



STATISTICAL SECTION

Maintain the strong foundation built by the many talented and dedicated individuals who have nurtured the fund and protected its resources since its establishment in 1957.

Overview

The *Statistical Section* presents detailed information as a context for understanding what the information in the *Financial Statements*, note disclosures, and *Required Supplementary Information* says about MOSERS' overall financial health.

Financial Trends Information

- *Changes in Fiduciary Net Position* – This schedule presents financial trend information for the most recent ten fiscal years.
- *Deductions from Net Position for Benefits and Refunds by Type* – This information is intended to help the reader assess how benefit payments have changed over time.
- *Valuation Assets (Smoothed Market) vs. Pension Liabilities* – This information is intended to help the reader assess how MOSERS' funded status has changed over time.

Revenues Information

- *Required Employer Contribution Rates as a Percent of Payroll* – This information is intended to help the reader assess how MOSERS' contribution requirements have changed over time.

Operating & Economic Information

- *Membership in Retirement Plans* – This information is intended to help the reader assess how MOSERS' membership has changed over time.
- *Distribution of Benefit Recipients by Location* – This information is intended to help the reader evaluate where MOSERS distributes annuity payments.
- *Benefit Recipients by Type of Retirement and Option Elected* – This information is intended to help the reader understand the stratification of benefit payments by amount and elected option.
- *Benefits Tabulated by Type of Benefit and by Option* – This information is intended to help the reader understand the actuarially determined annual and average monthly benefit amounts by benefit type and option.
- *Average Monthly Benefit Amounts* – This information is intended to help the reader evaluate how benefit payments have changed over time. Figures have been stratified based on years of credited service.
- *Retirees and Beneficiaries Tabulated by Fiscal Year of Retirement* – This information is intended to help the reader understand how long current retirees have been in retirement.
- *Benefits Tabulated by Attained Ages of Benefit Recipients* – This information is intended to help the reader understand the actuarially determined annual and average monthly benefit amounts by type of recipient, and age of recipient.
- *Principal Participating Employers* – This information is intended to help the reader understand MOSERS' most significant sources of contribution revenue, and how it has changed over time.

Changes in Fiduciary Net Position

Last Ten Fiscal Years

	2023	2022	2021	2020	2019
MSEP					
Additions					
Employer contributions	\$ 582,381,146	\$ 471,302,256	\$ 463,293,368	\$ 436,895,653	\$ 394,150,042
Additional state contribution	500,000,000	0	0	0	0
Employee contributions	48,487,731	39,809,873	37,571,263	35,141,960	31,286,632
Member service purchases	1,591,102	2,119,195	1,520,330	1,388,992	1,293,774
Service transfers in	3,573,592	3,494,626	2,298,914	2,664,796	2,592,737
Prepaid employer contributions discount	(1,719,767)	0	0	0	0
Investment income (net of expenses)	177,598,790	(816,407,543)	2,032,991,086	400,354,303	313,159,178
Other	646	5,852	80,121	133,952	496,898
Total additions to plan net position	1,311,913,240	(299,675,741)	2,537,755,082	876,579,656	742,979,261
Deductions					
Benefit payments	979,142,541	949,501,630	911,424,269	864,807,554	842,813,907
Contribution refunds	7,981,346	8,417,124	5,894,157	5,224,489	6,006,484
Service transfers out	4,426,152	4,672,072	2,520,166	3,784,195	3,001,189
Administrative expenses	10,984,550	9,248,916	8,816,943	8,398,164	9,200,826
Total deductions from plan net position	1,002,534,589	971,839,742	928,655,535	882,214,402	861,022,406
Change in net position	\$ 309,378,651	\$ (1,271,515,483)	\$ 1,609,099,547	\$ (5,634,746)	\$ (118,043,145)
Judicial Plan					
Additions					
Employer contributions	\$ 39,064,758	\$ 39,228,848	\$ 39,996,509	\$ 39,174,515	\$ 38,604,668
Employee contributions	1,746,913	1,550,712	1,448,428	1,314,570	1,138,101
Investment income (net of expenses)	4,165,663	(18,801,946)	44,049,707	8,162,709	6,051,941
Other	0	0	0	0	3,895
Total additions to plan net position	44,977,334	21,977,614	85,494,644	48,651,794	45,798,605
Deductions					
Benefit payments	45,108,589	42,513,238	41,625,546	39,622,268	37,585,484
Contribution refunds	0	17,140	0	0	7,565
Administrative expenses	91,076	79,492	75,822	74,450	72,141
Total deductions from plan net position	45,199,665	42,609,870	41,701,368	39,696,718	37,665,190
Change in net position	\$ (222,331)	\$ (20,632,256)	\$ 43,793,276	\$ 8,955,076	\$ 8,133,415
Insurance Activities					
Additions					
Premium receipts	\$ 31,755,533	\$ 29,924,611	\$ 31,609,219	\$ 32,582,558	\$ 31,342,778
Investment income	87,335	4,258	1,869	46,539	121,298
Miscellaneous income	480,120	480,120	480,074	484,075	494,722
Total operating revenues	32,322,988	30,408,989	32,091,162	33,113,172	31,958,798
Deductions					
Premium disbursements	31,737,102	29,896,004	31,597,820	32,549,567	31,325,399
Premium refunds	18,370	28,608	11,401	32,991	17,379
Administrative expenses	480,119	480,122	480,120	480,120	501,018
Total deductions from net position	32,235,591	30,404,734	32,089,341	33,062,678	31,843,796
Change in net position	\$ 87,397	\$ 4,255	\$ 1,821	\$ 50,494	\$ 115,002

Changes in Net position continued on following page

Changes in Fiduciary Net Position (continued)

Last Ten Fiscal Years

	2018	2017	2016	2015	2014
MSEP					
<i>Additions</i>					
Employer contributions	\$ 379,557,962	\$ 335,217,422	\$ 329,957,369	\$ 329,752,832	\$ 326,370,336
Additional state contribution	0	0	0	0	0
Employee contributions	28,303,993	25,439,343	21,684,920	18,099,455	14,025,328
Member service purchases	2,020,720	1,691,046	2,815,749	1,859,005	2,909,423
Service transfers in	3,297,251	3,977,803	2,107,873	3,575,815	2,252,206
Prepaid employer contributions discount	0	0	0	0	0
Investment income (net of expenses)	578,883,501	272,073,643	1,194,422	(237,603,530)	1,484,709,539
Other	538,600	522,025	545,847	533,001	450,453
Total additions to plan net position	992,602,027	638,921,282	358,306,180	116,216,578	1,830,717,285
<i>Deductions</i>					
Benefit payments	879,148,738	787,300,328	750,440,412	723,994,041	677,097,411
Contribution refunds	5,502,698	4,820,737	3,798,199	2,479,264	1,421,856
Service transfers out	2,060,037	1,843,792	3,071,892	1,792,495	1,916,840
Administrative expenses	10,024,178	8,759,341	8,489,375	8,077,692	7,336,922
Total deductions from plan net position	896,735,651	802,724,198	765,799,878	736,343,492	687,773,029
Change in net position	\$ 95,866,376	\$ (163,802,916)	\$ (407,493,698)	\$ (620,126,914)	\$ 1,142,944,256
Judicial Plan					
<i>Additions</i>					
Employer contributions	\$ 36,892,203	\$ 34,246,826	\$ 33,642,497	\$ 32,696,686	\$ 29,264,877
Employee contributions	902,320	786,745	661,206	488,193	294,810
Investment income (net of expenses)	10,727,603	4,671,168	19,273	(3,618,469)	21,388,261
Other	9,981	8,963	8,808	8,117	6,489
Total additions to plan net position	48,532,107	39,713,702	34,331,784	29,574,527	50,954,437
<i>Deductions</i>					
Benefit payments	35,651,489	33,979,837	32,979,706	31,245,906	29,406,625
Contribution refunds	5,760	4,888	10,008	0	0
Administrative expenses	185,763	150,387	136,983	123,015	105,693
Total deductions from plan net position	35,843,012	34,135,112	33,126,697	31,368,921	29,512,318
Change in net position	\$ 12,689,095	\$ 5,578,590	\$ 1,205,087	\$ (1,794,394)	\$ 21,442,119
Insurance Activities					
<i>Additions</i>					
Premium receipts	\$ 31,119,232	\$ 28,779,398	\$ 30,360,162	\$ 30,177,918	\$ 29,563,054
Investment income	79,389	33,984	15,207	9,749	11,886
Miscellaneous income	480,120	480,120	480,120	(519,880)	1,480,120
Total operating revenues	31,678,741	29,293,502	30,855,489	29,667,787	31,055,060
<i>Deductions</i>					
Premium disbursements	31,100,612	28,769,588	30,328,802	30,157,271	29,544,110
Premium refunds	14,211	9,810	31,360	20,646	18,942
Administrative expenses	526,023	532,169	550,843	516,782	435,830
Total deductions from net position	31,640,846	29,311,567	30,911,005	30,694,699	29,998,882
Change in net position	\$ 37,895	\$ (18,065)	\$ (55,516)	\$ (1,026,912)	\$ 1,056,178

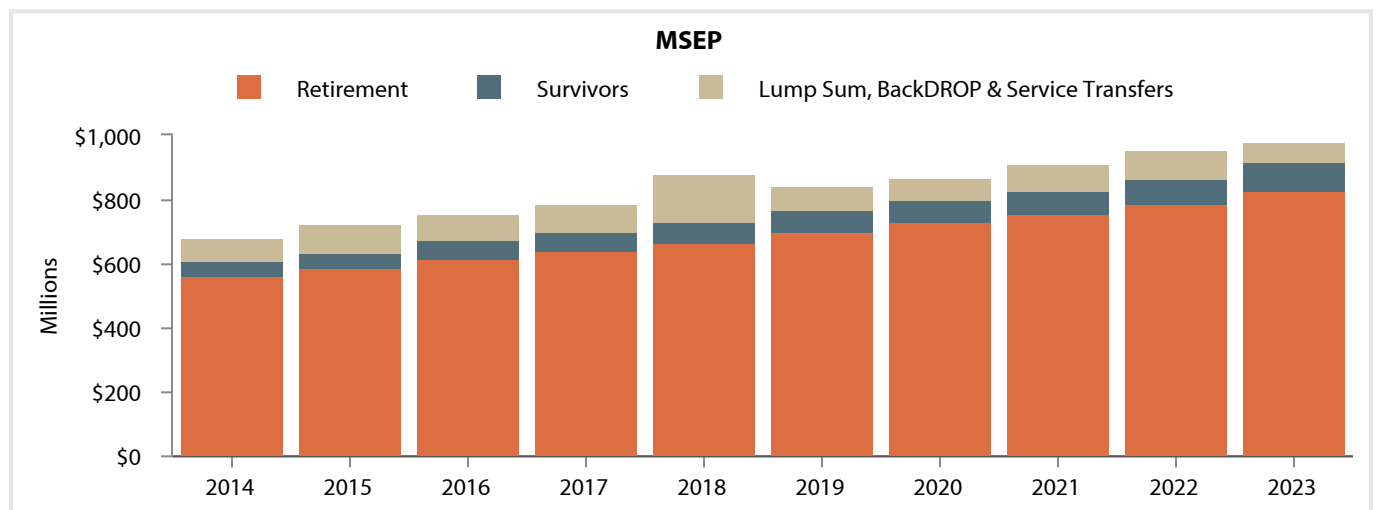
Deductions from Net Position for Benefits and Refunds by Type

Last Ten Fiscal Years

MSEP

Type of benefit	2014	2015	2016	2017	2018
Retirement	\$ 560,553,490	\$ 586,597,187	\$ 615,708,229	\$ 640,637,749	\$ 670,663,932
Survivors	49,922,170	52,940,062	56,495,787	59,628,687	63,081,129
Disability	22,468	16,857	15,470	14,821	5,223
Lump-sum	286,184	57,525	267,198	123,005	61,041,258
BackDROP	66,313,097	84,382,410	77,953,728	86,896,066	84,357,196
Service transfers	1,916,840	1,792,495	3,071,892	1,843,792	2,060,037
Total benefits	\$ 679,014,249	\$ 725,786,536	\$ 753,512,304	\$ 789,144,120	\$ 881,208,775
Refunds - separation of service	\$ 1,409,958	\$ 2,435,771	\$ 3,750,757	\$ 4,777,245	\$ 5,396,418
Refunds - death	11,898	43,493	47,442	43,492	106,280
Total contribution refunds	\$ 1,421,856	\$ 2,479,264	\$ 3,798,199	\$ 4,820,737	\$ 5,502,698

Type of benefit	2019	2020	2021	2022	2023
Retirement	\$ 703,117,097	\$ 730,310,371	\$ 757,076,179	\$ 789,168,797	\$ 831,847,718
Survivors	66,493,496	70,583,387	74,890,437	79,635,271	85,388,069
Disability	2,260	2,300	2,328	1,171	0
Lump-sum	318,656	245,297	92,059	695,778	72,129
BackDROP	72,882,398	63,666,199	79,363,265	80,000,613	61,834,625
Service transfers	3,001,189	3,784,195	2,520,166	4,672,072	4,426,152
Total benefits	\$ 845,815,096	\$ 868,591,749	\$ 913,944,434	\$ 954,173,702	\$ 983,568,693
Refunds - separation of service	\$ 5,930,152	\$ 5,143,987	\$ 5,704,491	\$ 8,257,062	\$ 7,687,393
Refunds - death	76,332	80,502	189,666	160,062	293,953
Total contribution refunds	\$ 6,006,484	\$ 5,224,489	\$ 5,894,157	\$ 8,417,124	\$ 7,981,346



Source: MOSERS' financial records

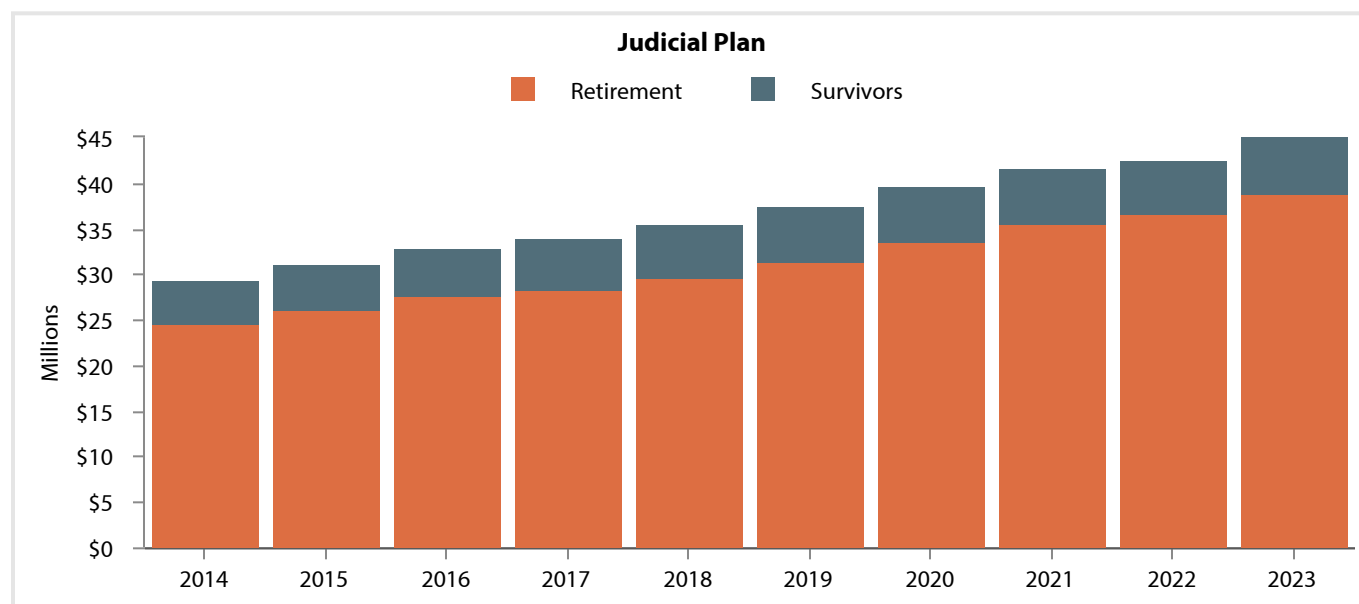
Deductions from Net Position for Benefits and Refunds by Type (continued)

Last Ten Fiscal Years

Judicial Plan

Type of benefit	2014	2015	2016	2017	2018
Retirement	\$ 24,609,421	\$ 26,181,505	\$ 27,641,108	\$ 28,304,733	\$ 29,655,995
Survivors	4,797,204	5,064,400	5,338,598	5,675,104	5,995,494
Total benefits	\$ 29,406,625	\$ 31,245,905	\$ 32,979,706	\$ 33,979,837	\$ 35,651,489
Refunds - separation of service	\$ 0	\$ 0	\$ 10,008	\$ 4,888	\$ 5,760

Type of benefit	2019	2020	2021	2022	2023
Retirement	\$ 31,463,475	\$ 33,577,616	\$ 35,487,401	\$ 36,654,586	\$ 38,962,752
Survivors	6,122,009	6,044,652	6,138,145	5,858,652	6,145,837
Total benefits	\$ 37,585,484	\$ 39,622,268	\$ 41,625,546	\$ 42,513,238	\$ 45,108,589
Refunds - separation of service	\$ 7,565	\$ 0	\$ 0	\$ 17,140	\$ 0



Source: MOSERS' financial records

Pension Trust Funds

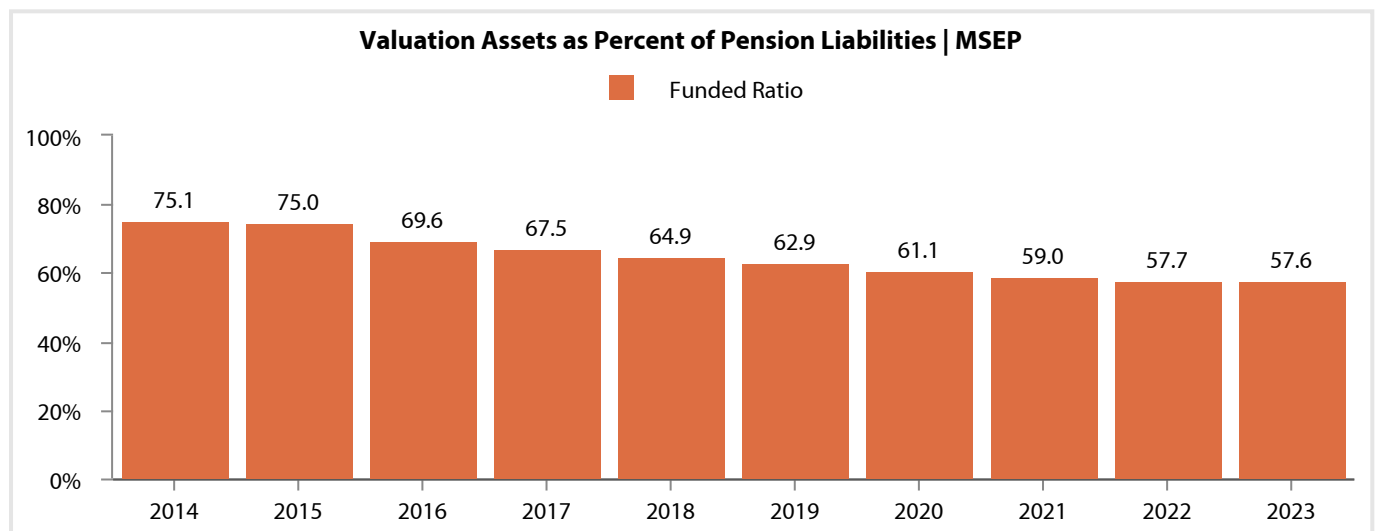
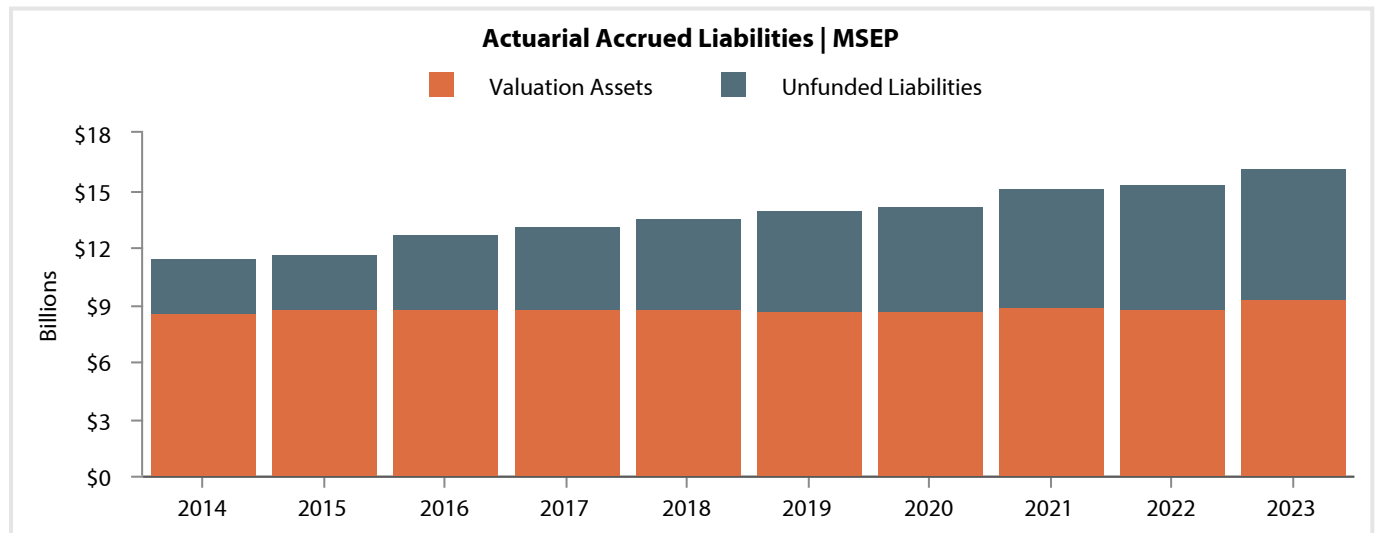
Valuation Assets (Smoothed Market) vs. Pension Liabilities

Last Ten Fiscal Years

MSEP

Dollars in Billions

Fiscal Year	Valuation Assets	Unfunded Liabilities	Accrued Liabilities	Funded Ratio
2014	\$8.6378	\$2.8568	\$11.4946	75.1%
2015	8.7925	2.9351	11.7276	75.0
2016	8.8781	3.8731	12.7512	69.6
2017	8.8724	4.2799	13.1523	67.5
2018	8.8304	4.7824	13.6128	64.9
2019	8.7824	5.1752	13.9576	62.9
2020	8.7112	5.5472	14.2584	61.1
2021	8.9093	6.2014	15.1106	59.0
2022	8.8943	6.5147	15.4090	57.7
2023	9.3312	6.8596	16.1908	57.6



Source: MOSERS' MSEP Actuarial Valuation Reports, most recent 10 years

Pension Trust Funds

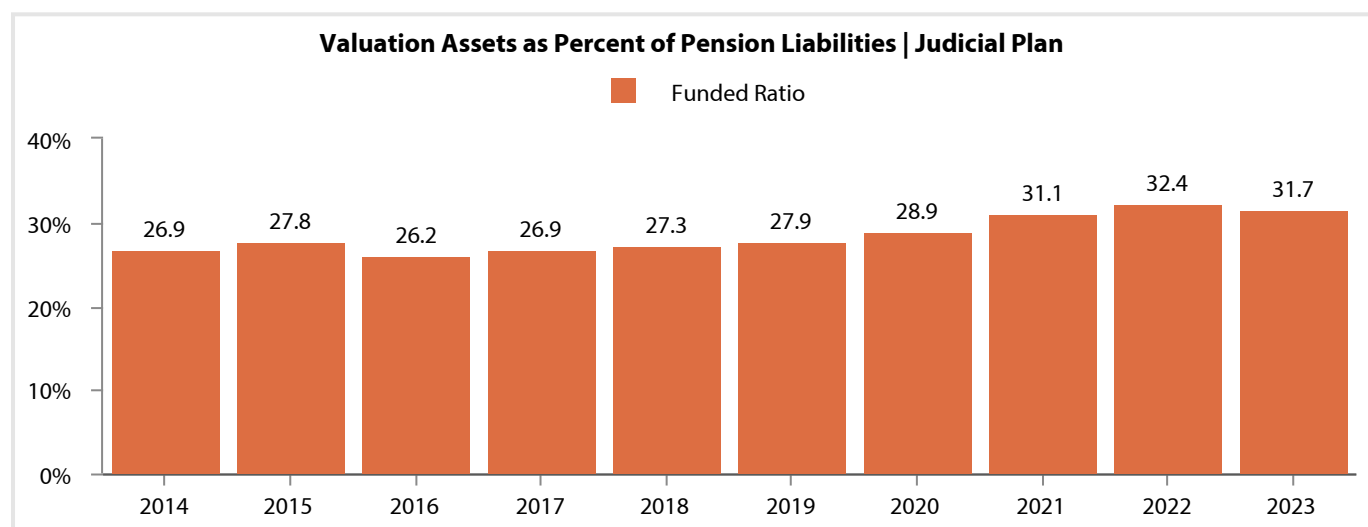
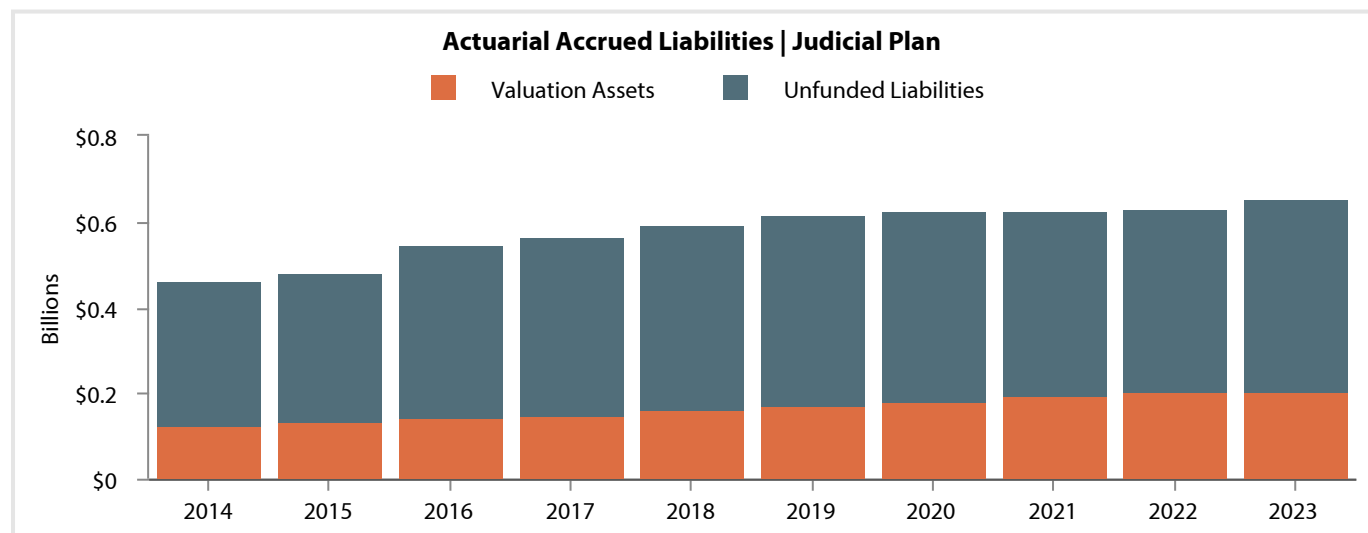
Valuation Assets (Smoothed Market) vs. Pension Liabilities (continued)

Last Ten Fiscal Years

Judicial Plan

Dollars in Billions

Fiscal Year	Valuation Assets	Unfunded Liabilities	Accrued Liabilities	Funded Ratio
2014	\$0.1243	\$0.3381	\$0.4623	26.9%
2015	0.1343	0.3486	0.4830	27.8
2016	0.1435	0.4042	0.5476	26.2
2017	0.1518	0.4126	0.5644	26.9
2018	0.1621	0.4317	0.5938	27.3
2019	0.1722	0.4453	0.6175	27.9
2020	0.1807	0.4441	0.6248	28.9
2021	0.1950	0.4313	0.6263	31.1
2022	0.2040	0.4260	0.6300	32.4
2023	0.2071	0.4472	0.6542	31.7



Source: MOSERS' Judicial Plan Actuarial Valuation Reports, most recent 10 years

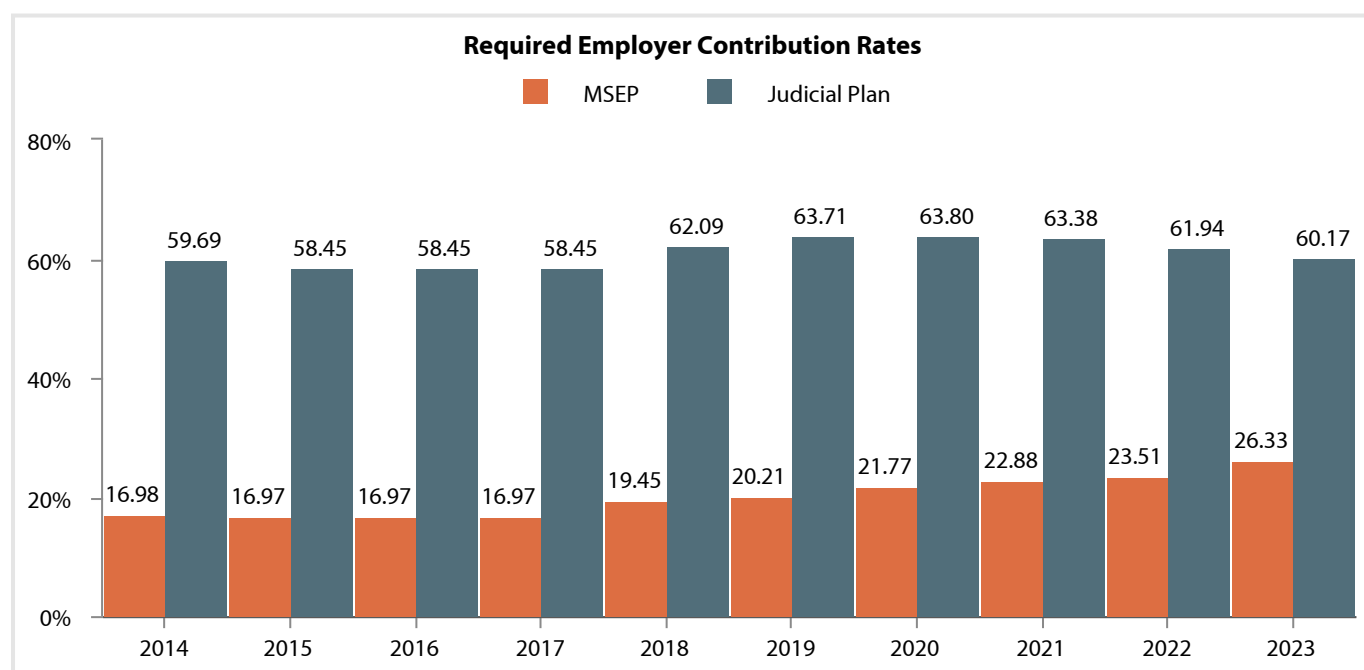
Pension Trust Funds

Required Employer Contribution Rates as a Percent of Payroll

Last Ten Fiscal Years

Fiscal Year	MSEP	Judicial
2014	16.98%	59.69%
2015	16.97	58.45
2016	16.97	58.45
2017	16.97	58.45
2018	19.45	62.09
2019	20.21	63.71
2020	21.77	63.80
2021	22.88	63.38
2022	23.51	61.94
2023	26.33	60.17

Note: In addition to the employer contribution rates, MOSERS also receives a fixed 4% employee contribution from MSEP 2011 and Judicial Plan 2011 members. Beginning in fiscal year 2023, the employers were given the option to prepay contributions at certain times during the year and receive an actuarially determined present value discount based on MOSERS' investment return assumption. Amounts are before any prepaid discounts.



Source: MOSERS' MSEP and Judicial Plan Actuarial Valuation Reports, most recent 10 years

Membership in Retirement Plans

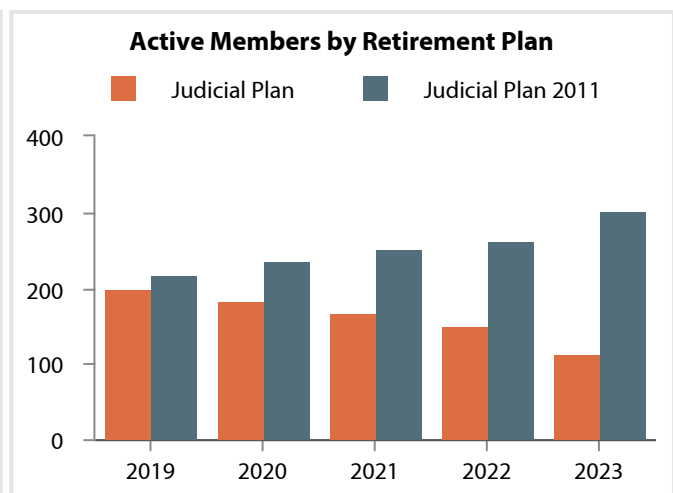
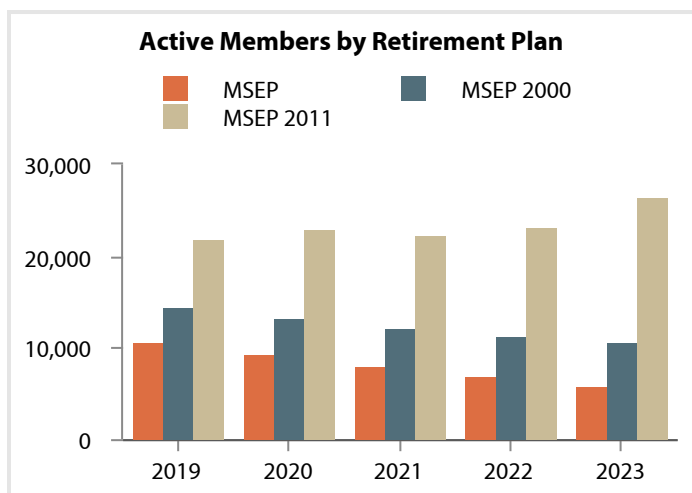
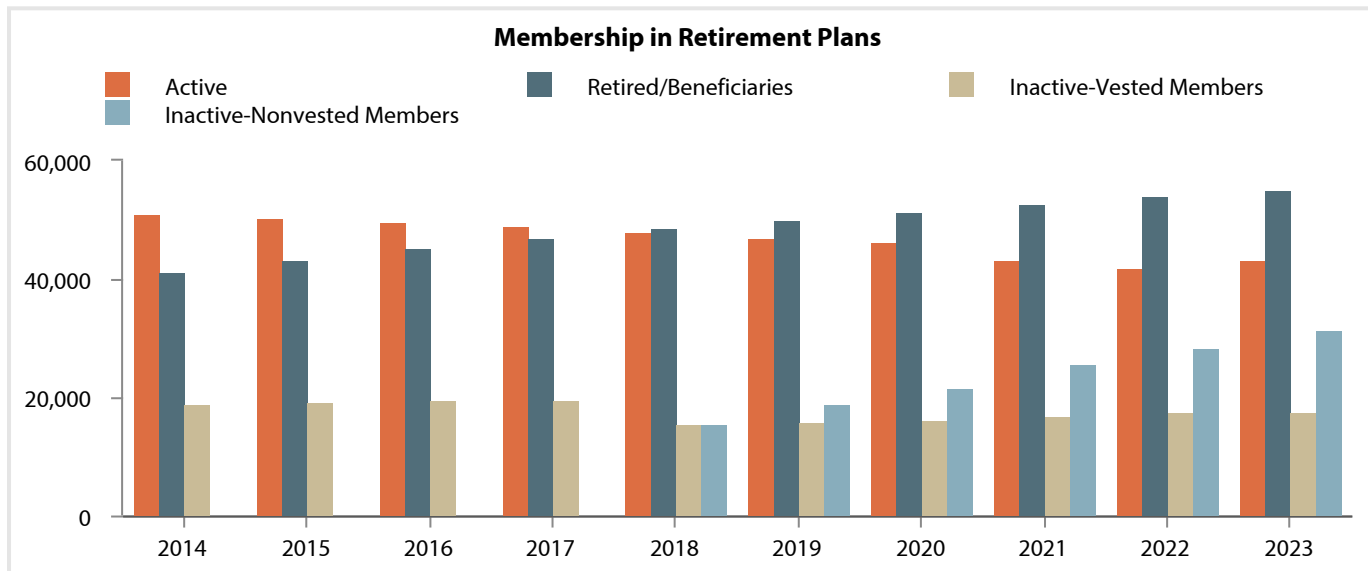
Last Ten Fiscal Years

MSEP & Judicial Plans Combined

Fiscal Year	Active Members	Retirees and Beneficiaries	Inactive-Vested Members*	Inactive-Nonvested Members**	Totals
2014	51,026	41,511	18,957		111,494
2015	50,385	43,503	19,319		113,207
2016	49,872	45,368	19,538		114,778
2017	49,320	47,119	19,603		116,042
2018	48,221	48,776	15,502	15,619	128,118
2019	47,278	50,281	16,052	18,852	132,463
2020	46,417	51,447	16,335	21,735	135,934
2021	43,247	52,830	16,986	25,613	138,676
2022	42,010	54,244	17,465	28,444	142,163
2023	43,503	55,328	17,683	31,575	148,089

* Excludes members on leave of absence and long-term disability.

** Inactive-nonvested members of the MSEP 2011 who have not requested a refund of their contributions are now being included in the membership data.



Source: MOSERS' MSEP and Judicial Plan Actuarial Valuation Reports, most recent 10 years

Benefit Recipients by Type of Retirement and Option Elected

June 30, 2023

MSEP

Amount of Monthly Benefit	Number of Benefit Recipients	Type of Retirement			
		Normal Retirement	Early Retirement	Survivor of Active	Survivor of Retired
1-500	13,509	6,023	5,548	619	1,319
501-1000	11,434	7,141	2,487	523	1,283
1001-1500	9,719	8,044	664	269	742
1501-2000	7,100	6,384	192	139	385
2001-2500	4,688	4,311	66	87	224
2501-3000	3,017	2,797	27	43	150
3001-3500	1,763	1,609	12	32	110
3501-4000	1,136	1,047	11	14	64
Over 4000	2,343	2,101	8	36	198
Total	54,709	39,457	9,015	1,762	4,475

Amount of Monthly Benefit	Option Elected							
	1	2	3	4	5	6	7	8
1-500	37	554	561	1,697	0	3,105	62	7,493
501-1000	44	317	240	2,480	2	2,538	26	5,787
1001-1500	25	155	116	2,427	0	2,334	3	4,659
1501-2000	18	105	53	1,774	0	1,522	2	3,626
2001-2500	6	56	35	1,199	0	1,086	1	2,305
2501-3000	8	23	17	837	0	738	0	1,394
3001-3500	3	12	9	471	0	481	0	787
3501-4000	1	14	0	318	0	313	0	490
Over 4000	9	16	7	726	0	815	0	770
Total	151	1,252	1,038	11,929	2	12,932	94	27,311

Option Elected

- 1 - Life Income with 60 Guaranteed Payments
- 2 - Life Income with 120 Guaranteed Payments
- 3 - Life Income with 180 Guaranteed Payments
- 4 - Joint & 50% Survivor
- 5 - Joint & 75% Survivor
- 6 - Joint & 100% Survivor
- 7 - Automatic Minor Survivor
- 8 - No Survivor Option (includes pop-ups)

Source: MOSERS' MSEP Plan Actuarial Valuation Report as of June 30, 2023

Benefit Recipients by Type of Retirement and Option Elected (continued)

June 30, 2023

Judicial Plan

Amount of Monthly Benefit	Number of Benefit Recipients	Type of Retirement			
		Normal Retirement	Early Retirement	Survivor of Active	Survivor of Retired
1-500	7	0	3	0	4
501-1000	10	0	7	0	3
1001-1500	9	0	5	2	2
1501-2000	12	1	7	1	3
2001-2500	9	0	3	2	4
2501-3000	19	0	6	4	9
3001-3500	40	0	10	11	19
3501-4000	45	1	8	7	29
Over 4000	468	386	32	4	46
Total	619	388	81	31	119

Amount of Monthly Benefit	Option Elected							
	1	2	3	4	5	6	7	8
1-500	0	0	0	7	0	0	0	0
501-1000	0	0	0	10	0	0	0	0
1001-1500	0	0	0	6	0	1	0	2
1501-2000	0	0	0	12	0	0	0	0
2001-2500	0	0	0	9	0	0	0	0
2501-3000	0	0	0	19	0	0	0	0
3001-3500	0	0	0	36	0	0	0	4
3501-4000	0	0	0	44	0	1	0	0
Over 4000	0	0	1	460	0	1	1	5
Total	0	0	1	603	0	3	1	11

Option Elected

- 1 - Life Income with 60 Guaranteed Payments
- 2 - Life Income with 120 Guaranteed Payments
- 3 - Life Income with 180 Guaranteed Payments
- 4 - Joint & 50% Survivor
- 5 - Joint & 75% Survivor
- 6 - Joint & 100% Survivor
- 7 - Automatic Minor Survivor
- 8 - No Survivor Option (includes pop-ups)

Source: MOSERS' Judicial Plan Actuarial Valuation Report as of June 30, 2023

Benefits Tabulated by Type of Benefit and by Option

June 30, 2023

MSEP Combined

Type of Benefit	Number	Annual Benefits	Average Annual Benefits
Service retirement			
Life income annuity	27,275	\$ 430,487,004	\$ 15,783
Joint & 50% survivor	9,818	219,028,824	22,309
Joint & 100% survivor	9,230	177,790,008	19,262
Life income with 60 guaranteed payments	150	2,563,668	17,091
Life income with 120 guaranteed payments	1,144	12,469,464	10,900
Life income with 180 guaranteed payments	855	7,698,816	9,004
Survivor beneficiary	4,475	66,047,016	14,759
Total	52,947	916,084,800	17,302
Death-in-service	1,762	21,764,556	12,352
Grand totals	54,709	\$ 937,849,356	17,143

Judicial Plan Combined

Type of Benefit	Number	Annual Benefits	Average Annual Benefits
Service retirement			
Life income annuity	7	\$ 460,548	\$ 65,793
Joint & 50% survivor	459	40,137,288	87,445
Joint & 100% survivor	3	119,820	39,940
Survivor beneficiary	119	5,111,004	42,950
Total	588	45,828,660	77,940
Death-in-service	31	1,188,276	38,331
Grand totals	619	\$ 47,016,936	75,956

Source: MOSERS' MSEP and Judicial Plan Actuarial Valuation Reports as of June 30, 2023

Benefits Tabulated by Type of Benefit and by Option (continued)

June 30, 2023

MSEP (Closed Plan)

Type of Benefit	Number	Annual Benefits	Average Annual Benefits
Service retirement			
Life income annuity	5,743	\$ 107,247,840	\$ 18,675
Unreduced joint & 50% survivor	4,920	115,274,328	23,430
Joint & 100% survivor	3,090	78,460,500	25,392
Life income with 60 guaranteed payments	137	2,371,764	17,312
Life income with 120 guaranteed payments	174	2,415,252	13,881
Survivor beneficiary	2,755	47,557,692	17,262
Total	16,819	353,327,376	21,008
Death-in-service	1,355	19,266,072	14,219
Grand totals	18,174	\$ 372,593,448	20,501

MSEP 2000

Type of Benefit	Number	Annual Benefits	Average Annual Benefits
Service retirement			
Life income annuity	21,134	\$ 321,377,232	\$ 15,207
Joint & 50% survivor	4,844	103,487,016	21,364
Joint & 100% survivor	5,988	98,597,364	16,466
Life income with 60 guaranteed payments	13	191,904	14,762
Life income with 120 guaranteed payments	944	9,930,072	10,519
Life income with 180 guaranteed payments	818	7,520,100	9,193
Survivor beneficiary	1,712	18,464,292	10,785
Total	35,453	559,567,980	15,783
Death-in-service	371	2,327,304	6,273
Grand totals	35,824	\$ 561,895,284	15,685

MSEP 2011

Type of Benefit	Number	Annual Benefits	Average Annual Benefits
Service retirement			
Life income annuity	398	\$ 1,861,932	\$ 4,678
Joint & 50% survivor	54	267,480	4,953
Joint & 100% survivor	152	732,144	4,817
Life income with 120 guaranteed payments	26	124,140	4,775
Life income with 180 guaranteed payments	37	178,716	4,830
Survivor beneficiary	8	25,032	3,129
Total	675	3,189,444	4,725
Death-in-service	36	171,180	4,755
Grand totals	711	\$ 3,360,624	4,727

Benefits Tabulated by Type of Benefit and by Option (continued)

June 30, 2023

Judicial Plan

Type of Benefit	Number	Annual Benefits	Average Annual Benefits
Service retirement			
Life income annuity	4	\$ 332,460	\$ 83,115
Joint & 50% survivor	456	39,976,980	87,669
Survivor beneficiary	118	5,042,916	42,737
Total	578	45,352,356	78,464
Death-in-service	28	1,105,392	39,478
Grand totals	606	\$ 46,457,748	76,663

Judicial Plan 2011

Type of Benefit	Number	Annual Benefits	Average Annual Benefits
Service retirement			
Life income annuity	3	\$ 128,088	\$ 42,696
Joint & 50% survivor	3	160,308	53,436
Joint & 100% survivor	3	119,820	39,940
Survivor beneficiary	1	68,088	68,088
Total	10	476,304	47,630
Death-in-service	3	82,884	27,628
Grand totals	13	\$ 559,188	43,014

Source: MOSERS' MSEP and Judicial Plan Actuarial Valuation Reports as of June 30, 2023

Average Monthly Benefit Amounts

Last Ten Fiscal Years

MSEP

Members Retiring During Fiscal Year		Years Credited Service by Category							All Members
		<5	5-10	11-15	16-20	21-25	26-30	31+	
2014	Average monthly benefit	\$ 280	\$ 308	\$ 520	\$ 809	\$ 1,199	\$ 1,691	\$ 2,207	\$ 937
	Average final salary	\$ 4,426	\$ 2,675	\$ 2,614	\$ 3,029	\$ 3,229	\$ 3,650	\$ 3,999	\$ 3,066
	Number of retirees	5	636	507	370	436	392	199	2,545
2015	Average monthly benefit	\$ 219	\$ 315	\$ 522	\$ 801	\$ 1,268	\$ 1,723	\$ 2,217	\$ 999
	Average final salary	\$ 5,058	\$ 2,596	\$ 2,624	\$ 2,954	\$ 3,416	\$ 3,729	\$ 4,016	\$ 3,119
	Number of retirees	6	644	519	437	450	487	250	2,793
2016	Average monthly benefit	\$ 151	\$ 307	\$ 506	\$ 819	\$ 1,300	\$ 1,838	\$ 2,360	\$ 1,016
	Average final salary	\$ 3,284	\$ 2,623	\$ 2,600	\$ 3,020	\$ 3,445	\$ 3,968	\$ 4,204	\$ 3,175
	Number of retirees	6	611	502	430	505	423	215	2,692
2017	Average monthly benefit	\$ 309	\$ 339	\$ 562	\$ 946	\$ 1,365	\$ 1,860	\$ 2,391	\$ 1,116
	Average final salary	\$ 4,658	\$ 2,731	\$ 2,849	\$ 3,426	\$ 3,641	\$ 4,030	\$ 4,291	\$ 3,406
	Number of retirees	9	518	508	459	440	477	239	2,650
2018	Average monthly benefit	\$ 402	\$ 338	\$ 584	\$ 922	\$ 1,420	\$ 1,887	\$ 2,511	\$ 1,148
	Average final salary	\$ 5,977	\$ 2,815	\$ 2,899	\$ 3,323	\$ 3,802	\$ 4,096	\$ 4,538	\$ 3,488
	Number of retirees	7	523	475	486	520	515	208	2,734
2019	Average monthly benefit	\$ 198	\$ 369	\$ 609	\$ 886	\$ 1,356	\$ 1,840	\$ 2,321	\$ 1,131
	Average final salary	\$ 5,081	\$ 2,907	\$ 2,900	\$ 3,076	\$ 3,637	\$ 3,978	\$ 4,206	\$ 3,390
	Number of retirees	3	484	388	409	456	428	225	2,393
2020	Average monthly benefit	\$ 270	\$ 321	\$ 602	\$ 901	\$ 1,375	\$ 1,822	\$ 2,391	\$ 1,110
	Average final salary	\$ 5,379	\$ 2,677	\$ 3,012	\$ 3,149	\$ 3,707	\$ 3,967	\$ 4,329	\$ 3,390
	Number of retirees	8	475	378	378	447	441	172	2,299
2021	Average monthly benefit	\$ 526	\$ 353	\$ 624	\$ 966	\$ 1,420	\$ 1,952	\$ 2,554	\$ 1,195
	Average final salary	\$ 5,705	\$ 2,763	\$ 3,054	\$ 3,337	\$ 3,798	\$ 4,257	\$ 4,651	\$ 3,561
	Number of retirees	9	481	456	390	568	464	207	2,575
2022	Average monthly benefit	\$ 330	\$ 332	\$ 630	\$ 987	\$ 1,418	\$ 1,934	\$ 2,556	\$ 1,197
	Average final salary	\$ 5,506	\$ 2,822	\$ 3,123	\$ 3,448	\$ 3,772	\$ 4,201	\$ 4,634	\$ 3,584
	Number of retirees	7	576	414	398	579	532	222	2,728
2023	Average monthly benefit	\$ 415	\$ 321	\$ 602	\$ 983	\$ 1,340	\$ 1,970	\$ 2,545	\$ 1,150
	Average final salary	\$ 7,077	\$ 2,857	\$ 3,157	\$ 3,648	\$ 3,773	\$ 4,481	\$ 4,838	\$ 3,679
	Number of retirees	9	527	395	357	485	447	187	2,407
Ten Years Ended June 30, 2023									
	Average monthly benefit	\$ 330	\$ 329	\$ 572	\$ 901	\$ 1,351	\$ 1,855	\$ 2,401	\$ 1,099
	Average final average salary	\$ 5,330	\$ 2,740	\$ 2,865	\$ 3,238	\$ 3,633	\$ 4,043	\$ 4,360	\$ 3,383
	Number of retirees	69	5,475	4,542	4,114	4,886	4,606	2,124	25,816

Note: COLA increases and temporary benefits payable under MSEP 2000 until age 62 are excluded from the above for comparison purposes.

Source: FY23 from MOSERS' MSEP Actuarial Valuation Report; prior to FY23 from MOSERS' Pension Administration System

Average Monthly Benefit Amounts (continued)

Last Ten Fiscal Years

General Employees in the MSEP*

Members Retiring During Fiscal Year		Years Credited Service by Category							All Members
		<5	5-10	11-15	16-20	21-25	26-30	31+	
2014	Average monthly benefit	\$ 262	\$ 298	\$ 514	\$ 803	\$ 1,195	\$ 1,691	\$ 2,207	\$ 935
	Average final salary	\$ 5,382	\$ 2,663	\$ 2,612	\$ 3,029	\$ 3,230	\$ 3,650	\$ 3,999	\$ 3,065
	Number of retirees	3	629	503	368	435	392	199	2,529
2015	Average monthly benefit	\$ 219	\$ 301	\$ 517	\$ 786	\$ 1,268	\$ 1,723	\$ 2,208	\$ 994
	Average final salary	\$ 5,058	\$ 2,581	\$ 2,623	\$ 2,947	\$ 3,416	\$ 3,729	\$ 4,007	\$ 3,116
	Number of retirees	6	633	517	433	450	487	249	2,775
2016	Average monthly benefit	\$ 151	\$ 297	\$ 506	\$ 819	\$ 1,285	\$ 1,838	\$ 2,343	\$ 1,011
	Average final salary	\$ 3,284	\$ 2,617	\$ 2,600	\$ 3,020	\$ 3,420	\$ 3,968	\$ 4,184	\$ 3,168
	Number of retirees	6	603	502	430	502	423	213	2,679
2017	Average monthly benefit	\$ 230	\$ 313	\$ 551	\$ 934	\$ 1,355	\$ 1,853	\$ 2,379	\$ 1,109
	Average final salary	\$ 5,026	\$ 2,710	\$ 2,839	\$ 3,414	\$ 3,624	\$ 4,016	\$ 4,265	\$ 3,395
	Number of retirees	6	500	504	456	439	476	238	2,619
2018	Average monthly benefit	\$ 220	\$ 329	\$ 577	\$ 921	\$ 1,397	\$ 1,887	\$ 2,511	\$ 1,142
	Average final salary	\$ 5,477	\$ 2,813	\$ 2,889	\$ 3,321	\$ 3,762	\$ 4,096	\$ 4,538	\$ 3,477
	Number of retirees	6	517	474	485	517	515	208	2,722
2019	Average monthly benefit	\$ 198	\$ 340	\$ 594	\$ 868	\$ 1,345	\$ 1,840	\$ 2,321	\$ 1,126
	Average final salary	\$ 5,081	\$ 2,903	\$ 2,885	\$ 3,077	\$ 3,624	\$ 3,978	\$ 4,206	\$ 3,390
	Number of retirees	3	463	384	403	454	428	225	2,360
2020	Average monthly benefit	\$ 237	\$ 307	\$ 597	\$ 901	\$ 1,360	\$ 1,814	\$ 2,391	\$ 1,105
	Average final salary	\$ 5,720	\$ 2,658	\$ 3,012	\$ 3,149	\$ 3,682	\$ 3,952	\$ 4,329	\$ 3,381
	Number of retirees	7	468	376	378	445	440	172	2,286
2021	Average monthly benefit	\$ 467	\$ 319	\$ 616	\$ 958	\$ 1,413	\$ 1,946	\$ 2,542	\$ 1,191
	Average final salary	\$ 5,797	\$ 2,747	\$ 3,055	\$ 3,340	\$ 3,787	\$ 4,245	\$ 4,636	\$ 3,560
	Number of retirees	8	457	452	387	567	463	206	2,540
2022	Average monthly benefit	\$ 300	\$ 326	\$ 627	\$ 987	\$ 1,418	\$ 1,928	\$ 2,556	\$ 1,196
	Average final salary	\$ 5,912	\$ 2,820	\$ 3,123	\$ 3,448	\$ 3,772	\$ 4,189	\$ 4,634	\$ 3,583
	Number of retirees	6	571	413	398	579	531	222	2,720
2023	Average monthly benefit	\$ 313	\$ 302	\$ 575	\$ 976	\$ 1,340	\$ 1,970	\$ 2,545	\$ 1,148
	Average final salary	\$ 7,534	\$ 2,840	\$ 3,146	\$ 3,651	\$ 3,773	\$ 4,481	\$ 4,838	\$ 3,679
	Number of retirees	7	514	386	355	485	447	187	2,381
Ten Years Ended June 30, 2023									
	Average monthly benefit	\$ 270	\$ 312	\$ 564	\$ 894	\$ 1,342	\$ 1,852	\$ 2,396	\$ 1,095
	Average final average salary	\$ 5,501	\$ 2,728	\$ 2,860	\$ 3,237	\$ 3,620	\$ 4,038	\$ 4,353	\$ 3,378
	Number of retirees	58	5,355	4,511	4,093	4,873	4,602	2,119	25,611

* Excludes legislators, elected officials, water patrol, and administrative law judges.

Note: COLA increases and temporary benefits payable under MSEP 2000 until age 62 are excluded from the above for comparison purposes.

Source: FY23 from MOSERS' MSEP Actuarial Valuation Report; prior to FY23 from MOSERS' Pension Administration System

Average Monthly Benefit Amounts (continued)

Last Ten Fiscal Years

Legislators in the MSEP

Members Retiring During Fiscal Year		Years Credited Service by Category							All Members
		<5	5-10	11-15	16-20	21-25	26-30	31+	
2014	Average monthly benefit	\$ 307	\$ 1,051	\$ 1,496	\$ 1,995	\$ 2,744	\$ 0	\$ 0	\$ 1,296
	Average final salary	\$ 2,993	\$ 2,993	\$ 2,993	\$ 2,993	\$ 2,993	\$ 0	\$ 0	\$ 2,993
	Number of retirees	2	6	3	2	1	0	0	14
2015	Average monthly benefit	\$ 0	\$ 977	\$ 1,735	\$ 2,162	\$ 0	\$ 0	\$ 0	\$ 1,315
	Average final salary	\$ 0	\$ 2,993	\$ 2,993	\$ 2,993	\$ 0	\$ 0	\$ 0	\$ 2,993
	Number of retirees	0	10	2	3	0	0	0	15
2016	Average monthly benefit	\$ 0	\$ 1,048	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,048
	Average final salary	\$ 0	\$ 2,993	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,993
	Number of retirees	0	7	0	0	0	0	0	7
2017	Average monthly benefit	\$ 499	\$ 954	\$ 1,580	\$ 1,995	\$ 0	\$ 0	\$ 0	\$ 1,041
	Average final salary	\$ 2,993	\$ 2,993	\$ 2,993	\$ 2,993	\$ 0	\$ 0	\$ 0	\$ 2,993
	Number of retirees	2	17	3	1	0	0	0	23
2018	Average monthly benefit	\$ 0	\$ 1,122	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,122
	Average final salary	\$ 0	\$ 2,993	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,993
	Number of retirees	0	6	0	0	0	0	0	6
2019	Average monthly benefit	\$ 0	\$ 1,017	\$ 1,496	\$ 2,117	\$ 2,744	\$ 0	\$ 0	\$ 1,327
	Average final salary	\$ 0	\$ 2,993	\$ 2,993	\$ 2,993	\$ 2,993	\$ 0	\$ 0	\$ 2,993
	Number of retirees	0	21	2	6	1	0	0	30
2020	Average monthly benefit	\$ 499	\$ 956	\$ 1,621	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,053
	Average final salary	\$ 2,993	\$ 2,993	\$ 2,993	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,993
	Number of retirees	1	6	2	0	0	0	0	9
2021	Average monthly benefit	\$ 0	\$ 984	\$ 1,507	\$ 1,995	\$ 0	\$ 0	\$ 0	\$ 1,155
	Average final salary	\$ 0	\$ 2,993	\$ 2,993	\$ 2,993	\$ 0	\$ 0	\$ 0	\$ 2,993
	Number of retirees	0	23	4	3	0	0	0	30
2022	Average monthly benefit	\$ 511	\$ 964	\$ 1,864	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,028
	Average final salary	\$ 3,068	\$ 3,068	\$ 3,068	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,068
	Number of retirees	1	5	1	0	0	0	0	7
2023	Average monthly benefit	\$ 511	\$ 900	\$ 1,487	\$ 2,314	\$ 0	\$ 0	\$ 0	\$ 1,224
	Average final salary	\$ 3,142	\$ 3,142	\$ 3,142	\$ 3,142	\$ 0	\$ 0	\$ 0	\$ 3,142
	Number of retirees	1	11	8	2	0	0	0	22
Ten Years Ended June 30, 2023									
	Average monthly benefit	\$ 448	\$ 989	\$ 1,549	\$ 2,105	\$ 2,744	\$ 0	\$ 0	\$ 1,190
	Average final average salary	\$ 3,025	\$ 3,011	\$ 3,044	\$ 3,011	\$ 2,993	\$ 0	\$ 0	\$ 3,016
	Number of retirees	7	112	25	17	2	0	0	163

Note: COLA increases are excluded from the above for comparison purposes.

Source: FY23 from MOSERS' MSEP Actuarial Valuation Report; prior to FY23 from MOSERS' Pension Administration System

Average Monthly Benefit Amounts (continued)

Last Ten Fiscal Years

Elected Officials in the MSEP

Members Retiring During Fiscal Year		Years Credited Service by Category							All Members
		<5	5-10	11-15	16-20	21-25	26-30	31+	
2014	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2015	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2016	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2017	Average monthly benefit	\$ 0	\$ 2,993	\$ 3,099	\$ 0	\$ 5,576	\$ 0	\$ 0	\$ 3,889
	Average final salary	\$ 0	\$ 8,979	\$ 7,207	\$ 0	\$ 11,152	\$ 0	\$ 0	\$ 9,113
	Number of retirees	0	1	1	0	1	0	0	3
2018	Average monthly benefit	\$ 1,496	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,496
	Average final salary	\$ 8,979	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 8,979
	Number of retirees	1	0	0	0	0	0	0	1
2019	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2020	Average monthly benefit	\$ 0	\$ 3,234	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,234
	Average final salary	\$ 0	\$ 9,703	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 9,703
	Number of retirees	0	1	0	0	0	0	0	1
2021	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2022	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2023	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
Ten Years Ended June 30, 2023									
	Average monthly benefit	\$ 1,496	\$ 3,114	\$ 3,099	\$ 0	\$ 5,576	\$ 0	\$ 0	\$ 3,279
	Average final average salary	\$ 8,979	\$ 9,341	\$ 7,207	\$ 0	\$ 11,152	\$ 0	\$ 0	\$ 9,204
	Number of retirees	1	2	1	0	1	0	0	5

Note: COLA increases are excluded from the above for comparison purposes.

Source: FY23 from MOSERS' MSEP Actuarial Valuation Report; prior to FY23 from MOSERS' Pension Administration System

Average Monthly Benefit Amounts (continued)

Last Ten Fiscal Years

Uniformed Water Patrol in the MSEP

Members Retiring During Fiscal Year		Years Credited Service by Category							All Members
		<5	5-10	11-15	16-20	21-25	26-30	31+	
2014	Average monthly benefit	\$ 0	\$ 0	\$ 780	\$ 0	\$ 0	\$ 0	\$ 0	\$ 780
	Average final salary	\$ 0	\$ 0	\$ 2,507	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,507
	Number of retirees	0	0	1	0	0	0	0	1
2015	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 4,539	\$ 4,539
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 6,321	\$ 6,321
	Number of retirees	0	0	0	0	0	0	1	1
2016	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 4,221	\$ 4,221
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 6,375	\$ 6,375
	Number of retirees	0	0	0	0	0	0	2	2
2017	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 1,079	\$ 0	\$ 0	\$ 0	\$ 1,079
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 2,846	\$ 0	\$ 0	\$ 0	\$ 2,846
	Number of retirees	0	0	0	1	0	0	0	1
2018	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 1,492	\$ 0	\$ 0	\$ 0	\$ 1,492
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 4,347	\$ 0	\$ 0	\$ 0	\$ 4,347
	Number of retirees	0	0	0	1	0	0	0	1
2019	Average monthly benefit	\$ 0	\$ 0	\$ 671	\$ 0	\$ 0	\$ 0	\$ 0	\$ 671
	Average final salary	\$ 0	\$ 0	\$ 2,659	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,659
	Number of retirees	0	0	1	0	0	0	0	1
2020	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2021	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 5,026	\$ 5,026
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 7,809	\$ 7,809
	Number of retirees	0	0	0	0	0	0	1	1
2022	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2023	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
Ten Years Ended June 30, 2023									
	Average monthly benefit	\$ 0	\$ 0	\$ 726	\$ 1,286	\$ 0	\$ 0	\$ 4,502	\$ 2,754
	Average final average salary	\$ 0	\$ 0	\$ 5,166	\$ 7,193	\$ 0	\$ 0	\$ 26,880	\$ 39,239
	Number of retirees	0	0	2	2	0	0	4	8

Note: COLA increases and temporary benefits payable under MSEP 2000 until age 62 are excluded from the above for comparison purposes.

Source: FY23 from MOSERS' MSEP Actuarial Valuation Report; prior to FY23 from MOSERS' Pension Administration System

Average Monthly Benefit Amounts (continued)

Last Ten Fiscal Years

Administrative Law Judges and Legal Advisors in the MSEP

Members Retiring During Fiscal Year		Years Credited Service by Category								All Members
		<5	5-10	11-15	16-20	21-25	26-30	31+		
2014	Average monthly benefit	\$ 0	\$ 2,433	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,433	
	Average final salary	\$ 0	\$ 8,146	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 8,146	
	Number of retirees	0	1	0	0	0	0	0	1	
2015	Average monthly benefit	\$ 0	\$ 2,259	\$ 0	\$ 3,012	\$ 0	\$ 0	\$ 0	\$ 2,636	
	Average final salary	\$ 0	\$ 7,936	\$ 0	\$ 6,023	\$ 0	\$ 0	\$ 0	\$ 6,980	
	Number of retirees	0	1	0	1	0	0	0	2	
2016	Average monthly benefit	\$ 0	\$ 853	\$ 0	\$ 0	\$ 3,811	\$ 0	\$ 0	\$ 3,072	
	Average final salary	\$ 0	\$ 3,508	\$ 0	\$ 0	\$ 7,623	\$ 0	\$ 0	\$ 6,594	
	Number of retirees	0	1	0	0	3	0	0	4	
2017	Average monthly benefit	\$ 401	\$ 0	\$ 0	\$ 5,065	\$ 0	\$ 5,298	\$ 5,273	\$ 4,009	
	Average final salary	\$ 5,777	\$ 0	\$ 0	\$ 10,129	\$ 0	\$ 10,596	\$ 10,546	\$ 9,262	
	Number of retirees	1	0	0	1	0	1	1	4	
2018	Average monthly benefit	\$ 0	\$ 0	\$ 3,860	\$ 0	\$ 5,313	\$ 0	\$ 0	\$ 4,950	
	Average final salary	\$ 0	\$ 0	\$ 7,720	\$ 0	\$ 10,625	\$ 0	\$ 0	\$ 9,899	
	Number of retirees	0	0	1	0	3	0	0	4	
2019	Average monthly benefit	\$ 0	\$ 0	\$ 4,353	\$ 0	\$ 5,115	\$ 0	\$ 0	\$ 4,734	
	Average final salary	\$ 0	\$ 0	\$ 8,707	\$ 0	\$ 10,230	\$ 0	\$ 0	\$ 9,469	
	Number of retirees	0	0	1	0	1	0	0	2	
2020	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 4,630	\$ 5,323	\$ 0	\$ 4,861	
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 9,260	\$ 10,647	\$ 0	\$ 9,722	
	Number of retirees	0	0	0	0	2	1	0	3	
2021	Average monthly benefit	\$ 1,001	\$ 1,559	\$ 0	\$ 0	\$ 5,115	\$ 4,926	\$ 0	\$ 3,150	
	Average final salary	\$ 4,969	\$ 4,828	\$ 0	\$ 0	\$ 10,230	\$ 9,851	\$ 0	\$ 7,470	
	Number of retirees	1	1	0	0	1	1	0	4	
2022	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 5,323	\$ 0	\$ 5,323	
	Average final salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 10,647	\$ 0	\$ 10,647	
	Number of retirees	0	0	0	0	0	1	0	1	
2023	Average monthly benefit	\$ 1,030	\$ 1,913	\$ 3,750	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,152	
	Average final salary	\$ 7,808	\$ 5,708	\$ 7,500	\$ 0	\$ 0	\$ 0	\$ 0	\$ 6,681	
	Number of retirees	1	2	1	0	0	0	0	4	
Ten Years Ended June 30, 2023										
	Average monthly benefit	\$ 811	\$ 1,822	\$ 3,988	\$ 4,039	\$ 4,686	\$ 5,218	\$ 5,273	\$ 3,669	
	Average final average salary	\$ 6,185	\$ 5,972	\$ 7,976	\$ 8,076	\$ 9,372	\$ 10,435	\$ 10,546	\$ 8,292	
	Number of retirees	3	6	3	2	10	4	1	29	

Note: COLA increases are excluded from the above for comparison purposes.

Source: FY23 from MOSERS' MSEP Actuarial Valuation Report; prior to FY23 from MOSERS' Pension Administration System

Average Monthly Benefit Amounts (continued)

Last Ten Fiscal Years

Judicial Plan

Members Retiring During Fiscal Year		Years Credited Service by Category							All Members
		<5	5-10	11-15	16-20	21-25	26-30	31+	
2014	Average monthly benefit	\$ 0	\$ 2,310	\$ 4,571	\$ 5,151	\$ 5,117	\$ 4,869	\$ 5,293	\$ 4,313
	Average final salary	\$ 0	\$ 8,259	\$ 9,143	\$ 10,303	\$ 10,233	\$ 9,738	\$ 10,585	\$ 9,435
	Number of retirees	0	4	6	3	3	1	1	18
2015	Average monthly benefit	\$ 1,114	\$ 3,140	\$ 5,572	\$ 5,572	\$ 5,970	\$ 5,572	\$ 5,848	\$ 5,392
	Average final salary	\$ 11,143	\$ 9,419	\$ 11,143	\$ 11,143	\$ 11,940	\$ 11,143	\$ 11,697	\$ 11,253
	Number of retirees	1	3	7	10	7	4	7	39
2016	Average monthly benefit	\$ 0	\$ 4,193	\$ 5,575	\$ 5,452	\$ 6,166	\$ 5,844	\$ 0	\$ 5,545
	Average final salary	\$ 0	\$ 11,688	\$ 11,503	\$ 10,903	\$ 12,332	\$ 11,688	\$ 0	\$ 11,569
	Number of retirees	0	2	3	5	4	2	0	16
2017	Average monthly benefit	\$ 602	\$ 4,487	\$ 5,506	\$ 6,054	\$ 5,878	\$ 6,178	\$ 5,931	\$ 5,293
	Average final salary	\$ 8,136	\$ 11,696	\$ 11,367	\$ 12,108	\$ 11,756	\$ 12,355	\$ 11,861	\$ 11,574
	Number of retirees	2	3	2	4	6	4	2	23
2018	Average monthly benefit	\$ 0	\$ 4,549	\$ 5,525	\$ 6,114	\$ 5,989	\$ 6,238	\$ 6,365	\$ 5,955
	Average final salary	\$ 0	\$ 12,477	\$ 11,947	\$ 12,227	\$ 11,978	\$ 12,477	\$ 12,730	\$ 12,259
	Number of retirees	0	1	4	4	4	4	3	20
2019	Average monthly benefit	\$ 603	\$ 0	\$ 5,658	\$ 6,025	\$ 6,037	\$ 6,074	\$ 6,074	\$ 5,653
	Average final salary	\$ 9,520	\$ 0	\$ 11,371	\$ 12,051	\$ 12,075	\$ 12,147	\$ 12,147	\$ 11,758
	Number of retirees	2	0	10	13	7	2	4	38
2020	Average monthly benefit	\$ 0	\$ 3,163	\$ 5,389	\$ 6,415	\$ 6,237	\$ 6,256	\$ 6,415	\$ 5,875
	Average final salary	\$ 0	\$ 12,653	\$ 10,927	\$ 12,830	\$ 12,501	\$ 12,511	\$ 12,830	\$ 12,132
	Number of retirees	0	1	5	1	7	4	1	19
2021	Average monthly benefit	\$ 633	\$ 4,525	\$ 5,961	\$ 6,229	\$ 6,319	\$ 7,049	\$ 6,672	\$ 6,017
	Average final salary	\$ 12,653	\$ 13,164	\$ 11,923	\$ 12,457	\$ 12,638	\$ 14,099	\$ 13,345	\$ 12,738
	Number of retirees	1	1	5	7	2	3	3	22
2022	Average monthly benefit	\$ 0	\$ 2,710	\$ 6,218	\$ 6,469	\$ 6,729	\$ 6,606	\$ 6,616	\$ 6,173
	Average final salary	\$ 0	\$ 9,374	\$ 12,736	\$ 12,937	\$ 13,459	\$ 13,211	\$ 13,233	\$ 12,779
	Number of retirees	0	2	4	3	5	3	4	21
2023	Average monthly benefit	\$ 0	\$ 0	\$ 6,162	\$ 6,498	\$ 6,360	\$ 6,614	\$ 6,388	\$ 6,443
	Average final salary	\$ 0	\$ 0	\$ 12,652	\$ 12,996	\$ 12,720	\$ 13,045	\$ 12,775	\$ 12,893
	Number of retirees	0	0	7	12	5	11	3	38
Ten Years Ended June 30, 2023									
	Average monthly benefit	\$ 693	\$ 3,421	\$ 5,615	\$ 6,013	\$ 6,101	\$ 6,300	\$ 6,198	\$ 5,712
	Average final average salary	\$ 9,851	\$ 10,400	\$ 11,422	\$ 12,027	\$ 12,205	\$ 12,547	\$ 12,396	\$ 11,894
	Number of retirees	6	17	53	62	50	38	28	254

Note: COLA increases are excluded from the above for comparison purposes.

Source: FY23 from MOSERS' Judicial Plan Actuarial Valuation Reports; prior to FY23 from MOSERS' Pension Administration System

Retirees and Beneficiaries Tabulated by Fiscal Year of Retirement

As of June 30, 2023

MSEP

Fiscal Year of Retirement	Number	Total Annual Benefit	Average Monthly Benefit
1983 and prior	22	\$ 135,640	\$ 514
1984	11	97,276	737
1985	20	171,001	713
1986	27	255,840	790
1987	40	444,648	926
1988	47	808,681	1,434
1989	61	1,208,721	1,651
1990	67	1,015,946	1,264
1991	100	2,118,866	1,766
1992	142	2,707,084	1,589
1993	198	4,226,424	1,779
1994	208	4,180,578	1,675
1995	320	6,440,594	1,677
1996	366	8,163,674	1,859
1997	408	8,823,839	1,802
1998	500	11,466,607	1,911
1999	618	14,073,594	1,898
2000	691	15,358,145	1,852
2001	1,562	34,104,295	1,819
2002	1,107	21,159,964	1,593
2003	1,246	24,804,645	1,659
2004	1,756	32,845,880	1,559
2005	1,237	21,379,726	1,440
2006	1,428	23,319,383	1,361
2007	1,721	28,947,190	1,402
2008	1,762	28,542,378	1,350
2009	1,852	30,442,894	1,370
2010	1,942	30,613,073	1,314
2011	2,506	41,378,158	1,376
2012	2,368	36,217,526	1,275
2013	2,473	36,482,966	1,229
2014	2,482	37,434,444	1,257
2015	2,810	43,444,846	1,288
2016	2,811	44,501,807	1,319
2017	2,769	47,892,097	1,441
2018	2,914	50,361,358	1,440
2019	2,664	45,995,650	1,439
2020	2,642	43,543,262	1,373
2021	3,019	52,587,849	1,452
2022	3,263	56,553,689	1,444
2023	2,529	43,599,118	1,437
	54,709	\$ 937,849,356	\$ 1,429

Source: MOSERS' MSEP Actuarial Valuation Report as of June 30, 2023

Retirees and Beneficiaries Tabulated by Fiscal Year of Retirement (continued)

As of June 30, 2023

Judicial Plan

Fiscal Year of Retirement	Number	Total Annual Benefit	Average Monthly Benefit
1983 and prior	3	\$ 60,072	\$ 1,669
1984	0	0	0
1985	0	0	0
1986	0	0	0
1987	5	266,236	4,437
1988	0	0	0
1989	1	31,956	2,663
1990	2	71,709	2,988
1991	5	240,921	4,015
1992	1	93,820	7,818
1993	3	152,857	4,246
1994	2	100,452	4,186
1995	6	459,324	6,380
1996	3	179,976	4,999
1997	4	272,628	5,680
1998	7	431,508	5,137
1999	7	445,908	5,308
2000	6	521,244	7,240
2001	13	1,261,392	8,086
2002	12	1,074,199	7,460
2003	12	1,012,272	7,030
2004	12	921,912	6,402
2005	12	1,218,641	8,463
2006	10	424,300	3,536
2007	38	3,072,744	6,738
2008	21	1,635,963	6,492
2009	29	1,934,630	5,559
2010	12	828,732	5,755
2011	30	2,199,898	6,111
2012	15	873,238	4,851
2013	26	2,025,002	6,490
2014	20	1,350,208	5,626
2015	47	4,025,232	7,137
2016	20	1,632,464	6,802
2017	29	2,205,517	6,338
2018	31	2,603,339	6,998
2019	43	3,473,302	6,731
2020	25	1,913,223	6,377
2021	30	2,161,150	6,003
2022	33	2,357,054	5,952
2023	44	3,483,913	6,598
	619	\$ 47,016,936	\$ 6,330

Source: MOSERS' Judicial Plan Actuarial Valuation Report as of June 30, 2023

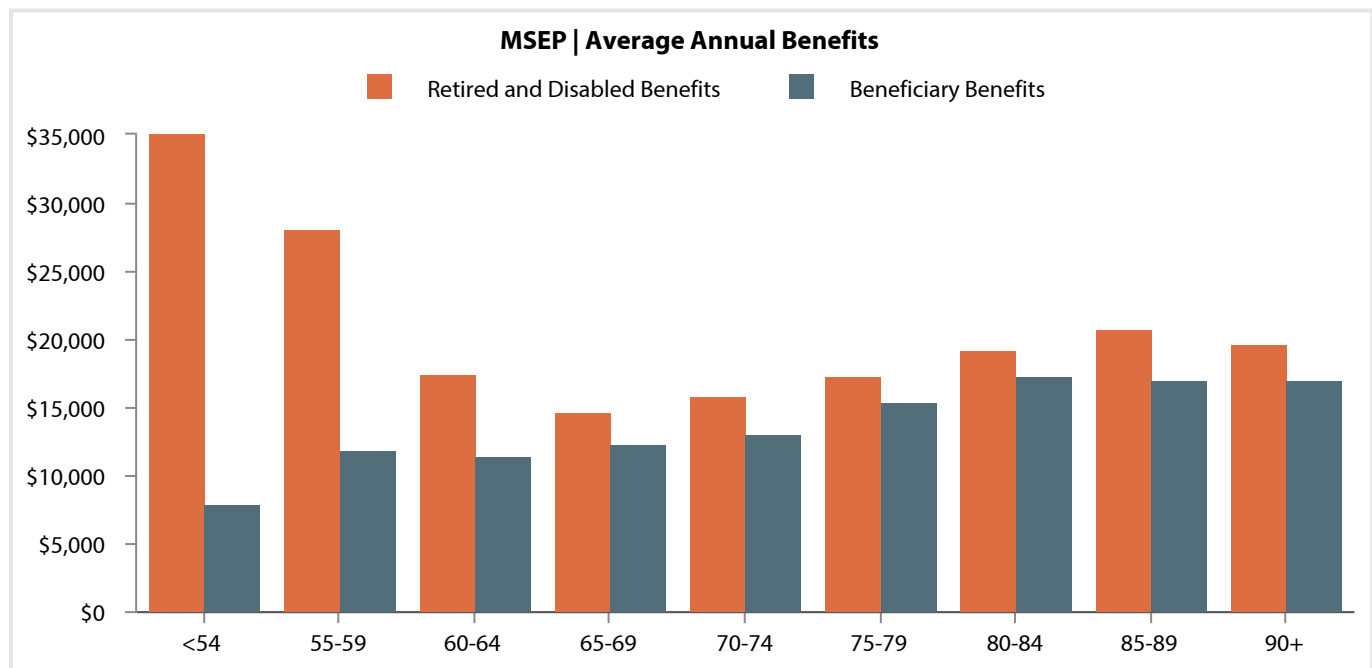
Benefits Tabulated by Attained Ages of Benefit Recipients

As of June 30, 2023

MSEP

Attained Ages	Retired and Disabled		Beneficiaries		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
<54	476	\$ 17,151,876	555	\$ 4,410,936	1,031	\$ 21,562,812
55-59	2,747	77,024,916	314	3,761,268	3,061	80,786,184
60-64	7,556	132,286,140	511	5,859,024	8,067	138,145,164
65-69	11,593	170,715,912	781	9,697,188	12,374	180,413,100
70-74	11,453	182,000,928	1,049	13,711,236	12,502	195,712,164
75-79	7,798	135,582,132	969	14,956,128	8,767	150,538,260
80-84	4,005	77,412,000	896	15,596,940	4,901	93,008,940
85-89	1,885	38,963,184	688	11,757,324	2,573	50,720,508
90+	959	18,900,684	474	8,061,540	1,433	26,962,224
Totals	48,472	\$ 850,037,772	6,237	\$ 87,811,584	54,709	\$ 937,849,356

Average age at retirement: 61.3 years • Average age now: 71.6 years



Average annual benefit : \$17,537 retired and disabled • \$14,079 beneficiaries

Source: MOSERS' MSEP Actuarial Valuation Report as of June 30, 2023

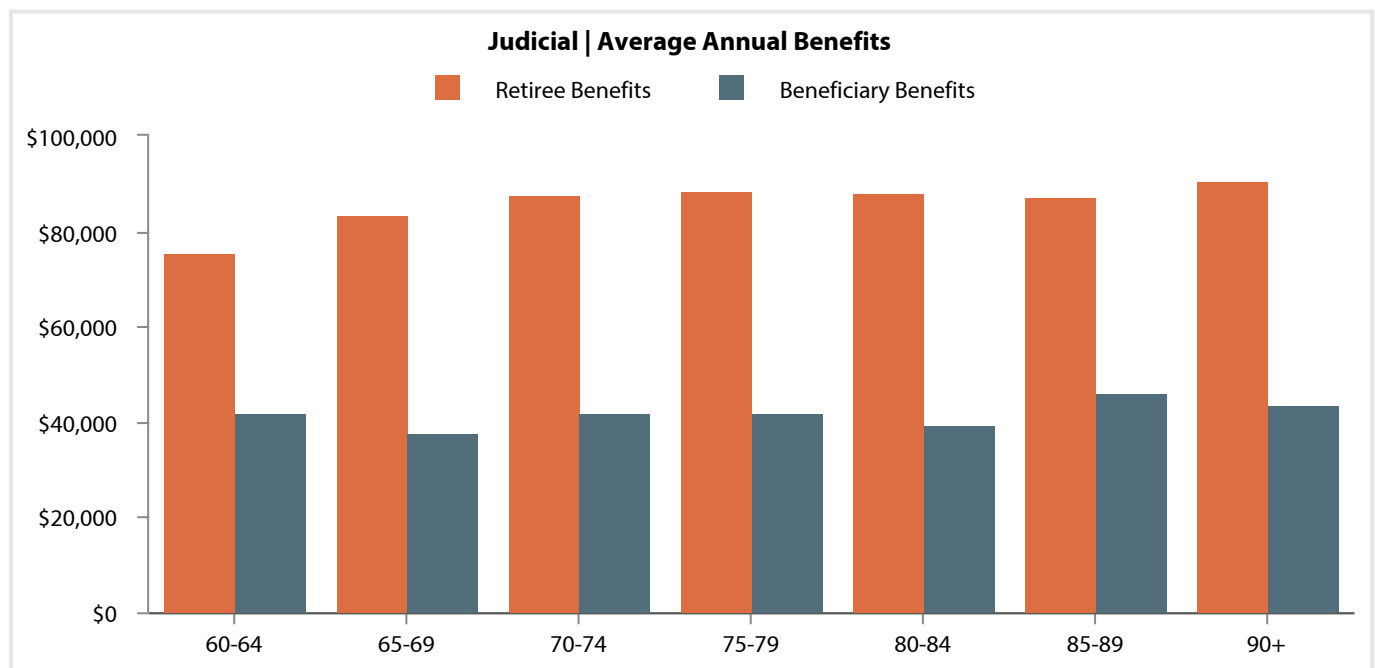
Benefits Tabulated by Attained Ages of Benefit Recipients (continued)

As of June 30, 2023

Judicial Plan

Attained Ages	Retirees		Beneficiaries		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
60-64	29	\$ 2,190,252	9	\$ 377,472	38	\$ 2,567,724
65-69	64	5,363,628	16	604,512	80	5,968,140
70-74	145	12,720,948	17	711,420	162	13,432,368
75-79	120	10,624,212	33	1,382,136	153	12,006,348
80-84	59	5,195,916	24	944,304	83	6,140,220
85-89	29	2,533,236	21	972,540	50	3,505,776
90+	23	2,089,464	30	1,306,896	53	3,396,360
Totals	469	\$ 40,717,656	150	\$ 6,299,280	619	\$ 47,016,936

Average age at retirement: 65.8 years • Average age now: 76.8 years



Average annual benefit: \$86,818 retirees • \$41,995 beneficiaries

Source: MOSERS' Judicial Plan Actuarial Valuation Report as of June 30, 2023

Principal Participating Employers

Current Year and Nine Years Ago

Participating Employer	2023			2014		
	Covered Employees	Rank	Percent of Membership	Covered Employees	Rank	Percent of Membership
State of Missouri	38,109	1	86.9%	44,228	1	86.8%
Missouri State University	1,784	2	4.0	1,870	2	3.7
University of Central Missouri	820	3	1.9	1,062	3	2.1
Southeast Missouri State University	680	4	1.6	934	4	1.8
Northwest Missouri State University	558	5	1.3	573	6	1.1
Truman State University	468	6	1.1	635	5	1.2
Missouri Southern State University	319	7	0.7	450	7	0.9
Missouri Western State University	294	8	0.7	410	8	0.8
Lincoln University	270	9	0.6	368	9	0.7
State Technical College of Missouri	203	10	0.5	168	10	0.3
All others	287		0.7	328		0.6
Total	43,792		100.0%	51,026		100.0%

Source: MOSERS' Pension Administration System

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Relay Missouri numbers are 711 (Voice) or (800) 735-2966 (TTY).

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