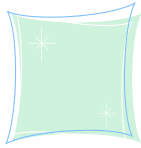




SCERA Actuarial Board Meeting

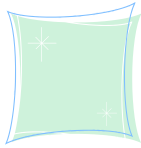
Actuarial Report Review

May 4, 2023



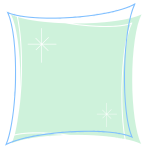
SCERA Actuarial Analysis of Plan Experience

SCERA Actuarial Analysis of Financial Experience						
(K\$)	2022	2021	2020	2019	2018	5 Year Total
Beginning of the Year UAAL Liability (Surplus)	244546	282715	332031	404732	359557	
Source of Actuarial (Gain) Loss:						
Compensation Increase Greater/(Less) than Expected	12509	(5243)	17286	(34651)	11293	1194
Investment Experience recognized	39826	(99099)	(41110)	(32718)	13629	(119472)
Other Experience	(1211)	(7266)	(983)	(2786)	661	(11585)
(Greater)/Less than Expected Contributions	4298	(1976)	(255)	12332	(493)	13906
Composite (Gain) Loss for the Year - Total	55422	(113584)	(25062)	(57823)	25090	(115957)
Other Items Impacting UAAL:						
Assumption Change (Economic and Demographic)		96768			31798	128566
Interest Accrual on UAAL Balance	15353	18586	22003	27009	24876	107827
County's Additional UAAL Payment	(5795)	(1873)	(7128)			(14796)
Expected UAAL Contribution Payment	(37934)	(38066)	(39129)	(41887)	(36589)	(193605)
Other Items Impacting UAAL - Total	(28376)	75415	(24254)	(14878)	20085	27992
End of the Year UAAL Liability (Surplus)	271592	244546	282715	332031	404732	



SCERA Actuarial Analysis of Plan Experience

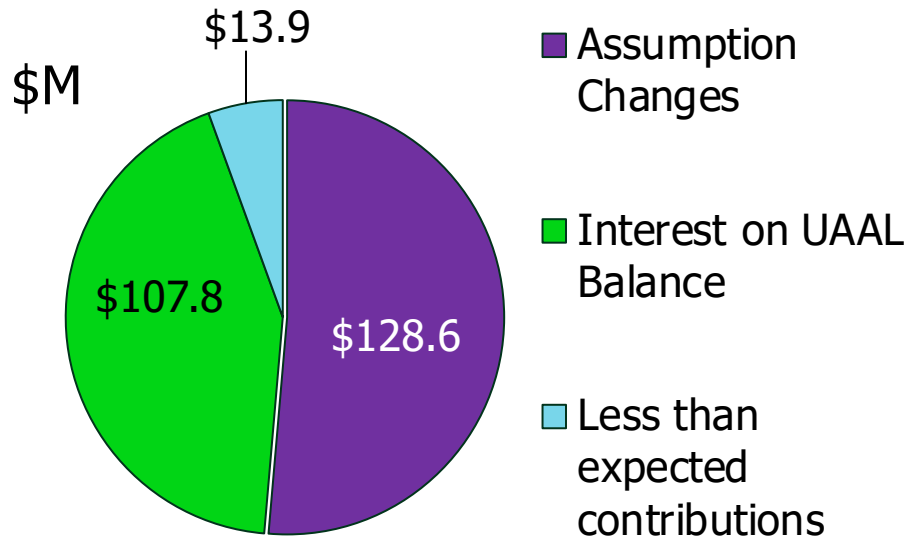
SCERA Actuarial Analysis of Financial Experience						
(K\$)	2017	2016	2015	2014	2013	5 Year Total
Beginning of the Year UAAL Liability (Surplus)	408227	405922	343043	449443	494240	
Source of Actuarial (Gain) Loss:						
Compensation Increase Greater (Less) than expected	4586	5983	(12829)	(64347)	2926	(63681)
Investment Experience recognized	(44256)	891	(3307)	(44167)	(71109)	(161948)
Other Experience	(3890)	(859)	(2546)	(5254)	3491	(9058)
(Greater)/Less than Expected Contributions	4568	4094	(3519)	10343		15486
Composite (Gain) Loss for the Year	(38992)	10109	(22201)	(103425)	(64692)	(219201)
Other Items Impacting UAAL:						
Assumption Changes			93686			93686
Interest Accrual on UAAL Balance	28358	28249	24727	32514	36447	150295
Other			(3661)		(16552)	(20213)
Expected employer/member contributions less Normal Cost	(38036)	(36053)	(29672)	(35489)		(139250)
Other Items Impacting UAAL	(9678)	(7804)	85080	(2975)	19895	84518
End of the Year UAAL Liability (Surplus)	359557	408227	405922	343043	449443	



SCERA Actuarial Experience

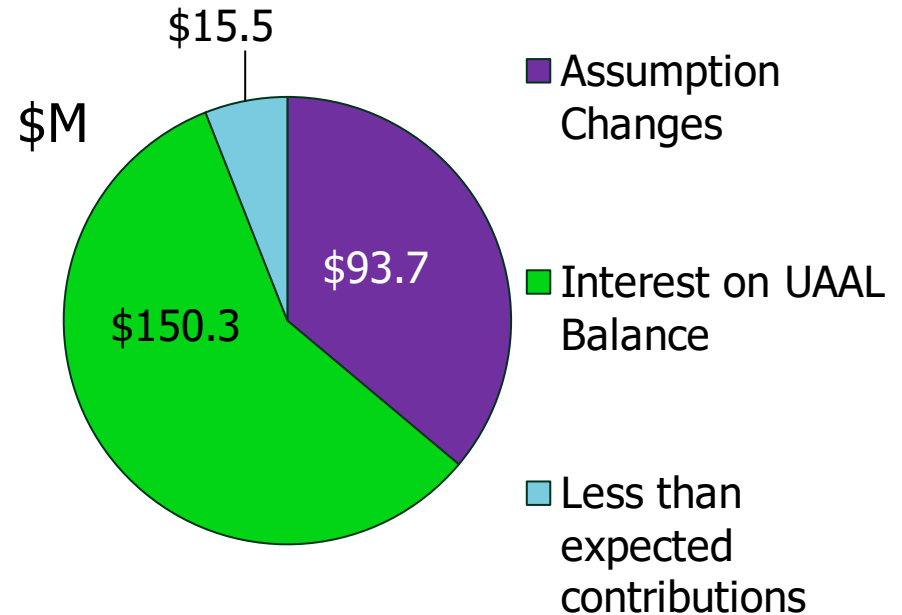
2018 to 2022

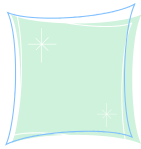
Items Increasing UAAL –
5 Year Summary



2013 to 2017

Items Increasing UAAL –
5 Year Summary





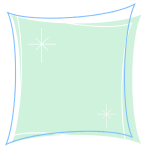
SCERA Current Active and Deferred Membership

Active General				Active Safety			
Plan	Number	Avg. Age	Avg. Service	Plan	Number	Avg. Age	Avg. Service
Plan A Legacy	1391	51.7	16.4	Plan A Legacy	365	46.4	16.4
Plan B PEPR	2042	41.7	4.2	Plan B PEPR	305	35.6	4.4
Total	3433			Total	670		

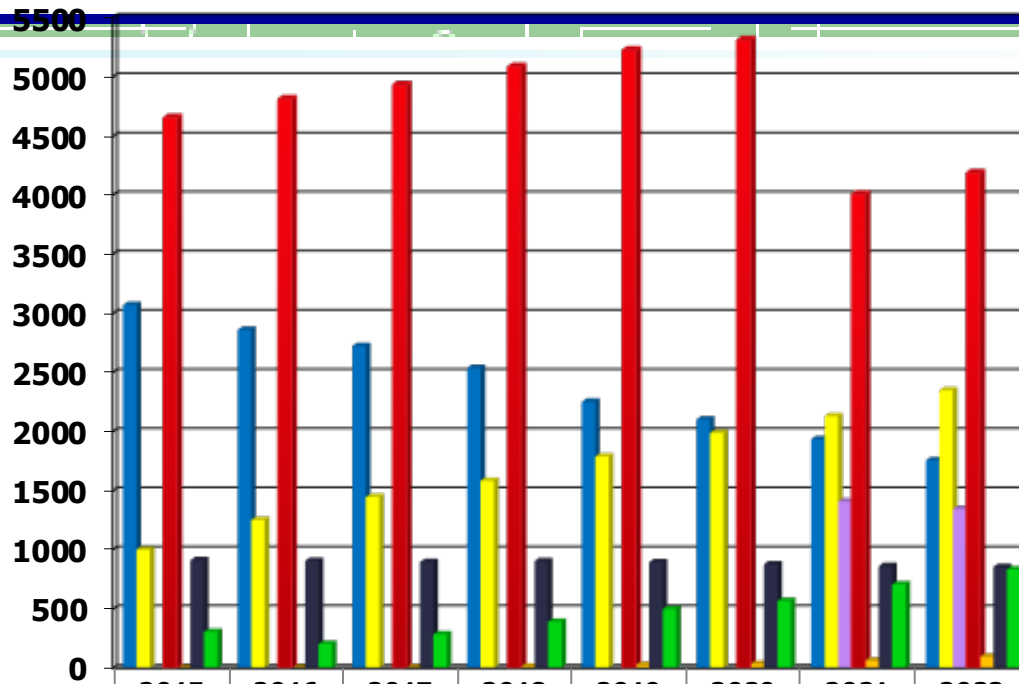
Total General & Safety Active
Plan A 1756 (43%)

Total General & Safety Active
Plan B 2347 (57%)

Deferred (Inactive)					
Plan - General	Number	Avg. Age	Plan - Safety	Number	Avg. Age
Plan A Legacy	693	50.0	Plan A Legacy	162	46.4
Plan B PEPR	726	41.8	Plan B PEPR	107	32.8
Total	1419			269	



SCERA Total Membership



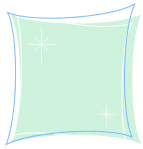
	2015	2016	2017	2018	2019	2020	2021	2022
■ Active Plan A	3070	2860	2723	2537	2252	2103	1936	1756
■ Active Plan B	1001	1252	1447	1584	1788	1987	2130	2347
■ Retired/Bene Pre-A							1409	1345
■ Retired/Bene Plan A	4653	4810	4931	5083	5224	5311	4006	4186
■ Retired/Bene Plan B	0	2	5	13	26	36	63	96
■ Deferred Plan A	912	907	896	904	895	877	862	855
■ Deferred Plan B	306	205	285	391	500	568	707	833

2022 Retirees

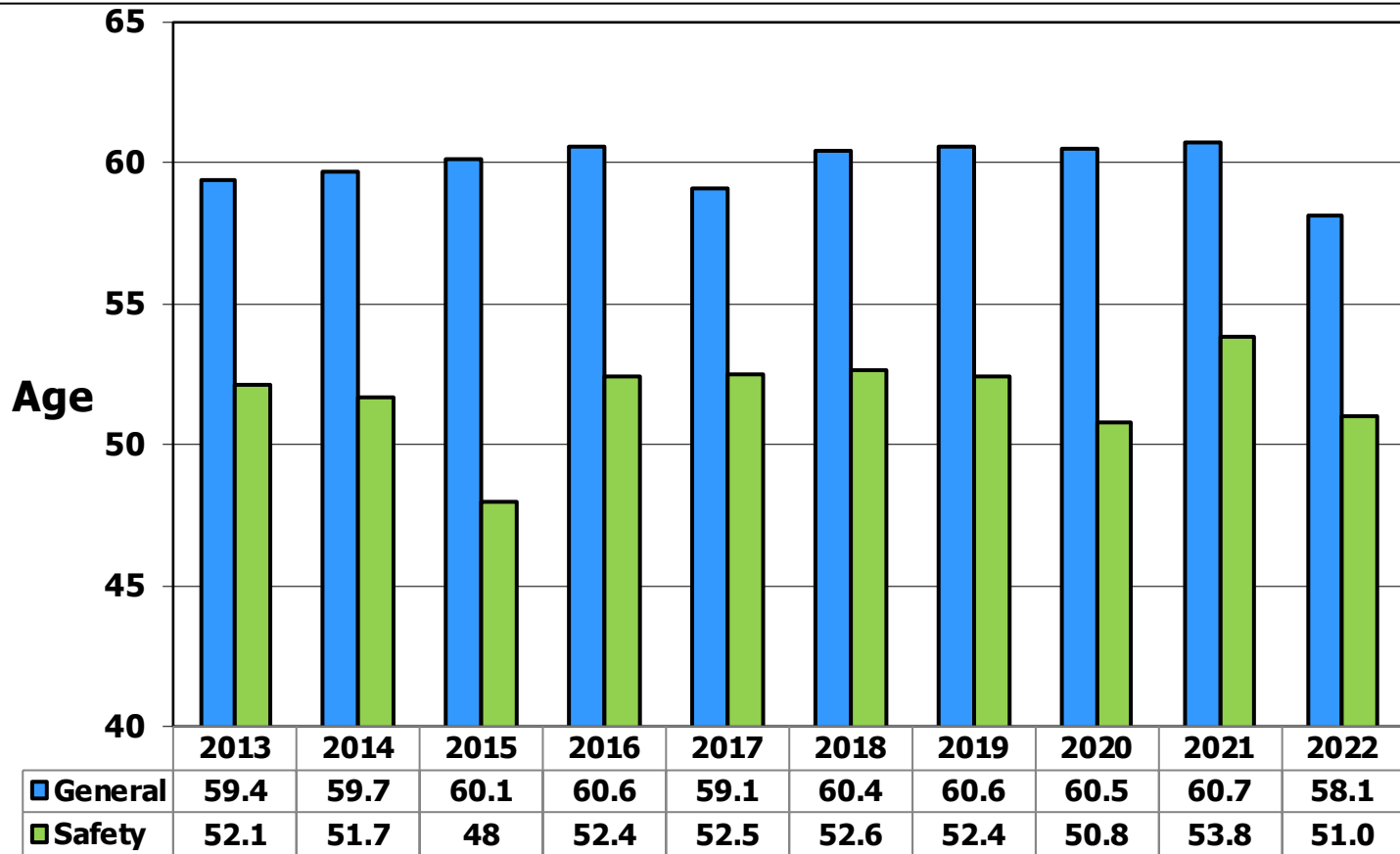
Gen Pre-Plan A	860
Gen Plan A	3069
Gen Plan B	78
Safety Pre-Plan A	337
Safety Plan A	601
Safety Plan B	16
Total	4961

2022 Beneficiaries

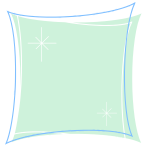
Pre-Plan A	148
Plan A	516
Plan B	2



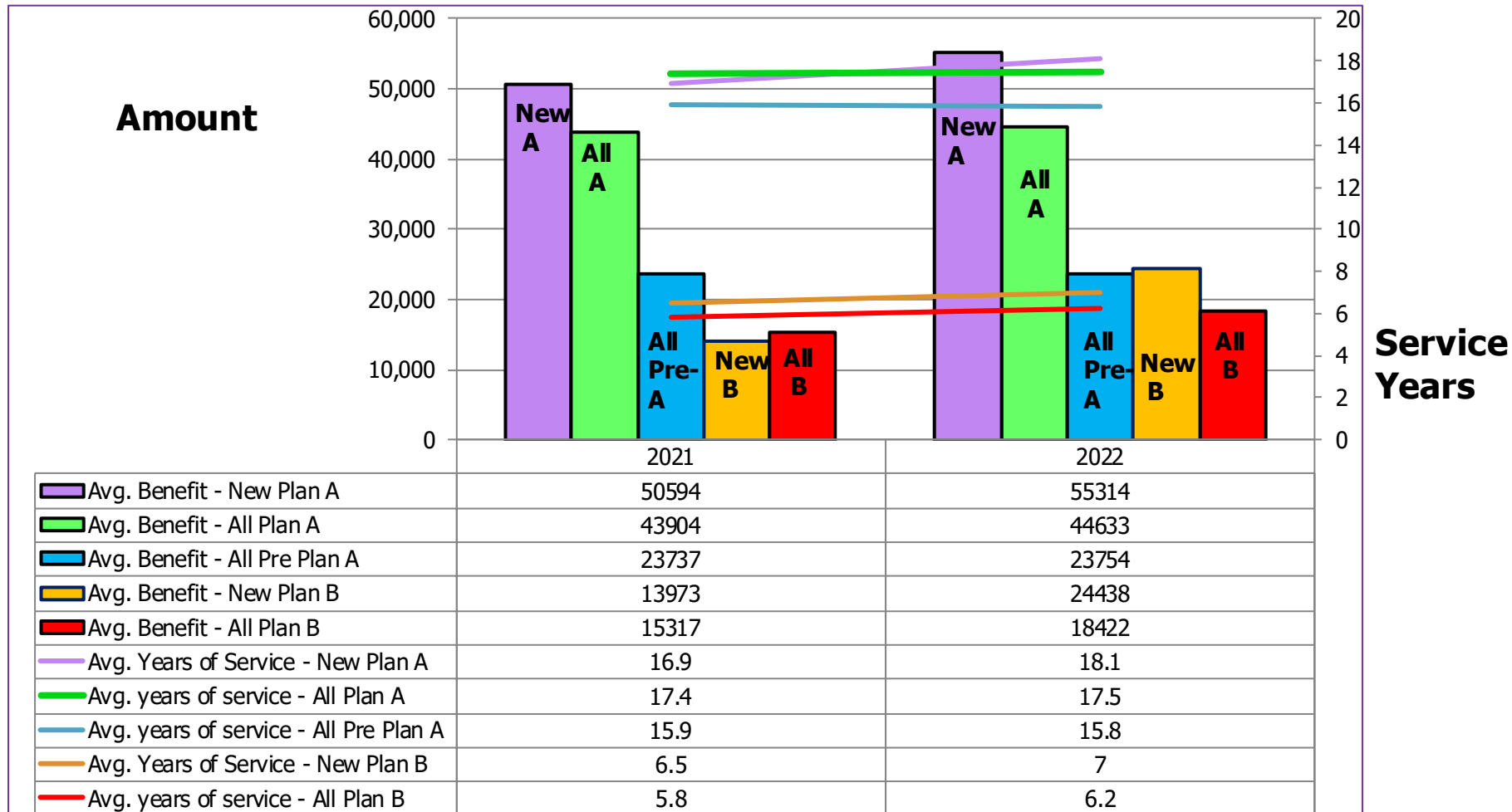
SCERA Retirements - Average Age at Retirement as of 12-31-22

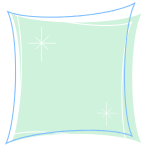


Average age at Retirement	
All Retirees as of 2022	56.8
New Retirees in 2022 (187 General, 44 Safety)	58.3



SCERA Average Annual Retirement Benefit 2021 - 2022

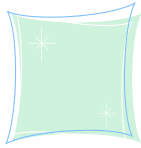




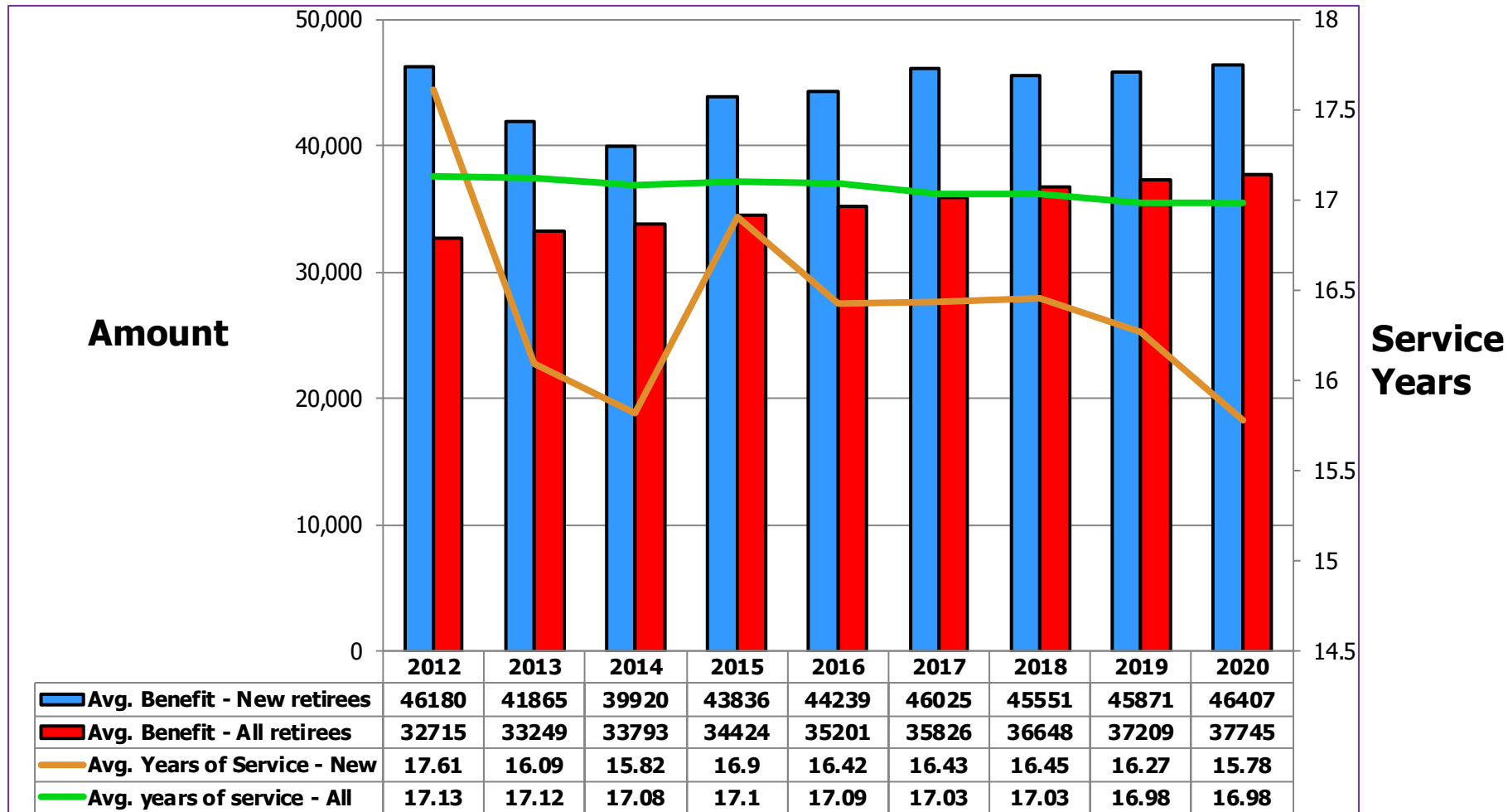
SCERA Average and Median Annual Retirement Benefit and Average Service 2022

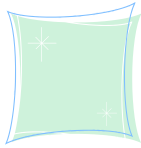
Plan	Number	Average Annual Benefit	Median Annual Benefit	Average Years of Service at Retirement
General Pre-Plan A	860	\$18,405	\$15,338	14.3
General Plan A	3069	\$41,449	\$34,263	17.3
General Plan B	78	\$13,819	\$13,468	6.5
Safety Pre-Plan A	337	\$37,403	\$31,220	16.1
Safety Plan A	601	\$60,892	\$55,796	18.4
Safety Plan B	16	\$40,860	\$45,989	4.8

*Note: Median amounts shown for illustrative purposes. Actuary uses averages in the actuarial valuation which are universally included by other pension systems in valuation reports and as such useful when auditing an actuarial service provider.

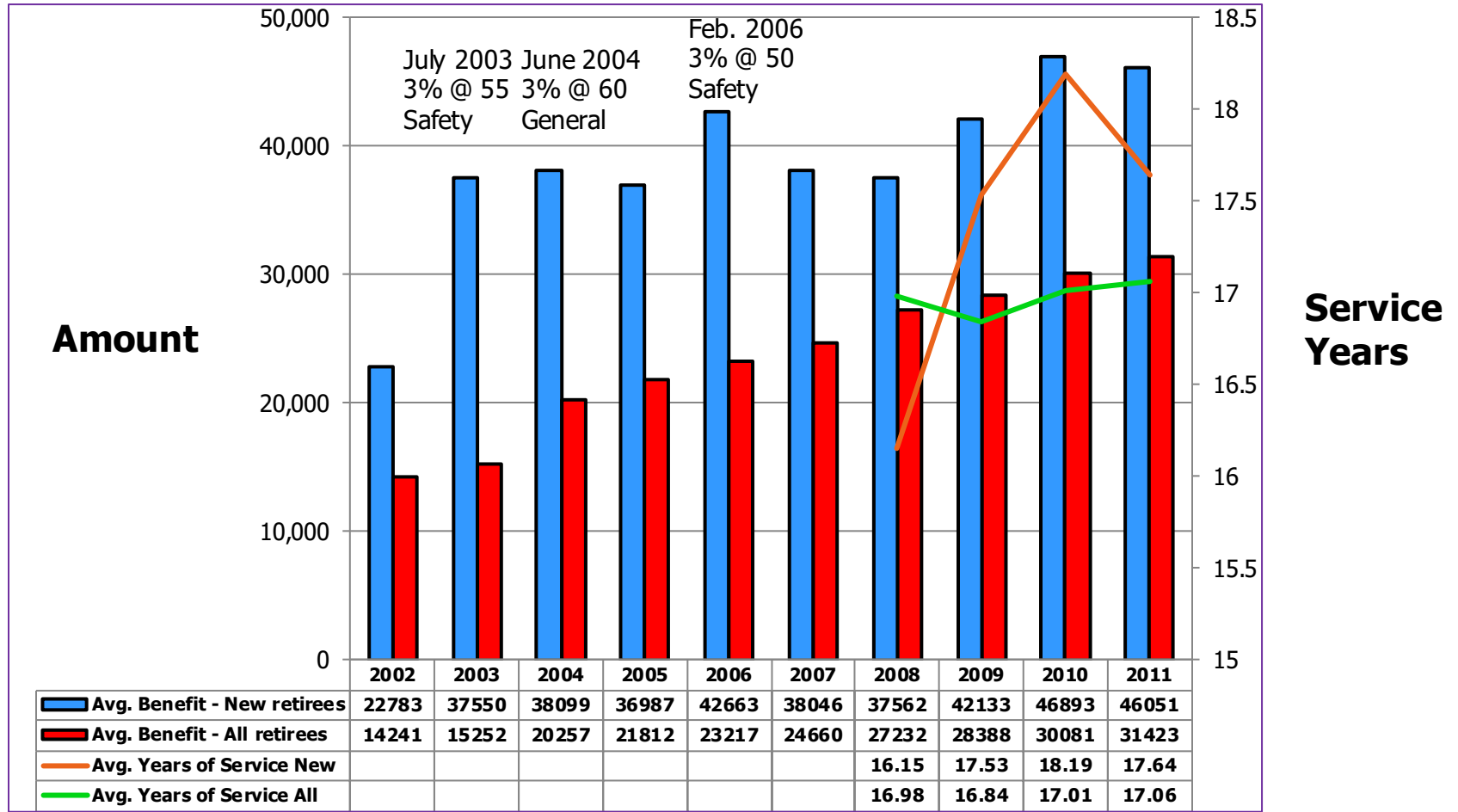


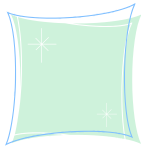
SCERA Average Annual Retirement Benefit 2012 - 2020





SCERA Average Annual Retirement Benefit 2002 - 2011



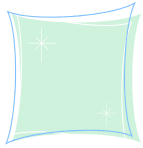


SCERA Market Value Investment Returns (net of fees)

Calendar year-end information

	Annualized Return 12/31/22	Annualized Return 12/31/21	Annualized Return 12/31/20	Annualized Return 12/31/19	Annualized Return 12/31/18
1 Year	-6.18%	16.42%	8.08%	16.27%	-3.3%
3 Year	5.70%	13.52%	6.71%	9.35%	7.0%
5 Year 2018 - 2022	5.76%	10.47%	8.99%	7.66%	5.6%
10 Year 2013 - 2022	7.96%	10.11%	8.51%	8.95%	9.1%
15 Year 2008 - 2022	5.69%	6.75%	6.62%	6.65%	6.3%
20 Year 2003 - 2022	7.52%	7.18%	5.99%	5.54%	5.5%
30 Year 1993 - 2022	7.36%	7.90%	8.15%	8.05%	8.1%

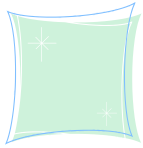
Sourced from Aon Investment Consulting



Market Stabilization Reserve (rounded)

	Inv. Return Surplus (Deficit)	2022 Recognized	2023 Deferred	2024 Deferred	2025 Deferred	2026 Deferred	Total Deferred 2023 to 2026
2018	(290.2M)	(58.0M)	0				0M
2019	231.5M	46.3M	46.3M				46.3M
2020	30.6M	6.1M	6.1M	6.1M			12.2M
2021	316.1M	63.2M	63.2M	63.2M	63.2M		189.6M
2022	(487.2M)	(97.4M)	(97.4M)	(97.4M)	(97.4M)	(97.4M)	(389.7M)
Total recognized		(39.8M)					
Total Deferred Returns							(141.5M)

Note: Positive Recognition Adds To/Negative Recognition Reduces Valuation Value of Assets



SCERA Unfunded Actuarial Accrued Liability Major Impacts

- Benefit Formula Changes:
3% at 55 (2003); 3% at 60 (2004); 3% at 50 (2006)
- Financial Market
Downturn/"Great Recession"
(2008)
- Cash Allowance Benefit (2009)
- Actuarial Assumption Changes
(economic, demographic in
2005, 2008, 2009, 2010, 2011,
2014, 2017, 2021)
- Pension Obligation Bonds
 - May 2003 \$210M
 - September 2010 \$289M
- Public Employees' Pension
Reform Act – PEPPRA (2013)
- County Elimination of Cash
Outs in Benefit Calculations
(2013, impacted 2012
valuation)
- Additional Unfunded Actuarial
Accrued Liability payments
(2015, 2020, 2021, 2022 and
ongoing)