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0
45-49	0	1	0	0	0	0	1
50-54	0	0	0	0	0	0	0
55-59	9	1	0	0	0	0	10
60-64	17	0	0	0	0	1	18
65-69	29	1	0	0	0	1	31
70-74	21	1	0	1	0	1	24
75-79	7	0	0	0	0	2	9
80-84	2	1	0	0	0	1	4
85 and Over	1	0	0	0	0	1	2
All Ages	**86**	**5**	**0**	**1**	**0**	**7**	**99**

Distribution of Average Annual Disbursements to Retirees and Beneficiaries by Age and Retirement Type*

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Average
Under 30	$0	$0	$0	$0	$0	$0	$0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0
45-49	0	18,085	0	0	0	0	18,085
50-54	0	0	0	0	0	0	0
55-59	28,366	28,427	0	0	0	0	28,372
60-64	22,951	0	0	0	0	27,094	23,181
65-69	29,528	15,098	0	0	0	9,142	28,405
70-74	35,362	31,556	0	3,852	0	18,371	33,182
75-79	33,512	0	0	0	0	10,810	28,467
80-84	57,459	21,243	0	0	0	30,652	41,703
85 and Over	12,504	0	0	0	0	6,168	9,336
All Ages	**$30,307**	**$22,882**	**$0**	**$3,852**	**$0**	**$16,149**	**$28,663**

Retired Members and Beneficiaries (continued)

Distribution of Retirees and Beneficiaries by Years Retired and Retirement Type*

Years Retired	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 5 Yrs	41	0	0	0	0	2	43
5-9	21	1	0	1	0	2	25
10-14	14	1	0	0	0	0	15
15-19	9	0	0	0	0	2	11
20-24	0	1	0	0	0	1	2
25-29	0	1	0	0	0	0	1
30 and Over	1	1	0	0	0	0	2
All Years	**86**	**5**	**0**	**1**	**0**	**7**	**99**

Distribution of Average Annual Disbursements to Retirees and Beneficiaries by Years Retired and Retirement Type*

Years Retired	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Average
Under 5 Yrs	$29,831	$0	$0	$0	$0	$28,873	$29,786
5-9	32,233	28,427	0	3,852	0	7,655	28,979
10-14	29,672	18,085	0	0	0	0	28,900
15-19	30,943	0	0	0	0	14,345	27,925
20-24	0	21,243	0	0	0	11,301	16,272
25-29	0	31,556	0	0	0	0	31,556
30 and Over	12,504	15,098	0	0	0	0	13,801
All Years	**$30,307**	**$22,882**	**$0**	**$3,852**	**$0**	**$16,149**	**$28,663**

* Counts of members do not include alternate payees receiving benefits while the member is still working. Therefore, the total counts may not match information on C-1 of the report. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Appendix D - Glossary

Glossary

Accrued Liability (Actuarial Accrued Liability)
The portion of the Present Value of Benefits allocated to prior years. It can also be expressed as the Present Value of Benefits minus the present value of future Normal Cost. Different actuarial cost methods and different assumptions will lead to different measures of Accrued Liability.

Actuarial Assumptions
Assumptions made about certain events that will affect pension costs. Assumptions generally can be broken down into two categories: demographic and economic. Demographic assumptions include such things as mortality, dis ability, and retirement rates. Economic assumptions include discount rate, wage inflation, and price inflation.

Actuarial Methods
Procedures employed by actuaries to achieve certain funding goals of a pension plan. Actuarial methods include an actuarial cost method, an amortization policy, and an asset valuation method.

Actuarial Valuation
The determination as of a valuation date of the Normal Cost, Accrued Liability, and related actuarial present values for a pension plan. These valuations are performed annually or when an employer is contemplating a change in plan provisions.

Actuary
A business professional proficient in mathematics and statistics who measures and manages risk. A public retirement system actuary in California performs actuarial valuations necessary to properly fund a pension plan and disclose its liabilities and must satisfy the qualification standards for actuaries issuing statements of actuarial opinion in the United States with regard to pensions.

Amortization Bases
Separate payment schedules for different portions of the Unfunded Accrued Liability (UAL). The total UAL of a rate plan can be segregated by cause. The impact of such individual causes on the UAL are quantified at the time of their occurrence, resulting in new amortization bases. Each base is separately amortized and paid for over a specific period of time. Generally, in an actuarial valuation, the separate bases consist of changes in UAL due to contract amendments, actuarial assumption changes, method changes, and/or experience gains and losses.

Amortization Period
The number of years required to pay off an Amortization Base.

Classic Member (under PEPRA)
A member who joined a public retirement system prior to January 1, 2013, and who is not defined as a new member under PEPRA. (See definition of New Member below.)

Discount Rate
The rate used to discount the expected future benefit payments to the valuation date to determine the Projected Value of Benefits. Different discount rates will produce different measures of the Projected Value of Benefits. The discount rate for funding purposes is based on the assumed long-term rate of return on plan assets, net of investment and administrative expenses. This rate is called the "actuarial interest rate" in Section 20014 of the California Public Employees' Retirement Law.

Entry Age
The earliest age at which a plan member begins to accrue benefits under a defined benefit pension plan. In most cases, this is the age of the member on their date of hire.

Entry Age Actuarial Cost Method
An actuarial cost method that allocates the cost of the projected benefits on an individual basis as a level percent of earnings for the individual between entry age and retirement age. This method yields a total normal cost rate, expressed as a percentage of payroll, which is designed to remain level throughout the member's career.

Fresh Start
A Fresh Start is when multiple amortization bases are combined into a single base and amortized over a new Amortization Period.

Glossary (continued)

Funded Ratio

Defined as the Market Value of Assets divided by the Accrued Liability. Different actuarial cost methods and different assumptions will lead to different measures of Funded Ratio. The Funded Ratio with the Accrued Liability equal to the funding target is a measure of how well funded a rate plan is. A ratio greater than 100% means the rate plan has more assets than the funding target and the employer need only contribute the Normal Cost. A ratio less than 100% means assets are less than the funding target and contributions in addition to Normal Cost are required.

Funded Status

Any comparison of a particular measure of plan assets to a particular measure of pension obligations. The methods and assumptions used to calculate a funded status should be consistent with the purpose of the measurement.

Funding Target

The Accrued Liability measure upon which the funding requirements are based. The funding target is the Accrued Liability under the Entry Age Actuarial Cost Method using the assumptions adopted by the board.

GASB 68

Statement No. 68 of the Governmental Accounting Standards Board. The accounting standard governing a state or local governmental employer's accounting and financial reporting for pensions.

New Member (under PEPRA)

A new member includes an individual who becomes a member of a public retirement system for the first time on or after January 1, 2013, and who was not a member of another public retirement system prior to that date, and who is not subject to reciprocity with another public retirement system.

Normal Cost

The portion of the Present Value of Benefits allocated to the upcoming fiscal year for active employees. Different actuarial cost methods and different assumptions will lead to different measures of Normal Cost. The Normal Cost under the Entry Age Actuarial Cost Method, using the assumptions adopted by the board, plus the required amortization of the UAL, if any, make up the required contributions.

PEPRA

The California Public Employees' Pension Reform Act of 2013.

Present Value of Benefits (PVB)

The total dollars needed as of the valuation date to fund all benefits earned in the past or expected to be earned in the future for *current* members.

Traditional Unit Credit Actuarial Cost Method

An actuarial cost method that sets the Accrued Liability equal to the Present Value of Benefits assuming no future pay increases or service accruals. The Traditional Unit Credit Cost Method is used to measure the accrued liability on a termination basis.

Unfunded Accrued Liability (UAL)

The Accrued Liability minus the Market Value of Assets. If the UAL for a rate plan is positive, the employer is required to make contributions in excess of the Normal Cost.

ReGen MONTEREY

Finance Committee
November 6, 2024

CalPERS Actuarial Liability Options

CalPERS Unfunded Actuarial Liability – Current Status

Based on the most recent June 30, 2023, Actuarial Valuation (*page 4 of Actuarial Valuation Report*)

- Unfunded accrued liability is $19,668,750
- Funded ratio is 67.8% based on a 6.8% discount rate

CalPERS posted 9.3% investment gain, thus no change in discount rate for next year.

Termination liability (*page 31 of Actuarial Valuation Report*)

- Discount rate drastically lowered
- Liability increases to $55.3M at the low discount of 3.06%
- Liability increases to $30.5M at the high discount rate of 4.5%

CalPERS Actuarial Liability Options

Funding Status as of June 30, 2023

	June 30, 2022	June 30, 2023
Entry Age Accrued Liability (AL)	$58,057,967	$61,109,881
Market Value of Assets (MVA)	39,090,075	41,441,131
Unfunded Accrued Liability (UAL) [AL – MVA]	$18,967,892	$19,668,750
Funded Ratio [MVA ÷ AL]	67.3%	67.8%

Funding Options

ReGen has four funding options to consider:

1. Continue to pay the minimum Unfunded Actuarial Pension Liability (UAL)
2. Create a reserve policy
3. Create a Section 115 Trust
4. Reduce the amortization period from 23 years to 15 or 10 years by making additional UAL payments annually

Continue Paying minimum required UAL

Option 1: Continue paying minimum required UAL

Pros

- No change in process
- Burden on cash requirements changes minimally annually

Cons

- Interest continues to accrue and grow- no savings
- Liability continues to grow
- Liability growth subject to fluctuations in interest

Create a Reserve Policy

Option 2: Create a reserve policy

Pros
- Cash set aside for future payment UAL
- Board has ability to unreserve cash

Cons
- Interest continues to accrue and grow- no savings
- Liability continues to grow
- Liability growth subject to fluctuations in interest rates/discount rate based on Treasury Bond market
- UAL is not reduced

Create Section 115 Trust

Option 3: Create a Section 115 Trust

Pros

- Sets aside funds to pay liability
- Earnings on funds may offset interest expense on liability

Cons

- Does not reduce liability with CalPERS
- Interest on liability continue to be incurred
- Cash once placed in Trust can only be used for CalPERS liability
- Board cannot undesignated/unreserve cash

Decrease UAL Amortization Period /Accelerate Payment

Option 4: Decrease UAL Amortization Period/Accelerate Payment

Pros

- Reduces liability
- Saves interest expense
- That UAL payment amount can be adjusted from year to year depending on current cash needs.
- There is no obligation to make a payment each year.

Cons

- Increased cash usage requirements
- Depending on CalPERS investment earnings- liability may continue to grow.

CalPERS Actuarial Liability Options

Sample – Accelerated Payment Alternative Schedules

	Current Amortization Schedule		Alternative Schedules: 15 Year Amortization		Alternative Schedules: 10 Year Amortization	
Date	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2025	19,445,329	1,572,630	19,445,329	2,039,886	19,445,329	2,654,276
6/30/2026	19,142,392	1,686,672	18,659,510	2,039,886	18,024,574	2,654,276
6/30/2027	18,701,001	1,778,845	17,820,255	2,039,886	16,507,208	2,654,276
6/30/2028	18,134,338	1,974,543	16,923,931	2,039,886	14,886,661	2,654,276
6/30/2029	17,326,897	2,019,365	15,966,657	2,039,887	13,155,917	2,654,276
6/30/2030	16,418,231	2,057,810	14,944,287	2,039,887	11,307,482	2,654,276
6/30/2031	15,408,045	2,027,325	13,852,396	2,039,886	9,333,354	2,654,277
6/30/2032	14,360,670	2,019,169	12,686,257	2,039,886	7,224,984	2,654,277
6/30/2033	13,250,503	1,942,257	11,440,821	2,039,887	4,973,245	2,654,277
6/30/2034	12,144,329	1,908,785	10,110,694	2,039,886	2,568,387	2,654,276
6/30/2035	10,997,529	1,847,005	8,690,120	2,039,887		
6/30/2036	9,836,592	1,731,384	7,172,946	2,039,887		
6/30/2037	8,716,198	1,662,110	5,552,604	2,039,887		
6/30/2038	7,591,209	1,588,109	3,822,079	2,039,887		
6/30/2039	6,466,196	1,532,442	1,973,878	2,039,886		
6/30/2040	5,322,209	1,502,099				
6/30/2041	4,131,788	1,327,421				
6/30/2042	3,040,939	1,146,128				
6/30/2043	2,063,266	1,523,140				
6/30/2044	629,493	377,582				
6/30/2045	282,090	178,355				
6/30/2046	116,953	120,864				
6/30/2047						
6/30/2048						
6/30/2049						
Total		33,524,040		30,598,297		26,542,763
Interest Paid		14,078,711		11,152,968		7,097,434
Estimated Savings				2,925,743		6,981,277

Sample – Accelerated Payment Alternative Schedules

Original Payments + $500,000 on Jan 1 each Year

Pay #	Date	Revised Balance	Original Payment	Revised Payment	Additional Payment
13	6/30/2024	19,667,969	1,509,584	2,009,584	500,000
12	6/30/2025	18,928,605	1,572,630	2,072,630	500,000
11	6/30/2026	18,073,810	1,686,672	2,186,672	500,000
10	6/30/2027	17,043,033	1,778,845	2,278,845	500,000
9	6/30/2028	15,846,908	1,974,543	2,474,543	500,000
8	6/30/2029	14,367,204	2,019,365	2,519,365	500,000
7	6/30/2030	12,740,559	2,057,810	2,557,810	500,000
6	6/30/2031	10,963,572	2,027,325	2,527,325	500,000
5	6/30/2032	9,097,254	2,019,169	2,519,169	500,000
4	6/30/2033	7,112,455	1,942,257	2,442,257	500,000
3	6/30/2034	5,072,174	1,908,785	2,408,785	500,000
2	6/30/2035	2,927,745	1,847,005	2,347,005	500,000
1	6/30/2036	701,341	N/A	724,794	-
0	6/30/2037	-	-	-	-
	6/30/2038	-	-	-	-
	6/30/2039	-	-	-	-
	6/30/2040	-	-	-	-

Total Payments	**29,068,784**
Total Interest Paid	**9,400,815**
Estimated Savings	**5,964,840**

ReGen Monterey

14201 Del Monte Blvd.
Salinas, CA 93908
831-384-5313

ReGenMonterey.org
@ReGenMonterey

ReGen Monterey
is the public name of
Monterey Regional Waste
Management District

For more information, please contact:

Helen Rodriguez
Director of Finance and Administration
HRodriguez@ReGenMonterey.org

Meeting Date: November 22, 2024

To: Board of Directors
From: Accounting Manager, Garth Gregson
Approved by: General Manager, Felipe Melchor

Subject: October 2024 Financial Review

Financial & Operations Review October 2024

	October	Month Budget	B/(W) Month Bud	Year to Date	YTD Budget	B/(W) YTD Budget
Tipping Fees Revenue	$ 3,573,848	$ 3,673,288	$ (99,440)	$ 13,583,791	$ 14,574,658	$ (990,867)
Other Operating Revenue	1,327,451	1,152,945	174,506	4,846,432	4,574,589	271,843
* Total Operating Revenues *	4,901,300	4,826,233	75,067	18,430,223	19,149,247	(719,024)
* Operating Expenses *						
Employment Expenses	1,680,141	1,749,441	69,300	6,677,413	6,941,332	263,918
Non-Employment Expenses:	2,411,725	2,339,137	(72,589)	9,062,325	9,356,355	294,029
* Total Operating Expenses *	4,091,867	4,088,578	(3,289)	15,739,739	16,297,686	557,948
** Operating Income **	809,433	737,655	71,778	2,690,484	2,851,560	(161,076)
Non-operating Revenues (Expenses)	40,190	(6,917)	47,108	289,589	(30,902)	320,491
*** Net income ***	$ 849,623	$ 730,738	$ 118,886	$ 2,980,073	$ 2,820,658	$ 159,415

Month

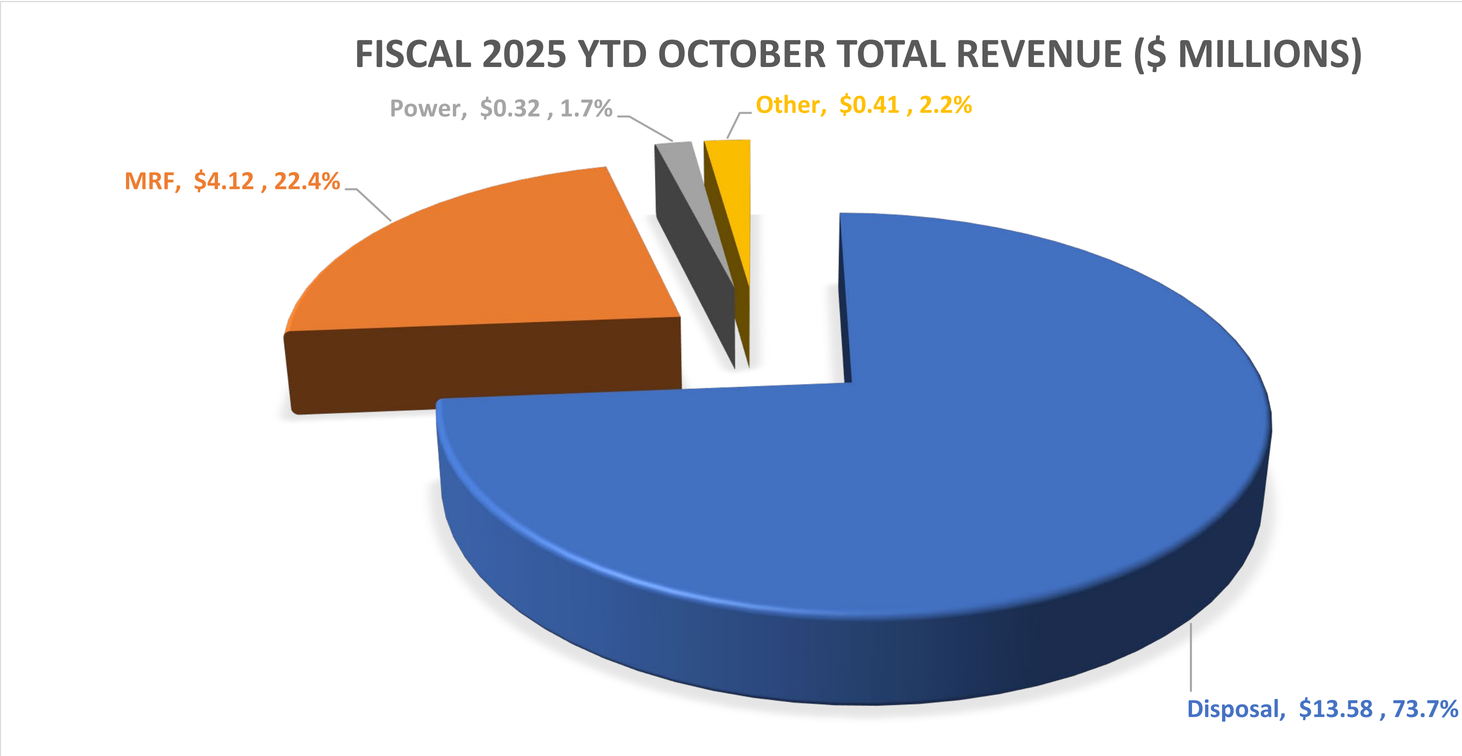
- Total revenue is $4.90 million and is $75K over budget. The overage is primarily due to continued higher MRF commodity prices.
- Tonnage received in October is 81.6K tons which is 9.0K tons higher than the prior month.
- Cost of employment is $1.68 million and is $69K below the month budget.
- Non-employment operating expenses are $2.41 million and are $73K over the month budget.
- Net income for the month is $850K and is $119K over budgeted net income of $731K.

Year to Date

- Tip fee revenue year to date is $13.6 million and is $991K or 6.8% below budget and $386K higher than the same period last year.
- Tonnage received year to date 304.4K tons and compared to 343.3K tons received in Fiscal 2024. The largest difference is a lower amount of ADC received this year compared to last year. 304K tons this year compared to 343.3K tons last year.
- The rolling 12 month diversion rate for the MRF is 62.7% which is 0.5% lower than the 12 month rate from prior month.
- Total other operating revenue year to date is $4.85 million and is $272K over budget and $524K higher than last year.
- MRF revenue YTD is $4.12 million and is $519K over budget. MRF direct expenses are $3.30 million and are $165K below budget.
- Power revenue is $319K compared to budget of $607K. The power revenue shortfall is due to major repairs being incurred.
- Cost of employment is $6.68 million compared to budget of $6.94 million.
- Environmental services are $818K and are $47K under budget partially due to lower LFG system maintenance costs.
- Operating supplies are $803K and are $301K over budget partially due to road maintenance costs.
- Repair and maintenance costs are $1.05 million and are $26K under budget.
- Recycling services are $1.37 million and are $15K under budget.
- Total non-employment expenses are $9.06 million and are $294K under budget and $504K higher than last year.
- Total operating expenses are $15.7 million and are $558K under budget and $1.03 million higher than the same period last year.
- Net income for the year to date is $2.13 million compared to budget of $2.09 million.

Balance Sheet

- Cash consumed in the period July 2024 through October 2024 is $3.35 million.
- Fixed assets additions year to date are $3.80 million. Landfill module development is the largest expenditure at $2.82 million
- Fixed asset disposals year to date are $536K with a gain on disposal of $94K.



Operating Expense by Department YTD October 2024

Department	Year to Date	YTD Budget	B/(W) Budget YTD	Annual Budget
Administration	$ 3,491,500	$ 3,392,058	$ (99,441)	$ 10,165,278
Human Resources	232,932	319,812	86,879	953,268
Accounting	331,859	360,551	28,692	1,071,750
Engineering	566,841	664,753	97,911	1,979,589
Safety & Risk Management	111,048	163,515	52,467	486,973
Communications	293,840	449,624	155,785	1,340,929
Household Hazardous Waste	435,169	363,690	(71,478)	1,083,019
Last Chance Mercantile	518	21,333	20,815	64,000
Landfill Gas	1,554,621	1,601,245	46,625	4,781,312
Organics	1,065,881	1,166,667	100,786	3,500,000
Maintenance Shop	1,031,607	1,129,343	97,735	3,364,952
MRF Operations	2,718,934	2,886,805	167,871	8,590,513
MRF Maintenance	588,922	586,087	(2,835)	1,744,823
Scales	424,439	401,997	(22,442)	1,195,758
Site & Facilities	2,891,627	2,790,206	(101,421)	8,332,394
Total	$ 15,739,739	$ 16,297,686	$ 557,948	$ 48,654,558

Fiscal 2025 Capital Spending Through October 2024

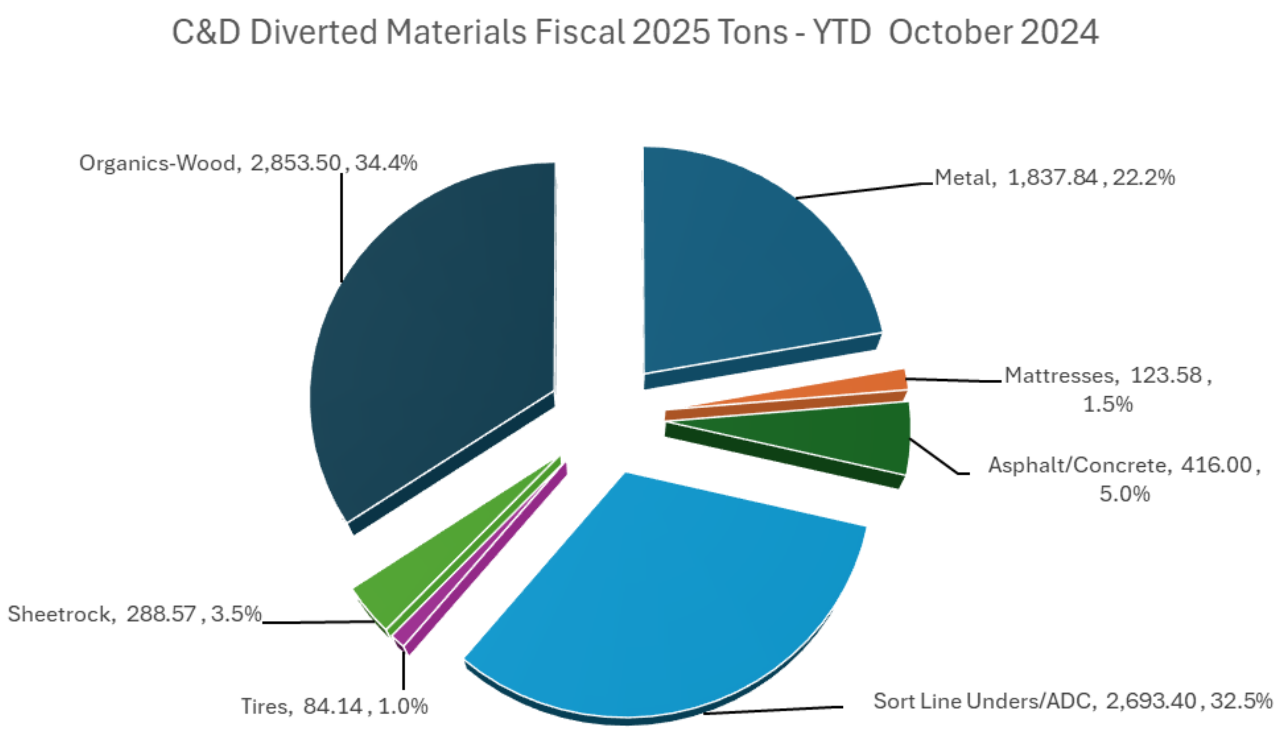
	Actual YTD	F25 Budget
Capital improvements	$ 3,252,595	$ 18,940,000
Equipment	550,392	3,197,000
	$ 3,802,987	$ 22,137,000

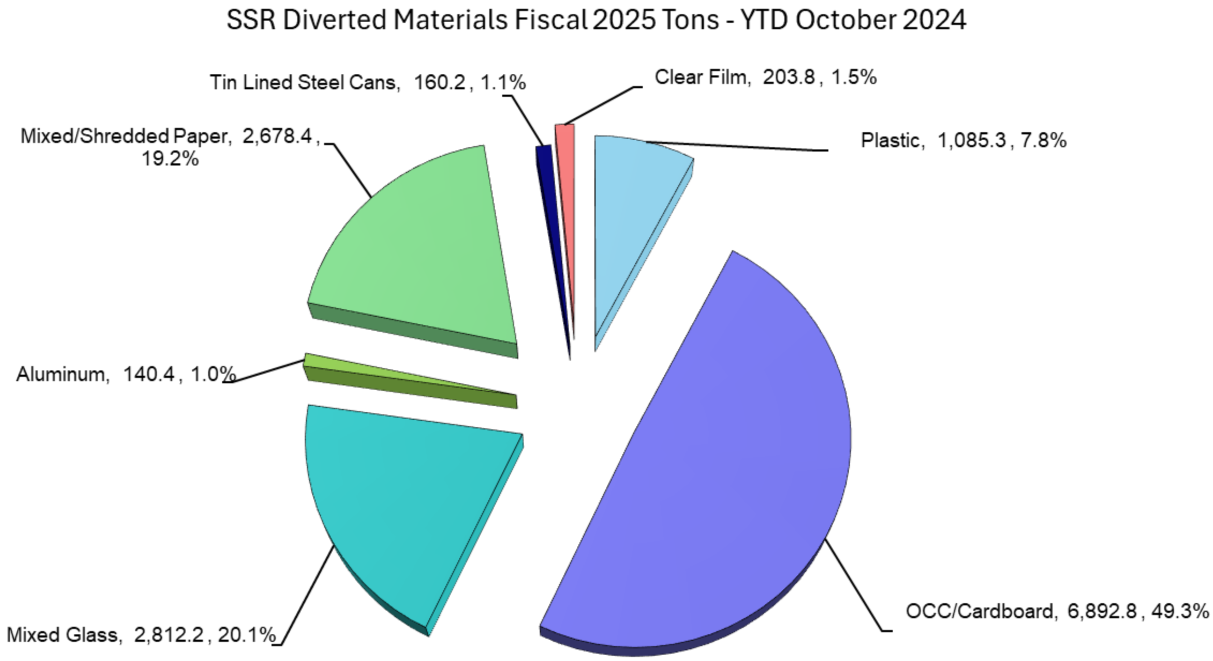
Cash Position

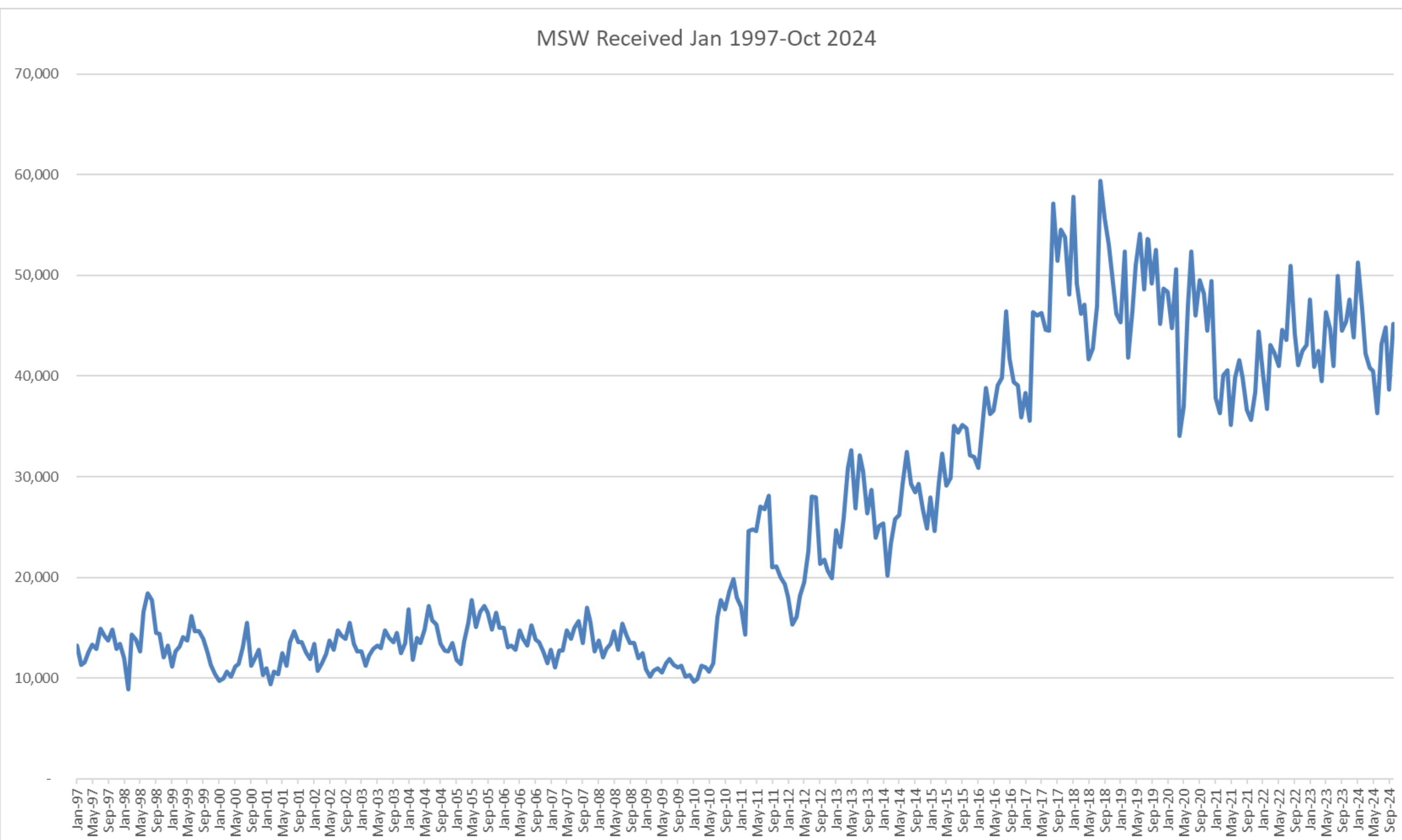
	Jul 1, 2024	Oct 31, 2024	Change
Cash in bank	$ 19,402,851	$ 15,592,189	$ (3,810,662)
Temporary investments	17,373,167	17,832,613	459,446
Restricted funds	6,013,000	6,013,000	-
	$ 42,789,018	$ 39,437,802	$ (3,351,216)

12 Month Rolling Average Diversion-Oct 2024

C&D Diversion	60.1%
Single Stream Recycling Diversion	64.4%
Entire MRF Diversion	62.7%




SSR Diverted Materials Fiscal 2025 Tons - YTD October 2024
Tin Lined Steel Cans, 160.2, 1.1%
Clear Film, 203.8, 1.5%
Mixed/Shredded Paper, 2,678.4, 19.2%
Plastic, 1,085.3, 7.8%
Aluminum, 140.4, 1.0%
Mixed Glass, 2,812.2, 20.1%
OCC/Cardboard, 6,892.8, 49.3%


MSW Received Jan 1997-Oct 2024
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT
Statement of Net Position
as at October 31, 2024

Assets		
Current Assets:		
Cash and Short Term Investments	$	33,509,686
Accounts Receivable, net		5,084,480
Accrued Interest Receivable		93,488
Other Receivable		2,791,436
Prepaid Expenses		2,427,163
Total Current Assets		43,906,252
Non-Current Assets		7,014,656
Restricted Assets:		
Capital Reserve		3,513,000
Site Closure Fund		1,500,000
Environmental Impairment Fund		1,000,000
Total Restricted Assets		6,013,000
Fixed Assets:		
Land		578,210
Facilities		40,885,951
Equipment		62,027,496
Module Development		31,680,115
Power Project		25,644,614
Less Total Accumulated Depreciation		(64,251,903)
Total Fixed Assets		96,564,483
Intangible Assets		20,032
*** Total Assets ***	$	153,518,423
Liabilities and Net Assets		
Current Liabilities:		
Accounts Payable	$	3,362,782
Accrued State/County Disposal Fee		109,793
Interest Payable Revenue Bonds		75,163
Accrued Vacation / Compensation Payable		572,911
Deferred Revenue		10,000
Security Deposits/Gift Cert		50,267
Total Current Liabilities		4,180,915
Non-Current Liabililites:		
Accrued Vacation/Comp Non-Current		655,582
Post Employment Health Benefit		3,022,862
Net Pension Liability		18,487,113
Deferred Inflows		102,328
Total Non-Current Liabililites		22,267,885
Long Term Debt		26,081,737
*** Total Liabilities ***		52,530,537
Net Position		100,987,886
*** Total Liabilities and Net Position ***	$	153,518,423

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT
Statement of Revenue, Expenses, and Changes in Net Position for the Period Ending
October 31, 2024

	October	Month Budget	B/(W) Month Budget	Year to Date	YTD Budget	B/(W) YTD Budget	Annual Budget
* Operating Revenues *							
Total Tipping Fees Revenue	$ 3,573,848	$ 3,673,288	$ (99,440)	$ 13,583,791	$ 14,574,658	$ (990,867)	$ 43,250,000
Other Sales Revenue:							
Power Sales	63,511	152,877	(89,366)	319,426	606,575	(287,149)	1,800,000
MRF Sales & CRV Revenue	1,149,125	907,918	241,207	4,121,363	3,602,384	518,980	10,690,000
Other Sales	114,816	92,151	22,665	405,643	365,630	40,012	1,085,000
Total Other Sales Revenue	1,327,451	1,152,945	174,506	4,846,432	4,574,589	271,843	13,575,000
* Total Operating Revenues *	4,901,300	4,826,233	75,067	18,430,223	19,149,247	(719,024)	56,825,000
* Operating Expenses *							
Employment Expenses	1,680,141	1,749,441	69,300	6,677,413	6,941,332	263,918	20,598,260
Non-Employment Expenses:							
Amortization & Depreciation	531,202	518,750	(12,452)	2,121,759	2,075,000	(46,759)	6,225,000
Closure/Post Closure Costs	60,665	37,500	(23,165)	236,518	150,000	(86,518)	450,000
Outside Services	89,060	109,833	20,773	377,362	439,333	61,972	1,318,000
Environmental Services	448,957	216,302	(232,655)	818,182	865,206	47,025	2,583,619
Gasoline, Oil & Fuel	111,659	155,667	44,008	576,320	622,667	46,347	1,868,000
Hazardous Waste Disposal	17,692	26,275	8,583	143,187	105,100	(38,087)	315,300
Insurance	124,562	133,333	8,771	521,799	533,333	11,535	1,600,000
Office Expense	41,736	53,326	11,590	180,001	213,303	33,303	639,910
Operating Supplies	118,127	125,500	7,372	803,213	501,999	(301,214)	1,505,997
Other Expense	2,511	5,621	3,110	21,160	22,483	1,323	67,450
Professional Services	71,580	115,820	44,240	193,737	463,089	269,352	1,388,500
Public Awareness	2,282	42,042	39,760	33,344	168,167	134,823	504,500
Recycling Services	428,791	346,106	(82,685)	1,369,854	1,384,424	14,570	4,153,272
Repairs & Maintenance	207,918	269,550	61,632	1,051,773	1,078,200	26,427	3,234,600
Safety Equip/Supplies/Training	26,806	24,854	(1,951)	99,054	99,417	363	298,250
Taxes & Surcharges	112,690	124,250	11,560	434,895	497,000	62,105	1,491,000
Training/Meetings/Education	1,545	16,625	15,080	25,665	66,500	40,835	199,500
Utilities	13,943	17,783	3,840	54,505	71,133	16,629	213,400
Total Non-Employment Expenses:	2,411,725	2,339,137	(72,589)	9,062,325	9,356,355	294,029	28,056,297
* Total Operating Expenses *	4,091,867	4,088,578	(3,289)	15,739,739	16,297,686	557,948	48,654,558
** Operating Income **	809,433	737,655	71,778	2,690,484	2,851,560	(161,076)	8,170,442
* Nonoperating Revenues (Expenses) *	40,190	(6,917)	47,108	289,589	(30,902)	320,491	(105,639)
*** Change in Net Position ***	$ 849,623	$ 730,738	$ 118,886	$ 2,980,073	$ 2,820,658	$ 159,415	$ 8,064,803

GM Communications

Meeting Date: November 22, 2024

To: Board of Directors
From: Felipe Melchor

Subject: General Manager Communications

- Welcome new Assistant Engineer Keon Feldsien to ReGen Monterey's Engineering Department. He earned his Bachelor of Science degree and Master's degree from Cal Poly, San Luis Obispo in Civil and Environmental Engineering. Keon is also an Eagle Scout and earned his title by setting up a composting program at an elementary school. We are excited to have him join our team and look forward to his future contributions to ReGen Monterey.

- The County of Monterey is installing cameras in hots pots for illegal dumping. At the urging of Mayor Delgado and ReGen staff, the first cameras were placed on Lapis Road, adjacent to ReGen Monterey's site. Within the first week, the first illegal dumper was caught dumping a mattress when our facility was open and accepts mattresses and box springs free of charge. The County sent out a press release and KSBW did a top-of-the-hour news story about the incident that featured Zoe Shoats speaking about ReGen's free offerings to encourage proper disposal rather than the potential of facing hefty illegal dumping fines.

- ReGen Monterey Communications staff participated in the Monterey County Illegal Dumping and Litter Abatement Task Force (IDLATF) quarterly clean-up on November 7. The group is made up of staff from Monterey County, cities, haulers and other stakeholders concerned about illegal dumping. In addition to their meetings about education and enforcement, they pick a different site each quarter in Monterey County to have a group clean-up. Salinas' Gabilan Creek Wilderness Sanctuary was chosen, which is a greenbelt near ag fields, Alvarez High School and Steinbeck Elementary School. They picked up litter from the dry riverbed before storm season and along the creek's busy pedestrian path and removed a dishwasher and construction and household hazardous waste, along with over a dozen full bags of litter.

- Our Engineering and Communications staff partnered together to provide a tour for CSUMB's new Engineering program, showing university faculty and staff the kinds of job opportunities available in the waste management industry, and showcasing ReGen's various innovations and the permitting, design, regulatory compliance and construction responsibilities that our staff perform.

- We also hosted Monterey Peninsula College's horticulture faculty and students last month. They were especially interested in the mulching and composting processing at ReGen Monterey. Both tours demonstrate how ReGen Monterey is committed to partnerships with schools to educate them about local job opportunities and our complex systems of disposal, recycling, reuse, renewable power and composting.

Physical Address	Mailing Address	Phone / Fax	Web / Social	
14201 Del Monte Blvd.	P.O. Box 1670	831-384-5313 PHONE	ReGenMonterey.org	*Let's not waste this.*
Salinas, CA 93908	Marina, CA 93933	831-384-3567 FAX	@ReGenMonterey	

- Eric Palmer presented a webinar to the California Association of Public Information Officials about best practices for government social media accounts. He serves on the association's Board of Directors as Social Media Chair. He shared how ReGen Monterey uses compelling imagery and video from our operations to inspire proper disposal, recycling and composting, encouraging other government agencies to get creative and think outside the box. / /