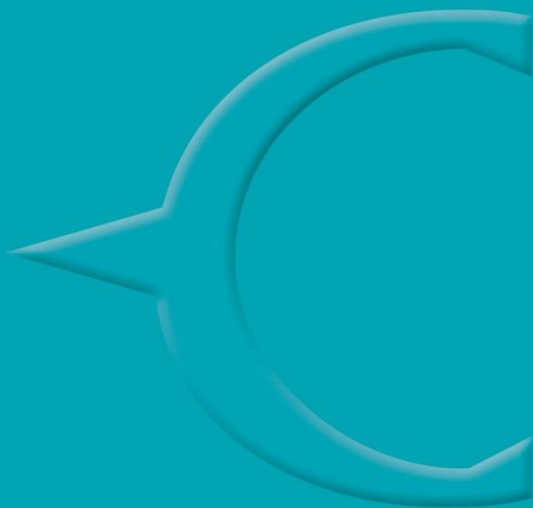




City of San José Police and Fire Department Retirement Plan

Demographic Experience Study as of June 30, 2025

Produced by Cheiron

October 2025

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**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

SECTION 1 – EXECUTIVE SUMMARY

Actuarial assumptions are intended to be long term in nature and should be both individually reasonable and consistent in the aggregate with no significant bias except when provisions for adverse deviation are explicitly included. The purpose of this experience study is to evaluate whether the current demographic assumptions adequately reflect the long-term expectations for the Plan, and if not, to recommend any adjustments that might be needed. It is important to note that significant changes in the actuarial assumptions are not typically recommended, unless there are known fundamental changes in expectations that would warrant such significant changes. In accordance with the San José Municipal Code, demographic experience studies are performed every two years.

Demographic assumptions are used to predict membership behavior, including rates of retirement, termination, disability, and mortality. These assumptions are based primarily on the historical experience of the Plan, with some adjustments where future experience is expected to differ from historical experience and with deference to standard tables where the Plan's experience is not fully credible and a standard table is available. For purposes of this study, merit salary increases are also considered a demographic assumption because the assumption is based primarily on the Plan's historical experience.

Table I-1 below shows the Plan's historical liability gains and losses by source for the last four actuarial valuations, reflecting experience since the demographic experience studies in 2021 and 2023. Salary increases were the primary source of losses during this period. Smaller gains and losses evened out the experience from retirements and terminations, although there have been gains since the 2023 experience study. Mortality provided consistent gains during the period. Disability experience had also produced gains until the most recent year.

Table 1-1

Historical Sources of Liability (Gain) or Loss					
Source	Year Ending June 30th				Total
	2022	2023	2024	2025	
Salary Increases	\$ 24,411	\$ 71,972	\$ 59,449	\$ 49,048	\$ 204,880
Retirement	4,524	1,986	(729)	(2,762)	3,019
Termination	2,269	4,826	(5,135)	(3,082)	(1,122)
Mortality	(2,043)	(3,934)	(1,705)	(1,716)	(9,398)
Disability	(7,701)	(6,235)	(3,579)	1,442	(16,073)
Other	(1,196)	1,005	(12,880)	8,739	(4,332)

Dollar amounts in thousands

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

SECTION 1 – EXECUTIVE SUMMARY

SUMMARY OF DEMOGRAPHIC ASSUMPTION ANALYSIS

This experience study specifically analyzes and proposes the following changes to demographic assumptions.

Table 1-2

Demographic Assumption	Proposed Changes
Merit Salary Scale	• Lower increases for 0 to 4 years of service • Slightly higher increases after 8 years of service • Special adjustments to reflect the POA agreement on longevity and crisis training pay
Retirement Rates	• Reductions in most retirement rates
Disability Rates	• Higher disability incidence rates, particularly for ages 50 and older • Separate rates for Police and Fire
Mortality Rates	• Change from Pub-2010 to Pub-2016 tables • Lower mortality rates at younger ages • Higher mortality rates at older ages
Termination Rates	• Reduction in termination rates for Fire members with 0 to 3 years of service.
Reciprocity	• No changes
Family Composition	• Reduce the percentage of females assumed to be married at retirement from 85% to 70%.
Administrative Expenses	• No changes

The proposed changes are expected to reduce City and Fire member contribution rates, while increasing Police member contribution rates.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

SECTION 2 – CERTIFICATION

The purpose of this report is to present the results of the experience study of the City of San José Police and Fire Department Retirement Plan (“The Plan”) covering demographic experience through June 30, 2025. This report is for the use of the Plan in selecting assumptions to be used in actuarial valuations beginning June 30, 2025.

In preparing our report, we relied on information (some oral and some written) supplied by the Plan. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Cheiron utilizes ProVal actuarial valuation software leased from Winklevoss Technologies (WinTech) to develop exposures and decrements for demographic experience studies. We have relied on WinTech as the developer of ProVal. We have a basic understanding of ProVal and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this experience study.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This report was prepared exclusively for the Plan for the purpose described herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.



William R. Hallmark, ASA, EA, MAAA, FCA
Consulting Actuary



Anne D. Harper, FSA, EA, MAAA
Principal Consulting Actuary

SECTION 3 – DEMOGRAPHIC ASSUMPTIONS

INTRODUCTION TO ANALYSIS OF DEMOGRAPHIC ASSUMPTIONS

For the demographic assumptions (other than merit salary scale), we determined the ratio of the actual number of decrements for each membership group compared to the expected number of decrements (A/E ratio or actual-to-expected ratio). For example, if the A/E ratio is 90 percent, it means that for every 100 decrements expected, there were only 90 actual decrements in the analysis. If the assumption is perfect, this ratio will be 100 percent, and any recommended assumption change should move from the current A/E ratio towards 100 percent unless future experience is expected to be different than the experience during the study period.

In addition, we calculated the 90 percent confidence interval, which represents the range within which the true decrement rate during the experience study period fell with 90 percent confidence. (If there is insufficient data to calculate a confidence interval, no confidence interval will be shown.) We generally propose assumption changes when the current assumption is outside the 90 percent confidence interval of the observed experience. However, adjustments are made to account for differences between future expectations and historical experience, to account for the past experience represented by the current assumption, and to maintain a neutral to slight conservative bias in the selection of the assumption. For disability and mortality rates, we compare the Plan's experience to that of a benchmark table and only adjust the benchmark table to the extent the Plan's experience is large enough to be credible and to ensure that the aggregate mortality or disability rate falls within the 90 percent confidence interval of aggregate experience.

To track how well the assumption fits the pattern of the data, we calculate the percentage of the assumptions that fall within the 90 percent confidence interval, and we calculate an r-squared statistic for each assumption. R-squared can be thought of as the percentage of the variation in actual data explained by the assumption. Ideally, all the assumptions would fall within the 90 percent confidence interval and r-squared would equal 100 percent although this is never the case. Any proposed assumption change should increase the percentage of assumptions within the confidence interval and should increase the r-squared compared to the current assumption making it closer to 100 percent unless the pattern of future decrements is expected to be different from the pattern experienced during the period of study.

Except as otherwise noted, this analysis is based on the last 10 years of plan experience. We reviewed the experience during the pandemic, and if it was materially different than the other experience, we considered whether it should be included in the study as representative of a potential future trend or excluded from the study because it was not likely to represent future experience.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
MERIT SALARY INCREASES**

MERIT SALARY INCREASES

Wage inflation is one of two components of total individual salary increases. In this section, the analysis develops the second of these components: the merit or longevity increase. Generally, newer employees are more likely to earn a step increase or receive a promotion, so their salary increases tend to be greater than those for longer service employees.

The merit/longevity salary increase assumption is added to the wage inflation assumption to calculate an individual's expected salary increase each year. To analyze the merit component, the across-the-board wage increase negotiated for a given year, representing wage inflation, is subtracted from the average salary increase for continuing active members at each year of service.

The merit/longevity salary increase assumption analysis is based on experience from 2016 through 2025. Table 3-S1 below shows the actual increases, current assumptions, and proposed assumptions. Chart 3-S1 on the following page shows the information graphically.

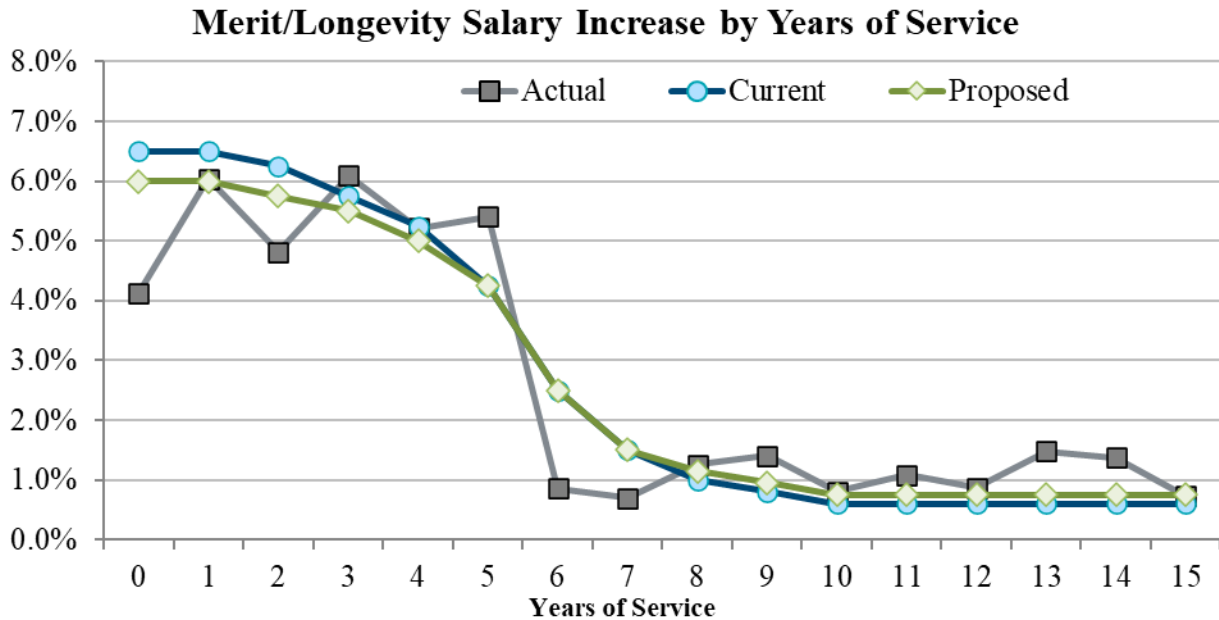
Table 3-S1

Merit/Longevity Salary Increases			
Service	Actual	Current	Proposed
0	4.13%	6.50%	6.00%
1	6.04%	6.50%	6.00%
2	4.82%	6.25%	5.75%
3	6.10%	5.75%	5.50%
4	5.22%	5.25%	5.00%
5	5.41%	4.25%	4.25%
6	0.85%	2.50%	2.50%
7	0.70%	1.50%	1.50%
8	1.25%	1.00%	1.15%
9	1.41%	0.80%	0.95%
10	0.80%	0.60%	0.75%
11	1.09%	0.60%	0.75%
12	0.87%	0.60%	0.75%
13	1.48%	0.60%	0.75%
14	1.37%	0.60%	0.75%
15 or more	0.73%	0.60%	0.75%

CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025

SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
MERIT SALARY INCREASES

Chart 3-S1



Merit salary increases have been lower than expected for early years of service, and higher than expected for later years of service. We propose lower rates of increase for 0 to 4 years of service and slightly higher rates of increase for 8 or more years of service.

In addition, the City and the Police Officers Association recently agreed to make crisis training pay and a portion of longevity pay pensionable for members with 20 or more years of service effective beginning with the fiscal year ending June 30, 2028, for crisis training pay, and with the fiscal year ending June 30, 2029, for longevity pay. While the necessary amendments to the San José Municipal Code have yet to be made, we propose to add an additional 3.75% increase when a member's crisis training pay becomes pensionable and an additional 1.25% increase when a member's longevity pay becomes pensionable.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

RETIREMENT RATES

TIER 1

The current retirement rates are applied only to members who are eligible to retire with no early retirement reduction. There are separate rates for Police and Fire, and they vary by age within three separate service groups: members with less than 24 years of service, members with 25 to 29 years of service, and members with 30 or more years of service. All members are assumed to retire when they reach age 62. The data represents experience from 2016 through 2025. The table below show the calculation of actual-to-expected ratios, the percentage of rates within the 90 percent confidence interval, and the R-squared statistic for each group analyzed. The accompanying charts show the information graphically.

Table 3-R1 below and Chart 3-R1 on the following page show the analysis for Tier 1 Police members with 20 to 24 years of service. The retirement rates are lower than the current assumption, so we propose reducing the assumptions. The proposed assumptions increase the aggregate A/E ratio from 58% to 78%, the percentage of rates within the confidence interval from 50% to 100%, and the R-squared from 90% to 92%.

Table 3-R1

Police Tier 1 Retirement Rates - 20 to 24 Years of Service									
Age	Exposures	Retirements			Retirement Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
55	50	9	15	13	18.0%	30.0%	25.0%	60%	72%
56	30	8	9	8	26.7%	30.0%	25.0%	89%	107%
57	19	3	6	5	15.8%	30.0%	25.0%	53%	63%
58	14	3	6	4	21.4%	45.0%	25.0%	48%	86%
59	8	1	4	2	12.5%	45.0%	25.0%	28%	50%
60	5	1	2	1	20.0%	45.0%	25.0%	44%	80%
61	3	0	1	1	0.0%	45.0%	25.0%	0%	0%
TOTAL	129	25	43	32	19.4%	33.5%	25.0%	58%	78%
Confidence Interval %			50%	100%					
R-squared			90%	92%					

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

Chart 3-R1

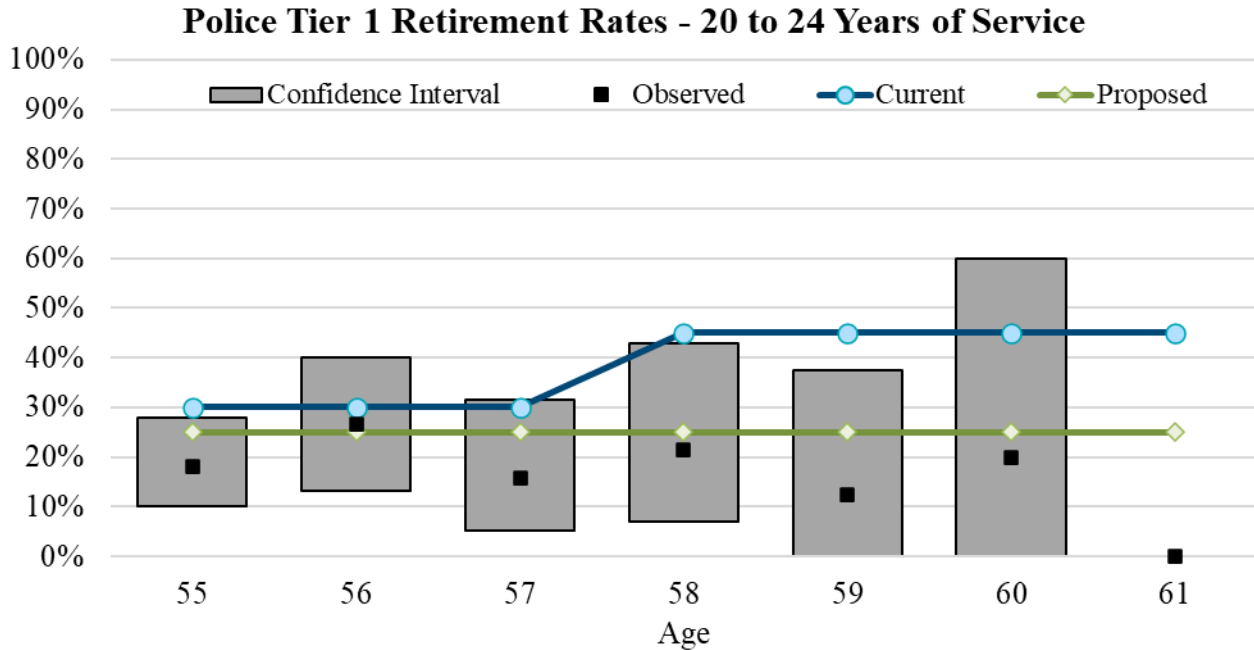


Table 3-R2 below and Chart 3-R2 on the following page show the analysis for Tier 1 Fire members with 20 to 24 years of service. The retirement rates are slightly lower than the current assumptions, so we propose reducing the assumptions for ages 55 to 57. The proposed assumptions increase the aggregate A/E ratio from 86% to 92%.

Table 3-R2

Fire Tier 1 Retirement Rates - 20 to 24 Years of Service									
Age	Exposures	Retirements			Retirement Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
55	66	18	20	18	27.3%	30.0%	27.5%	91%	99%
56	37	8	9	8	21.6%	25.0%	22.5%	86%	96%
57	29	2	6	5	6.9%	20.0%	17.5%	34%	39%
58	21	6	6	6	28.6%	27.5%	27.5%	104%	104%
59	11	4	3	3	36.4%	27.5%	27.5%	132%	132%
60	5	0	1	1	0.0%	27.5%	27.5%	0%	0%
61	2	1	1	1	50.0%	27.5%	27.5%	182%	182%
TOTAL	171	39	46	42	22.8%	26.7%	24.7%	86%	92%
Confidence Interval %			83%	83%					
R-squared			94%	95%					

CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025

SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES

Chart 3-R2

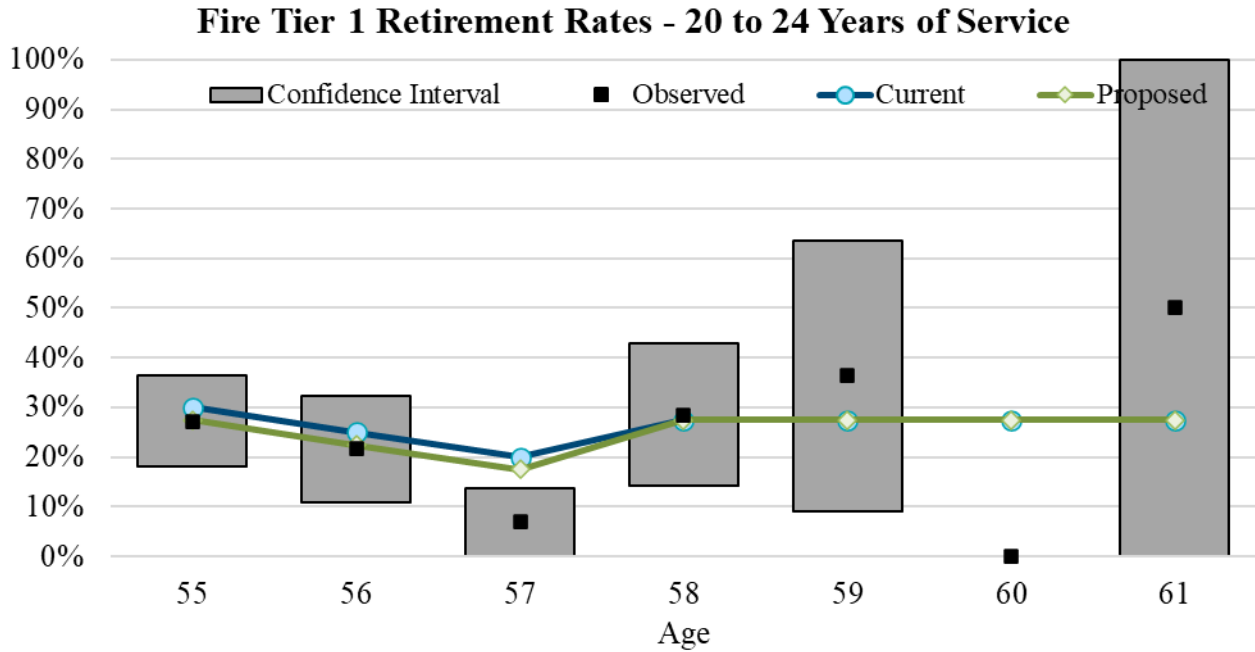


Table 3-R3 and Chart 3-R3 on the following page show the analysis for Tier 1 Police members with 25 to 29 years of service. The retirement rates are slightly lower than the current assumption. We propose reducing the assumptions for ages 55 through 61. The proposed changes increase the aggregate A/E from 90% to 93%.

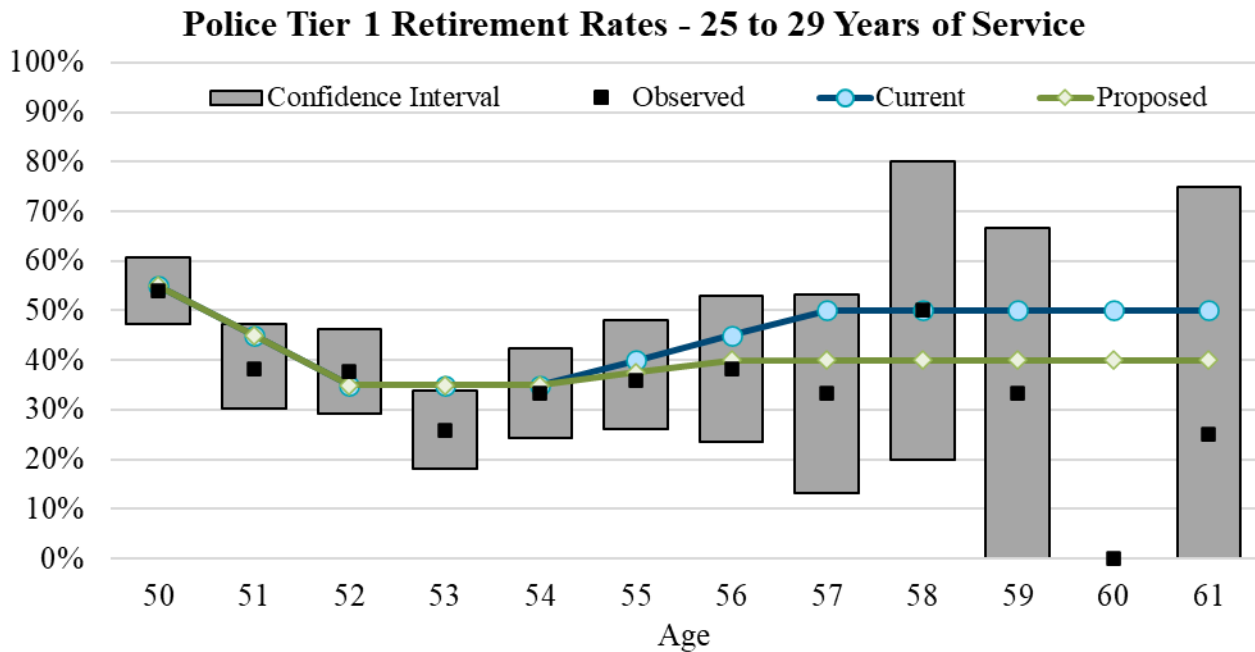
**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

Table 3-R3

Police Tier 1 Retirement Rates - 25 to 29 Years of Service									
Age	Exposures	Retirements			Retirement Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
50	148	80	81	81	54.1%	55.0%	55.0%	98%	98%
51	89	34	40	40	38.2%	45.0%	45.0%	85%	85%
52	82	31	29	29	37.8%	35.0%	35.0%	108%	108%
53	77	20	27	27	26.0%	35.0%	35.0%	74%	74%
54	66	22	23	23	33.3%	35.0%	35.0%	95%	95%
55	50	18	20	19	36.0%	40.0%	37.5%	90%	96%
56	34	13	15	14	38.2%	45.0%	40.0%	85%	96%
57	15	5	8	6	33.3%	50.0%	40.0%	67%	83%
58	10	5	5	4	50.0%	50.0%	40.0%	100%	125%
59	6	2	3	2	33.3%	50.0%	40.0%	67%	83%
60	5	0	3	2	0.0%	50.0%	40.0%	0%	0%
61	4	1	2	2	25.0%	50.0%	40.0%	50%	63%
TOTAL	586	231	256	249	39.4%	43.6%	42.4%	90%	93%
Confidence Interval %			91%	91%					
R-squared			99%	99%					

Chart 3-R3



**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

Table 3-R4 below and Chart 3-R4 on the following page show the analysis for Tier 1 Fire members with 25 to 29 years of service. The retirement rates are lower than the current assumption. We propose reducing the assumption for all ages except 51. The proposed assumptions increase the aggregate A/E from 70% to 87% and the percentage of rates within the confidence interval from 67% to 85%.

Table 3-R4

Fire Tier 1 Retirement Rates - 25 to 29 Years of Service									
Age	Exposures	Retirements			Retirement Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
50	47	16	21	19	34.0%	45.0%	40.0%	76%	85%
51	43	10	13	13	23.3%	30.0%	30.0%	78%	78%
52	48	7	19	14	14.6%	40.0%	30.0%	36%	49%
53	55	21	22	17	38.2%	40.0%	30.0%	95%	127%
54	40	9	16	12	22.5%	40.0%	30.0%	56%	75%
55	34	11	14	10	32.4%	40.0%	30.0%	81%	108%
56	29	8	12	9	27.6%	40.0%	30.0%	69%	92%
57	15	3	6	5	20.0%	40.0%	30.0%	50%	67%
58	14	4	6	4	28.6%	40.0%	30.0%	71%	95%
59	8	1	3	2	12.5%	40.0%	30.0%	31%	42%
60	6	0	2	2	0.0%	40.0%	30.0%	0%	0%
61	3	1	1	1	33.3%	40.0%	30.0%	83%	111%
TOTAL	342	91	135	107	26.6%	39.4%	31.4%	67%	85%
Confidence Interval %			64%	91%					
R-squared			81%	81%					

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

Chart 3-R4

Fire Tier 1 Retirement Rates - 25 to 29 Years of Service

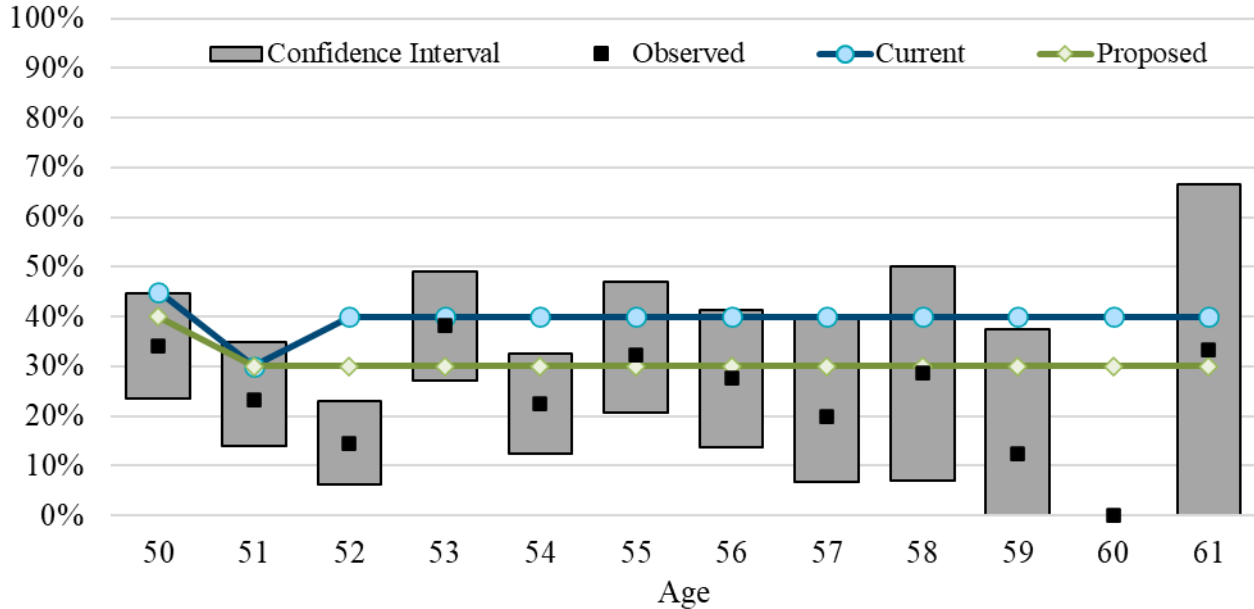


Table 3-R5 and Chart 3-R5 on the following page show the analysis for Tier 1 Police members with 30 or more years of service. While there is not a lot of data because most members retire by the time they have 30 years of service, the retirement rates are lower than the current assumption. We propose reducing the assumption from 60% to 55% for all ages. The proposed assumptions increase the aggregate A/E from 80% to 87%.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

Table 3-R5

Police Tier 1 Retirement Rates - 30 to 39 Years of Service									
Age	Exposures	Retirements			Retirement Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
50	0	0	0	0	0.0%	100.0%	100.0%	0%	0%
51	0	0	0	0	0.0%	100.0%	100.0%	0%	0%
52	2	2	1	1	100.0%	60.0%	55.0%	167%	182%
53	0	0	0	0	0.0%	100.0%	100.0%	0%	0%
54	3	1	2	2	33.3%	60.0%	55.0%	56%	61%
55	5	4	3	3	80.0%	60.0%	55.0%	133%	145%
56	3	1	2	2	33.3%	60.0%	55.0%	56%	61%
57	4	0	2	2	0.0%	60.0%	55.0%	0%	0%
58	4	2	2	2	50.0%	60.0%	55.0%	83%	91%
59	2	1	1	1	50.0%	60.0%	55.0%	83%	91%
60	0	0	0	0	0.0%	100.0%	100.0%	0%	0%
61	0	0	0	0	0.0%	100.0%	100.0%	0%	0%
TOTAL	23	11	14	13	47.8%	60.0%	55.0%	80%	87%
Confidence Interval %			100%	100%					
R-squared			54%	54%					

Chart 3-R5



Table 3-R6 and Chart 3-R6 on the following page show the analysis for Tier 1 Fire members with 30 or more years of service. While there is not a lot of data because most members retire by the time they have 30 years of service, the retirement rates are lower than the current assumption. We

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

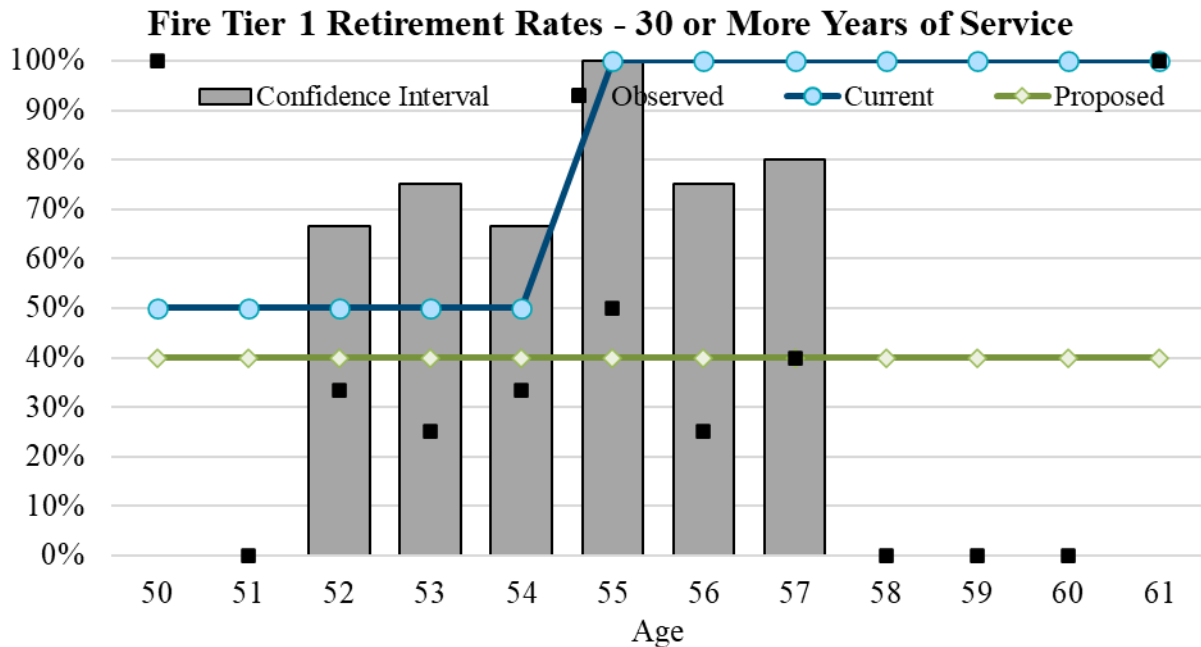
**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

propose reducing the assumption to 40% for all ages. The proposed assumptions increase the aggregate A/E from 48% to 89%, the percentage of rates within the confidence interval from 67% to 100%, and the R-squared from 65% to 68%.

Table 3-R6

Fire Tier 1 Retirement Rates - 30 to 39 Years of Service									
Age	Exposures	Retirements			Retirement Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
50	1	1	1	0	100.0%	50.0%	40.0%	200%	250%
51	2	0	1	1	0.0%	50.0%	40.0%	0%	0%
52	3	1	2	1	33.3%	50.0%	40.0%	67%	83%
53	4	1	2	2	25.0%	50.0%	40.0%	50%	63%
54	6	2	3	2	33.3%	50.0%	40.0%	67%	83%
55	4	2	4	2	50.0%	100.0%	40.0%	50%	125%
56	4	1	4	2	25.0%	100.0%	40.0%	25%	63%
57	5	2	5	2	40.0%	100.0%	40.0%	40%	100%
58	0	0	0	0	0.0%	100.0%	100.0%	0%	0%
59	1	0	1	0	0.0%	100.0%	40.0%	0%	0%
60	0	0	0	0	0.0%	100.0%	100.0%	0%	0%
61	1	1	1	0	100.0%	100.0%	40.0%	100%	250%
TOTAL	31	11	23	12	35.5%	74.2%	40.0%	48%	89%
Confidence Interval %			67%	100%					
R-squared			65%	68%					

Chart 3-R6



**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

TIER 2

New Tier 2 retirement rates were developed in April 2017 for the implementation of Measure F based on experience from CalPERS for a plan with comparable benefits. This experience study does not include any retirement experience for Tier 2. To keep retirement rates consistent between tiers, we propose reducing the assumptions for ages 57 to 61 with 30 or more years of service from 100% to 55% for Police and 40% for Fire.

RETIREMENT AGE FOR TERMINATED VESTED MEMBERS

Tier 1 terminated vested members are eligible to retire as early as age 50 with 25 years of service and age 55 with 20 years of service. Currently, we assume Tier 1 terminated vested members with 25 or more years of service will retire at age 50 and terminated vested members with less than 25 years of service will retire at age 55. We propose no change to this assumption.

Tier 2 terminated vested members receive an actuarially equivalent benefit if they retire before age 60. For valuation purposes, Tier 2 terminated vested members are assumed to retire at age 60.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
DISABILITY RATES**

DISABILITY RATES

This section analyzes the incidence of disability by the age of the employee. There is one unisex assumption for males and females at each age. Unlike many of the other demographic assumptions that rely exclusively on the experience of the plan, disability rates are a blend between a table based on a much larger data set and adjustments to that table to better match the Plan’s actual experience to the extent it is credible.

The current assumption for Police and Fire members is equal to the sum of the 2021 CalPERS Police Officers & Firefighters industrial and non-industrial disability rates multiplied by 104%.

The disability rates in this experience study are significantly higher than in the prior study. Many disabilities attributable to previous years have been granted in the last two years. For this analysis, we used data during the 10-year period covering fiscal years ending 2015 through 2024. We excluded experience for 2025 because the lag in processing disabilities makes data in the most recent year unreliable. We also found that the disability experience for Police and Fire members was different enough to warrant separate assumptions.

The proposed assumption for Police members is 77% of the 2021 CalPERS Public Agency ordinary and industrial disability rates for Police. For Fire members, the proposed assumption is 110% of the 2021 CalPERS Public Agency ordinary and industrial disability rates for Firefighters.

Table 3-D1 summarizes our analysis of the disability incidence assumption for all active Police members, showing the calculation of actual-to-expected ratios, the percentage of rates within the 90 percent confidence interval, and the R-squared statistic. Actual disability rates are significantly higher than the current assumption, particularly for those aged 50 and older. The proposed assumptions reduce the A/E ratio from 170% to 100%, increase the percentage of rates that are within the confidence interval from 40% to 80%, and increase the R-squared from 53% to 89%.

Table 3-D1

Police Disability Incidence Rates									
Age Band	Exposures	Disabilities			Average Disability Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
< 35	3,074	3	6	11	0.10%	0.20%	0.34%	49%	28%
35 - 39	1,343	12	5	10	0.89%	0.40%	0.72%	221%	125%
40 - 44	1,577	13	10	15	0.82%	0.64%	0.97%	129%	85%
45 - 49	2,207	24	21	27	1.09%	0.95%	1.22%	115%	89%
50 - 54	1,479	43	19	40	2.91%	1.31%	2.67%	222%	109%
55 - 59	301	19	5	12	6.31%	1.78%	3.98%	354%	159%
60 +	35	2	1	2	5.71%	2.39%	4.94%	239%	116%
TOTAL	10,016	116	68	116	1.16%	0.68%	1.15%	170%	100%
Confidence Interval %			40%	80%					
R-squared			53%	89%					

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**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
DISABILITY RATES**

Chart 3-D1 below shows the actual disability rates for police members' age bands, the 90 percent confidence interval for each age band, the current assumptions, and the proposed assumptions.

Chart 3-D1

Police Disability Incidence Rates

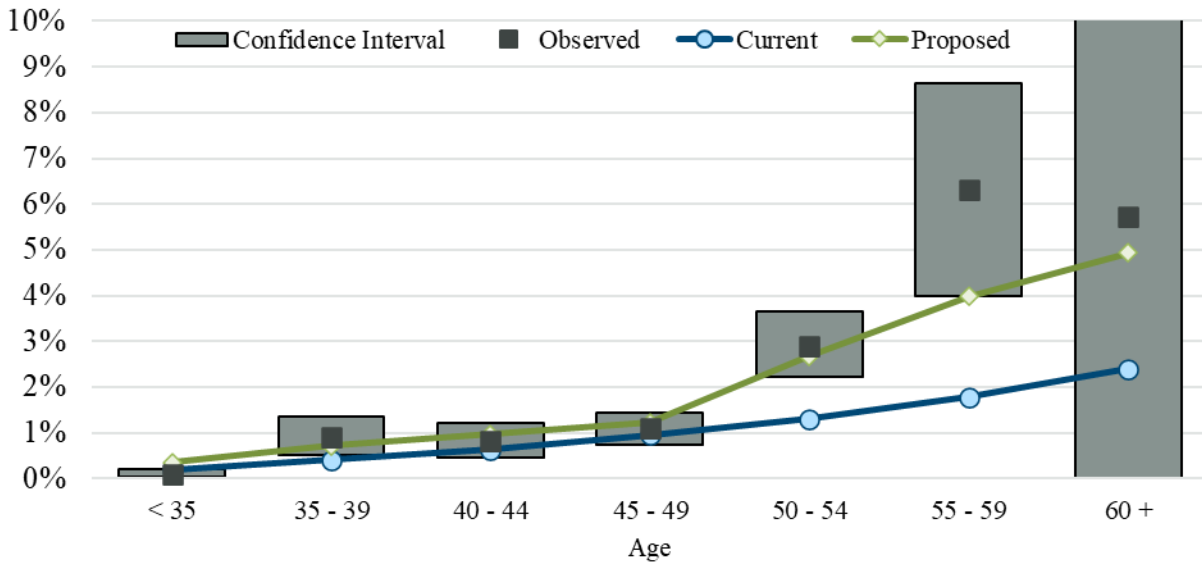


Table 3-D2 summarizes our analysis of the disability incidence assumption for all active Fire members, showing the calculation of actual-to-expected ratios, the percentage of rates within the 90 percent confidence interval, and the R-squared statistic. Actual disability rates are significantly higher than the current assumption, particularly for those ages 50 and older. The proposed assumptions reduce the A/E ratio from 149% to 124%, increase the percentage of rates within the confidence interval from 60% to 100%, and increase the R-squared from 48% to 99%.

Table 3-D2

Fire Disability Incidence Rates									
Age Band	Exposures	Disabilities			Average Disability Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
< 35	1,073	0	2	1	0.00%	0.23%	0.08%	0%	0%
35 - 39	1,145	2	5	2	0.17%	0.41%	0.18%	43%	95%
40 - 44	1,303	7	8	4	0.54%	0.63%	0.33%	85%	163%
45 - 49	1,476	10	14	9	0.68%	0.94%	0.58%	72%	118%
50 - 54	1,225	37	16	33	3.02%	1.33%	2.69%	228%	112%
55 - 59	320	17	6	12	5.31%	1.78%	3.76%	298%	141%
60 +	26	4	1	1	15.38%	2.34%	5.12%	658%	300%
TOTAL	6,568	77	52	62	1.17%	0.79%	0.95%	149%	124%
Confidence Interval %			60%	100%					
R-squared			48%	99%					

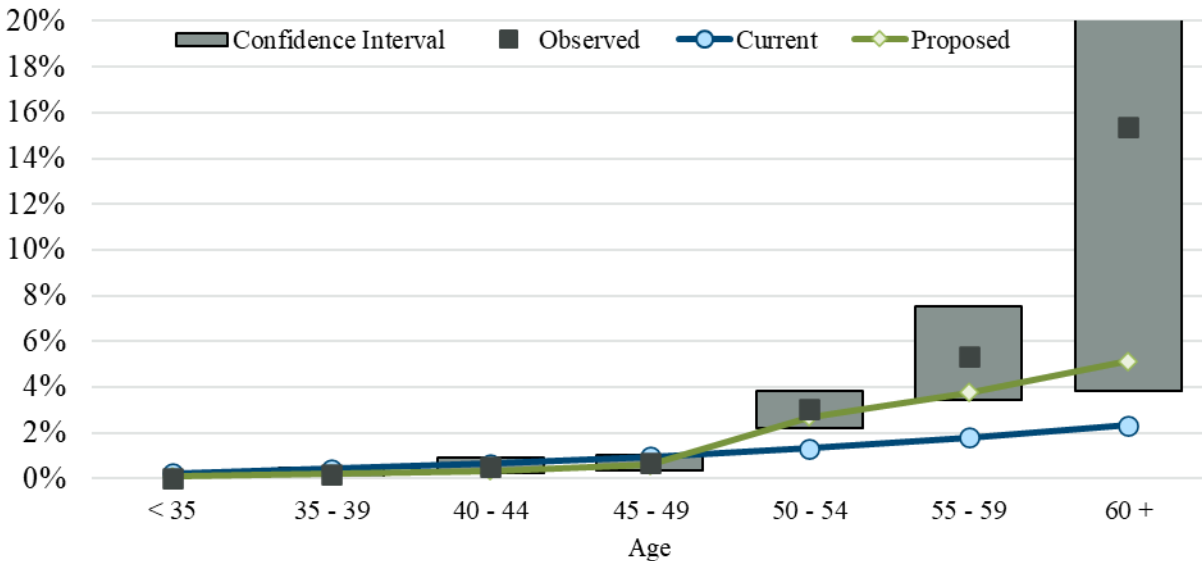
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**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
DISABILITY RATES**

Chart 3-D2 shows the actual disability rates for Fire members' age bands, the 90 percent confidence interval for each age band, the current assumptions, and the proposed assumptions.

Chart 3-D2

Fire Disability Incidence Rates



PROPORTION OF DUTY AND NON-DUTY DISABILITIES

When a member suffers from a disability, the source of the disability determines the benefit amount they will receive while disabled. The current assumption is that 100 percent of disabilities are duty related.

The June 30, 2025 valuation data has 904 disabled retirees, 878 (97%) are retired due to duty-related disabilities. We propose maintaining the assumed percentage of duty-related disabilities at 100 percent.

**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

MORTALITY RATES

Post-retirement mortality assumptions are typically developed separately by sex for both healthy annuitants and disabled annuitants. Pre-retirement mortality assumptions are also developed separately for males and females. Unlike many of the other demographic assumptions that rely exclusively on the plan's experience, for mortality, published mortality tables and projection scales serve as the primary basis for the assumption.

The steps in our analysis are as follows:

1. Select an appropriate mortality improvement projection scale to apply to the base mortality table.
2. Select a published mortality table based on experience most closely matching the anticipated experience of the Plan.
3. Compare the actual experience of the Plan to what would have been predicted by the selected published table for the experience study period.
4. Adjust the published table either fully or partially, depending on the level of credibility for the Plan's experience. This adjusted table is called the base table.

When actual experience of the Plan is compared to that of the published table, the experience is weighted based on the amount of benefit being paid (or salary for active members). Mortality studies in the U.S. have consistently shown that higher-income individuals have longer life expectancies than lower-income individuals. Because higher-income individuals also typically have higher pension benefit amounts, it is important for a pension plan to use assumptions that are weighted to reflect the impact on the Plan's liability.

Historically, pension plans used a static mortality assumption. That is, the same mortality rates were used for all members regardless of their year of birth. With mortality improvements, however, we expect that the mortality rate at age 70, for example, will be different for someone who is currently age 40 than it is for someone who is age 70 today.

A generational mortality assumption uses a separate mortality table for each year of birth so that the mortality rate at age 70 of someone who is 40 today reflects 30 years of expected mortality improvement while the rate for someone who is currently age 70 does not. A generational assumption more accurately measures the liability associated with each individual. Consequently, the Society of Actuaries and others strongly recommend the use of generational mortality assumptions.

Mortality Projection Scale

There has been a long history of mortality improvement among pensioners in the U.S., and there is an expectation that mortality rates will continue to improve in the future. The Society of Actuaries published mortality improvement scales each year from 2014 to 2021. However, with the impact of COVID on mortality, no new scales have been published. Consequently, we propose continuing to use the MP-2021 mortality projection scale.

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**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

The current assumptions are based on the Pub-2010 tables published in January 2019 by the Society of Actuaries (SOA). These tables were developed exclusively using public plan experience and contain separate tables based on public safety member mortality experience. The SOA published the Pub-2016 tables in May 2025. The Pub-2016 tables are based on mortality experience from calendar years 2013 through 2019, whereas the Pub 2010 tables are based on calendar years 2008 through 2013. We found the above median income safety Pub 2016 tables to provide the best fit for members and the main general tables to provide the best fit for beneficiaries. The Pub-2016 tables have lower mortality rates at younger ages and higher rates at older ages, more closely matching the Plan's experience.

Our analysis is based on the Plan's experience from 2009 through 2025, producing a central year for the study of 2017. Since the central year of the Pub-2016 tables is 2016, our analysis adjusts those tables for mortality improvement to 2017 using scale MP-2021 to compare to the Plan's experience.

Healthy Retiree Mortality

Base Mortality Table for Healthy Retirees			
Assumption	Published Table	Male Factor	Female Factor
Current	PubS-2010(A) Healthy Retirees	0.972	0.972
Proposed	PubS-2016(A) Healthy Retirees	1.000	1.000

Table 3-M1 summarizes our analysis and development of the base mortality tables for healthy retirees. The actual-to-expected ratios are shown on the right side of the table. The ratio for the current assumption for males is 95 percent. Since this is a benefit-weighted analysis, this means that \$95 of benefits ceased due to actual deaths for every \$100 of benefits expected to cease. We propose changing to the Pub-2016 tables with no adjustment to the base rates, which increases the A/E ratio to 99 percent.

The current assumption for females' A/E ratio is 38%, but there were only four deaths in the analysis. Since this data is not credible, we propose the same base tables for the females as the males with no adjustment factor, increasing the A/E ratio for females to 39%.

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MORTALITY RATES**

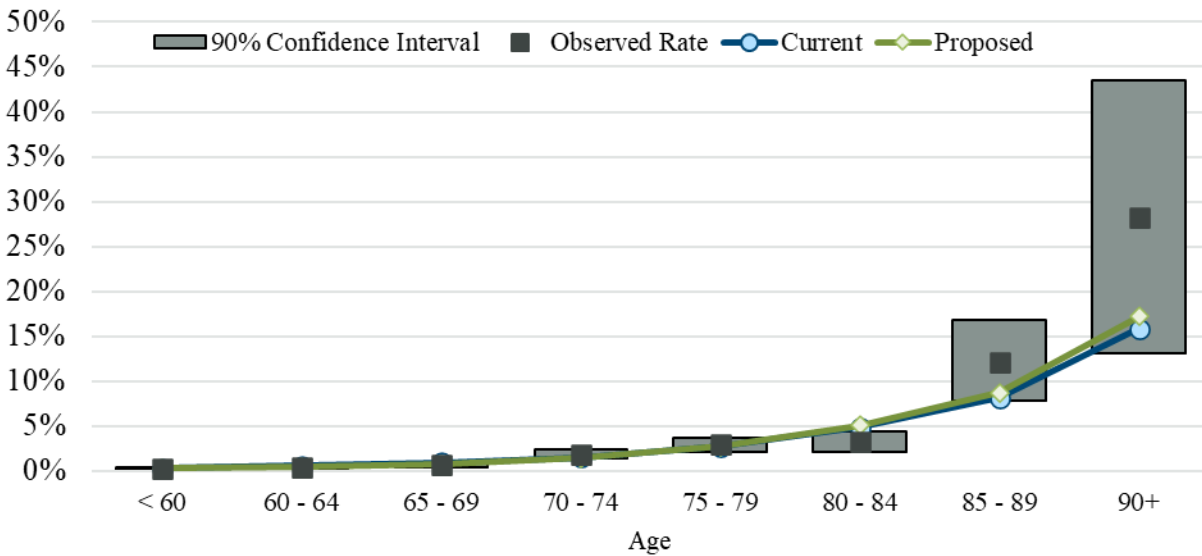
Table 3-M1

Healthy Retiree Mortality								
Sex	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
Male	14,360	169	130,414,752	1,322,504	1,393,120	1,330,566	95%	99%
Female	893	4	7,465,052	18,122	47,731	46,551	38%	39%
Total	15,253	173	137,879,804	1,340,627	1,440,851	1,377,117	93%	97%

Chart 3-M1 shows the actual mortality rates for male retirees for five-year age bands from age 60 to age 89, plus all experience for ages 60 and younger and 90 and older, the 90 percent confidence interval for each age band, and the current and proposed base table assumptions. Given the lack of data, there is no chart for female retirees.

Chart 3-M1

Male Healthy Annuitant Mortality



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**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Disabled Retiree Mortality

Base Mortality Table for Disabled Retirees			
Assumption	Published Table	Male Factor	Female Factor
Current	PubS-2010 Disabled Retirees	0.915	0.915
Proposed	PubS-2016 Disabled Retirees	0.900	0.900

Table 3-M2 summarizes our analysis and development of the base mortality table for disabled retirees. The actual-to-expected ratios are shown on the right side of the table. For the current assumption, the actual-to-expected ratio is 91 percent for males and 102 percent for females. As with healthy retiree mortality, the data for females is not credible, so we apply the same adjustment factor we use for males to the published table. We propose changing to the Pub-2016 tables for disabled retirees with an adjustment factor of 0.90, which increases the actual-to-expected ratio to 92 percent for males.

Table 3-M2

Disabled Retiree Mortality								
Sex	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
Male	13,297	342	100,409,416	2,111,125	2,311,401	2,305,308	91%	92%
Female	637	8	4,426,587	33,762	33,024	33,440	102%	101%
Total	13,934	350	104,836,003	2,144,887	2,344,425	2,338,748	91%	92%

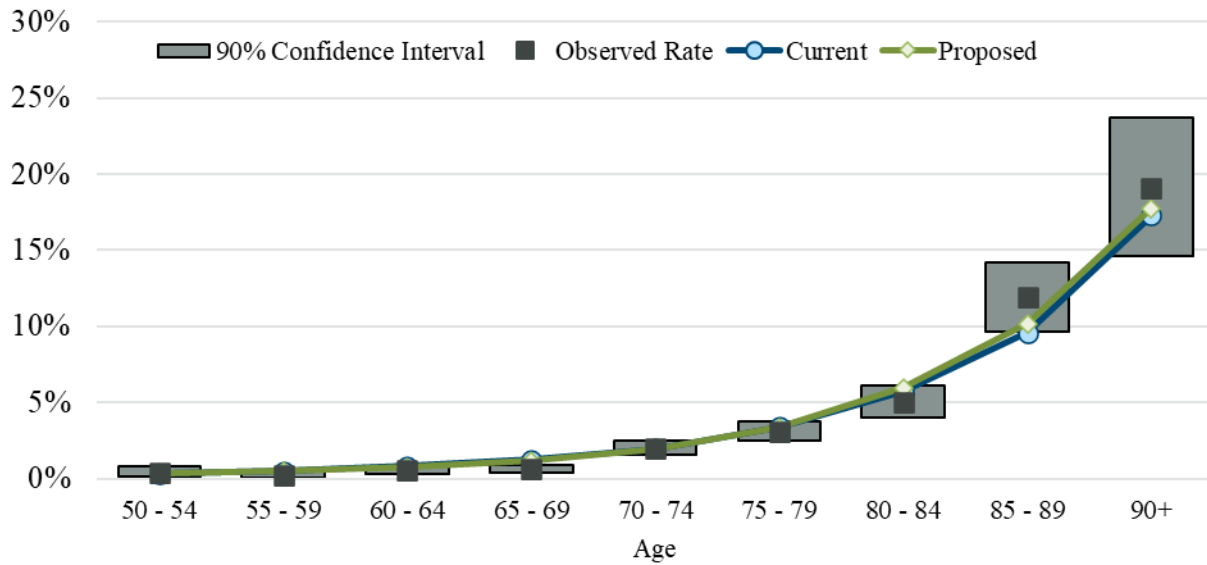
Chart 3-M2 on the following page shows the actual mortality rates for male disabled retirees for five-year age bands from age 50 to age 89, plus all experience for ages 90 and older, the 90 percent confidence interval for each age band, and the current and proposed base table assumptions. Given the lack of data, there is no chart for female retirees.

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SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES

Chart 3-M2

Male Disabled Annuitant Mortality



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**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Beneficiary Mortality

Base Mortality Table for Beneficiaries			
Assumption	Published Table	Male Factor	Female Factor
Current	PubG-2010 Healthy Retirees	1.032	1.032
Proposed	PubG-2016 Healthy Retirees	1.100	1.100

The Plan's beneficiary valuation data is only maintained after the retiree's death. In the SOA's analysis, mortality rates for contingent survivors are higher than those for similarly categorized retirees. Studies have documented a grieving widow(er) effect on mortality, but the higher mortality rates could also be due to other factors correlated with beneficiary status. Because the beneficiary data available is only after the retiree's death, we would expect the mortality tables to produce higher actual-to-expected ratios.

Table 3-M3 summarizes our analysis and development of the base mortality table for beneficiaries. The actual-to-expected ratios are shown on the right side of the table. For the current assumption, the actual-to-expected ratio is 165 percent for males and 127 percent for females. The male data is not credible, so we apply the same adjustment factor we use for females to the published table. We propose changing to the Pub-2016 tables for healthy general retirees with an adjustment factor of 1.10, which reduces the actual-to-expected ratio to 115 percent for females.

Table 3-M3

Beneficiary Mortality								
Sex	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
Male	47	3	142,507	4,726	2,864	3,101	165%	152%
Female	4,551	158	16,624,934	543,848	429,573	472,418	127%	115%
Total	4,598	161	16,767,441	548,574	432,436	475,519	127%	115%

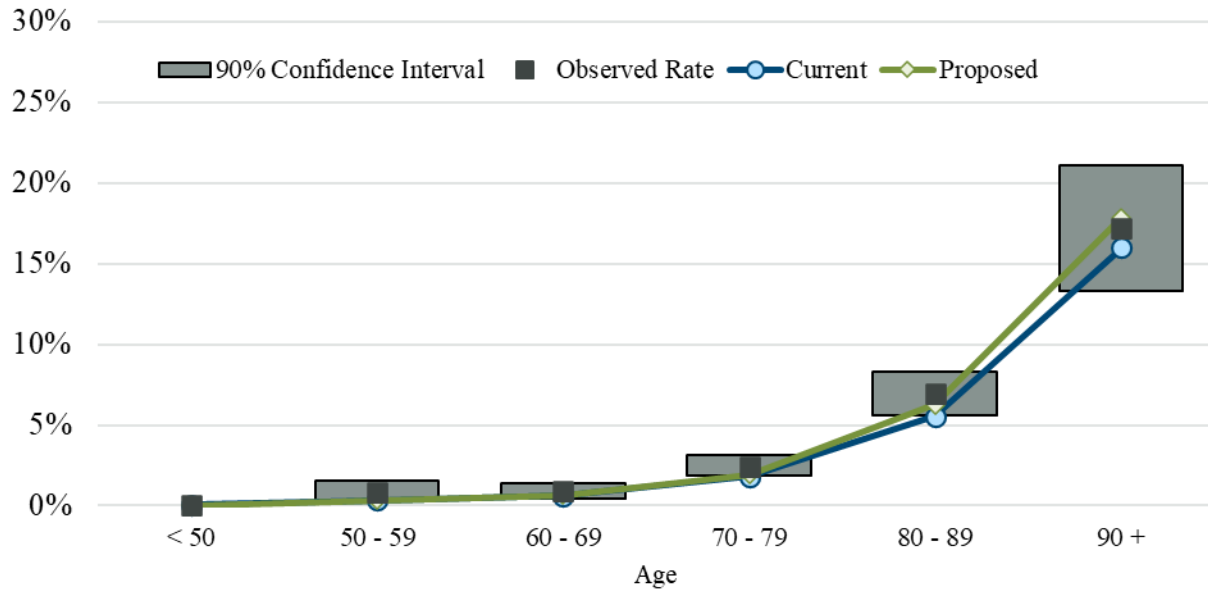
Chart 3-M3 on the next page shows the actual mortality rates for female beneficiaries for 10-year age bands from age 50 to age 89, plus all experience for ages 90 and older, the 90 percent confidence interval for each age band, and the current and proposed base table assumptions. Given the lack of data, there is no chart for male beneficiaries.

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SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES

Chart 3-M3

Female Beneficiary Mortality



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**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Non-Annuitant Mortality

Base Mortality Table for Non-Annuitants			
Assumption	Published Table	Male Factor	Female Factor
Current	PubS-2010(A) Employees	0.979	0.979
Proposed	PubS-2016(A) Employees	0.960	0.960

Table 3-M3 summarizes our analysis and development of the base mortality table for non-annuitants. The actual-to-expected ratios are shown on the right side of the table. For the current assumption, the actual-to-expected ratio is 66 percent for males and 102 percent for females. With only 13 combined deaths, the actual experience of the Plan is not very credible. We propose changing to the Pub-2016 tables for Safety employees with an adjustment factor of 0.96, which increases the actual-to-expected ratio to 68 percent for males and reduces it to 92 percent for females.

Table 3-M4

Non-Annuitant Mortality								
Sex	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
Male	25,330	12	3,346,622,701	1,599,538	2,418,107	2,365,358	66%	68%
Female	2,275	1	296,029,112	147,510	144,546	129,713	102%	114%
Total	27,605	13	3,642,651,813	1,747,048	2,562,653	2,495,071	68%	70%

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**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES**

TERMINATION RATES

The current termination assumptions vary depending on the member's years of service. The data represents the Plan's experience from FYE 2016 through 2025. Tier 1 and Tier 2 members are analyzed together, although setting the assumption based on service effectively divides the two tiers.

Table 3-T1 below shows the calculation of actual-to-expected ratios, the percentage of rates within the 90 percent confidence interval, and the R-squared statistic for Police members with 20 years of service or less; Chart 3-T1 on the following page shows the information graphically.

Table 3-T1

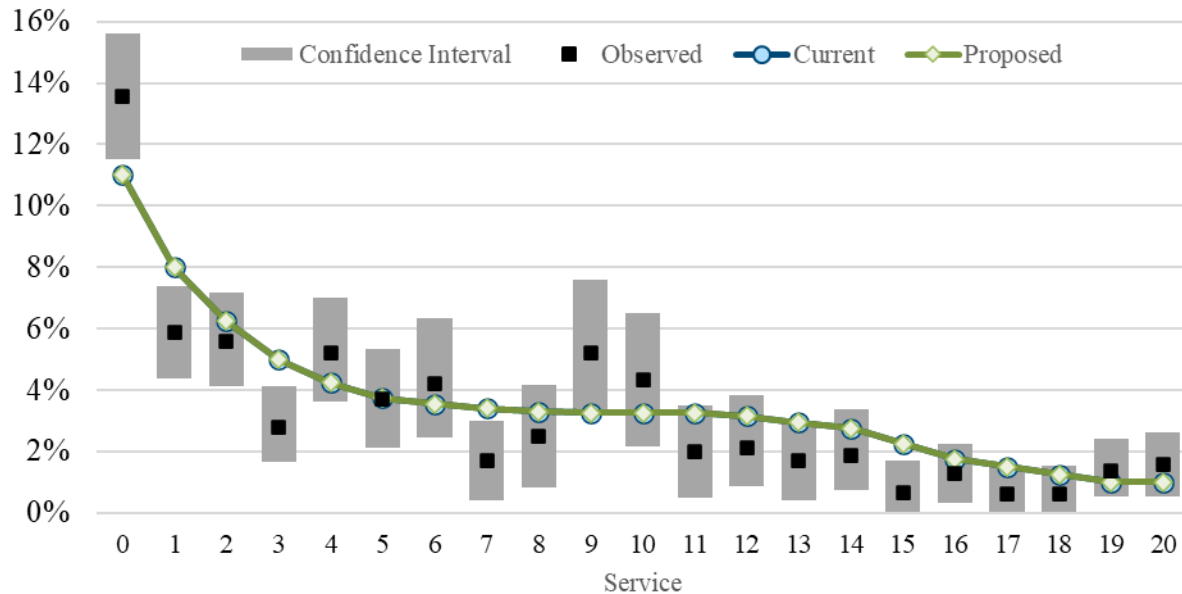
Police Termination Rates									
Service	Exposures	Terminations			Termination Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
0	789	107	87	87	13.56%	11.00%	11.00%	123%	123%
1	665	39	53	53	5.86%	8.00%	8.00%	73%	73%
2	627	35	39	39	5.58%	6.25%	6.25%	89%	89%
3	535	15	27	27	2.80%	5.00%	5.00%	56%	56%
4	443	23	19	19	5.19%	4.25%	4.25%	122%	122%
5	376	14	14	14	3.72%	3.75%	3.75%	99%	99%
6	284	12	10	10	4.23%	3.55%	3.55%	119%	119%
7	235	4	8	8	1.70%	3.40%	3.40%	50%	50%
8	239	6	8	8	2.51%	3.30%	3.30%	76%	76%
9	250	13	8	8	5.20%	3.25%	3.25%	160%	160%
10	230	10	7	7	4.35%	3.25%	3.25%	134%	134%
11	201	4	7	7	1.99%	3.25%	3.25%	61%	61%
12	234	5	7	7	2.14%	3.15%	3.15%	68%	68%
13	234	4	7	7	1.71%	2.95%	2.95%	58%	58%
14	267	5	7	7	1.87%	2.75%	2.75%	68%	68%
15	295	2	7	7	0.68%	2.25%	2.25%	30%	30%
16	309	4	5	5	1.29%	1.75%	1.75%	74%	74%
17	326	2	5	5	0.61%	1.50%	1.50%	41%	41%
18	327	2	4	4	0.61%	1.25%	1.25%	49%	49%
19	370	5	4	4	1.35%	1.00%	1.00%	135%	135%
20	380	6	4	4	1.58%	1.00%	1.00%	158%	158%
TOTAL	7,616	317	337	337	4.16%	4.43%	4.43%	94%	94%
Confidence Interval %			76%	76%					
R-squared			93%	93%					

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SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES

Chart 3-T1

Police Termination Rates



The data shows actual termination rates are close to those expected under the current assumption, with an actual-to-expected ratio of 94 percent. No changes are proposed for Police member termination rates.

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**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES**

Table 3-T2 shows the calculation of actual-to-expected ratios, the percentage of rates within the 90 percent confidence interval, and the R-squared statistic for Fire members; Chart 3-T2 on the following page shows the information graphically.

Table 3-T2

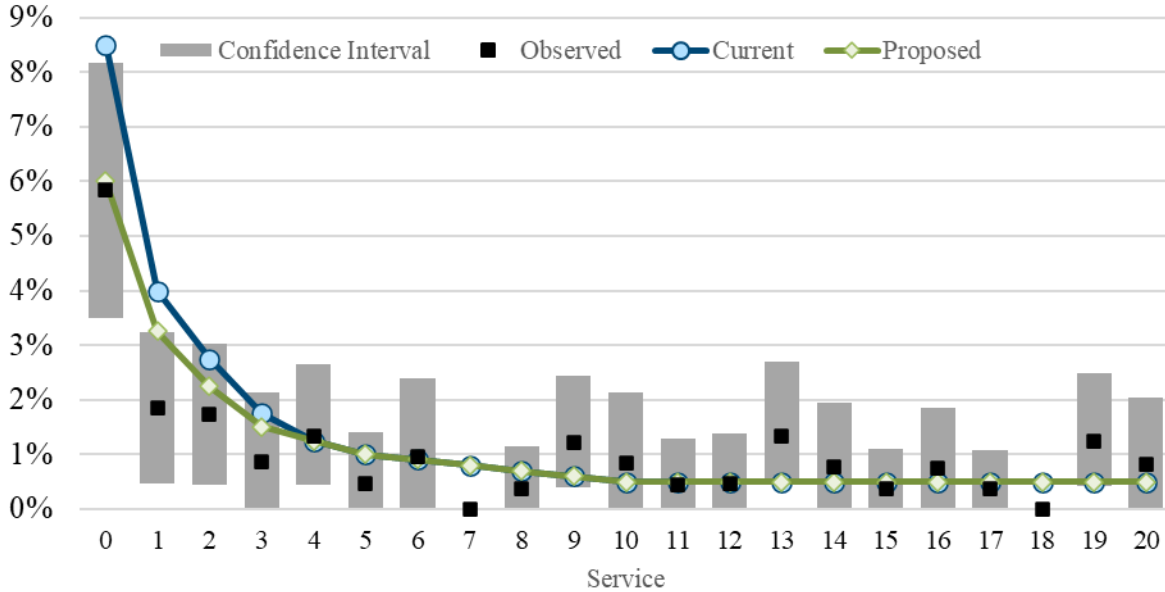
Fire Termination Rates									
Service	Exposures	Terminations			Termination Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
0	257	15	22	15	5.84%	8.50%	6.00%	69%	97%
1	216	4	9	7	1.85%	4.00%	3.25%	46%	57%
2	231	4	6	5	1.73%	2.75%	2.25%	63%	77%
3	234	2	4	4	0.85%	1.75%	1.50%	49%	57%
4	226	3	3	3	1.33%	1.25%	1.25%	106%	106%
5	212	1	2	2	0.47%	1.00%	1.00%	47%	47%
6	209	2	2	2	0.96%	0.90%	0.90%	106%	106%
7	208	0	2	2	0.00%	0.80%	0.80%	0%	0%
8	264	1	2	2	0.38%	0.70%	0.70%	54%	54%
9	247	3	1	1	1.21%	0.60%	0.60%	202%	202%
10	235	2	1	1	0.85%	0.50%	0.50%	170%	170%
11	232	1	1	1	0.43%	0.50%	0.50%	86%	86%
12	217	1	1	1	0.46%	0.50%	0.50%	92%	92%
13	223	3	1	1	1.35%	0.50%	0.50%	269%	269%
14	256	2	1	1	0.78%	0.50%	0.50%	156%	156%
15	275	1	1	1	0.36%	0.50%	0.50%	73%	73%
16	269	2	1	1	0.74%	0.50%	0.50%	149%	149%
17	276	1	1	1	0.36%	0.50%	0.50%	72%	72%
18	239	0	1	1	0.00%	0.50%	0.50%	0%	0%
19	242	3	1	1	1.24%	0.50%	0.50%	248%	248%
20	244	2	1	1	0.82%	0.50%	0.50%	164%	164%
TOTAL	5,012	53	66	57	1.06%	1.32%	1.13%	80%	94%
Confidence Interval %			81%	86%					
R-squared			88%	86%					

CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025

SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES

Chart 3-T2

Fire Termination Rates



The data shows actual termination rates are lower than those expected under the current assumption in members' first four years of service, with an overall actual-to-expected ratio for those with 20 or less years of service of 80 percent. The proposed assumptions decrease the termination rates for members with less than four years of service, which increases the A/E ratio for those with 20 or less years of service to 94 percent.

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**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
RECIPROCITY**

RECIPROCITY

If an employee terminates employment and works for a reciprocal employer, the employee's retirement benefit is ultimately based on the employee's service with the City of San José and Final Compensation based on employment with any reciprocal employer. The current assumption is that 75 percent of terminating employees work for reciprocal employers and receive salary increases equal to the payroll growth assumption.

Over the last 5 years, 69 percent of members who retired from vested terminated status appear to have had reciprocal service following their service with San Jose, which increased the final compensation used to calculate their benefit.

No changes are proposed to the reciprocity assumption.

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**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
FAMILY COMPOSITION**

FAMILY COMPOSITION

Members who are married or have a domestic partner at the time of retirement are entitled to an unreduced joint and survivor annuity. The current assumption is that 85 percent of members qualify for an automatic spousal continuance at retirement. Based on recent experience, we propose lowering the marriage assumption for female retirees to 70 percent.

In addition, spouses/domestic partners of male retirees are assumed to be three years younger than the retiree, and spouses/domestic partners of female retirees are assumed to be 3 years older than the retiree. Spouses/domestic partners are also assumed to be the opposite gender of the retiree. Based on recent experience, no change is proposed to this assumption.

The family composition analyses examined the data for all retirements since July 1, 2015.

Family Composition Assumptions								
Fiscal Year	Male Retirees	Male	Average		Female Retirees	Female	Average	
		Retirees with J&S Benefit	Male Percent Married	Age Difference (Male - Female)		Retirees with J&S Benefit	Female Percent Married	Age Difference (Male - Female)
2016	50	37	74%	2.7	5	4	80%	(6.3)
2017	52	45	87%	2.8	12	6	50%	(3.8)
2018	62	49	79%	2.3	13	6	46%	(4.4)
2019	75	65	87%	2.7	8	5	63%	(1.4)
2020	79	63	80%	1.5	5	5	100%	(6.8)
2021	91	83	91%	3.0	7	5	71%	(4.0)
2022	84	74	88%	2.3	6	3	50%	(5.6)
2023	96	85	89%	3.1	5	4	80%	2.7
2024	72	63	88%	2.1	4	3	75%	0.8
2025	49	43	88%	2.3	4	3	75%	(5.7)
Total	710	607	85%	2.5	69	44	64%	(2.9)

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

**SECTION 3 – DEMOGRAPHIC ASSUMPTIONS
ADMINISTRATIVE EXPENSES**

ADMINISTRATIVE EXPENSES

Administrative expenses are incurred on active employees when collecting contributions and retaining records, on retirees to calculate and pay benefits, and on the plan as a whole for legal, actuarial, and auditing services.

The current assumption equals the administrative expenses paid by the Plan in the most recent fiscal year, increased with wage inflation to the year the contribution will be paid, and allocated to groups and tiers in proportion to their respective market values of assets. Total administrative expenses are assumed to increase with wage inflation each year in the future.

We propose no change to this assumption.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

APPENDIX A – SUMMARY OF CURRENT DEMOGRAPHIC ASSUMPTIONS

DEMOGRAPHIC ASSUMPTIONS

1. Merit Salary Increase Rate

The following merit component is added to wage inflation based on an individual member's years of service:

Table A-1

Merit Salary Increases	
Years of Service	Increase
0	6.50%
1	6.50
2	6.25
3	5.75
4	5.25
5	4.25
6	2.50
7	1.50
8	1.00
9	0.80
10+	0.60

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

APPENDIX A – SUMMARY OF CURRENT DEMOGRAPHIC ASSUMPTIONS

2. Rates of Retirement

Rates of retirement are based on age and service according to the following Tables A-2, A-3, and A-4. Tier 1 rates only apply when the member is eligible for unreduced benefits.

Table A-2

Tier 1 Rates of Retirement						
Age	Police Years of Service			Fire Years of Service		
	<25	25 – 29	30+	<25	25 – 29	30+
50	0.0%	55.0%	60.0%	0.0%	45.0%	50.0%
51	0.0	45.0	60.0	0.0	30.0	50.0
52	0.0	35.0	60.0	0.0	40.0	50.0
53	0.0	35.0	60.0	0.0	40.0	50.0
54	0.0	35.0	60.0	0.0	40.0	50.0
55	30.0	40.0	60.0	30.0	40.0	100.0
56	30.0	45.0	60.0	25.0	40.0	100.0
57	30.0	50.0	60.0	20.0	40.0	100.0
58 – 61	45.0	50.0	60.0	27.5	40.0	100.0
62+	100.0	100.0	100.0	100.0	100.0	100.0

Table A-3

Police Tier 2 Rates of Retirement Years of Service				
Age	5 - 19	20 - 24	25 – 29	30+
50 – 56	2.0%	2.0%	2.0%	5.0%
57 – 59	7.5	10.0	20.0	100.0
60 – 61	10.0	20.0	35.0	100.0
62 – 64	25.0	50.0	75.0	100.0
65+	100.0	100.0	100.0	100.0

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

APPENDIX A – SUMMARY OF CURRENT DEMOGRAPHIC ASSUMPTIONS

Table A-4

Fire Tier 2 Rates of Retirement Years of Service				
Age	5 - 19	20 - 24	25 – 29	30+
50 – 56	1.0%	1.0%	1.0%	2.5%
57 – 59	5.0	7.5	15.0	100.0
60 – 61	7.5	15.0	25.0	100.0
62 – 64	20.0	35.0	50.0	100.0
65+	100.0	100.0	100.0	100.0

Tier 1 vested terminated members are assumed to retire at age 50 if they have 25 or more years of service or at age 55 if they have less than 25 years of service. Tier 2 vested terminated members are assumed to retire at age 60.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

APPENDIX A – SUMMARY OF CURRENT DEMOGRAPHIC ASSUMPTIONS

3. Rates of Termination

Rates of termination are shown in Table A-5 below.

Table A-5

Service	Rates of Termination	
	Police	Fire
0	11.00%	8.50%
1	8.00	4.00
2	6.25	2.75
3	5.00	1.75
4	4.25	1.25
5	3.75	1.00
6	3.55	0.90
7	3.40	0.80
8	3.30	0.70
9	3.25	0.60
10	3.25	0.50
11	3.25	0.50
12	3.15	0.50
13	2.95	0.50
14	2.75	0.50
15	2.25	0.50
16	1.75	0.50
17	1.50	0.50
18	1.25	0.50
19+	1.00	0.50

Termination rates do not apply once retirement rates apply.

Tier 1 members who terminate with less than 10 years of service and Tier 2 members who terminate with less than 5 years of service are assumed to receive a refund of contributions. For terminating employees who are not assumed to receive a refund, 75% are assumed to subsequently work for a reciprocal employer and receive 3.00% pay increases per year.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

APPENDIX A – SUMMARY OF CURRENT DEMOGRAPHIC ASSUMPTIONS

4. Rates of Disability

For Police and Fire, disability rates are equal to the CalPERS Police Officers & Firefighters (POFF) industrial and non-industrial rates multiplied by 104%. Sample disability rates of active participants are provided in Table A-6.

Table A-6

Rates of Disability at Selected Ages	
Age	Disability Incidence
25	0.12%
30	0.20
35	0.33
40	0.52
45	0.80
50	1.17
55	1.65
60	2.24
65	2.96

All disabilities are assumed to be duty related.

5. Rates of Mortality

Mortality rates for actives, retirees, beneficiaries, terminated vested, and reciprocals are based on the sex-distinct employee and annuitant mortality tables shown on the following page. Future mortality improvements are reflected by applying the SOA MP-2021 projection scale on a generational basis from the base year of 2010.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

APPENDIX A – SUMMARY OF CURRENT DEMOGRAPHIC ASSUMPTIONS

Table A-7

Category	Base Mortality Tables	
	Male	Female
Healthy Retirees	0.972 times the 2010 Public Safety Above Median Income Mortality Table (PubS-2010(A)) for Healthy Retirees	0.972 times the 2010 Public Safety Above Median Income Mortality Table (PubS-2010(A)) for Healthy Retirees
Disabled Retiree	0.915 times the 2010 Public Safety Mortality Table (PubS-2010) for Disabled Retirees	0.915 times the 2010 Public Safety Mortality Table (PubS-2010) for Disabled Retirees
Beneficiaries	1.032 times the 2010 General Member Mortality Table (PubG-2010) for Healthy Retirees	1.032 times the 2010 General Member Mortality Table (PubG-2010) for Healthy Retirees
Healthy Non-Annuitant	0.979 times the 2010 Public Safety Above Median Income Mortality Table (PubS-2010(A)) for Employees	0.979 times the 2010 Public Safety Above Median Income Mortality Table (PubS-2010(A)) for Employees

It is assumed that 50% of active deaths are service related.

6. Family Composition

Percentage married is shown in the following Table A-8. Women are assumed to be three years younger than men.

Table A-8

Gender	Percentage Married
	Percentage
Males	85%
Females	85%

7. Administrative Expenses

Administrative expenses are assumed to equal the prior year's actual administrative expenses increased by the wage inflation assumption to the year of the contribution. Administrative expenses are allocated to tier groups in proportion to each groups' Market Value of Assets.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

APPENDIX B – SUMMARY OF PROPOSED DEMOGRAPHIC ASSUMPTIONS

DEMOGRAPHIC ASSUMPTIONS

1. Merit Salary Increase Rate

The following merit component is added to wage inflation based on an individual member's years of service:

Table B-1

Merit Salary Increases	
Years of Service	Increase
0	6.00%
1	6.00
2	5.75
3	5.50
4	5.00
5	4.25
6	2.50
7	1.50
8	1.15
9	0.95
10+	0.75

2. Police Crisis Training and Longevity Pay

An additional 3.75% increase when a member's crisis training pay becomes pensionable and an additional 1.25% increase when a member's longevity pay becomes pensionable.

3. Rates of Retirement

Rates of retirement are based on age and service according to Tables B-2 and B-3 on the next page. Tier 1 rates only apply when the member is eligible for unreduced benefits.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

APPENDIX B – SUMMARY OF PROPOSED DEMOGRAPHIC ASSUMPTIONS

Table B-2

Police Rates of Retirement							
Age	Tier 1 Years of Service			Tier 2 Years of Service			
	<25	25 – 29	30+	<20	20 – 24	25 – 29	30+
50	0.0%	55.0%	55.0%	2.0%	2.0%	2.0%	5.0%
51	0.0	45.0	55.0	2.0	2.0	2.0	5.0
52 – 54	0.0	35.0	55.0	2.0	2.0	2.0	5.0
55	25.0	37.5	55.0	2.0	2.0	2.0	5.0
56	25.0	40.0	55.0	2.0	2.0	2.0	5.0
57 – 59	25.0	40.0	55.0	7.5	10.0	20.0	55.0
60 – 61	25.0	40.0	55.0	10.0	20.0	35.0	55.0
62 – 64	100.0	100.0	100.0	25.0	50.0	75.0	100.0
65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table B-3

Fire Rates of Retirement							
Age	Tier 1 Years of Service			Tier 2 Years of Service			
	<25	25 – 29	30+	<20	20 – 24	25 – 29	30+
50	0.0%	40.0%	40.0%	1.0%	1.0%	1.0%	2.5%
51 – 54	0.0	30.0	40.0	1.0	1.0	1.0	2.5
55	27.5	30.0	40.0	1.0	1.0	1.0	2.5
56	22.5	30.0	40.0	1.0	1.0	1.0	2.5
57	17.5	30.0	40.0	5.0	7.5	15.0	40.0
58 – 59	27.5	30.0	40.0	5.0	7.5	15.0	40.0
60 – 61	27.5	30.0	40.0	7.5	15.0	25.0	40.0
62 – 64	100.0	100.0	100.0	20.0	35.0	50.0	100.0
65+	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Tier 1 vested terminated members are assumed to retire at age 50 if they have 25 or more years of service or at age 55 if they have less than 25 years of service. Tier 2 vested terminated members are assumed to retire at age 60.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

APPENDIX B – SUMMARY OF PROPOSED DEMOGRAPHIC ASSUMPTIONS

4. Rates of Termination

Rates of termination are shown in Table B-5 below.

Table B-5

Rates of Termination		
Service	Police	Fire
0	11.00%	6.00%
1	8.00	3.25
2	6.25	2.25
3	5.00	1.50
4	4.25	1.25
5	3.75	1.00
6	3.55	0.90
7	3.40	0.80
8	3.30	0.70
9	3.25	0.60
10	3.25	0.50
11	3.25	0.50
12	3.15	0.50
13	2.95	0.50
14	2.75	0.50
15	2.25	0.50
16	1.75	0.50
17	1.50	0.50
18	1.25	0.50
19+	1.00	0.50

Termination rates do not apply once retirement rates apply.

Tier 1 members who terminate with less than 10 years of service and Tier 2 members who terminate with less than 5 years of service are assumed to receive a refund of contributions. For terminating employees who are not assumed to receive a refund, 75% are assumed to subsequently work for a reciprocal employer and receive 3.00% pay increases per year.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

APPENDIX B – SUMMARY OF PROPOSED DEMOGRAPHIC ASSUMPTIONS

5. Rates of Disability

For Police, disability rates are equal to the CalPERS Public Agency Police industrial and non-industrial rates multiplied by 77%. For Fire, disability rates are equal to the CalPERS Public Agency Fire industrial and non-industrial rates multiplied by 110%. Sample disability rates of active participants are provided in Table B-6.

Table B-6

Rates of Disability at Selected Ages		
Age	Police	Fire
25	0.13%	0.03%
30	0.38	0.07
35	0.62	0.14
40	0.86	0.26
45	1.11	0.46
50	1.46	2.33
55	3.74	3.43
60	4.73	4.87
65	5.69	6.74

All disabilities are assumed to be duty related.

6. Rates of Mortality

Mortality rates for actives, retirees, beneficiaries, terminated vested, and reciprocals are based on the sex-distinct employee and annuitant mortality tables shown on the following page. Future mortality improvements are reflected by applying the SOA MP-2021 projection scale on a generational basis from the base year of 2016.

**CITY OF SAN JOSÉ POLICE AND FIRE DEPARTMENT RETIREMENT PLAN
DEMOGRAPHIC EXPERIENCE STUDY AS OF JUNE 30, 2025**

APPENDIX B – SUMMARY OF PROPOSED DEMOGRAPHIC ASSUMPTIONS

Table B-7

Category	Base Mortality Tables	
	Male	Female
Healthy Retirees	1.000 times the 2016 Public Safety Above Median Income Mortality Table (PubS-2016(A)) for Healthy Retirees	1.000 times the 2016 Public Safety Above Median Income Mortality Table (PubS-2016(A)) for Healthy Retirees
Disabled Retiree	0.900 times the 2016 Public Safety Mortality Table (PubS-2016) for Disabled Retirees	0.900 times the 2016 Public Safety Mortality Table (PubS-2016) for Disabled Retirees
Beneficiaries	1.100 times the 2016 General Member Mortality Table (PubG-2016) for Healthy Retirees	1.100 times the 2016 General Member Mortality Table (PubG-2016) for Healthy Retirees
Healthy Non-Annuitant	0.960 times the 2016 Public Safety Above Median Income Mortality Table (PubS-2016(A)) for Employees	0.960 times the 2016 Public Safety Above Median Income Mortality Table (PubS-2016(A)) for Employees

It is assumed that 50 percent of active deaths are service related.

7. Family Composition

Percentage married is shown in the following Table B-8. Women are assumed to be three years younger than men.

Table B-8

Gender	Percentage Married
	Percentage
Males	85%
Females	70%

8. Administrative Expenses

Administrative expenses are assumed to equal the prior year's actual administrative expenses increased by the wage inflation assumption to the year of the contribution. Administrative expenses are allocated to tier groups in proportion to each groups' Market Value of Assets.



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