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# **Western States Office & Professional Employees Plan**

## Actuarial Valuation

As of January 1, 2023

November 2023

# Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

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## Actuarial Certification

November 22, 2023

Board of Trustees  
Western States Office & Professional Employees Plan

Dear Trustees:

Rael & Letson has prepared this report exclusively for the use of the Board of Trustees of the Western States Office & Professional Employees Plan (“Plan”). All supporting information pertaining to the findings presented in this report is described or contained within this report and the findings should not be relied upon for any other purpose than as stated herein. This report may only be provided to other parties in its entirety.

This report has been prepared as of January 1, 2023 to report on the health of the Plan, including reporting the:

1. Plan’s funded status
2. Plan’s funding requirements under the Employee Retirement Income Security Act of 1974 (ERISA)
3. Plan experience for the 2022 Plan Year
4. Unfunded vested benefits for withdrawal liability purposes
5. FASB ASC 960 required information for auditors
6. Information required for governmental agencies
7. Plan’s risk assessment

We have relied on information supplied by the auditor with respect to contributions and assets and by the Plan Administrator with respect to participant data. We have not verified and customarily would not verify such information, but we have no reason to doubt its substantial accuracy. We have also relied on third party actuarial valuation software to generate the liabilities in this report. We have reviewed sample life calculations and have no reason to doubt the underlying valuation model or the results being generated by that model.

These results are applicable for the Plan Year ending December 31, 2023. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: Plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (for instance, the end of an amortization period or additional cost or contribution requirements based on the Plan’s funded status); and changes in Plan provisions or applicable law. Due to the limited scope of the assignment, we did not perform analysis of the potential range of such future measurements.

**Actuarial Certification (Continued)**

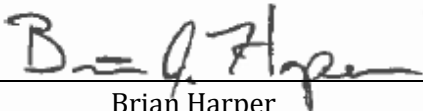
On May 24, 2023, the Plan received \$294,717,463 in Special Financial Assistance ("SFA") from the PBGC under the American Rescue Plan Act. The SFA funds will be reflected in the January 1, 2024 actuarial valuation. We are not aware of any other events, subsequent to January 1, 2023, that would have a material effect on the actuarial findings presented in this report.

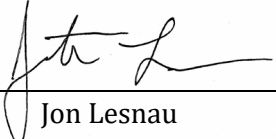
In preparation of this report and the actuarial findings contained herein, we certify that:

1. We have completed this actuarial valuation of the Plan as of January 1, 2023 in accordance with generally accepted actuarial principles and practices, including Actuarial Standards of Practice (ASOP) Nos. 4, 23, 27, 35, 41, 44, 51 and 56.
2. There has been no conflict of interest between any relevant parties; no findings for which we, the actuaries, do not assume responsibility; and no deviation from ASOP Nos. 4, 23, 27, 35, 41, 44, 51 and 56.
3. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate and, in our opinion, the individual assumptions used: (a) are reasonably related to the experience of the Plan and to reasonable expectations; and (b) represent our best estimate of anticipated experience under the Plan.

We, Paul Graf, and Brian Harper, are actuaries for Rael & Letson. We are members of the American Academy of Actuaries and each meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

**Certified by:**  ASA, EA, MAAA  
Paul Graf  
Enrolled Actuary No. 23-05627

**Reviewed by:**  EA, MAAA  
Brian Harper  
Enrolled Actuary No. 23-06435

**Reviewed by:**  ASA, MAAA  
Jon Lesnau

cc: Paula Allphin  
Joe Reinhart  
Alex Miller

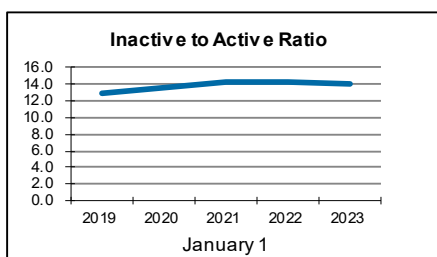
# Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

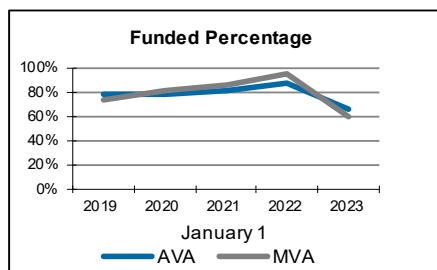
## Valuation Highlights

A summary of the key valuation highlights for the Western States Office & Professional Employees Plan follows:

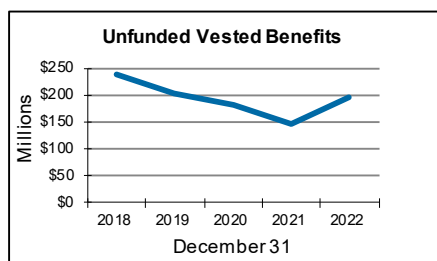
### Participant Data



### Financial Information



### Unfunded Vested Benefits



	January 1, 2022	January 1, 2023	Change
Actives	462	458	(4)
Non-Vested Inactives <sup>1</sup>	195	175	(20)
Vested Inactives	2,444	2,333	(111)
In Pay Status <sup>2</sup>	4,152	4,174	22
<b>Total Participants</b>	<b>7,253</b>	<b>7,140</b>	<b>(113)</b>
Market Value of Assets (MVA)	\$ 368,165,003	\$ 297,782,774	\$ (70,382,229)
Return on MVA (Prior Year)	13.30 %	(12.48)%	(25.78)%
Actuarial Value of Assets (AVA) <sup>3</sup>	\$ 337,375,911	\$ 329,473,104	\$ (7,902,807)
Return on AVA (Prior Year)	10.95 %	5.60 %	(5.35)%
Actuarial Accrued Liability <sup>4</sup>	\$ 386,063,031	\$ 494,617,019	\$ 108,553,988
Unfunded Accrued Liability (MVA)	17,898,028	196,834,245	178,936,217
Unfunded Accrued Liability (AVA)	48,687,120	165,143,915	116,456,795
MVA Funded Percentage	95.4 %	60.2 %	(35.2)%
AVA Funded Percentage	87.4 %	66.6 %	(20.8)%
Contributions (Prior Year)	\$ 18,054,587	\$ 9,792,539	\$ (8,262,048)
Benefit Payments (Prior Year)	33,019,640	34,290,719	1,271,079
Expenses (Prior Year)	1,233,798	1,561,155	327,357
Vested Benefit Liability	\$ 512,305,722	\$ 494,009,806	\$ (18,295,916)
Unfunded Vested Benefits <sup>5</sup>	144,140,719	203,382,215	59,241,496
Zone Certification Status	Critical	Critical and Declining	
PPA Funded Percentage <sup>6</sup>	87.4 %	66.6 %	(20.8)%
Credit Balance	\$ (10,325,121)	\$ (16,286,686)	\$ (5,961,565)

<sup>1</sup> These are non-vested inactive participants who have not incurred a permanent break-in-service.

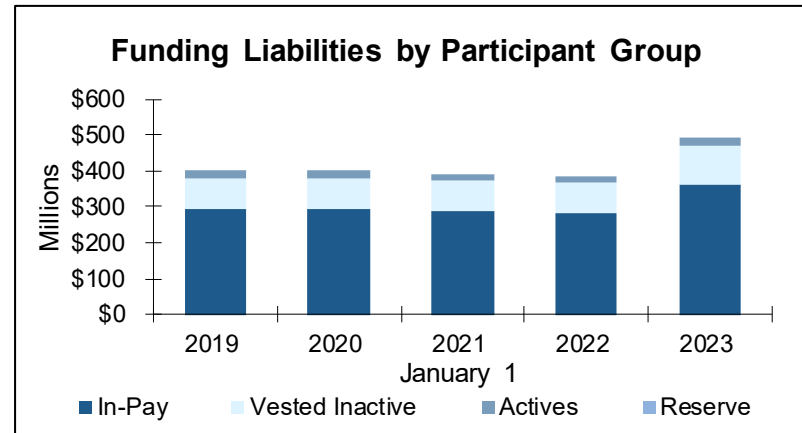
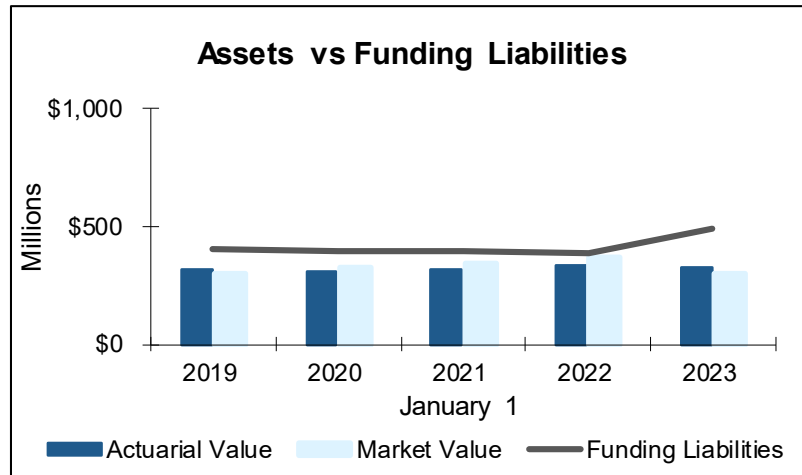
<sup>2</sup> Includes 23 Alternate Payees as of January 1, 2022 and 23 Alternate Payees as of January 1, 2023.

<sup>3</sup> 2022 Plan Year experience includes an asset loss of \$5.3 million and a liability loss of \$0.3 million as of January 1, 2023.

<sup>4</sup> The Actuarial Accrued Liability as of January 1, 2022 reflects the MPRA benefit reduction. The Actuarial Accrued Liability as of January 1, 2023 reflects the restoration of MPRA benefit reductions.

<sup>5</sup> Unfunded Vested Benefits are based on the Market Value of Assets, and includes the applicable PBGC 10-3 base. The MPRA Suspension base is included as of December 31, 2021, and is eliminated as of December 31, 2022.

## Section I – Assets and Liabilities



### ASSETS

A. Cash and Cash Equivalents	\$ 9,901,391
B. Marketable Securities	287,676,504
C. Net Receivables, Payables and Prepaid Expenses	204,879
<b>D. Market Value of Assets (A + B + C)</b>	<b>\$ 297,782,774</b>
E. Actuarial Adjustment (Appendix E)	31,690,330
<b>F. Total Assets at Actuarial Value (D + E)</b>	<b>\$ 329,473,104</b>

### LIABILITIES

#### Funding<sup>1</sup>

G. Actives	\$ 22,170,380
H. Vested Inactives	112,735,146
I. In Pay Status	359,711,493
J. Actuarial Accrued Liability (G + H + I)	\$ 494,617,019
<b>K. Unfunded Accrued Liability (J - F)</b>	<b>\$ 165,143,915</b>

#### PPA (Statutory)<sup>1</sup>

L. Actives	\$ 22,170,380
M. Vested Inactives	112,735,146
N. In Pay Status	359,711,493
O. Actuarial Accrued Liability (L + M + N)	\$ 494,617,019
<b>P. PPA Funded Percentage (F / O)</b>	<b>66.6 %</b>

#### Low Default-Risk Obligation Measure (LDROM)

Q. Actuarial Accrued Liability	\$ 798,483,609
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<sup>1</sup> Liabilities include the restoration of benefits previously suspended under MPRA, effective November 1, 2022.

## **Section I – Assets and Liabilities *(Continued)***

The financial status of the Plan provides us with the means of measuring the actuarial position of the Plan as of January 1, 2023.

### **ASSETS**

The total Market Value of Assets as of January 1, 2023 is \$297,782,774. Information regarding assets was taken from the audit report provided by Eide Bailly LLP.

We have utilized an actuarial value of asset method that recognizes net investment income on Trust assets that is more or less than a 7.25% market return per year over a five-year period. The value of Trust assets based on this method is \$329,473,104, which represents 110.6% of the Market Value of Assets. This method is intended to dampen the volatility associated with year-to-year changes in the market value of Trust assets, while at the same time systematically recognizing overall investment performance over the long term. The derivation of the Actuarial Value of Assets is shown in Appendix E.

Contributions receivable from Employers for hours worked in the 2022 Plan Year but received after December 31, 2022 are included with net receivables.

### **LIABILITIES**

The liabilities of the Plan are calculated for each individual participant based on data provided by the Plan Administrator and assumptions and methods that are outlined in Appendix A. The \$359,711,493 liability for those in pay status represents the estimated amount required as of the valuation date to pay their benefits as they come due in the future. The remaining liability is split between participants who are inactive and those who are continuing to earn benefits under the Plan. The Actuarial Accrued Liability is the sum of the liability amounts for each group and is equal to \$494,617,019.

The Low-Default Risk Obligation Measure (LDRM) is a required disclosure of the Plan's liability assuming the Plan is invested in risk-free investment alternatives instead of the Plan's diversified portfolio. As a result, this liability will typically be much higher than the Plan's funding liability but is not an indication of the funding health of the plan, nor the ability of the Plan to pay future benefit payments. It may be used to evaluate the risk to the Plan on a liquidation basis as shown in Section V, Risk Assessment. The LDRM shown on the prior page is based on the Current Liability assumptions outlined in Appendix A.

## **Section I – Assets and Liabilities *(Continued)***

### **UNFUNDED ACCRUED LIABILITIES**

The liabilities of the Plan exceed the Actuarial Value of Assets by \$165,143,915. This amount is known as the Unfunded Accrued Liability, which is amortized by the excess of contributions received over the cost of each future year's accumulation of benefits and operating expenses. If the Market Value of Assets is used, the Unfunded Accrued Liability is equal to \$196,834,245.

As shown in Section III, the current excess of contributions over benefit accruals and operating expenses is about \$7.2 million as of the beginning of year and is not sufficient to pay down the Unfunded Accrued Liability assuming payment of all outstanding withdrawal liability on both an Actuarial Value of Assets basis and a Market Value of Assets basis assuming all future actuarial assumptions are realized.

The reduction in plan liabilities associated with the MPRA benefit suspensions was first reflected in the January 1, 2019 actuarial valuation. The January 1, 2023 results include the restoration of MPRA-reduced benefits, but do not include the Special Financial Assistance (SFA) amount received by the Plan in May 2023.



## **Section II – Actuarial Experience**

### **ACTUARIAL VALUATION**

An actuarial valuation is a snapshot of asset and liability measures of the pension fund. It is used to estimate the amount of funds needed to help assure the future payment of retirement, termination, disability and death benefits to Plan participants based on Plan benefits in effect on the valuation date. The liability is based on the actual service rendered by these participants prior to the valuation date and on a set of actuarial assumptions and methods. These assumptions have been selected by the Actuary while the methods have been adopted by the Trustees upon the recommendation of the Actuary. Both are described in Appendix A.

### **GAIN/(LOSS)**

To the extent that actual experience during the plan year is different from what was expected based on the set of actuarial assumptions outlined in Appendix A, gains or losses are realized.

An asset gain or loss results if the Actuarial Value of Assets returns more or less than the assumed rate of return. Actual operating expenses that are more or less than that assumed are also included as gains or losses in the asset gain or loss amount.

Liability gains or losses occur when actual demographic experience is different from that assumed by the demographic assumptions. The total liability gain or loss consists of gains or losses attributable to mortality, termination, retirement and disability assumptions. In addition, the effects of unforeseen data changes that may occur from year to year are part of the miscellaneous component.

## Section II – Actuarial Experience *(Continued)*

### Development of Gain/(Loss)

The net actuarial gain or loss includes all actuarial experience from assets and liabilities. The following exhibit develops the net actuarial gain or loss for the 2022 Plan Year:

NET ACTUARIAL GAIN/(LOSS)	
A. Unfunded Accrued Liability on January 1, 2022	\$ 48,687,120
B. Normal Cost (Including Operating Expenses)	2,261,734
C. Contributions for 2022	(9,792,539)
D. Interest on A, B and C	3,338,812
E. Expected Unfunded Accrued Liability on January 1, 2023 (A + B + C + D)	\$ 44,495,127
F. Plan Amendment	115,047,767
G. Unfunded Accrued Liability on January 1, 2023	165,143,915
H. Net Actuarial Gain/(Loss) (E. + F. - G.)	\$ (5,601,021)

### Summary of Gain/(Loss) by Source

The total net actuarial gain or loss for the 2022 Plan Year is allocated among asset and liability components as shown below:

	Gain/(Loss)
<b>Asset Experience</b>	
Investment	\$ (5,358,575)
Operating Expenses	71,341
Total Asset Loss	\$ (5,287,234)
<b>Liability Experience</b>	
Mortality	292,165
Termination	(29,787)
Retirement	(522,808)
Disability	(1,770)
Miscellaneous	(51,587)
Total Liability Loss	\$ (313,787)
<b>Net Actuarial Experience Loss</b>	<b>\$ (5,601,021)</b>

# Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

## Section II – Actuarial Experience (Continued)

### ASSET EXPERIENCE

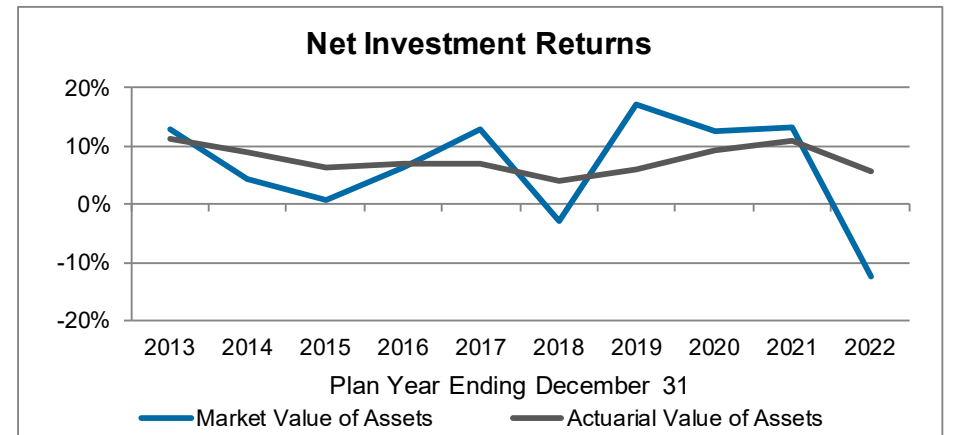
#### Net Investment Return

The assumed rate of return on investments is 7.25% compounded annually, net of investment expenses. The net investment return on the Actuarial Value of Assets (AVA) during the 2022 Plan Year was 5.60% and resulted in an asset loss of \$5,358,575. Appendix E shows the details of the actual net investment income calculation.

	Dollar Amount	Return on AVA
A. Gross Investment Income	\$ 19,284,416	5.95 %
B. Investment Expenses	(1,127,888)	(0.35)%
C. Net Investment Income (A + B)	\$ 18,156,528	5.60 %
D. Expected Net Investment Income	23,515,103	7.25 %
E. Investment Loss (C - D)	\$ (5,358,575)	(1.65)%

Plan Year Ending December 31	Net Investment Return	
	Actuarial Value	Market Value
2018	4.14 %	(2.98)%
2019	5.96 %	17.10 %
2020	9.29 %	12.62 %
2021	10.95 %	13.30 %
2022	5.60 %	(12.48)%
5-Year Average <sup>1</sup>	7.16 %	4.88 %
10-Year Average <sup>1</sup>	7.61 %	6.13 %

<sup>1</sup> Geometric average return.



## Section II – Actuarial Experience *(Continued)*

### Operating Expenses

The assumed operating expenses for 2022 were \$1,630,000, payable mid-year. The actual operating expenses for the year were \$1,561,155, resulting in a gain on expenses of \$71,341, with interest to the end of the 2022 Plan Year.

Plan Year	Gain/(Loss)	Assumption
2018	\$ (247,721)	\$ 1,352,681
2019	(515,236)	966,200
2020	(429,913)	1,000,000
2021	327,664	1,550,000
2022	71,341	1,630,000
<b>5-Year Total</b>	<b>\$ (793,865)</b>	

### Liability Experience

The key demographic assumptions in the valuation are mortality for active and inactive participants and termination, retirement and disability for active participants. Liability gains and losses that are allocated to mortality, termination, retirement and disability components usually reflect more than one related demographic assumption, such as the form of benefit elected and the spouse age difference. These items as well as further details and historical information on the Plan's liability experience are included in Appendix D.

## Western States Office & Professional Employees Plan

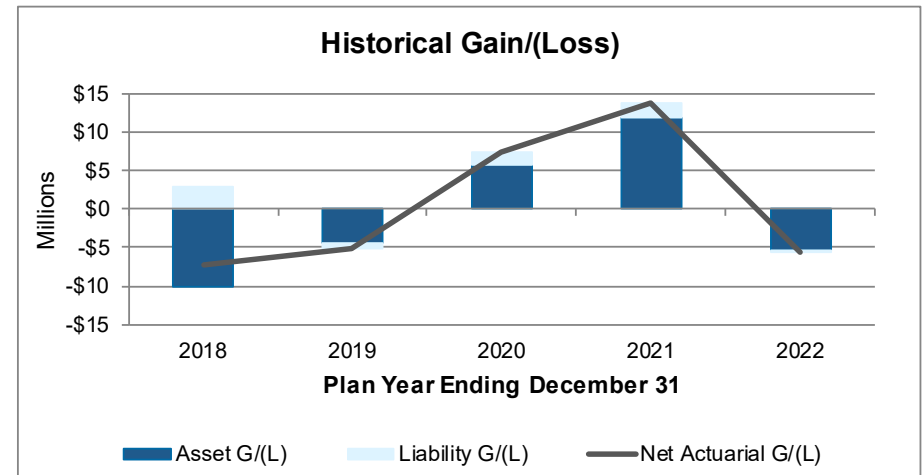
Actuarial Valuation as of January 1, 2023

### Section II – Actuarial Experience *(Continued)*

#### Historical Gain/(Loss)

Fluctuations in experience for all assumptions are to be expected from year to year. It is the net result over a period of time that must be viewed to determine the validity of the assumptions used. A summary of the asset, liability and net actuarial gain/loss amounts over the last five years is shown below.

Plan Year	Asset Gain/(Loss)	Liability Gain/(Loss)	Net Actuarial Gain/(Loss)
2018	\$ (10,172,116)	\$ 2,786,127	\$ (7,385,989)
2019	(4,482,923)	(722,618)	(5,205,541)
2020	5,741,928	1,556,328	7,298,256
2021	11,853,290	1,810,824	13,664,114
2022	(5,287,234)	(313,787)	(5,601,021)
5-Year Total	\$ (2,347,055)	\$ 5,116,874	\$ 2,769,819



## Section III – Employer Contributions and Costs

### PROJECTION FOR 2023 PLAN YEAR

Employer contributions and costs for the 2023 Plan Year are based on expected contributions, including base, surcharge, and supplemental contributions as well as expected withdrawal liability payments, and hours assumed to be worked in 2023. Projected Employer contributions for the 2023 Plan Year will meet minimum funding requirements of ERISA and will be fully deductible by Employers.

The difference between the Employer contributions and the cost of benefits is the excess (if any) that can be used to pay down the Unfunded Accrued Liability.

		Dollars per Covered Hour
A. Employer Contributions	\$ 4,285,000	\$ 5.33
B. Withdrawal Liability Payments	5,355,000	N/A
C. Estimated Cost of Benefits	646,000	0.80
D. Estimated Operating Expenses	1,572,000	N/A
E. Available for Funding <sup>1</sup> (A + B - C - D)	\$ 7,422,000	N/A

<sup>1</sup> Mid-year.

The projected Employer contributions exceed the estimated cost of benefits to be earned, plus operating expenses, during 2023 by about \$7.2 million as of the beginning of year. Based on asset and liability measures on the valuation date, this excess is not sufficient to pay down the Unfunded Accrued Liability assuming payment of all outstanding withdrawal liability on both an Actuarial Value of Assets basis and a Market Value of Assets basis assuming all future actuarial assumptions are realized. The payoff period does not reflect SFA funding received by the Plan in 2023.

	Actuarial Value Basis	Market Value Basis
Unfunded Accrued Liability	\$ 165,143,915	\$ 196,834,245
Amount Available for Funding <sup>1</sup>	7,171,140	7,171,140
Period to Pay off UAL	Cannot Pay Off	Cannot Pay Off

<sup>1</sup> Beginning of year.

### Section III – Employer Contributions and Costs *(Continued)*

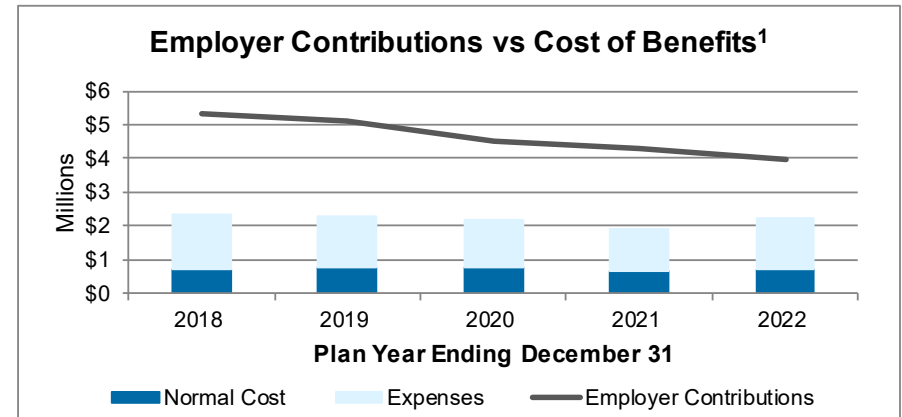
The Trustees originally adopted a Rehabilitation Plan on October 16, 2009, which was updated in 2012 to include reasonable measures to forestall possible insolvency. The Plan was first certified in critical and declining status for the 2016 Plan Year.

In order to avoid plan insolvency, the Fund submitted an application to the United States Department of the Treasury to implement benefit suspensions as permitted under the Multiemployer Pension Reform Act. On August 3, 2018 the Treasury approved the Fund’s application for suspension of benefits. Participant voting to approve the benefit suspensions ended on September 7, 2018 and benefit reductions of 30% on benefits earned through September 30, 2018 took effect on October 1, 2018.

Effective November 1, 2022, the Board of Trustees elected to restore MPRA benefit suspensions for all affected participants with the expectation of submitting an application with the PBGC for Special Financial Assistance. The Plan filed its SFA application with the PBGC on December 29, 2022. As of the date of the PPA certification, the PBGC was reviewing the Plan’s SFA filing application and therefore, the SFA funding the Plan was expected to receive was excluded from the calculations in the certification. As of January 1, 2023, the Plan was certified in critical and declining status. The Plan’s application was approved on April 28, 2023, and received \$294,717,463 in SFA funding on May 24, 2023.

#### HISTORICAL CONTRIBUTIONS AND COSTS

Over time, Employer contributions have exceeded the cost of benefits and operating expenses, but have not been sufficient to reduce the Unfunded Accrued Liability.



<sup>1</sup> Contributions do not include withdrawal liability payments.

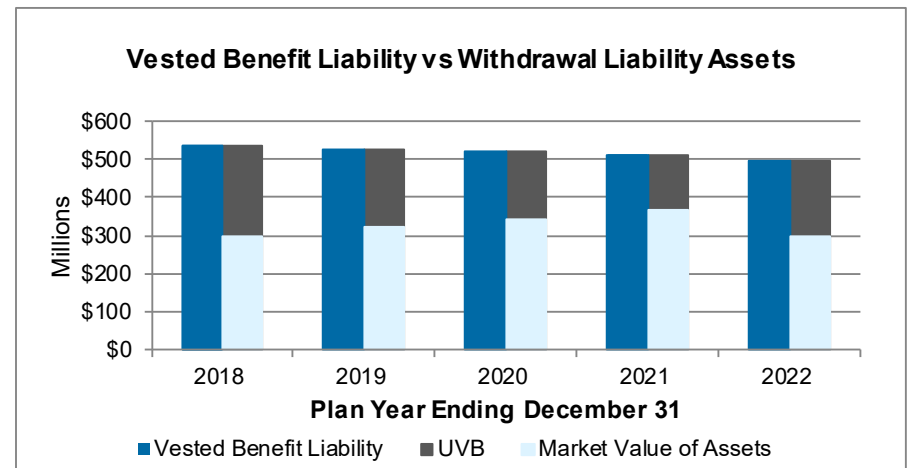
## Section IV – Withdrawal Liability

Withdrawal liability assessments, if any, are based on the amount of “Unfunded Vested Benefits” (UVB) and an Employer’s contribution history. For this purpose, benefits in which a participant is not immediately vested are excluded from the determination of vested benefits (disability and death benefits other than the Qualified Pre-retirement Survivor Annuity (QPSA) are not included). The present value of vested benefits (Vested Benefit Liability) for withdrawal liability determination uses an interest rate of 7.25% along with all other valuations assumptions.

The simplified method (under PBGC Technical Update 10-3) was adopted to comply with the Pension Protection Act’s requirement for Red Zone plans to disregard any reduction in adjustable benefits when determining the UVB for withdrawal liability – this includes early retirement subsidies, including those for the Rule of 80, and the 60-month guarantee in life annuity. The Static Method as outlined in the final PBGC regulations issued in January 2021 is used to disregard certain adjustable benefits. The restoration of MPRA benefit suspensions is included in the PVVB and is no longer included as a separate PBGC base. Please refer to Appendix K for a list of PBGC 10-3 bases that have been established under this Plan. The resulting UVB as of December 31, 2022 is as follows:

	December 31, 2022
A. Vested Benefit Liability <sup>1</sup>	\$ 494,009,806
B. Market Value of Assets	297,782,774
C. Unfunded Vested Benefits (UVB) (A - B, not less than \$0)	\$ 196,227,032

A positive Unfunded Vested Benefits value means that Employers who withdraw in the 2023 Plan Year may be subject to a withdrawal liability assessment.





### Section V – Risk Assessment

The Plan's future financial condition will be based on actual experience that arises in each future year. The actuarial assumptions, both economic and demographic as outlined in Appendix A, are selected to anticipate the experience for the Plan. There is a range of potential acceptable assumptions that could be used. We have not analyzed the range of acceptable assumptions but have selected the assumptions that we feel best represent the expected experience of the Plan for the purpose at hand. The risk to the Plan is that there is uncertainty of future results due to actual experience deviating from expected experience. These deviations can cause asset/liability mismatch risk, or the potential that changes in asset values are not matched by changes in the value of liabilities. This mismatch can create funding risk for employers and participants. Funding risk is primarily comprised of the following key risk factors:

- **Investment return risk**
- **Longevity and other demographic risks**
- **Contribution risk**

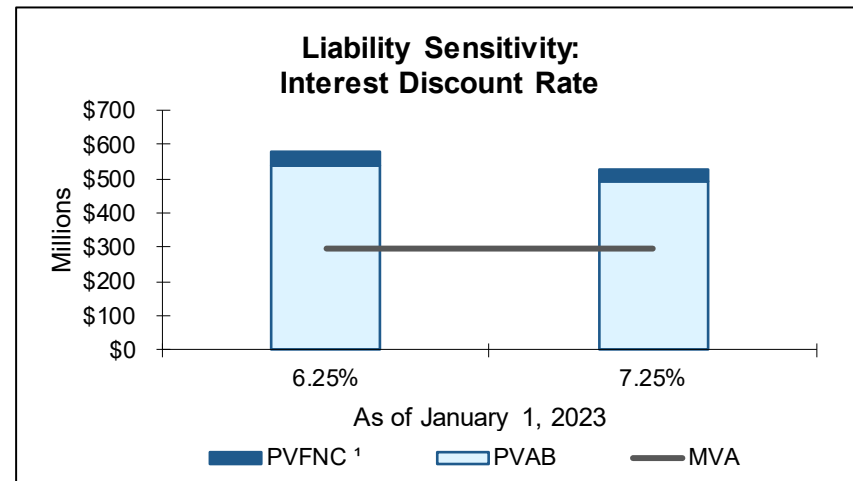
All plans will face longevity and other demographic risks to some extent. These risks can be analyzed by looking at the historical gains or losses due to the corresponding assumptions in the context of the business cycles that were present. Refer to Section II and Appendix D for additional details. As the traditional multiemployer defined benefit plan matures (more inactive participants and fewer actives), there is higher investment and contribution risk to the plan. In this traditional multiemployer plan design, planning for these risks is vital in managing funding risks for stakeholders. The primary risks above can be analyzed by looking at a sensitivity analysis and statistics related to the Plan's level of maturity. Historical information related to the Plan's risks is shown in Appendix F. In addition, projections or risk studies can provide a further look at the Plan's risk analysis.

## Section V – Risk Assessment (Continued)

### INVESTMENT RETURN RISK

Investment return risk is the potential that investment returns will be different from expected. The Plan faces investment risk when the assets return less than the assumed rate of return. Note that investment returns will vary year by year, but they are currently expected to average 7.25% over the long term. The interest discount rate for liabilities of the Plan has been set according to our long-term outlook on what the Plan might receive based on the current investment policy. Generally, the more mature a plan is, the more reliant it is on investment returns and thus may be more vulnerable to investment return risk.

To illustrate the impact of a change in the investment return, we look at the impact on the Plan’s liabilities. The following graph illustrates how sensitive the Plan’s liabilities are to a 1.00% decrease in the interest discount rate currently used to value liabilities. The graph shows liabilities valued at the corresponding interest discount rates (6.25% and 7.25%) in comparison to the current Market Value of Assets. The liabilities shown are the present value of future benefits broken down into the present value of accrued benefits (PVAB) and the present value of future normal costs and operating expenses (PVFNC), which is the present value of benefits expected to be earned in the future plus operating expenses.



<sup>1</sup> Includes operating expenses of \$1,518,897 as of the beginning of year, plus 1.50% inflation in each future plan year.

If the current hours and contribution levels remain the same going forward and the assumed rate of return and interest discount rate are 6.25%, the excess contributions are not sufficient to pay down the Unfunded Accrued Liability (UAL) on a Market Value basis if all future actuarial assumptions are realized.

If the current hours level remains the same going forward and the assumed rate of return and interest discount rate are 6.25%, an hourly rate increase of \$5.78 would be needed to pay for the one-time increase in liabilities if amortized over the next 15 years and all other actuarial assumptions are realized. In addition, an hourly rate increase of \$0.15 would be needed each year to pay for the associated annual increase in normal cost. Even with these hourly rate increases, the Plan may be

## **Section V – Risk Assessment (*Continued*)**

projected to have a lower funded percentage in 15 years due to a lower expected return on Plan assets (6.25% vs. 7.25%). The impact of variable investment returns (especially through projections) is outside the scope of this report.

### **LONGEVITY AND OTHER DEMOGRAPHIC RISKS**

Longevity and other demographic risks are the potential that mortality and other demographic experience will be different from expected experience based on the assumptions outlined in Appendix A. Gains and losses over a period of time can be analyzed to see how well actual experience follows expected experience. Section II and Appendix D can be reviewed for current and historical demographic experience to help guide future expectations.

Of utmost importance demographically is longevity risk. If participants live longer than what is expected through the mortality assumption, the liabilities will be understated and the future funding levels of the Plan will be lower than expected. Retirement risk can sometimes be significant as well. For example, if demographic experience results in a 3% increase in the Plan's liability due to such issues as increased early retirements and fewer deaths than expected, an hourly rate increase of \$1.99 would be needed to cover the added cost if amortized over the next 15 years assuming no change in expected hours and all other actuarial assumptions are realized.

## Section V – Risk Assessment (Continued)

### CONTRIBUTION RISK

Contribution risk is the potential that contributions received are different from contributions expected to be received, including contributions required under collective bargaining agreements, Funding Improvement/ Rehabilitation Plans and withdrawal liability assessments. The Plan could also face contribution risk if the current contribution level does not cover the cost of benefits being earned or would result in a current or projected credit balance deficiency. Contributions can also be impacted by unexpected changes in hours or the number of active participants for whom contributions are due to the Plan. The hours and number of active participants over the last 19 years can be reviewed under Appendix F to help understand the role of contribution risk historically and to help evaluate this risk prospectively.

The chart below illustrates how the Plan’s hours level can impact the number of years required to pay down the Unfunded Accrued Liability on a Market Value basis (UAL (MVA)) assuming the same level of hours are worked in each future year, the average hourly contribution rate remains the same and all other actuarial assumptions are realized. SFA funding received in 2023 is not reflected in the results below:

Years to Fully Fund on a Market Value Basis Based on Hours Worked			
	20% Drop in Hours	Current Hours Assumption	20% Increase in Hours
Expected Hours	643,200	804,000	964,800
Expected Contributions <sup>1</sup>	\$ 3,428,000	\$ 4,285,000	\$ 5,142,000
Expected Withdrawal Liability Payments <sup>2</sup>	5,355,000	\$ 5,355,000	\$ 5,355,000
Estimated Normal Cost <sup>3</sup>	2,089,000	2,218,000	2,348,000
Expected Available for Funding as of Mid-Year	\$ 6,694,000	\$ 7,422,000	\$ 8,149,000
UAL (MVA)	\$ 196,834,245	\$ 196,834,245	\$ 196,834,245
Years to Fully Fund	Cannot Pay Off	Cannot Pay Off	Cannot Pay Off

- <sup>1</sup> Expected contributions are based on an hourly contribution rate of \$5.33.
- <sup>2</sup> Withdrawal liability payments are subject to a 20 year payment limit, which can potentially extend the time period to pay off the unfunded liability.
- <sup>3</sup> Includes assumed operating expenses of \$1,572,031.

## Section V – Risk Assessment (Continued)

### PLAN MATURITY AND RISK MEASUREMENTS

There are several statistics that can help in assessing a plan’s ability to recover from financial challenges and its long-term sustainability. The information that follows shows some of these key measurements for the Plan along with their definitions and concluding remarks about the Plan’s ability to address risk.

PLAN MATURITY AND RISK MEASUREMENTS			
	January 1, 2022	January 1, 2023	Change
Inactive to Active Ratio <sup>1</sup>	14.23	14.16	(0.07)
In Pay Status Actuarial Accrued Liability to Total Actuarial Accrued Liability Ratio	0.73	0.73	0.00
Net Cash Flow as a % of Average MVA	(4.6)%	(7.8)%	(3.2)%
Contribution Increase to Fund 1% Market Return Shortfall Over One Year <sup>2</sup>	\$ 3.7 million (\$4.58 / hour)	\$ 3.0 million (\$3.70 / hour)	(19.2)%
Contribution Increase to Fund 10% Market Return Shortfall Over 15 Years <sup>2</sup>	\$4.76 / hour	\$3.85 / hour	(19.1)%
MVA Funded Percentage	95.4 %	60.2 %	(35.2)%
Current Liability Funded Percentage	56.6 %	37.3 %	(19.3)%

<sup>1</sup> Excludes Non-Vested Inactives and Alternate Payees.

<sup>2</sup> Assumes 804,000 future hours in 2022 and 804,000 future hours in 2023. Figure shown is a “temporary” one-time increase to fund a one-time shortfall.

- Inactive to Active Ratio is the number of retirees, beneficiaries and vested inactive participants each active participant “supports.” The higher the ratio, the more mature the plan.
- In Pay Status Actuarial Accrued Liability to Total Actuarial Accrued Liability Ratio is the ratio of the liability associated with retirees and beneficiaries currently receiving a benefit to the Plan’s total liability. The higher the ratio, the more mature the plan.
- Net Cash Flow as a % of Average MVA is the Plan’s cash inflows in the form of contributions less the Plan’s cash outflows in the form of benefit payments and operating expenses as a percent of the average Market Value of Assets. The percentage represents the “opposite” investment return needed to maintain level assets (i.e., negative cash flow, positive return needed). The lower the percentage, the more mature the plan.
- Contribution Increase to Fund 1% Market Return Shortfall over One Year is the additional contribution that would be required to offset a 1% shortfall in the Plan’s investment return for the year. Also shown is the corresponding immediate increase in the average hourly contribution rate needed to fund the 1% shortfall based on the hours expected to be worked that year. Note,

## **Section V – Risk Assessment (*Continued*)**

future benefit reductions could also be used to address a shortfall.

- Contribution Increase to Fund 10% Market Return Shortfall over 15 Years is the immediate increase in the average hourly contribution rate that would be required to fund a 10% shortfall in the Plan's investment return for the year if amortized over a 15-year period. This assumes the hours expected to be worked in that year are also worked in each of the subsequent 14 years, the contribution rate remains the same and all other future actuarial assumptions are realized. Again, future benefit reductions could also be used to address a shortfall.
- MVA Funded Percentage is the Market Value of Assets divided by the Plan's liabilities, determined using valuation assumptions. In general, plans should have a long-term goal to achieve at least 100% funding and remain fully funded.
- Current Liability Funded Percentage is the Market Value of Assets divided by the Plan's liabilities, determined using a risk-free interest rate and mandated mortality assumption. This information is reported on the Form 5500 Schedule MB and may be used as a rough estimate of the Plan's funding on a liquidation basis. The liability used in this calculation is the Low Default-Risk Obligation Measurement for the Plan.

Based on the Plan Maturity and Risk Measurements shown above, the Plan is considered to be very mature. The Plan has cash outflows that significantly exceed cash inflows and the inactive participants significantly outnumber the active participants indicating the Plan is considerably more reliant on investment income to pay pension benefits than on contributions for active hours worked. Thus, if investment returns fall short of the 7.25% assumed return, even significant contribution increases and/or cuts to future accruals may not be enough to recover without future investment gains. The Plan is heavily dependent on its investment returns for future solvency.

## Section VI – Other Plan Information

### CHANGES IN PLAN PROVISIONS, VALUATION METHODOLOGY, AND ASSUMPTIONS

The current liability interest and mortality assumptions were updated as prescribed by IRS regulations. Refer to Appendix A for a description of these changes.

Effective November 1, 2022, the Board of Trustees elected to restore MPRA benefit suspensions for all affected participants.

No other changes to Plan provisions, valuation methodology, and assumptions have been made since the prior valuation as of January 1, 2022.

IMPACT OF CHANGES			
	Before Change	After Change	Impact
Accrued Liability	\$ 379,569,252	\$ 494,617,019	\$ 115,047,767
Plan Amendments			115,047,767
Actuarial Value of Assets	\$ 329,473,104	\$ 329,473,104	\$ 0
Unfunded Accrued Liability	\$ 50,096,148	\$ 165,143,915	\$ 115,047,767
Normal Cost	\$ 624,601	\$ 624,601	\$ 0

## **Section VII – Appendices**

<b>Appendix A</b>	<b>Actuarial Methods and Assumptions</b>
<b>Appendix B</b>	<b>Summary of Principal Plan Provisions</b>
<b>Appendix C</b>	<b>Participant Information</b>
<b>Appendix D</b>	<b>Liability Experience</b>
<b>Appendix E</b>	<b>Asset Information</b>
<b>Appendix F</b>	<b>Historical Information</b>
<b>Appendix G</b>	<b>Funding Standard Account (for Schedule MB)</b>
<b>Appendix H</b>	<b>Additional Schedule MB Information</b>
<b>Appendix I</b>	<b>Maximum Deductible Contribution</b>
<b>Appendix J</b>	<b>Auditor Information (FASB ASC 960)</b>
<b>Appendix K</b>	<b>Withdrawal Liability Information</b>
<b>Appendix L</b>	<b>Funding Standard Account (No Amortization Extension)</b>



## Appendix A – Actuarial Methods and Assumptions

METHODOLOGY:	
Actuarial Value of Assets	Assets are valued according to a method which recognizes 20% of each year's excess (or deficiency) of actual investment return on the Market Value of Assets over the expected return on the Market Value of Assets in the year the excess (or deficiency) occurs. An additional 20% of the excess (or deficiency) is recognized in each of the succeeding four years until it is totally recognized. In no event will the Actuarial Value of Assets be less than 80% or more than 120% of the Market Value of Assets.
Actuarial Cost Method	<p><b><u>Unit Credit Cost Method</u></b></p> <p>Under this method, we determine the present value of all benefits earned through the valuation date. An individual's normal cost is the present value of the benefit expected to be earned in the valuation year. The total accrued liability is the sum of the individual present values for all participants. The Unfunded Accrued Liability is the difference between the accrued liability and the assets of the Trust. If the assets exceed the accrued liability, the Plan is in a surplus position. This method requires that each year's contributions be applied first to the normal cost, and the balance of the contributions applied to amortize the Unfunded Accrued Liability. The normal cost is adjusted at the close of the plan year to reflect the actual level of contributions received during that plan year.</p>
Withdrawal Liability Basis	The present value of accrued vested benefits for withdrawal liability determination uses an interest rate of 7.25% along with all other valuation assumptions. The simplified method issued by the Pension Benefit Guaranty Corporation is used to account for the protected benefits that were reduced in accordance with the Plan's critical status and subsequent Rehabilitation Plan. The restoration of MPRA benefit suspensions is included in the PVVB and is no longer included as a separate PBGC base. Assets for this purpose are based on the Market Value of Assets.

## Appendix A – Actuarial Methods and Assumptions *(Continued)*

ASSUMPTIONS:	
Interest Discount Rate	7.25% for funding, FASB ASC 960, and withdrawal liability, and 2.55% for current liability.
Assumed Rate of Return on Investments	7.25% compounded annually, net of investment expenses.
Derivation of Net Investment Return and Discount Rate for FASB ASC 960 Accounting	The expected return assumptions are established based on a long-term outlook and are based on past experience, future expectations and professional judgment. We have modeled the assumptions based on average long-term future expected returns and their respective capital market assumptions as provided by several investment professionals. Based on the inputs of the Plan's specific target asset allocation, we have established the reasonability of the Plan's assumption.
Operating Expenses	The 2023 expected expenses are \$1,572,031 (\$1,518,897 at beginning of year), which are composed of expected PBGC premiums of \$243,775, ARPA-related expenses of \$120,000, and other administrative expenses of \$1,208,256.
Investment Expenses	Assumed covered by investment earnings
Justification for Demographic Assumptions	The mortality, termination, retirement and disability assumptions are reviewed with each valuation to ensure they are reasonable and represent the actuary's best estimate of the long-term expectations for the Plan. Past experience and anticipated future experience based on industry-specific knowledge and professional judgment are used to verify the reasonability of each of these assumptions.
Mortality	<p>Healthy Lives: RP-2014 Blue Collar Mortality Table for males and females, adjusted backward to 2006 using MP-2014, then projected forward from 2006 with Fully Generational Mortality Improvement under MP-2016.</p> <p>Disabled Lives: RP-2014 Disabled Retiree Mortality Table for males and females, adjusted backward to 2006 using MP-2014, then projected forward from 2006 with Fully Generational Mortality Improvement under MP-2016.</p> <p>Current Liability: 2023 static mortality tables provided in IRC Regulations Section 1.431(c)(6)-1, as prescribed by IRS Notice 2022-22.</p>
Mortality Improvement	<p>The mortality assumption has been updated to reflect fully generational mortality improvements using the MP-2016 scaling factors.</p> <p>The current mortality assumption, with generational improvement, is assumed to be reasonable at this time.</p>

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix A – Actuarial Methods and Assumptions *(Continued)*

ASSUMPTIONS:																															
Termination Rates	Table T-7 (Less 51 GAT) of The Actuary's Pension Handbook. Non-Vested Participants are assumed to earn one year of vesting credit annually until vested.																														
Retirement Rates	<p>Active participants are assumed to retire based on the following rate table:</p> <table border="1"> <thead> <tr> <th>Age</th> <th>Rate of Retirement</th> </tr> </thead> <tbody> <tr> <td>55</td> <td>20%</td> </tr> <tr> <td>56</td> <td>15%</td> </tr> <tr> <td>57-59</td> <td>12%</td> </tr> <tr> <td>60</td> <td>15%</td> </tr> <tr> <td>61</td> <td>20%</td> </tr> <tr> <td>62</td> <td>40%</td> </tr> <tr> <td>63-70</td> <td>35%</td> </tr> <tr> <td>71+</td> <td>100%</td> </tr> </tbody> </table> <p>Vested inactive participants are assumed to retire based on the following rate table:</p> <table border="1"> <thead> <tr> <th>Age</th> <th>Rate of Retirement</th> </tr> </thead> <tbody> <tr> <td>55</td> <td>15%</td> </tr> <tr> <td>56-61</td> <td>5%</td> </tr> <tr> <td>62</td> <td>18%</td> </tr> <tr> <td>63-64</td> <td>3%</td> </tr> <tr> <td>65+</td> <td>100%</td> </tr> </tbody> </table>	Age	Rate of Retirement	55	20%	56	15%	57-59	12%	60	15%	61	20%	62	40%	63-70	35%	71+	100%	Age	Rate of Retirement	55	15%	56-61	5%	62	18%	63-64	3%	65+	100%
Age	Rate of Retirement																														
55	20%																														
56	15%																														
57-59	12%																														
60	15%																														
61	20%																														
62	40%																														
63-70	35%																														
71+	100%																														
Age	Rate of Retirement																														
55	15%																														
56-61	5%																														
62	18%																														
63-64	3%																														
65+	100%																														
Disability Rates	1952 Society of Actuaries Table, Period 2, Benefit 5.																														
Form of Benefit	For those not yet in pay status, 55% of participants are assumed to elect a Life Annuity and 45% of participants are assumed to elect a 50% Joint and Survivor Annuity.																														
Marital Status	80% of non-retired male participants and 75% of non-retired female participants are assumed to be married. Beneficiaries are assumed to be one year younger than participants.																														

## Appendix A – Actuarial Methods and Assumptions *(Continued)*

ASSUMPTIONS:	
Active Participant	Worked at least 200 hours in covered employment.
Future Employment	Each active participant is assumed to work the same amount of hours worked in the prior plan year.
Missing Data	If not specified, participants are assumed to be female and the same age as the average of participants with the same status code.

<b>CHANGES SINCE PRIOR VALUATION</b>	The current liability interest rate was changed from 2.22% to 2.55% due to a change in the allowable interest rate range, and the current liability mortality table was updated as required.
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## Appendix B – Summary of Principal Plan Provisions

The Western States Office & Professional Employees Plan became effective 1959 as a result of collective bargaining between the contributing Employers and the Union. The Plan was last restated as of January 1, 2017, and last amended effective November 1, 2022. The principal provisions of the Plan as of January 1, 2023 are summarized below.

NORMAL RETIREMENT	
Eligibility	Age 65 and vested. Special eligibility if age 65 with 2 years of Vesting Credit (one immediately prior to retirement) and at least a \$10.00 Total Service Benefit.
Monthly Benefit	Service after 2009: 0.75% of Benefit Accruing Employer Contributions. 2004 - 2009: 1.8% of Employer Contributions. 2003 Service: 2.2% of Employer Contributions up to \$6,240, plus 1.8% of excess. 2001 - 2002 Service: 3.2% of Employer Contributions up to \$6,240 each year; plus 1.8% of excess. 1997 - 2000 Service: 3.65% of Employer Contributions up to \$6,240 each year, plus 1.8% of excess. Prior to 1997: 3.65% of Employer Contributions. Past Service: \$8.20 per year of past service (maximum 15 years).
EARLY RETIREMENT	
Eligibility	Age 55 and vested.
Monthly Benefit	Normal Retirement Benefit actuarially reduced from age 62 for benefits earned before January 1, 2010 and from age 65 for benefits earned on or after January 1, 2010.
POSTPONED RETIREMENT	
Eligibility	After Normal Retirement Age.
Monthly Benefit	Normal Retirement Benefit increased 6% per year (½% per month) past age 62 for benefits earned before January 1, 2010 and past age 65 for benefits earned on or after January 1, 2010. Effective for annuity starting dates on or after September 1, 2015, participants who continue working for a contributing employer will receive <u>the greater of</u> (a) or (b) below: (a) Normal Retirement Benefit increased ½ of 1% for each full month retirement is postponed. (b) Accrued benefit as of the participant's postponed retirement date.

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix B – Summary of Principal Plan Provisions *(Continued)*

<b>DISABILITY RETIREMENT (Effective January 1, 2010)</b>	
Eligibility	Vested with at least 200 hours in year prior to onset of Total and Permanent Disability.
Monthly Benefit	50% of Normal Retirement Benefit payable until age 55.
<b>PRE-RETIREMENT DEATH BENEFIT (Effective January 1, 2010)</b>	
Eligibility	Vested at time of death.
Monthly Benefit	Married: 50% Spousal Joint and Survivor Annuity (reduced for Early Retirement and for joint lives). All Others: Lump sum payment of \$500 per year of service (maximum of \$5,000 total).
<b>FORMS OF ANNUITY PAYMENTS</b>	
Normal Form	For Married Participants: An actuarially reduced benefit payable as a 50% Spousal Joint and Survivor Annuity. For Unmarried Participants: A life annuity.
Optional Forms	Straight Life Annuity 50%, 66-2/3% or 100% Spousal Joint and Survivor Annuity 50%, 66-2/3% or 100% Spousal Joint and Survivor Annuity with Pop-up 50%, 66-2/3% or 100% Non-Spousal Joint and Survivor Annuity Lump Sum if present value of accrued benefit $\leq$ \$5,000
<b>OTHER</b>	
Vesting Service	A Participant will receive one year of Vesting Credit if 200 or more hours are worked in a plan year.
Break in Service Rules	A one-year break in service is incurred if a Participant works less than 200 hours in a plan year.
<b>CHANGES SINCE PRIOR VALUATION</b>	
	Effective November 1, 2022, the Board of Trustees elected to restore MPRA benefit suspensions for all affected participants. No other changes to Plan provisions have been made since the prior valuation as of January 1, 2022.

# Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

## Appendix C – Participant Information

PARTICIPANT STATISTICS				
	January 1, 2022	January 1, 2023	Change	Percent Change
<b>Actives:</b>				
Number	462	458	(4)	(0.9)%
Averages:				
Age <sup>1</sup>	47.9	47.1	(0.8)	(1.7)%
Years of Credited Service	10.8	10.2	(0.6)	(5.6)%
Hours	1,691	1,710	19	1.1 %
<b>Non-Vested Inactives</b>				
Number	195	175	(20)	(10.3)%
Averages:				
Age <sup>1</sup>	42.4	42.5	0.1	0.2 %
Years of Credited Service	1.9	1.9	0.0	0.0 %
Accrued Benefit	\$ 45	\$ 45	\$ 0	0.0 %
<b>Vested Inactives:</b>				
Number	2,444	2,333	(111)	(4.5)%
Averages:				
Age <sup>1</sup>	54.4	55.0	0.6	1.1 %
Years of Credited Service	11.7	11.6	(0.1)	(0.9)%
Vested Accrued Benefit <sup>2</sup>	\$ 422	\$ 578	\$ 156	37.0 %
<b>In Pay Status:</b>				
Number:				
Healthy Retirees	3,766	3,771	5	0.1 %
Disabled Retirees	88	84	(4)	(4.5)%
Beneficiaries <sup>3</sup>	298	319	21	7.0 %
Total	4,152	4,174	22	0.5 %
Averages:				
Age	73.7	74.1	0.4	0.5 %
Monthly Benefit <sup>2</sup>	\$ 664	\$ 832	\$ 168	25.3 %

<sup>1</sup> For participants with known birthdates.

<sup>2</sup> MPRA benefit reduction has been reflected in the monthly benefit at January 1, 2022. The restoration of MPRA benefit reduction is reflected at January 1, 2023.

<sup>3</sup> Includes 23 Alternate Payees as of January 1, 2022 and 23 Alternate Payees as of January 1, 2023.

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix C – Participant Information (Continued)

PARTICIPANT RECONCILIATION					
	Actives	Non-Vested Inactives	Vested Inactives	In Pay Status	Total
<b>Total as of January 1, 2022</b>	<b>462</b>	<b>195</b>	<b>2,444</b>	<b>4,152</b>	<b>7,253</b>
New Entrants	76	0	0	0	76
Vested Terminations	(26)	0	26	0	0
Non-Vested Terminations	(42)	42	0	0	0
Returned to Work	7	(4)	(3)	0	0
Healthy Retirements	(19)	0	(104)	123	0
Disabled Retirements	0	0	0	0	0
Deaths in Year	0	0	(29) <sup>1</sup>	(135)	(164)
Benefit Period Expired	0	0	0	0	0
New Beneficiaries	0	0	0	33	33
New Alternate Payees	0	0	0	1	1
Lump Sum	0	0	(1)	0	(1)
Permanent Break in Service	0	(58)	0	0	(58)
Data Corrections	0	0	0	0	0
Net Change	(4)	(20)	(111)	22	(113)
<b>Total as of January 1, 2023</b>	<b>458</b>	<b>175</b>	<b>2,333</b>	<b>4,174</b>	<b>7,140</b>

<sup>1</sup> A death audit was performed during 2022 in conjunction with the Plan's application for Special Financial Assistance. Of the 29 deaths for Vested Inactives, 20 were from years prior to 2022.



## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix C – Participant Information (Continued)

DISTRIBUTION OF NON-RETIRED PARTICIPANTS						
Age Group	Actives			Inactives		
	Non-Vested	Vested	Total Actives	Non-Vested	Vested	Total Inactives
Under 25	11	1	12	0	0	0
25 - 29	35	4	39	21	1	22
30 - 34	23	12	35	34	13	47
35 - 39	27	21	48	24	74	98
40 - 44	20	32	52	25	169	194
45 - 49	20	35	55	16	286	302
50 - 54	19	34	53	15	502	517
55 - 59	14	48	62	19	581	600
60 - 64	8	45	53	8	473	481
65 - 69	1	23	24	6	182	188
70 and Over	0	9	9	1	52	53
Unknown	16	0	16	6	0	6
<b>Total</b>	<b>194</b>	<b>264</b>	<b>458</b>	<b>175</b>	<b>2,333</b>	<b>2,508</b>
Average Age <sup>1</sup>	39.7	52.1	47.1	42.5	55.0	54.1
Average Accrued Benefit <sup>2</sup>	\$ 73	\$ 946	\$ 576	\$ 45	\$ 578	\$ 541

<sup>1</sup> For participants with known birthdates.

<sup>2</sup> The restoration of MPRA benefit suspensions has been reflected in the average accrued benefit.

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix C – Participant Information (Continued)

DISTRIBUTION OF IN PAY STATUS							
Age Group	Continuing Healthy Retirees	New Healthy Retirees	Continuing Disabled Retirees	New Disabled Retirees	Continuing Beneficiaries <sup>1</sup>	New Beneficiaries <sup>1</sup>	Grand Total
Under 50	0	0	3	0	17	3	23
50 - 54	0	0	2	0	5	0	7
55 - 59	39	12	3	0	12	4	70
60 - 64	276	47	11	0	19	1	354
65 - 69	704	49	22	0	41	6	822
70 - 74	909	15	24	0	35	8	991
75 - 79	822	0	11	0	49	2	884
80 - 84	466	0	3	0	48	7	524
85 and Over	432	0	5	0	59	3	499
<b>Total</b>	<b>3,648</b>	<b>123</b>	<b>84</b>	<b>0</b>	<b>285</b>	<b>34</b>	<b>4,174</b>
Average Age	74.6	64.4	69.5	N/A	73.9	68.5	74.1
Average Monthly Benefit	\$ 861	\$ 806	\$ 1,025	\$ N/A	\$ 473	\$ 414	\$ 832

<sup>1</sup> Includes 22 continuing Alternate Payees and 1 new Alternate Payee.

## Appendix D – Liability Experience

Liability gains or losses are realized when actual demographic experience is different from what is assumed by the demographic assumptions outlined in Appendix A. The most important demographic assumptions are retirement, termination, disability, and mortality. These are the assumptions used to estimate when an active participant is going to leave active status, and how long a participant will remain in the Plan and receive a benefit. The retirement, termination and disability components also include a range of other assumptions, such as form of benefit election and spouse age difference. The miscellaneous gain or loss amounts include the effects of unforeseen data changes that might occur each year, like date of birth corrections, adjustment for past service or other adjustments to participant data that were not expected. It also includes the effects of new entrants and changes in hours and/or contribution rates that impact the amount of benefits active participants earn during the year.

Plan Year	Retirement Gain/(Loss)	Termination Gain/(Loss)	Disability Gain/(Loss)	Mortality Gain/(Loss)	Miscellaneous Gain/(Loss)
2018	\$ 1,878,099	\$ (22,276)	\$ (47,065)	\$ 1,032,363	\$ (54,994)
2019	380,147	(19,309)	800	(1,041,722)	(42,534)
2020	751,127	(24,463)	556	1,113,993	(284,885)
2021	1,568,353	(697,949)	(1,138)	1,156,197	(214,639)
2022	(522,808)	(29,787)	(1,770)	292,165	(51,587)
<b>5-Year Total</b>	<b>\$ 4,054,918</b>	<b>\$ (793,784)</b>	<b>\$ (48,617)</b>	<b>\$ 2,552,996</b>	<b>\$ (648,639)</b>

## Appendix E – Asset Information

SUMMARY OF MARKET VALUE OF ASSETS		
Assets as of December 31, 2022	Market Value	Percent of Total
Cash (Interest bearing and non-interest bearing)	\$ 9,901,391	3.3%
Partnership/joint venture interests	49,031,785	16.5%
Value of interest in common/collective trusts	201,046,099	67.5%
Value of interest in registered investment companies (e.g., mutual funds)	37,598,620	12.6%
Net Receivables, Payables and Prepaid Expenses	204,879	0.1%
Total Assets	\$ 297,782,774	100.0%

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix E – Asset Information *(Continued)*

SUMMARY OF RECEIPTS AND DISBURSEMENTS				
	Market Value 2021	Market Value 2022	Actuarial Value 2021	Actuarial Value 2022
<b>Assets (Beginning of Year)</b>	\$ 340,204,649	\$ 368,165,003	\$ 319,474,447	\$ 337,375,911
<b>Receipts During Year</b>				
Contributions <sup>1</sup>	\$ 18,054,587	\$ 9,792,539	\$ 18,054,587	\$ 9,792,539
Investment Income (Net of Investment Expenses)	44,159,205	(44,322,894)	34,100,315	18,156,528
Subtotal Receipts	\$ 62,213,792	\$ (34,530,355)	\$ 52,154,902	\$ 27,949,067
<b>Disbursements During Year</b>				
Benefit Payments	\$ (33,019,640)	\$ (34,290,719)	\$ (33,019,640)	\$ (34,290,719)
Operating Expenses	(1,233,798)	(1,561,155)	(1,233,798)	(1,561,155)
Subtotal Disbursements	\$ (34,253,438)	\$ (35,851,874)	\$ (34,253,438)	\$ (35,851,874)
<b>Assets (End of Year)</b>	\$ 368,165,003	\$ 297,782,774	\$ 337,375,911	\$ 329,473,104
<b>Return on Assets</b>	13.30 %	(12.48)%	10.95 %	5.60 %

<sup>1</sup> 2021 contributions include \$2,430,672 of benefit accruing contributions, \$1,846,706 of supplemental contributions, and \$13,777,209 of withdrawal liability payments, and 2022 contributions include \$2,208,495 of benefit accruing contributions, \$1,783,918 of supplemental contributions, and \$5,800,126 of withdrawal liability payments.

## Appendix E – Asset Information *(Continued)*

DETERMINATION OF NET INVESTMENT INCOME	
1. Expected Net Investment Income	
A. Market Value of Assets	\$ 368,165,003
B. Contributions	9,792,539
C. Benefit Payments	(34,290,719)
D. Operating Expenses	(1,561,155)
E. Expected Net Investment Income $(A + 1/2 B + 1/2 C + 1/2 D) \times 7.25\%$	\$ 25,747,312
2. Market Value Earnings	
A. Interest and Dividends	\$ 773,567
B. Realized and Unrealized Gains/(Losses)	(44,429,461)
C. Investment Expenses	(1,127,888)
D. Other Income	460,888
E. Total Market Value Earnings $(A + B + C + D)$	\$ (44,322,894)
3. Excess/(Deficit) of Market Value Earnings Over Expected Net Investment Income $(2E - 1E)$	(70,070,206)
4. Current Year Recognition of Excess/(Deficit) Earnings (Calculated on Next Page)	(7,590,784)
5. Net Investment Income $(1E + 4)$	18,156,528
6. Recognition of Assets in Excess of the Corridor	0
7. Total Net Investment Income $(5 + 6)$	\$ 18,156,528

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix E – Asset Information (Continued)

DETERMINATION OF ACTUARIAL VALUE OF ASSETS				
Plan Year Ended December 31	Excess / (Deficit) Earnings	Amount of Excess/(Deficit) Earnings Recognized or to be Recognized		
		Prior Years	Current Year	Future Years
2022	\$ (70,070,206)	\$ 0	\$ (14,014,041)	\$ (56,056,165)
2021	20,081,576	4,016,315	4,016,315	12,048,946
2020	16,743,475	6,697,390	3,348,695	6,697,390
2019	28,097,487	16,858,491	5,619,497	5,619,499
2018	(32,806,254)	(26,245,004)	(6,561,250)	0
Total	\$ (37,953,922)	\$ 1,327,192	\$ (7,590,784)	\$ (31,690,330)
A. Market Value of Assets as of January 1, 2023				\$ 297,782,774
B. Amount of Excess/(Deficit) Earnings to be Recognized in Future Years				(31,690,330)
C. Preliminary Actuarial Value of Assets as of January 1, 2023 (A - B)				\$ 329,473,104
D. Recognition of Assets in Excess of the 20% Corridor				0
E. Actuarial Value of Assets as of January 1, 2023 (C + D)				\$ 329,473,104

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix F – Historical Information

HISTORICAL PARTICIPANT POPULATION								
As of January 1	(A) Actives	(B) Non-Vested Inactives	(C) Vested Inactives	(D) Retirees	(E) Disableds	(F) Beneficiaries	(G) Alternate Payees	(C+D+E+F) / (A) Inactive to Active Ratio <sup>1</sup>
2004	2,075	0	2,617	2,561	65	105	0	2.58
2005	1,612	0	2,802	2,691	78	112	0	3.53
2006	2,458	0	2,745	2,770	83	129	0	2.33
2007	2,408	0	2,684	2,849	91	136	0	2.39
2008	2,278	0	2,635	2,909	102	133	0	2.54
2009 <sup>2</sup>	2,277	0	2,571	2,953	80	140	0	2.52
2010	2,050	0	2,589	3,199	79	158	14	2.94
2011	1,936	0	2,598	3,244	48	143	15	3.12
2012	1,887	0	2,577	3,245	46	154	15	3.19
2013 <sup>3</sup>	1,806	0	2,555	3,277	42	171	16	3.35
2014	1,718	340	2,546	3,374	39	174	16	3.57
2015	1,000	406	2,957	3,470	35	183	16	6.65
2016	868	376	2,939	3,502	31	194	17	7.68
2017	809	359	2,827	3,512	107	208	18	8.22
2018	626	376	2,798	3,622	101	227	20	10.78
2019	524	262	2,762	3,652	96	230	20	12.86
2020	491	233	2,636	3,743	93	236	21	13.66
2021	465	224	2,558	3,749	92	249	22	14.30
2022	462	195	2,444	3,766	88	275	23	14.23
2023	458	175	2,333	3,771	84	296	23	14.16

<sup>1</sup> Ratio excludes Non-Vested Inactives and Alternate Payees.

<sup>2</sup> Alternate Payees included with beneficiaries prior to January 1, 2010.

<sup>3</sup> Non-Vested Inactives were not valued prior January 1, 2014.



## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix F – Historical Information *(Continued)*

HISTORICAL EMPLOYMENT INFORMATION								
As of January 1	Total Hours (Prior Year)		Total Active Hours (Prior Year)		Active Participants		Average Active Hours (Prior Year)	
	Number	% Change	Number	% Change	Number	% Change	Number	% Change
2005	3,733,578	N/A	3,704,963	N/A	1,612	(22.3)%	2,298	N/A
2006	4,592,134	23.0 %	4,545,605	22.7 %	2,458	52.5 %	1,849	(19.5)%
2007	4,527,976	(1.4)%	4,476,696	(1.5)%	2,408	(2.0)%	1,859	0.5 %
2008	4,282,490	(5.4)%	4,219,030	(5.8)%	2,278	(5.4)%	1,852	(0.4)%
2009	4,203,802	(1.8)%	4,167,497	(1.2)%	2,277	(0.0)%	1,830	(1.2)%
2010	4,063,879	(3.3)%	3,854,000	(7.5)%	2,050	(10.0)%	1,880	2.7 %
2011	3,671,591	(9.7)%	3,647,424	(5.4)%	1,936	(5.6)%	1,884	0.2 %
2012	3,555,598	(3.2)%	3,513,594	(3.7)%	1,887	(2.5)%	1,862	(1.2)%
2013	3,358,483	(5.5)%	3,304,980	(5.9)%	1,806	(4.3)%	1,830	(1.7)%
2014	3,231,057	(3.8)%	3,176,582	(3.9)%	1,718	(4.9)%	1,849	1.0 %
2015	1,776,431	(45.0)%	1,736,000	(45.4)%	1,000	(41.8)%	1,736	(6.1)%
2016	1,575,730	(11.3)%	1,545,908	(11.0)%	868	(13.2)%	1,781	2.6 %
2017	1,358,925	(13.8)%	1,317,052	(14.8)%	809	(6.8)%	1,628	(8.6)%
2018	1,087,061	(20.0)%	1,032,369	(21.6)%	626	(22.6)%	1,649	1.3 %
2019	894,247	(17.7)%	868,660	(15.9)%	524	(16.3)%	1,658	0.5 %
2020	898,450	0.5 %	872,643	0.5 %	491	(6.3)%	1,777	7.2 %
2021	841,498	(6.3)%	813,073	(6.8)%	465	(5.3)%	1,749	(1.6)%
2022	804,434	(4.4)%	781,019	(3.9)%	462	(0.6)%	1,691	(3.3)%
2023	808,692	0.5 %	783,116	0.3 %	458	(0.9)%	1,710	1.1 %

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix F – Historical Information (Continued)

HISTORICAL EMPLOYER CONTRIBUTIONS AND COSTS					
As of January 1	Accruing Contributions (Prior Year)	Non-Accruing Contributions (Prior Year) <sup>1</sup>	Total Contributions (Prior Year)	Actual Normal Cost (Prior Year) <sup>2</sup>	Expenses Included in Normal Cost (Prior Year)
2004	\$ 7,854,003	\$ 0	\$ 7,854,003	\$ 6,981,686	\$ 0
2005	6,935,726	0	6,935,726	5,294,028	0
2006	7,357,903	0	7,357,903	5,616,275	0
2007	7,399,605	0	7,399,605	5,719,601	0
2008	7,678,247	0	7,678,247	6,083,355	0
2009	8,277,807	0	8,277,807	7,843,659	0
2010	7,842,903	161,882	8,004,785	7,397,015	0
2011	7,676,687	812,322	8,489,009	2,023,454	0
2012	7,297,989	1,324,397	8,622,386	1,949,714	0
2013	6,980,563	2,816,485	9,797,048	1,879,940	0
2014	6,485,023	4,559,318	11,044,341	1,942,949	0
2015	5,064,945	5,346,493	10,411,438	1,693,396	0
2016	4,883,040	6,928,912	11,811,952	1,337,905	0
2017	4,318,217	6,932,693	11,250,910	1,228,069	0
2018	3,383,971	6,204,518	9,588,489	2,108,688	1,352,681
2019	2,949,919	9,276,926	12,226,845	2,052,689	1,352,681
2020	2,823,105	8,902,822	11,725,927	1,736,463	966,200
2021	2,481,386	10,657,238	13,138,624	1,706,588	966,200
2022	2,430,672	15,623,915	18,054,587	2,179,894	1,497,611
2023	2,208,495	7,584,044	9,792,539	2,261,734	1,574,907

<sup>1</sup> Non-Accruing contributions include Critical Status surcharge contributions, Rehabilitation Plan supplemental contributions, and Withdrawal Liability payments.

<sup>2</sup> Expected expenses are included with the normal cost effective January 1, 2017 (the investment return assumption is net of investment expenses only). Prior to 2017, expenses were assumed to be covered by investment income (the investment return assumption was net of investment and operating expenses).

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix F – Historical Information *(Continued)*

HISTORICAL EMPLOYER CONTRIBUTION DETAIL					
As of January 1	Accruing Contributions (Prior Year)	Supplemental Contributions (Prior Year)	Surcharge Contributions (Prior Year)	Withdrawal Liability Payments (Prior Year)	Total Contributions (Prior Year) <sup>1</sup>
2004	\$ 7,854,003	\$ 0	\$ 0	\$ 0	\$ 7,854,003
2005	6,935,726	0	0	0	6,935,726
2006	7,357,903	0	0	0	7,357,903
2007	7,399,605	0	0	0	7,399,605
2008	7,678,247	0	0	0	7,678,247
2009	8,277,807	0	0	0	8,277,807
2010	7,842,903	0	161,882	0	8,004,785
2011	7,676,687	0	812,322	0	8,489,009
2012	7,297,989	884,461	433,924	6,012	8,622,386
2013	6,980,563	1,513,165	365,908	937,412	9,797,048
2014	6,485,023	2,656,274	228,709	1,674,335	11,044,341
2015	5,064,945	3,673,084	103,387	1,570,022	10,411,438
2016	4,883,040	3,509,909	81,811	3,337,192	11,811,952
2017	4,318,217	3,016,465	43,983	3,872,245	11,250,910
2018	3,383,971	2,706,688	8,598	3,489,232	9,588,489
2019	2,949,919	2,400,383	0	6,876,543	12,226,845
2020	2,823,105	2,266,228	0	6,636,594	11,725,927
2021	2,481,386	2,009,122	0	8,648,116	13,138,624
2022	2,430,672	1,846,706	0	13,777,209	18,054,587
2023	2,208,495	1,783,918	0	5,800,126	9,792,539

<sup>1</sup> Includes withdrawal liability payments.

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix F – Historical Information (Continued)

HISTORICAL ASSETS						
As of January 1	Market Value of Assets (MVA)		Actuarial Value of Assets (AVA)		Ratio of AVA to MVA	
	Value	Return	Value	Return		
2004	\$ 445,004,175	16.55 %	\$ 471,284,566	2.41 %	105.9 %	
2005	467,709,398	9.66 %	468,827,191	3.70 %	100.2 %	
2006	482,601,045	7.82 %	471,631,523	5.16 %	97.7 %	
2007	514,062,081	11.44 %	485,209,973	7.83 %	94.4 %	
2008	511,627,264	4.62 %	507,372,247	10.04 %	99.2 %	
2009	326,573,213	(32.15)%	391,887,856	(18.37)%	120.0 %	
2010	350,729,611	15.95 %	420,875,533	14.48 %	120.0 %	
2011	366,575,098	13.23 %	415,436,594	5.71 %	113.3 %	
2012	343,278,474	1.50 %	375,837,641	(2.74)%	109.5 %	
2013	353,805,803	11.53 %	341,155,304	(1.99)%	96.4 %	
2014	371,333,873	12.97 %	351,347,913	11.24 %	94.6 %	
2015	359,268,671	4.47 %	353,925,354	9.07 %	98.5 %	
2016	334,210,200	0.63 %	347,859,875	6.22 %	104.1 %	
2017	326,919,954	6.44 %	342,812,133	6.84 %	104.9 %	
2018	335,048,313	13.04 %	333,355,231	7.02 %	99.5 %	
2019	297,066,081	(2.98)%	318,132,109	4.14 %	107.1 %	
2020	322,508,567	17.10 %	313,036,709	5.96 %	97.1 %	
2021	340,204,649	12.62 %	319,474,447	9.29 %	93.9 %	
2022	368,165,003	13.30 %	337,375,911	10.95 %	91.6 %	
2023	297,782,774	(12.48)%	329,473,104	5.60 %	110.6 %	

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix F – Historical Information *(Continued)*

HISTORICAL CASH FLOW <sup>1</sup>					
As of January 1	(A) Contributions (Prior Year)	(B) Benefit Payments (Prior Year)	(C) Expenses (Prior Year)	(D) Average Market Value of Assets (MVA)	(A - B - C)/(D) Cash Flow as a % of Average MVA
2004	\$ 7,854,003	\$ 24,206,237	\$ N/A	\$ 420,770,486	(3.9)%
2005	6,935,726	26,487,895	N/A	456,356,787	(4.3)%
2006	7,357,903	28,371,211	N/A	475,155,222	(4.4)%
2007	7,399,605	29,919,215	N/A	498,331,563	(4.5)%
2008	7,678,247	32,970,957	N/A	512,844,673	(4.9)%
2009	8,277,807	32,853,989	N/A	419,100,239	(5.9)%
2010	8,004,785	34,155,460	N/A	338,651,412	(7.7)%
2011	8,489,009	37,136,630	N/A	358,652,355	(8.0)%
2012	8,622,386	37,224,104	N/A	354,926,786	(8.1)%
2013	9,797,048	37,280,366	N/A	348,542,139	(7.9)%
2014	11,044,341	37,690,222	N/A	362,569,838	(7.3)%
2015	10,411,438	38,445,844	N/A	365,301,272	(7.7)%
2016	11,811,952	39,045,991	N/A	346,739,436	(7.9)%
2017	11,250,910	39,153,722	N/A	330,565,077	(8.4)%
2018	9,588,489	40,137,025	1,847,596	330,984,134	(9.8)%
2019	12,226,845	39,023,959	1,639,055	316,057,197	(9.0)%
2020	11,725,927	33,574,714	1,497,212	309,787,324	(7.5)%
2021	13,138,624	33,368,397	1,414,873	331,356,608	(6.5)%
2022	18,054,587	33,019,640	1,233,798	354,184,826	(4.6)%
2023	9,792,539	34,290,719	1,561,155	332,973,889	(7.8)%

<sup>1</sup> Effective January 1, 2021, the investment return assumption is net of investment expenses only. Prior to 2017, expenses were assumed to be covered by investment income (the investment return assumption was net of investment and operating expenses).

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix F – Historical Information *(Continued)*

HISTORICAL FUNDED STATUS							
As of January 1	(A) Funding Actuarial Accrued Liability <sup>1</sup>	(B) Market Value of Assets (MVA)	(A) - (B) MVA Unfunded Accrued Liability/ (Actuarial Surplus)	(B) / (A) MVA Funded Percentage	(C) Actuarial Value of Assets (AVA)	(A) - (C) AVA Unfunded Accrued Liability/ (Actuarial Surplus)	(C) / (A) AVA Funded Percentage
2004	\$ 509,372,505	\$ 445,004,175	\$ 64,368,330	87.4 %	\$ 471,284,566	\$ 38,087,939	92.5 %
2005	522,638,089	467,709,398	54,928,691	89.5 %	468,827,191	53,810,898	89.7 %
2006	535,687,366	482,601,045	53,086,321	90.1 %	471,631,523	64,055,843	88.0 %
2007	551,165,594	514,062,081	37,103,513	93.3 %	485,209,973	65,955,621	88.0 %
2008	561,884,044	511,627,264	50,256,780	91.1 %	507,372,247	54,511,797	90.3 %
2009	552,544,039	326,573,213	225,970,826	59.1 %	391,887,856	160,656,183	70.9 %
2010	533,426,348	350,729,611	182,696,737	65.8 %	420,875,533	112,550,815	78.9 %
2011	535,120,828	366,575,098	168,545,730	68.5 %	415,436,594	119,684,234	77.6 %
2012	536,525,258	343,278,474	193,246,784	64.0 %	375,837,641	160,687,617	70.1 %
2013	538,389,644	353,805,803	184,583,841	65.7 %	341,155,304	197,234,340	63.4 %
2014	538,956,405	371,333,873	167,622,532	68.9 %	351,347,913	187,608,492	65.2 %
2015	537,887,774	359,268,671	178,619,103	66.8 %	353,925,354	183,962,420	65.8 %
2016	534,860,955	334,210,200	200,650,755	62.5 %	347,859,875	187,001,080	65.0 %
2017	527,455,968	326,919,954	200,536,014	62.0 %	342,812,133	184,643,835	65.0 %
2018	525,324,100	335,048,313	190,275,787	63.8 %	333,355,231	191,968,869	63.5 %
2019 <sup>2</sup>	403,274,236	297,066,081	106,208,155	73.7 %	318,132,109	85,142,127	78.9 %
2020	399,268,546	322,508,567	76,759,979	80.8 %	313,036,709	86,231,837	78.4 %
2021	392,875,253	340,204,649	52,670,604	86.6 %	319,474,447	73,400,806	81.3 %
2022	386,063,031	368,165,003	17,898,028	95.4 %	337,375,911	48,687,120	87.4 %
2023 <sup>3</sup>	494,617,019	297,782,774	196,834,245	60.2 %	329,473,104	165,143,915	66.6 %

<sup>1</sup> Prior to 2009, the Funding Actuarial Accrued Liability was determined based on the Entry Age Normal Cost Method. Beginning in 2009, the Unit Credit Cost Method is used.

<sup>2</sup> Effective October 1, 2018, benefit reductions of 30% on benefits earned through September 30, 2018 for all participants except those who retired under disability and who are over age 80. There is a prorated reduction for participants aged 75 – 80.

<sup>3</sup> Effective November 1, 2022, the Board of Trustees elected to restore MPRA benefit suspensions for all affected participants.

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix F – Historical Information *(Continued)*

HISTORICAL ZONE CERTIFICATION <sup>1</sup>				
As of January 1	(A) PPA Actuarial Accrued Liability	(B) Actuarial Value of Assets	(B) / (A) PPA Funded Percentage	Zone Status
2009	\$ 552,544,039	\$ 391,887,856	70.9 %	Critical
2010	533,426,348	420,875,533	78.9 %	Critical
2011	535,120,828	415,436,594	77.6 %	Critical
2012	536,525,258	375,837,641	70.1 %	Critical
2013	538,389,644	341,155,304	63.4 %	Critical
2014	538,956,405	351,347,913	65.2 %	Critical
2015	537,887,774	353,925,354	65.8 %	Critical
2016	534,860,955	347,859,875	65.0 %	Critical and Declining
2017	527,455,968	342,812,133	65.0 %	Critical and Declining
2018	525,324,100	333,355,231	63.5 %	Critical and Declining
2019	403,274,236	318,132,109	78.9 %	Critical
2020	399,268,546	313,036,709	78.4 %	Critical
2021	392,875,253	319,474,447	81.3 %	Critical
2022	386,063,031	337,375,911	87.4 %	Critical
2023	494,617,019	329,473,104	66.6 %	Critical and Declining

<sup>1</sup> The PPA Actuarial Accrued Liability, Actuarial Value of Assets and PPA Funded Percentage are based on the final valuation results for the corresponding plan year.

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix G – Funding Standard Account (for Schedule MB)

FUNDING STANDARD ACCOUNT		
	2022	2023 (Estimated) <sup>1</sup>
1. Charges		
A. Funding Deficiency on January 1	\$ 10,325,121	\$ 16,286,686
B. Normal Cost (Beginning of Year) <sup>2</sup>	2,261,734	2,143,000
C. Amortization Charges <sup>3</sup>	35,714,057	46,882,069
D. Interest on A, B and C	3,501,816	4,735,102
E. Subtotal Charges (A + B + C + D)	\$ 51,802,728	\$ 70,046,857
2. Credits		
A. Credit Balance on January 1	\$ 0	\$ 0
B. Employer Contributions for Year <sup>4</sup>	9,792,539	9,640,000
C. Amortization Credits	23,653,635	23,653,635
D. Interest on A, B and C	2,069,868	2,064,339
E. Subtotal Credits (A + B + C + D)	\$ 35,516,042	\$ 35,357,974
<b>3. Funding Deficiency on December 31 (2E - 1E)</b>	<b>\$ (16,286,686)</b>	<b>\$ (34,688,883)</b>
4. Minimum Required Contribution (Before Credit Balance)	\$ 26,434,204	\$ 44,678,333
5. Minimum Required Contribution (After Credit Balance)	26,434,204	44,678,333
6. ERISA FFL (Accrued Liability FFL)	\$ 54,642,646	\$ 213,404,058
7. "RPA '94" Override (90% Current Liability FFL)	244,165,664	392,155,940

<sup>1</sup> Assumes 804,000 contributory benefit hours are worked during the 2023 Plan Year.

<sup>2</sup> Normal cost includes assumed operating expenses of \$1,574,907 as of the beginning of the 2022 Plan Year and \$1,518,897 as of the beginning of the 2023 Plan Year (\$1,572,031 paid in monthly installments).

<sup>3</sup> Incorporates a 5-year amortization extension of the applicable charge bases effective January 1, 2009.

<sup>4</sup> 2023 estimated contributions reflect expected withdrawal payments from previously withdrawn employers.



## Appendix G – Funding Standard Account (for Schedule MB) (Continued)

FULL FUNDING LIMITS		
	2022	2023 (Estimated)
1. ERISA FFL		
A. Interest Rate	7.25 %	7.25 %
B. Liability	\$ 386,063,031	\$ 494,617,019
C. Normal Cost (without expenses)	686,827	625,000
D. Expected Benefit Payments	(34,463,353)	(43,777,813)
E. Interest on B, C and D	26,790,068	34,318,101
<b>F. Expected Liability (B + C + D + E)</b>	<b>\$ 379,076,573</b>	<b>\$ 485,782,307</b>
G. Min of AVA and MVA	337,375,911	297,782,774
H. Credit Balance	0	0
I. Adjusted Assets	337,375,911	297,782,774
J. Expected Benefit Payments	(34,463,353)	(43,777,813)
K. Expected Operating Expenses	(1,574,907)	(1,518,897)
L. Interest on I, J, and K	23,096,276	19,892,185
<b>M. Expected Assets (I + J + K + L)</b>	<b>\$ 324,433,927</b>	<b>\$ 272,378,249</b>
<b>N. ERISA FFL (F - M, not less than \$0)</b>	<b>\$ 54,642,646</b>	<b>\$ 213,404,058</b>
2. RPA '94 FFL		
A. Interest Rate	2.22 %	2.55 %
B. Liability	\$ 650,317,459	\$ 798,483,609
C. Normal Cost (without expenses)	1,821,877	1,578,000
D. Expected Benefit Payments	(34,508,906)	(43,838,626)
E. Interest on B, C and D	14,094,444	19,842,629
<b>F. Expected Liability (B + C + D + E)</b>	<b>\$ 631,724,874</b>	<b>\$ 776,065,612</b>
G. Funding Limit Factor	90 %	90 %
<b>H. Funding Limit Liability (F * G)</b>	<b>\$ 568,552,387</b>	<b>\$ 698,459,051</b>
I. AVA	\$ 337,375,911	\$ 329,473,104
J. Expected Benefit Payments	(34,508,906)	(43,838,626)
K. Expected Operating Expenses	(1,574,907)	(1,518,897)
L. Interest on I, J, and K	23,094,625	22,187,530
<b>M. Expected Assets (I + J + K + L)</b>	<b>\$ 324,386,723</b>	<b>\$ 306,303,111</b>
<b>N. RPA '94 FFL (H - M, not less than \$0)</b>	<b>\$ 244,165,664</b>	<b>\$ 392,155,940</b>

**Western States Office & Professional Employees Plan**

Actuarial Valuation as of January 1, 2023

**Appendix G – Funding Standard Account (for Schedule MB) (Continued)**

FUNDING STANDARD ACCOUNT AMORTIZATION BASES (As of January 1, 2023)						
Charges	Amortization Period			Balances		Beginning-of-Year Payment
	Date Established	Initial Period	Remaining Period	Initial	Remaining	
Plan Amendment	1/1/1980	45.00	2.00	\$ 395,897	\$ 43,722	\$ 22,619
Plan Amendment	1/1/1981	45.00	3.00	3,609,259	592,744	211,562
Plan Amendment	1/1/1989	35.00	1.00	6,238,198	372,151	372,151
Plan Amendment	1/1/1990	35.00	2.00	1,991,358	236,276	122,268
Plan Amendment+Act Assump	1/1/1991	35.00	3.00	3,867,632	681,795	243,346
Plan Amendment	1/1/1992	35.00	4.00	2,315,769	537,478	148,790
Plan Amendment	1/1/1993	35.00	5.00	8,009,694	2,289,093	524,040
Plan Amendment+Act Assump	1/1/1994	35.00	6.00	5,816,782	1,961,316	386,626
Plan Amendment	1/1/1995	35.00	7.00	3,954,934	1,527,289	266,543
Actuarial Assumption	1/1/1996	35.00	8.00	2,334,000	1,009,983	159,236
Plan Amendment	1/1/1996	35.00	8.00	19,722,004	8,534,172	1,345,523
Plan Amendment	1/1/1997	35.00	9.00	12,051,000	5,746,423	831,144
Plan Amendment	1/1/1998	35.00	10.00	12,834,000	6,655,303	893,747
Actuarial Assumption	1/1/1998	35.00	10.00	5,651,596	2,930,727	393,572
Actuarial Assumption	1/1/1999	35.00	11.00	500,000	278,992	35,122
Plan Amendment	1/1/1999	35.00	11.00	21,615,699	12,060,656	1,518,376
Plan Amendment	1/1/2000	35.00	12.00	7,937,933	4,723,777	561,942
Actuarial Assumption	1/1/2000	35.00	12.00	4,389,753	2,612,291	310,759
Plan Amendment	1/1/2001	35.00	13.00	12,746,807	8,031,105	908,708
Plan Amendment	1/1/2002	35.00	14.00	2,268,072	1,503,568	162,714
Plan Amendment	1/1/2003	35.00	15.00	2,964,980	2,057,140	213,933
Experience Loss	1/1/2004	20.00	1.00	23,109,456	1,861,081	1,861,081
Experience Loss	1/1/2005	20.00	2.00	12,406,469	1,987,172	1,028,346
Plan Amendment	1/1/2005	35.00	17.00	1,000,895	750,692	72,938
Actuarial Assumption	1/1/2005	35.00	17.00	1,063,519	797,649	77,502

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix G – Funding Standard Account (for Schedule MB) (Continued)

FUNDING STANDARD ACCOUNT AMORTIZATION BASES (As of January 1, 2023) (CONTINUED)						
Charges	Amortization Period			Balances		Beginning-of-Year Payment
	Date Established	Initial Period	Remaining Period	Initial	Remaining	
Experience Loss	1/1/2006	20.00	3.00	\$ 6,485,444	\$ 1,543,392	\$ 550,865
Plan Amendment	1/1/2006	35.00	18.00	1,459,383	1,131,792	106,809
Plan Amendment	1/1/2007	35.00	19.00	1,475,698	1,179,719	108,429
Plan Amendment	1/1/2008	20.00	5.00	1,383,243	533,662	122,173
Experience Loss	1/1/2009	20.00	6.00	123,105,349	56,036,117	11,046,176
Experience Loss	1/1/2011	15.00	3.00	5,600,066	1,631,692	582,379
Experience Loss	1/1/2012	15.00	4.00	39,179,040	14,718,345	4,074,425
Experience Loss	1/1/2013	15.00	5.00	33,032,826	15,005,798	3,435,249
Experience Loss	1/1/2016	15.00	8.00	506,616	334,159	52,686
Experience Loss	1/1/2017	15.00	9.00	1,021,519	734,479	106,233
Experience Loss	1/1/2018	15.00	10.00	1,612,860	1,249,000	167,729
Experience Loss	1/1/2019	15.00	11.00	7,385,989	6,101,165	768,106
Experience Loss	1/1/2020	15.00	12.00	5,205,541	4,550,689	541,350
Experience Loss	1/1/2023	15.00	15.00	5,601,021	5,601,021	582,478
Plan Amendment	1/1/2023	15.00	15.00	115,047,767	115,047,767	11,964,394
<b>Total Charges</b>					<b>\$ 295,181,392</b>	<b>\$ 46,882,069</b>

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix G – Funding Standard Account (for Schedule MB) (Continued)

FUNDING STANDARD ACCOUNT AMORTIZATION BASES (As of January 1, 2023) (CONTINUED)						
Credits	Amortization Period			Balances		Beginning-of-Year Payment
	Date Established	Initial Period	Remaining Period	Initial	Remaining	
Experience Gain	1/1/2010	15.00	2.00	\$ (27,345,881)	\$ (5,495,434)	\$ (2,843,835)
Plan Amendment	1/1/2010	15.00	2.00	(32,045,400)	(6,439,841)	(3,332,562)
Experience Gain	1/1/2014	15.00	6.00	(14,564,452)	(7,683,570)	(1,514,630)
Experience Gain	1/1/2015	15.00	7.00	(8,275,002)	(4,930,980)	(860,559)
Assumption Change	1/1/2017	15.00	9.00	(6,594,691)	(4,741,639)	(685,815)
Plan Amendment	1/1/2019	15.00	11.00	(117,661,915)	(97,194,127)	(12,236,252)
Experience Gain	1/1/2021	15.00	13.00	(7,298,256)	(6,707,832)	(758,982)
Experience Gain	1/1/2022	15.00	14.00	(13,664,114)	(13,130,740)	(1,421,000)
<b>Total Credits</b>					<b>\$ (146,324,163)</b>	<b>\$ (23,653,635)</b>

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix H – Additional Schedule MB Information

CURRENT LIABILITY (FOR 2023 SCHEDULE MB)		
	Counts	January 1, 2023
A. Retirees and Beneficiaries	4,174	\$ 520,756,947
B. Vested Inactive Participants	2,333	234,605,296
C. Active Participants		
1. Non-Vested <sup>1</sup>	194	\$ 768,441
2. Vested	264	42,352,925
3. Sub-total (1 + 2)	458	\$ 43,121,366
D. Total Current Liability (Line 1d(2)(a) ) (A + B + C3)		\$ 798,483,609
E. Market Value of Assets		297,782,774
F. Funded Percentage Using Market Value of Assets (E / D)		37.29 %
G. Expected Increase in Current Liability (Line 1d(2)(b)) <sup>2</sup>		\$ 1,578,000
H. Expected Release from Current Liability (Line 1d(2)(c))		43,293,582
I. Expected Plan Disbursements (Line 1d(3))		45,349,844
J. Current Liability Interest Rate		2.55 %

<sup>1</sup> Participant count excludes 175 Non-Vested Inactives whose liabilities are included in the Non-Vested Active liability.

<sup>2</sup> The amount reported on Line 1d(2)(b) will be adjusted on the 2023 Schedule MB to reflect actual vs expected accruals for the year.

# Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

## Appendix H – Additional Schedule MB Information (Continued)

### SCHEDULE MB, LINE 8b(1) - SCHEDULE OF PROJECTION OF EXPECTED BENEFIT PAYMENTS (FOR 2023 SCHEDULE MB)

Plan Year	Expected Annual Benefit Payments				Plan Year	Expected Annual Benefit Payments			
	Active Participants	Terminated Vested Participants	Retirees & Beneficiaries Receiving Payments	Total		Active Participants	Terminated Vested Participants	Retirees & Beneficiaries Receiving Payments	Total
2023	\$ 549,915	\$ 2,042,529	\$ 41,185,369	\$ 43,777,813	2048	\$ 1,753,371	\$ 11,326,429	\$ 7,508,017	\$ 20,587,817
2024	936,978	3,014,555	40,073,416	44,024,948	2049	1,631,658	10,579,712	7,021,878	19,233,248
2025	1,225,586	3,885,040	38,909,508	44,020,133	2050	1,555,707	10,157,772	6,217,304	17,930,783
2026	1,425,915	4,896,595	37,696,750	44,019,261	2051	1,480,373	9,717,853	5,459,805	16,658,031
2027	1,584,603	5,910,876	36,437,037	43,932,516	2052	1,405,036	9,248,841	4,792,181	15,446,057
2028	1,716,865	6,814,708	35,129,118	43,660,691	2053	1,326,057	8,763,247	4,191,398	14,280,703
2029	1,829,266	7,718,445	33,782,162	43,329,874	2054	1,255,250	8,261,669	3,650,643	13,167,562
2030	1,903,216	8,515,614	32,395,808	42,814,639	2055	1,176,244	7,752,791	3,185,967	12,115,002
2031	1,961,126	9,426,933	30,973,600	42,361,659	2056	1,100,908	7,240,133	2,769,628	11,110,668
2032	2,014,574	10,176,590	29,519,830	41,710,994	2057	1,026,872	6,726,272	2,411,681	10,164,825
2033	2,053,481	10,729,479	28,039,455	40,822,415	2058	956,004	6,217,070	2,099,160	9,272,234
2034	2,077,215	11,245,658	26,538,013	39,860,886	2059	884,806	5,715,795	1,834,452	8,435,053
2035	2,089,240	11,764,239	25,021,818	38,875,297	2060	819,236	5,226,475	1,601,790	7,647,501
2036	2,092,552	12,198,822	23,497,935	37,789,309	2061	754,993	4,752,603	1,406,552	6,914,149
2037	2,098,617	12,373,817	21,974,015	36,446,450	2062	693,641	4,297,337	1,238,080	6,229,057
2038	2,088,060	12,540,887	20,458,238	35,087,184	2063	636,264	3,863,492	1,092,409	5,592,165
2039	2,077,256	12,679,338	18,959,000	33,715,594	2064	582,843	3,453,445	966,729	5,003,017
2040	2,067,337	12,692,559	17,484,763	32,244,660	2065	532,986	3,069,012	858,104	4,460,103
2041	2,039,551	12,667,738	16,044,045	30,751,334	2066	486,732	2,711,419	763,327	3,961,478
2042	2,025,694	12,649,093	14,645,078	29,319,865	2067	443,896	2,381,425	680,175	3,505,496
2043	1,991,595	12,537,228	13,295,500	27,824,323	2068	404,282	2,079,343	606,633	3,090,258
2044	1,955,179	12,377,329	12,002,356	26,334,865	2069	367,708	1,805,020	541,095	2,713,823
2045	1,915,227	12,181,178	10,772,046	24,868,451	2070	333,988	1,557,875	482,319	2,374,181
2046	1,860,571	11,921,141	9,610,024	23,391,736	2071	302,927	1,336,906	429,402	2,069,234
2047	1,806,920	11,634,399	8,520,848	21,962,167	2072	274,329	1,140,751	381,666	1,796,745

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix H – Additional Schedule MB Information *(Continued)*

SCHEDULE MB, LINE 8b(2) - SCHEDULE OF ACTIVE PARTICIPANT DATA (FOR 2023 SCHEDULE MB)											
Age Group	Years Of Credited Service										Total
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 +	
Under 25	0	11	1	0	0	0	0	0	0	0	12
25 - 29	0	35	4	0	0	0	0	0	0	0	39
30 - 34	0	23	11	1	0	0	0	0	0	0	35
35 - 39	0	27	10	6	5	0	0	0	0	0	48
40 - 44	0	20	14	8	8	2	0	0	0	0	52
45 - 49	0	20	16	5	6	7	1	0	0	0	55
50 - 54	0	19	5	5	7	9	5	3	0	0	53
55 - 59	0	14	14	6	7	9	3	5	4	0	62
60 - 64	0	8	9	4	6	5	11	5	4	1	53
65 - 69	0	1	4	5	2	3	2	6	0	1	24
70 and Over	0	0	1	1	3	1	2	0	0	1	9
Unknown	0	16	0	0	0	0	0	0	0	0	16
<b>Total</b>	0	194	89	41	44	36	24	19	8	3	458

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix I – Maximum Deductible Contribution

MAXIMUM DEDUCTIBLE CONTRIBUTION	
	Plan Year Ending December 31, 2023
A. Normal Cost	\$ 2,143,000
B. 10-Year Amortization of Unfunded Accrued Liability	22,177,372
C. Interest to End of Plan Year	1,763,227
D. Preliminary Max (A + B + C)	\$ 26,083,599
E. Full Funding Limitation	
1. ERISA	\$ 213,404,058
2. RPA Full Funding Limit Override	392,155,940
3. Greater of E1 or E2	392,155,940
F. Regular Maximum Deductible Contribution (lesser of D and E3)	26,083,599
G. Minimum Required Contribution, End of Year	44,678,333
H. 140% of Current Liability Basis	
1. Current Liability, Projected to End of Year	\$ 776,065,612
2. Actuarial Value of Assets Projected to End of Year	306,303,111
3. Excess of 140% of Current Liability over Actuarial Value of Assets at End of Year (140% x H1 - H2, not less than \$0)	\$ 780,188,746
<b>I. Maximum Deductible Contribution (greater of F, G and H3)</b>	<b>\$ 780,188,746</b>



## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix I – Maximum Deductible Contribution *(Continued)*

FULL FUNDING LIMITS	
	Plan Year Ending December 31, 2023
1. ERISA FFL	
A. Interest Rate	7.25 %
B. Liability	\$ 494,617,019
C. Normal Cost (without expenses)	625,000
D. Expected Benefit Payments	(43,777,813)
E. Interest on B, C and D	34,318,101
<b>F. Expected Liability (B + C + D + E)</b>	<b>\$ 485,782,307</b>
G. Min of AVA and MVA	297,782,774
H. Credit Balance	N/A
I. Adjusted Assets	297,782,774
J. Expected Benefit Payments	(43,777,813)
K. Expected Operating Expenses	(1,518,897)
L. Interest on I, J, and K	19,892,185
<b>M. Expected Assets (I + J + K + L)</b>	<b>\$ 272,378,249</b>
<b>N. ERISA FFL (F - M, not less than \$0)</b>	<b>\$ 213,404,058</b>
2. RPA '94 FFL	
A. Interest Rate	2.55 %
B. Liability	\$ 798,483,609
C. Normal Cost (without expenses)	1,578,000
D. Expected Benefit Payments	(43,838,626)
E. Interest on B, C and D	19,842,629
<b>F. Expected Liability (B + C + D + E)</b>	<b>\$ 776,065,612</b>
G. Funding Limit Factor	90 %
<b>H. Funding Limit Liability (F * G)</b>	<b>\$ 698,459,051</b>
I. AVA	\$ 329,473,104
J. Expected Benefit Payments	(43,838,626)
K. Expected Operating Expenses	(1,518,897)
L. Interest on I, J, and K	22,187,530
<b>M. Expected Assets (I + J + K + L)</b>	<b>\$ 306,303,111</b>
<b>N. RPA '94 FFL (H - M, not less than \$0)</b>	<b>\$ 392,155,940</b>

## Western States Office & Professional Employees Plan

Actuarial Valuation as of January 1, 2023

### Appendix J – Auditor Information (FASB ASC 960)

#### RECONCILIATION OF ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS

	2021	2022
Actuarial Present Value of Accumulated Plan Benefits at Beginning of Year (January 1)	\$ 406,202,156	\$ 408,722,894
Increase/(Decrease) during the Year Attributable to:		
Benefits Accumulated and Actuarial Experience	\$ (407,143)	\$ (81,383)
Plan Amendment <sup>1</sup>	0	115,047,767
Actuarial Assumption Changes <sup>2</sup>	8,366,760	778,432
Increase for Interest	28,814,559	29,779,376
Benefits and Expenses Paid	(34,253,438)	(35,851,874)
Net Increase/(Decrease)	\$ 2,520,738	\$ 109,672,318
Actuarial Present Value of Accumulated Plan Benefits at End of Year (December 31) <sup>2</sup>	\$ 408,722,894	\$ 518,395,212

#### ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS

	2021	2022
Actuarial Present Value of Accrued Benefits		
Vested Benefits		
Participants Currently Receiving Benefits	\$ 299,956,906	\$ 377,004,245
Other Participants	107,892,047	140,754,563
Total Vested Benefits	\$ 407,848,953	\$ 517,758,808
Non-Vested Benefits	873,941	636,404
Actuarial Present Value of Accumulated Plan Benefits at End of Year (December 31) <sup>2</sup>	\$ 408,722,894	\$ 518,395,212

<sup>1</sup> Plan Amendment is the restoration of MPRA reduced benefits, effective November 1, 2022.

<sup>2</sup> In compliance with ASC 960, the Actuarial Present Value of Accumulated Plan Benefits include the present value of assumed operating expenses as of each valuation date and has been proportionately allocated to each participant liability group: \$22,659,863 (\$1,550,000 paid in monthly installments, or \$1,497,611 as of the beginning of the year \$250,000 is due to ARPA related expenses, or \$241,550 as of the beginning of the year) as of December 31, 2021 and \$23,778,193 (\$1,630,000 paid in monthly installments, or \$1,574,907 as of the beginning of the year \$250,000 is due to ARPA related expenses, or \$241,550 as of the beginning of the year) as of December 31, 2022. The change in the expense assumption is reflected in the Actuarial Assumption Changes line for 2022. The change in the current year expense assumption will be reflected in the Actuarial Present Value of Accumulated Plan Benefits as of December 31, 2023.

## Appendix K – Withdrawal Liability Information

DETERMINATION OF VESTED BENEFIT LIABILITIES FOR WITHDRAWAL LIABILITY PURPOSES				
	December 31, 2021		December 31, 2022	
1. Vested Benefit Liabilities Earned to Date <sup>1</sup>	\$	385,237,542	\$	494,009,806
2. PBGC 10-3 Base <sup>2</sup>		9,225,304		7,155,183
3. MPRA Suspension Base <sup>1</sup>		117,842,876		0
4. Vested Benefit Liabilities (1 + 2 + 3)	\$	512,305,722	\$	501,164,989

<sup>1</sup> Effective November 1, 2022, the Board of Trustees elected to restore MPRA benefit suspensions for all affected participants. The MPRA Suspension Base is eliminated as of December 31, 2022.

<sup>2</sup> PBGC Technical Update 10-3 describes the simplified method for plans in the Red Zone to disregard certain adjustable benefits in determining withdrawal liability. This involves the establishment of a base equal to the reduction in these adjustable benefits, which is then amortized over 15 years. The PBGC 10-3 base is the outstanding balance as of the applicable date.

## Western States Office & Professional Employees Plan

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### Appendix L – Funding Standard Account (No Amortization Extension)

FUNDING STANDARD ACCOUNT (No Amortization Extension)		
	2022	2023 (Estimated) <sup>1</sup>
1. Charges		
A. Funding Deficiency on January 1	\$ 83,852,734	\$ 91,718,484
B. Normal Cost (Beginning of Year) <sup>2</sup>	2,261,734	2,143,000
C. Amortization Charges	32,519,123	44,305,137
D. Interest on A, B and C	8,600,935	10,017,080
E. Subtotal Charges (A + B + C +D)	127,234,526	148,183,701
2. Credits		
A. Credit Balance on January 1	\$ 0	\$ 0
B. Employer Contributions for Year <sup>3</sup>	9,792,539	9,640,000
C. Amortization Credits	23,653,635	23,653,635
D. Interest on A, B and C	2,069,868	2,064,339
hide Full Funding Credit	0	0
E. Subtotal Credits (A + B + C + D)	\$ 35,516,042	\$ 35,357,974
<b>3. Funding Deficiency on December 31 (2E - 1E)</b>	<b>\$ (91,718,484)</b>	<b>\$ (112,825,727)</b>
4. Minimum Required Contribution (Before Credit Balance)	\$ 101,866,002	\$ 122,815,177
5. Minimum Required Contribution (After Credit Balance)	101,866,002	122,815,177
6. ERISA FFL (Accrued Liability FFL)	\$ 54,642,646	\$ 213,404,058
7. "RPA '94" Override (90% Current Liability FFL)	244,165,664	392,155,940

<sup>1</sup> This is the Funding Standard Account used to determine if the Plan falls into the Red Zone.

<sup>2</sup> Normal cost includes assumed operating expenses of \$1,574,907 as of the beginning of the 2022 Plan Year and \$1,518,897 as of the beginning of the 2023 Plan Year (\$1,572,031 paid in monthly installments).

<sup>3</sup> 2023 estimated contributions reflect withdrawal liability payments for previously withdrawn employers.

## Appendix L – Funding Standard Account (No Amortization Extension) (Continued)

FULL FUNDING LIMITS (No Amortization Extension)		
	2022	2023 (Estimated)
1. ERISA FFL		
A. Interest Rate	7.25 %	7.25 %
B. Liability	\$ 386,063,031	\$ 494,617,019
C. Normal Cost (without expenses)	686,827	625,000
D. Expected Benefit Payments	(34,463,353)	(43,777,813)
E. Interest on B, C and D	26,790,068	34,318,101
<b>F. Expected Liability (B + C + D + E)</b>	<b>\$ 379,076,573</b>	<b>\$ 485,782,307</b>
G. Min of AVA and MVA	337,375,911	297,782,774
H. Credit Balance	0	0
I. Adjusted Assets	337,375,911	297,782,774
J. Expected Benefit Payments	(34,463,353)	(43,777,813)
K. Expected Operating Expenses	(1,574,907)	(1,518,897)
L. Interest on I, J, and K	23,096,276	19,892,185
<b>M. Expected Assets (I + J + K + L)</b>	<b>\$ 324,433,927</b>	<b>\$ 272,378,249</b>
<b>N. ERISA FFL (F - M, not less than \$0)</b>	<b>\$ 54,642,646</b>	<b>\$ 213,404,058</b>
2. RPA '94 FFL		
A. Interest Rate	2.22 %	2.55 %
B. Liability	\$ 650,317,459	\$ 798,483,609
C. Normal Cost (without expenses)	1,821,877	1,578,000
D. Expected Benefit Payments	(34,508,906)	(43,838,626)
E. Interest on B, C and D	14,094,444	19,842,629
<b>F. Expected Liability (B + C + D + E)</b>	<b>\$ 631,724,874</b>	<b>\$ 776,065,612</b>
G. Funding Limit Factor	90 %	90 %
<b>H. Funding Limit Liability (F * G)</b>	<b>\$ 568,552,387</b>	<b>\$ 698,459,051</b>
I. AVA	\$ 337,375,911	\$ 329,473,104
J. Expected Benefit Payments	(34,508,906)	(43,838,626)
K. Expected Operating Expenses	(1,574,907)	(1,518,897)
L. Interest on I, J, and K	23,094,625	22,187,530
<b>M. Expected Assets (I + J + K + L)</b>	<b>\$ 324,386,723</b>	<b>\$ 306,303,111</b>
<b>N. RPA '94 FFL (H - M, not less than \$0)</b>	<b>\$ 244,165,664</b>	<b>\$ 392,155,940</b>

**Western States Office & Professional Employees Plan**

Actuarial Valuation as of January 1, 2023

**Appendix L – Funding Standard Account (No Amortization Extension) (Continued)**

FUNDING STANDARD ACCOUNT AMORTIZATION BASES (No Amortization Extension) (As of January 1, 2023)						
Charges	Amortization Period			Balances		Beginning-of-Year Payment
	Date Established	Initial Period	Remaining Period	Initial	Remaining	
Plan Amendment+Act Assump	1/1/1994	30.00	1.00	\$ 5,816,782	\$ 448,101	\$ 448,101
Plan Amendment	1/1/1995	30.00	2.00	3,954,934	588,739	304,667
Actuarial Assumption	1/1/1996	30.00	3.00	2,334,000	503,758	179,799
Plan Amendment	1/1/1996	30.00	3.00	19,722,004	4,256,661	1,519,277
Plan Amendment	1/1/1997	30.00	4.00	12,051,000	3,353,532	928,344
Plan Amendment	1/1/1998	30.00	5.00	12,834,000	4,318,670	988,662
Actuarial Assumption	1/1/1998	30.00	5.00	5,651,596	1,901,759	435,369
Actuarial Assumption	1/1/1999	30.00	6.00	500,000	195,402	38,517
Plan Amendment	1/1/1999	30.00	6.00	21,615,699	8,447,160	1,665,157
Plan Amendment	1/1/2000	30.00	7.00	7,937,933	3,503,865	611,495
Actuarial Assumption	1/1/2000	30.00	7.00	4,389,753	1,937,670	338,162
Plan Amendment	1/1/2001	30.00	8.00	12,746,807	6,228,131	981,945
Plan Amendment	1/1/2002	30.00	9.00	2,268,072	1,207,999	174,720
Plan Amendment	1/1/2003	30.00	10.00	2,964,980	1,700,823	228,407
Plan Amendment	1/1/2005	30.00	12.00	1,000,895	648,136	77,104
Actuarial Assumption	1/1/2005	30.00	12.00	1,063,519	688,688	81,928
Plan Amendment	1/1/2006	30.00	13.00	1,459,383	993,582	112,423
Plan Amendment	1/1/2007	30.00	14.00	1,475,698	1,050,447	113,680
Experience Loss	1/1/2009	15.00	1.00	123,105,349	12,802,351	12,802,351
Experience Loss	1/1/2011	15.00	3.00	5,600,066	1,631,691	582,379
Experience Loss	1/1/2012	15.00	4.00	39,179,040	14,718,353	4,074,425
Experience Loss	1/1/2013	15.00	5.00	33,032,826	15,005,796	3,435,249
Experience Loss	1/1/2016	15.00	8.00	506,616	334,159	52,686
Experience Loss	1/1/2017	15.00	9.00	1,021,519	734,479	106,233
Experience Loss	1/1/2018	15.00	10.00	1,612,860	1,249,000	167,729

## Western States Office & Professional Employees Plan

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### Appendix L – Funding Standard Account (No Amortization Extension) (Continued)

FUNDING STANDARD ACCOUNT AMORTIZATION BASES (No Amortization Extension) (As of January 1, 2023) (CONTINUED)						
Charges	Amortization Period			Balances		Beginning-of-Year Payment
	Date Established	Initial Period	Remaining Period	Initial	Remaining	
Experience Loss	1/1/2019	15.00	11.00	\$ 7,385,989	\$ 6,101,165	\$ 768,106
Experience Loss	1/1/2020	15.00	12.00	5,205,541	4,550,689	541,350
Experience Loss	1/1/2023	15.00	15.00	5,601,021	5,601,021	582,478
Plan Amendment	1/1/2023	15.00	15.00	115,047,767	115,047,767	11,964,394
<b>Total Charges</b>					<b>\$ 219,749,594</b>	<b>\$ 44,305,137</b>

## Western States Office & Professional Employees Plan

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### Appendix L – Funding Standard Account (No Amortization Extension) (Continued)

FUNDING STANDARD ACCOUNT AMORTIZATION BASES (No Amortization Extension) (As of January 1, 2023) (CONTINUED)						
Credits	Amortization Period			Balances		Beginning-of-Year Payment
	Date Established	Initial Period	Remaining Period	Initial	Remaining	
Experience Gain	1/1/2010	15.00	2.00	\$ (27,345,881)	\$ (5,495,434)	\$ (2,843,835)
Plan Amendment	1/1/2010	15.00	2.00	(32,045,400)	(6,439,841)	(3,332,562)
Experience Gain	1/1/2014	15.00	6.00	(14,564,452)	(7,683,570)	(1,514,630)
Experience Gain	1/1/2015	15.00	7.00	(8,275,002)	(4,930,980)	(860,559)
Assumption Change	1/1/2017	15.00	9.00	(6,594,691)	(4,741,639)	(685,815)
Plan Amendment	1/1/2019	15.00	11.00	(117,661,915)	(97,194,127)	(12,236,252)
Experience Gain	1/1/2021	15.00	13.00	(7,298,256)	(6,707,832)	(758,982)
Experience Gain	1/1/2022	15.00	14.00	(13,664,114)	(13,130,740)	(1,421,000)
<b>Total Credits</b>					<b>\$ (146,324,163)</b>	<b>\$ (23,653,635)</b>





**Rael &  
Letson**