Dallas Police and Fire Pension System

Review of Actuarial Experience

For the Period January 1, 2020 to December 31, 2024

August 14, 2025 Board Meeting / Jeff Williams / Caitlin Grice

Segal

Agenda

Overview and Experience Review

Proposed Assumption Changes

Demographic Assumptions

Economic Assumptions

Actuarial Methods

Appendices

Overview and Experience Review

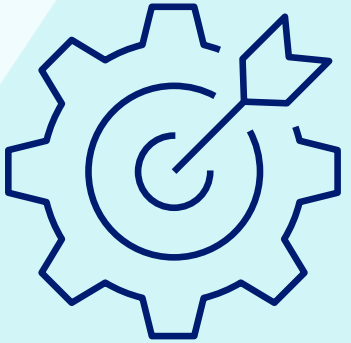
Overview: Purpose of an Experience Study

- An experience study provides the basis for developing recommended assumptions to be used in the annual actuarial valuation.
  - Performed on a periodic basis
  - Last full experience study was conducted in 2020 for the five-year period ended December 31, 2019
  - Current study is based on the period January 1, 2020 through December 31, 2024
- Actuarial Standards of Practice Statement 27 provides guidance on best practices for performing assumption-setting analysis.
  - Each assumption should be the actuary's best estimate.
- Segal's role is to make appropriate "best estimate" recommendations to the Board for each assumption.

The assumptions are the Board's assumptions, and the Board can adopt all, none, or some of the recommendations of the actuary.

Overview: How Assumptions Are Set

- Review past experience
- Compare past experience (“actual”) with assumptions (“expected”)
- Determine trends – make judgments about future
- Develop component parts of each assumption
  - Maintain linkage with investments
  - Maintain internal consistency
- Keep in mind
  - No “right” answer – best estimate
  - Assumptions are long-term, but need to be reviewed and revised periodically
    - Behavioral patterns can change over time
- Appendix 1 includes details of the current and proposed assumptions
- Appendix 2 contains a summary of actual, expected, and proposed experience
  - Proposed mortality counts include updated mortality projection scale



Overview: Actuarial Assumptions and Methods

Demographic

- Death in active service
- Death after retirement
  - Non-Disabled
  - Disabled
  - Contingent survivor
- Mortality improvement
- Retirement
  - DROP
  - Non-DROP
- Disability
- Withdrawal
- Other assumptions, including percent married, spousal age difference, etc.

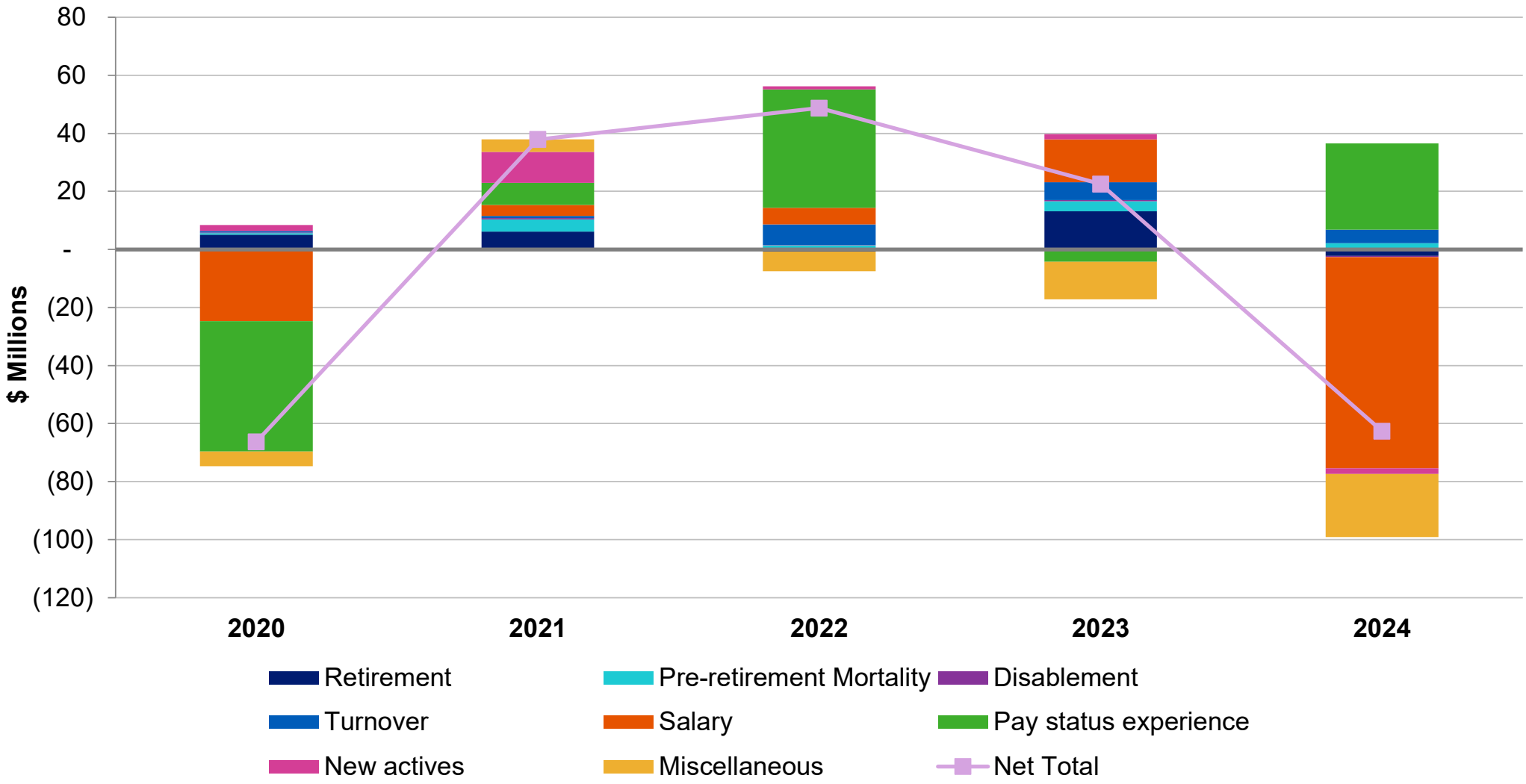
Economic

- Salary increases
- Payroll growth
- Inflation
- Discount rate (investment rate of return)
- Administrative expenses
- COLA

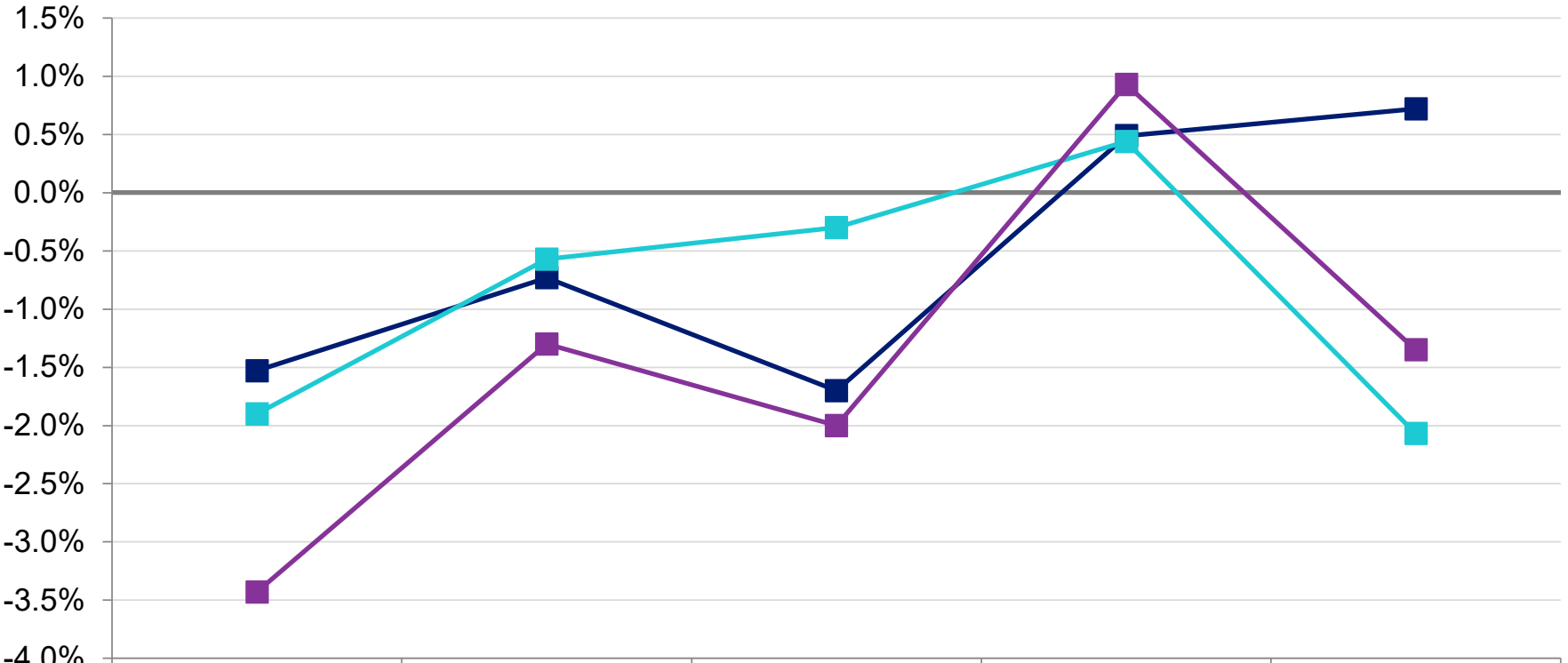
Methods

- Funding method
- Amortization method
- Asset method

Sources of Gain/(Loss) by Year



Experience Gains and Losses as a % of Actuarial Accrued Liability in Study Period



	2020	2021	2022	2023	2024
Investment	-1.53%	-0.73%	-1.70%	0.49%	0.72%
Non-Investment	-1.90%	-0.57%	-0.30%	0.44%	-2.07%
Total	-3.43%	-1.30%	-2.00%	0.93%	-1.35%

Proposed Assumption Changes

Summary of Proposed Assumptions

Assumption	Current Assumption	Proposed Assumption
Healthy Annuitant Mortality	Pub-2010 Public Safety Retiree Amount-weighted Mortality Table, set back one year for females	Pub-2016 Public Safety Retiree Amount-weighted Mortality Table, multiplied times 1.25 for males and multiplied by 0.8 for females
Contingent Beneficiary Mortality	Pub-2010 Public Safety Contingent Survivor Amount-weighted Mortality Table, set back one year for females	Pub-2016 Public Safety Contingent Survivor Amount-weighted Mortality Table, multiplied times 1.1 for males and multiplied by 1.25 for females
Disabled Annuitant Mortality	Pub-2010 Public Safety Disabled Retiree Amount-weighted Mortality Table, set forward four years for males and females	Pub-2016 Public Safety Disabled Retiree Amount-weighted Mortality Table, set forward five years for males
Pre-Retirement Mortality	Pub-2010 Public Safety Employee Amount-weighted Mortality Table, set forward five years for males	Pub-2016 Public Safety Employee Amount-weighted Mortality Table, set forward five years for males and set back two years for females
Mortality Improvement	Projected generationally with Scale MP-2019	Projected generationally with Scale MP-2021
DROP Retirement	Separate age-based rates for Fire and Police, with 100% retirement at age 65; 75% retirement after ten years in DROP	Lowered age-based rates covering the same service age ranges for each group
Non-DROP Retirement	Two separate age-based rates based on hire date and service, with 100% retirement at age 62 or after benefit multiplier hits 90% maximum	Updated age-based rates covering the same service age ranges for each group
DROP Utilization	No members are assumed to elect to enter the DROP	No change

Summary of Proposed Assumption Changes

Assumption	Current Assumption	Proposed Assumption
Terminated Vested Retirement	Age 50 if terminate pre-September 1, 2017; Age 58 if terminate on or after September 1, 2017 75% of those who terminate prior to age 40 will take a cash out at age 40	25% of those who terminate will take a cash out within the first two years after termination Afterwards, 100% retirement at normal retirement age
Disability	Age-based rates; rates zero out after age 54	Lowered age-based rates covering the same service age range
Service-Related Disability	100% of disabilities assumed service-related	No change
Turnover	Separate service-based rates for Fire and Police; rates zero out after 24 years of service	Updated service-based rates covering the same service ranges for each group
Percent Married	75% for Males and Females	No change
Spousal Age Difference	Females three years younger than males	Females two years younger than males
Inflation	2.50%	No change
Investment Return	6.50%	No change
Payroll Growth	2.50%	3.50%
Salary Scale	Separate salary scales based on rank as stated in the 2023 Meet and Confer agreement with an ultimate rate of 2.50% or 3.00%	Salary scales based on service, with 10-14% increase based on rank in first year based on 2025 Pay Scales
Administrative Expenses	Greater of $7,000,000 per year or 1% of computation pay	No change
Cost-of-Living Adjustment (COLA)	Beginning October 1, 2025, 0.85% for 1st 5 years, 1.00% for years 6-10, 1.25% for years 11-15 & 1.50% thereafter	No change

Impact of Each Proposed Change on Key Metrics

Assumption	Change in ADC as a Percent of Pay	Change in Funded Ratio (AVA)
Spouse Age Difference	-0.13%	0.03%
Turnover	-0.02%	0.01%
Mortality	-2.16%	0.86%
Mortality Scale	-0.28%	0.11%
Disability	-0.02%	0.00%
Retirement	-0.62%	0.15%
TV Retirement	0.27%	-0.03%
Payroll Growth	-3.70%	0.00%
Salary Scale	3.95%	-0.69%
All changes	**-2.72%**	**0.44%**

The results above reflect the incremental changes from one change to the next.

Impact of Proposed Changes on Overall Results

The chart below provides the estimated impact of the assumption changes, based on the preliminary January 1, 2025 valuation results. All dollar amounts are in millions.

	1	2	3
Item	**January 1, 2024 Valuation Results**	**Preliminary January 1, 2025 Valuation Results**	**Recommended Changes**
Employer Normal Cost	$38.33	$42.72	$58.99
Actuarial Accrued Liability (AAL)	5,719.38	5,956.82	5,874.47
Actuarial Value of Assets (AVA)	1,831.29	1,892.29	1,892.29
Unfunded Actuarial Accrued Liability (UAAL)	3,888.09	4,064.53	3,982.18
Funded Percentage (AVA/AAL)	32.02%	31.77%	32.21%
Actuarially Determined Contribution (ADC)	**$262.01**	**$308.89**	**$304.54**
ADC as a Percentage of Projected Payroll	**53.47%**	**55.42%**	**52.70%**
Projected payroll	$490.00	$557.37	$577.86

Demographic Assumptions

Healthy Annuitant Mortality

Current Assumption

- Pub-2010 Public Safety Retiree Amount-Weighted Mortality Table, set back one year for females, projected generationally using Scale MP-2019

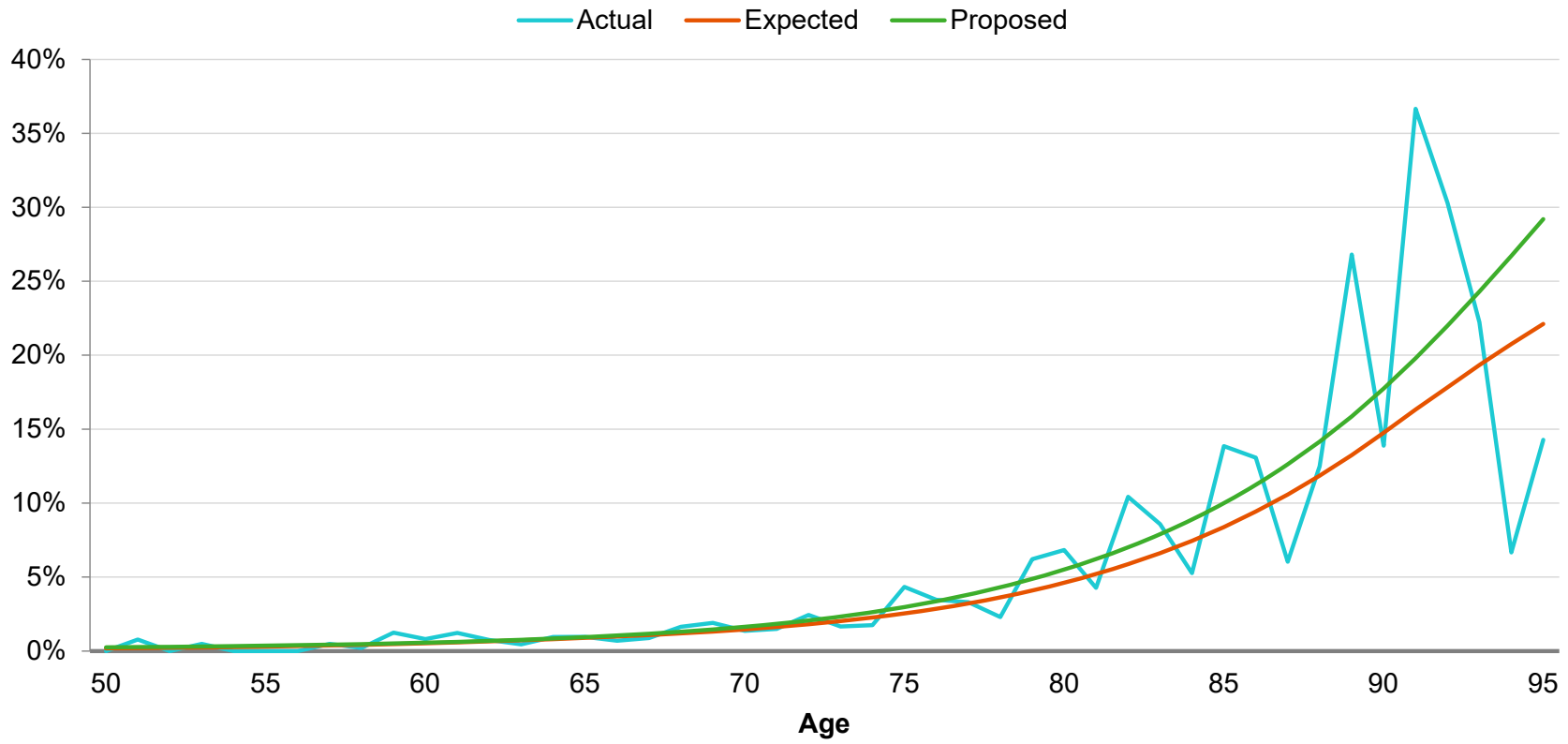
Findings

- Post-retirement mortality is the most important component of mortality assumptions; it determines the duration over which retirement benefits are paid.
- There were 18,937 non-disabled retiree exposures over the study period:
  - 467 actual deaths (not enough for full credibility)
  - 388 deaths were expected
  - 450 deaths would have been expected under the new assumptions

Recommendation

- Pub-2016 Public Safety Retiree Amount-Weighted Mortality Table, multiplied times 1.25 for males and multiplied times 0.8 for females, projected generationally using Scale MP-2021

Male Retiree Mortality



Contingent Beneficiary Mortality

Current Assumption

- Pub-2010 Public Safety Contingent Survivor Amount-Weighted Mortality Table, set back one year for females, projected generationally using Scale MP-2019

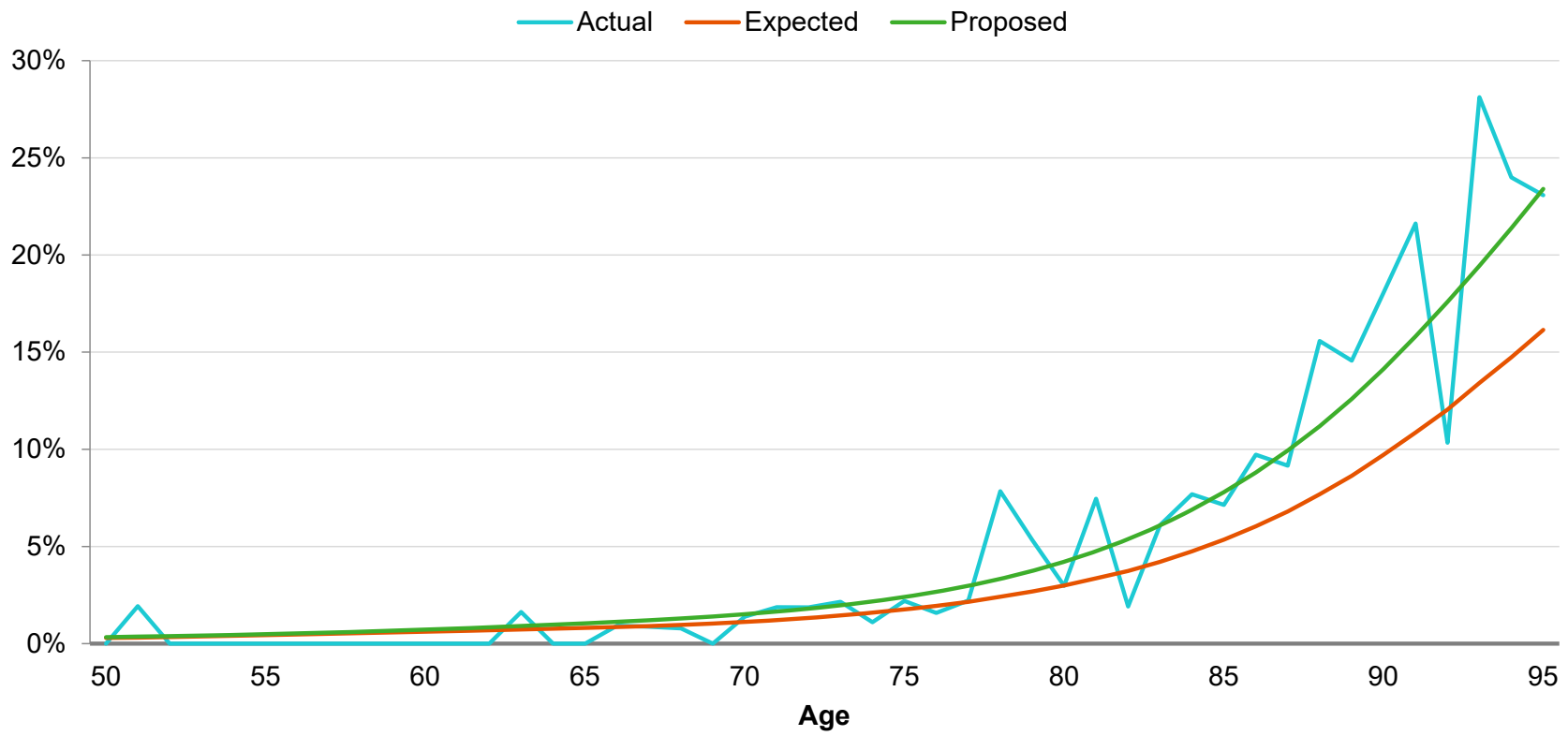
Findings

- Post-retirement mortality is the most important component of mortality assumptions; it determines the duration over which retirement benefits are paid.
- There were 5,695 beneficiary exposures over the study period:
  - 270 actual deaths (not enough for full credibility)
  - 176 deaths were expected
  - 250 deaths would have been expected under the new assumptions

Recommendation

- Pub-2016 Public Safety Contingent Survivor Amount-Weighted Mortality Table, multiplied by 1.1 for males and multiplied by 1.25 for females, projected generationally using Scale MP-2021

Female Beneficiary Mortality



Disabled Annuitant Mortality

Current Assumption

- Pub-2010 Public Safety Disabled Retiree Amount-Weighted Mortality Table, set forward four years for males and females, projected generationally using Scale MP-2019

Findings

- Post-retirement mortality is the most important component of mortality assumptions; it determines the duration over which retirement benefits are paid.
- There were 579 disabled retiree exposures over the study period:
  - 36 actual deaths (not enough for full credibility)
  - 29 deaths were expected
  - 32 deaths would have been expected under the new assumptions

Recommendation

- Pub-2016 Public Safety Disabled Retiree Amount-Weighted Mortality Table, set forward five years for males, projected generationally using Scale MP-2021

Pre-Retirement Mortality

Current Assumption

- Pub-2010 Public Safety Employee Amount-Weighted Mortality Table, set forward five years for males, projected generationally using Scale MP-2019

Findings

- There were 26,753 active and terminated vested exposures over the study period:
  - 35 actual deaths (not enough for full credibility)
  - 32 deaths were expected.
  - 32 deaths would have been expected under the new assumptions

Recommendation

- Pub-2016 Public Safety Employee Amount-Weighted Mortality Table, set forward five years for males and set back 2 years for females, projected generationally using Scale MP-2021

Retirement Rates

Current Assumptions

- Four separate sets of retirement rates; separate rates for DROP and non-DROP participants
- Rates are age-based
- For DROP participants:
  - Separate rates for Fire and Police
  - The retirement rate is set to 75% after ten years in DROP and 100% at age 65
- For non-DROP participants:
  - Same rates for Fire and Police
  - Separate rates based on years of service as of 9/1/2017
  - The retirement rate is set to 100% at age 62 or once benefit multiplier hits 90% maximum
- DROP utilization: No members are assumed to elect to enter the DROP

Retirement Rates – DROP Participants

Findings

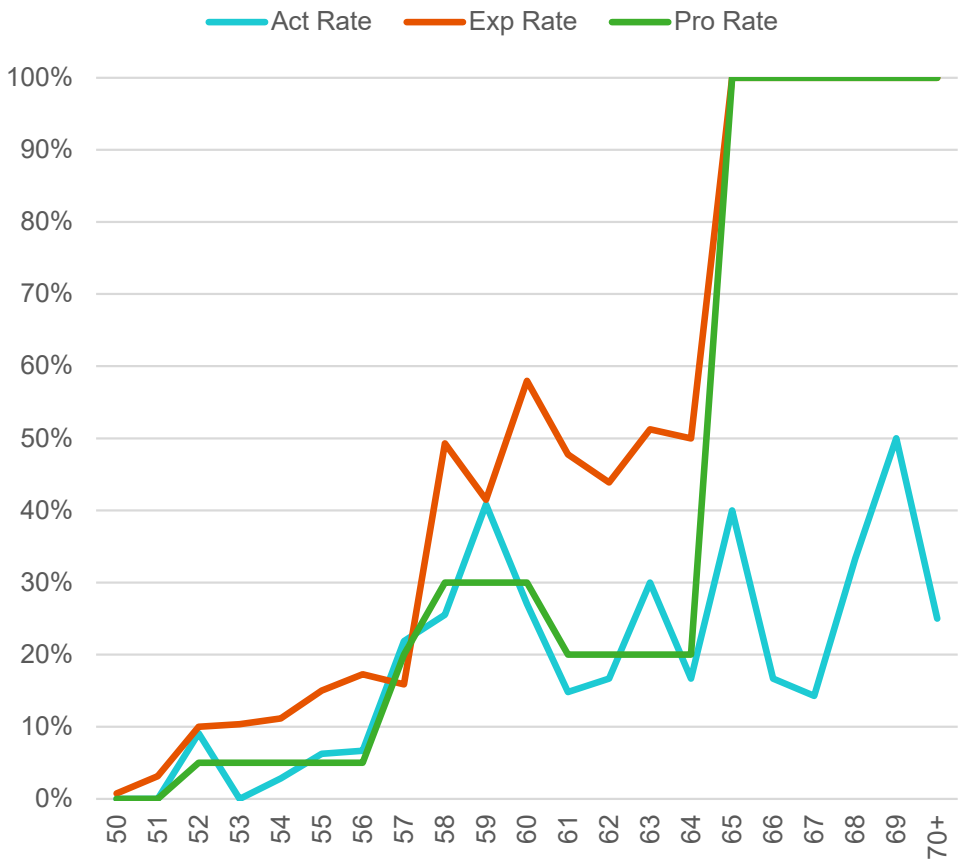
- **Fire:** 605 exposures over the study period
  - 121 actual retirements
  - 219 retirements were expected
  - 147 retirements would have been expected under the new assumptions
  - Through age 64
    - 109 actual, 176 expected, 104 proposed
- **Police:** 891 exposures over the study period
  - 142 actual retirements
  - 307 retirements were expected
  - 191 retirements would have been expected under the new assumptions
  - Through age 64
    - 137 actual, 252 expected, 136 proposed

Recommendation

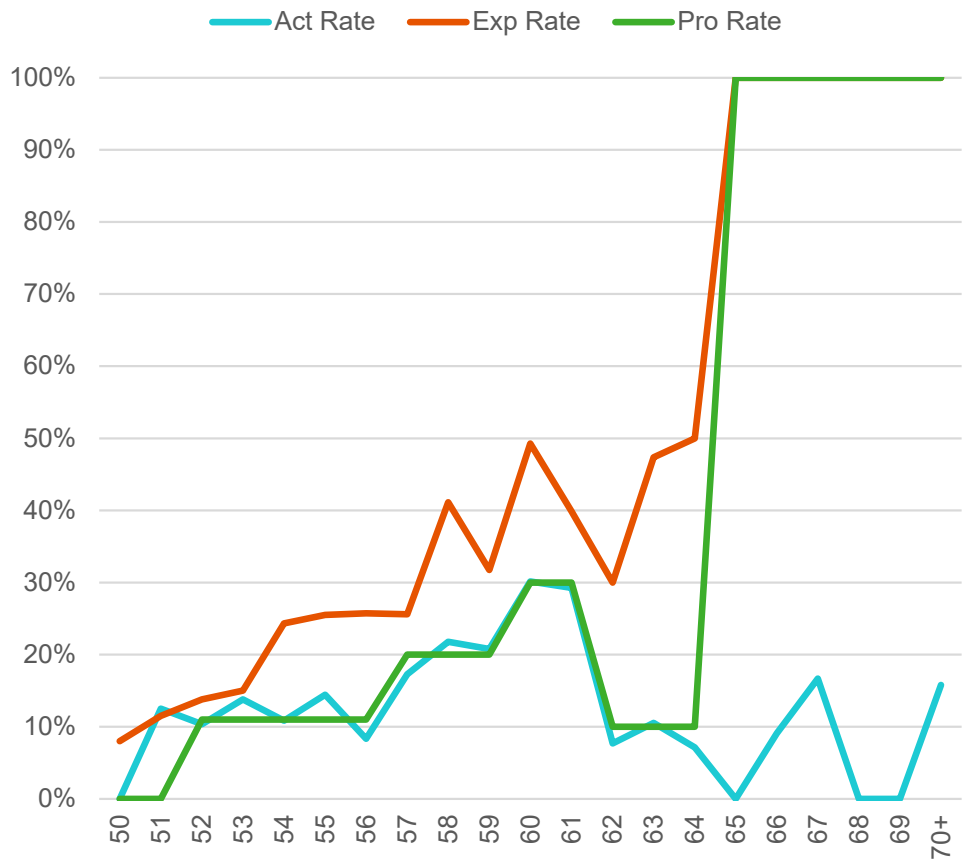
- Lower the rates used and begin at age 52
- Maintain the 75% retirement after 10 years in DROP and 100% retirement at age 65 assumption.

Retirement Rates – DROP Participants

Fire



Police



Retirement Rates – Non-DROP Participants

Findings

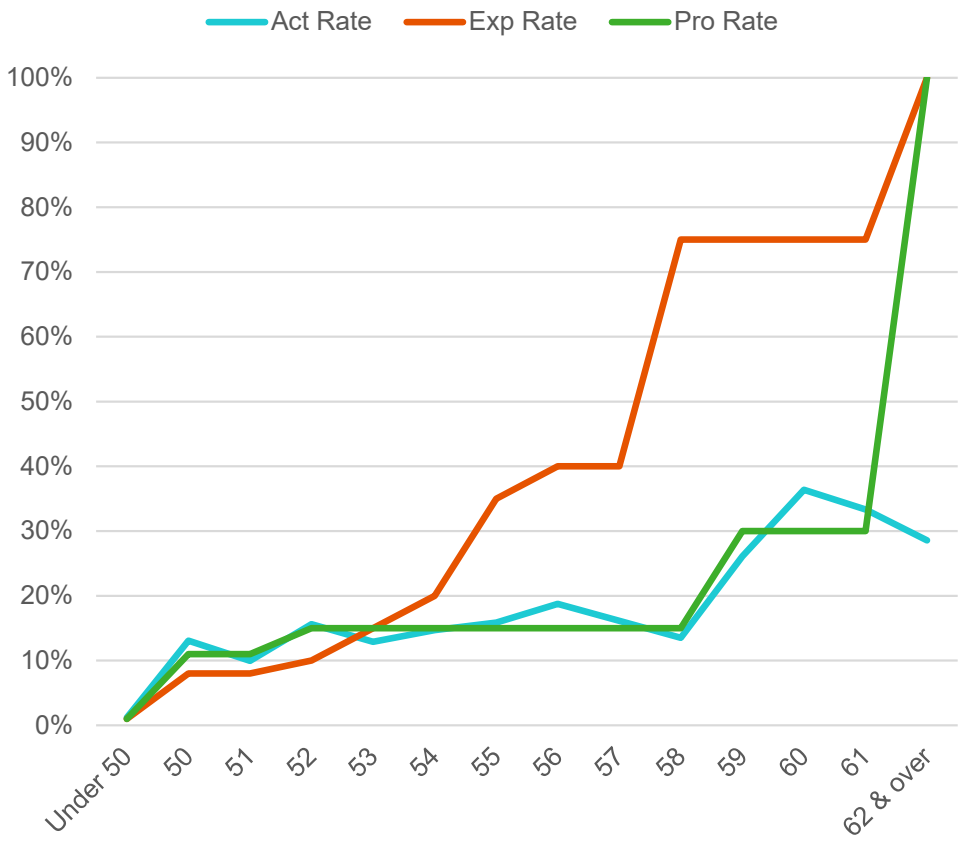
- **Service >= 20 as of 9/1/2017:** 1,809 exposures over the study period
  - 217 actual retirements
  - 348 retirements were expected
  - 219 retirements would have been expected under the new assumptions
- **Service < 20 as of 9/1/2017:** 3,759 exposures over the study period
  - 146 actual retirements
  - 171 retirements were expected
  - 168 retirements would have been expected under the new assumptions
- **DROP utilization:** 5,568 exposures over the study period
  - 90 new DROP elections

Recommendation

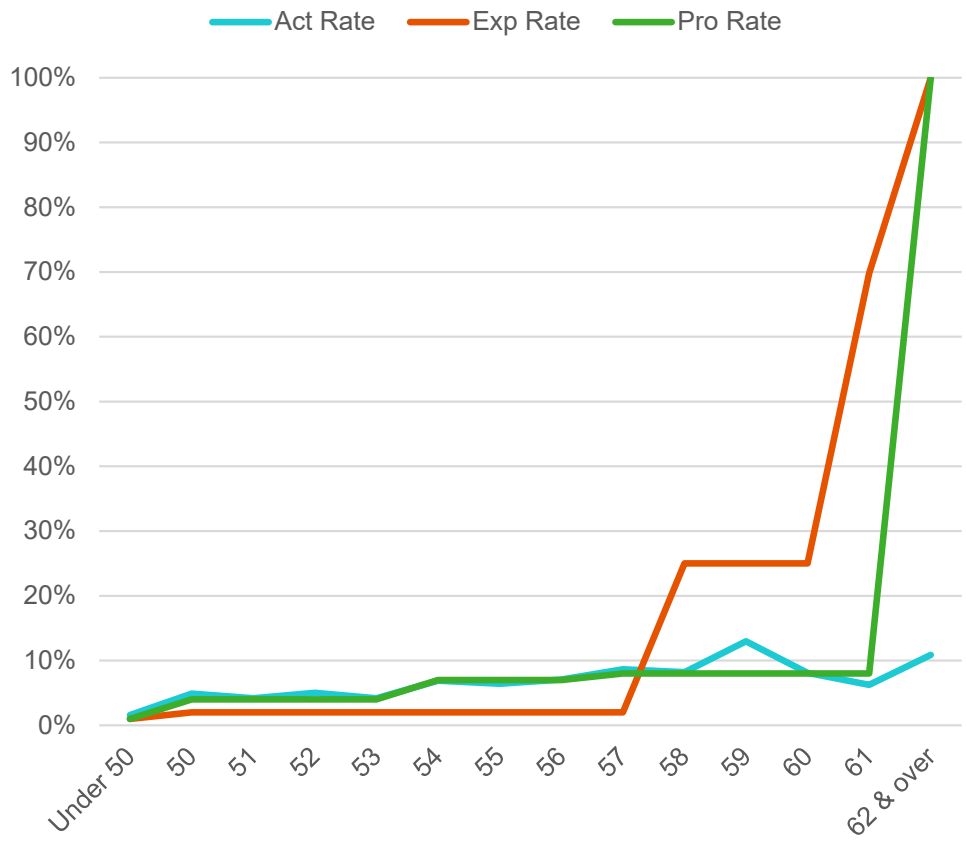
- Update the rates used
- Maintain the 100% retirement at age 62 or when benefit multiplier hits 90% maximum assumptions.
- Maintain the assumption that no new members are assumed to enter DROP

Retirement Rates – Non-DROP Participants

Service > 20 as of 9/1/2017



Service <= 20 as of 9/1/2017



Inactive Vested Participants

Current Assumption

- Members who terminated prior to September 1, 2017 retire at age 50
- Members who terminated on or after September 1, 2017 retire at age 58
- 75% of those who terminate prior to age 40 take a lump sum cash out at age 40

Findings

- 138 terminated vested participants either retired or cashed out during the study period:
  - 85, or 61.6%, retired at average age 50
  - 53, or 38.4%, cashed out at average age 36

Recommendation

- Update assumed retirement age to be Normal Retirement Age
- Adjust cash out assumption to assume 25% cash out within first two years of terminating

Disability Rates

Current Assumption

- Age-based rates ranging from 0.01% to 0.044%, stopping at age 54
- 100% of disabilities are assumed to be service-related

Findings

- There were 25,531 exposures over the study period:
  - 6 actual disabilities
  - 5 disabilities were expected
- 2 non-duty disabilities

Recommendation

- Lower rates at all ages
- Maintain assumption that 100% of disabilities are assumed to be service-related

Turnover Rates

Current Assumption

- Service-based rates with rates decreasing with longer services
- Rates differ for Fire and Police
- Rates do not apply once eligible for normal retirement

Findings

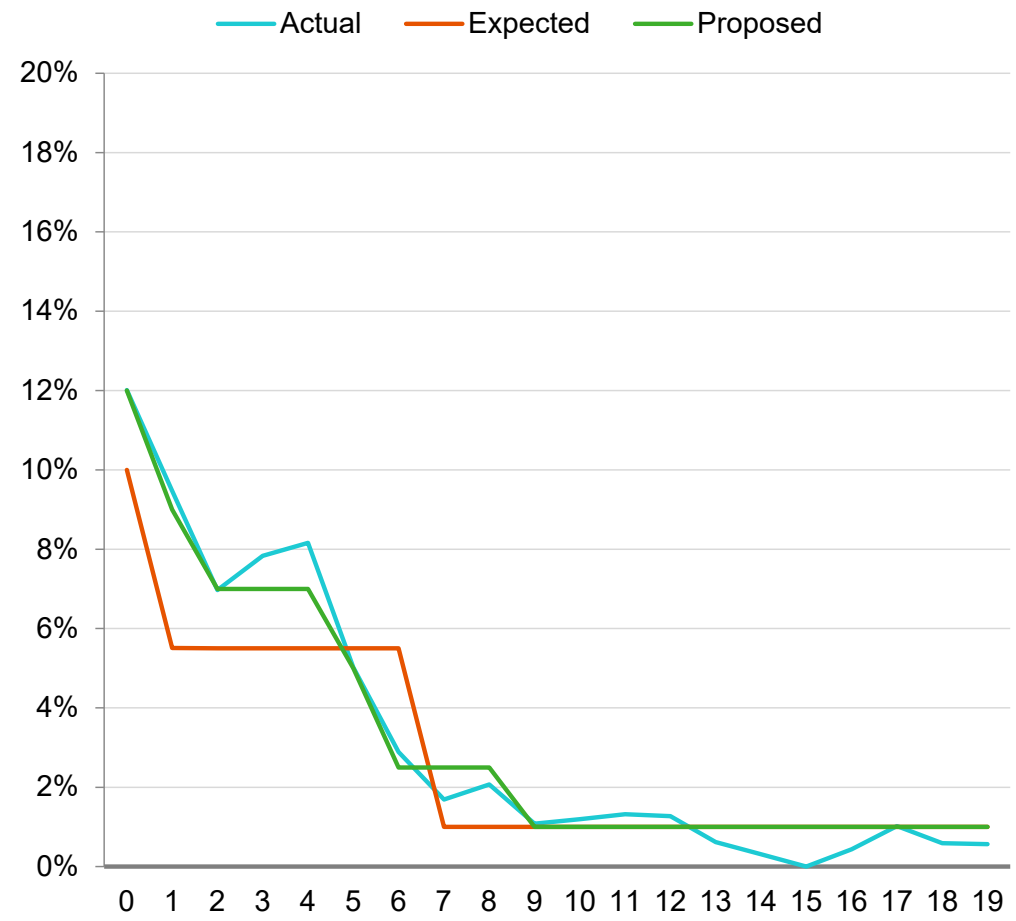
- **Fire:** 7,551 exposures over the study period
  - 308 actual terminations
  - 250 terminations were expected
  - 296 terminations would have been expected under the new assumptions
- **Police:** 11,131 exposures over the study period
  - 460 actual terminations
  - 455 terminations were expected
  - 458 terminations would have been expected under the new assumptions

Recommendation

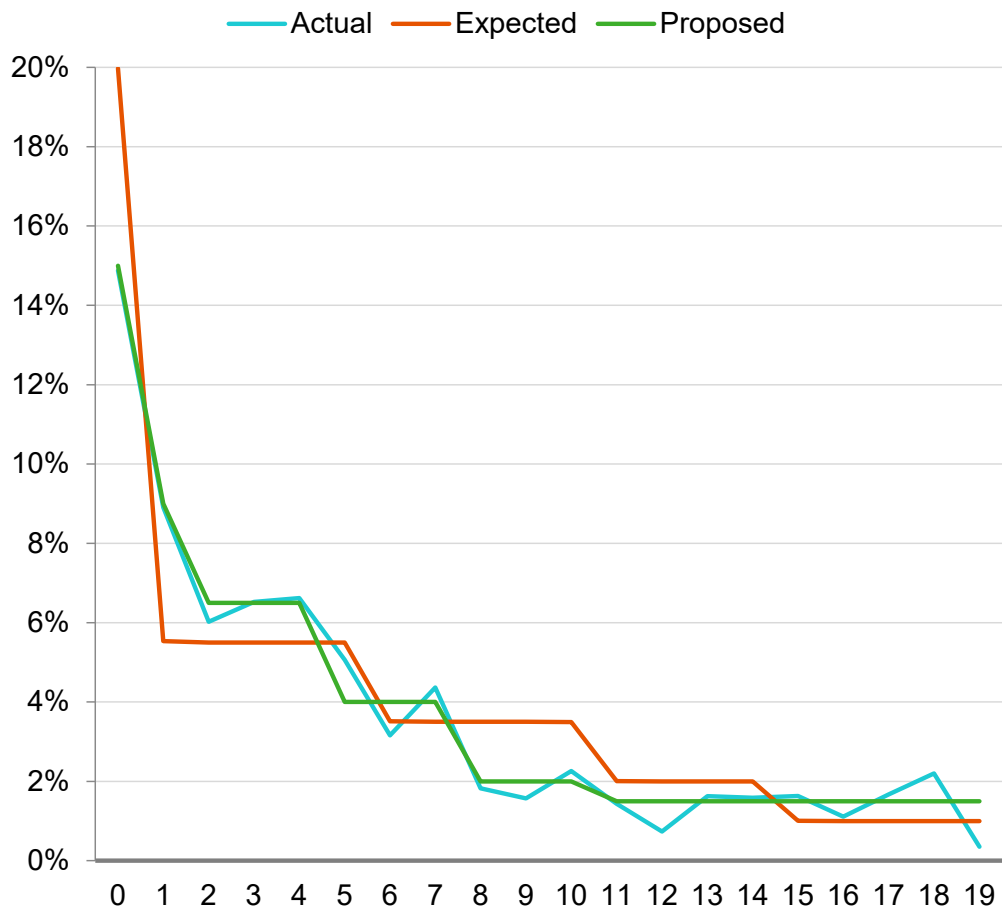
- Update the current rates

Turnover Rates

Fire



Police



Other Demographic Assumptions

Form of Benefit Election

- Married participants are assumed to elect the 50% J&S Annuity, unmarried are assumed to elect the Single Life Annuity
- No change recommended

Spousal Age Difference

- Females are assumed to be three years younger than males
- Females were approximately 1.3 years younger than their male spouses
- Recommend updating the assumption to assume females are two years younger than males

Percentage of Participants Married

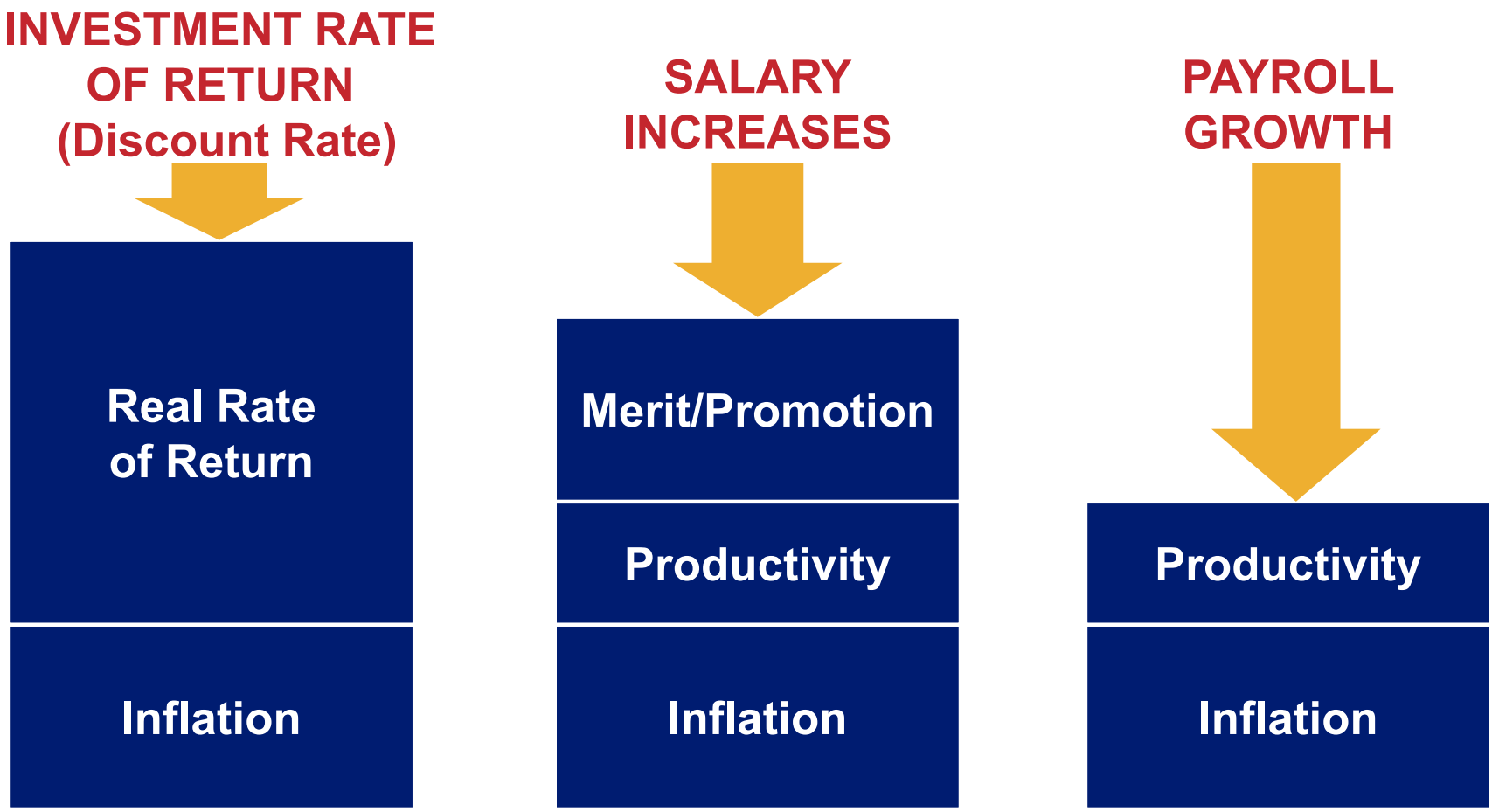
- 75% of participants are assumed to be married
- Approximately 77% of participants were married at the time of retirement
- No change recommended

Economic Assumptions

Economic Assumptions

Building Blocks

These economic assumptions have two or three components (or building blocks).



Building blocks must be consistent across all economic assumptions.

Inflation

Current Assumption: 2.50%

Comments

- 2025 OASDI Trustees Report:
  - 3.0% for high-cost projection, 2.4% for intermediate projection, 1.8% for low-cost projection
- Historical (through December 2024):

Average Annual Change in CPI-U	
Last 5 years	4.17%
Last 10 years	2.86%
Last 20 years	2.57%
Last 30 years	2.53%
Last 100 years	2.95%

Recommendation: No change

Investment Rate of Return

Current Assumption: 6.50%

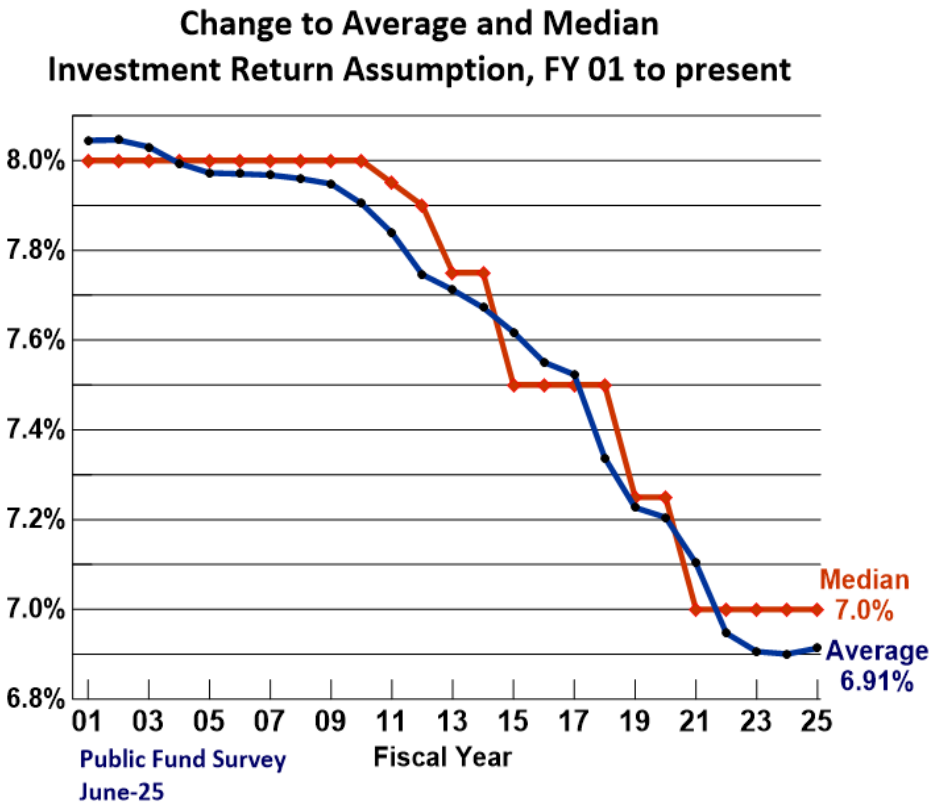
- NASRA Survey, November 2024
  - With FY24, the median has dropped to 7.00%, and the average is 6.91%.
  - Chart shows ongoing trend towards lower investment return assumptions.

Findings

- Based on the current asset allocation and Segal Marco Advisor's capital market assumptions as of December 31, 2024, over the next 20 years, the System has a:
  - 56% chance of exceeding 6.50%

Recommendation: No change

Change in Distribution of Public Pension Investment Return Assumptions, FY 01 to FY 25



Investment Rate of Return

- The chart below shows actuarial value and market value investment returns over the five-year period ending December 31, 2024.

Year Ended December 31	Actuarial Value Investment Return	Market Value Investment Return	Assumed Return
2020	3.46%	-0.45%	7.00%
2021	4.68%	16.99%	6.50%
2022	-9.78%	-11.46%	6.50%
2023	7.98%	13.90%	6.50%
2024	8.92%	9.27%	6.50%

Average Rates of Return	Actuarial Value	Market Value
Most recent five-year average return	0.21%	5.08%
Most recent ten-year average return	-3.90%	3.13%
Most recent 15-year average return	-0.44%	3.48%
20-year average return	0.01%	1.83%

Payroll Growth

Current Assumption: 2.50%

- Used to determine the amortization payment on the unfunded actuarial accrued liability (UAL)
- Payment on UAL expected to increase at payroll growth rate
- Usually equivalent to inflation assumption or inflation plus productivity

Recommendation: Increase to 3.50%

Average Annual Change in Covered Payroll	
Last 5 years	6.10%
Last 7 years (since 2018)	6.39%
Last 10 years	3.38%

Salary Scale

Current Assumption

- Rates based on rank and the 2023 Meet and Confer Agreement
- Higher rates in 2023 with ultimate rates of 2.5% or 3%
- The current rates reflect assumed inflation of 2.50%.

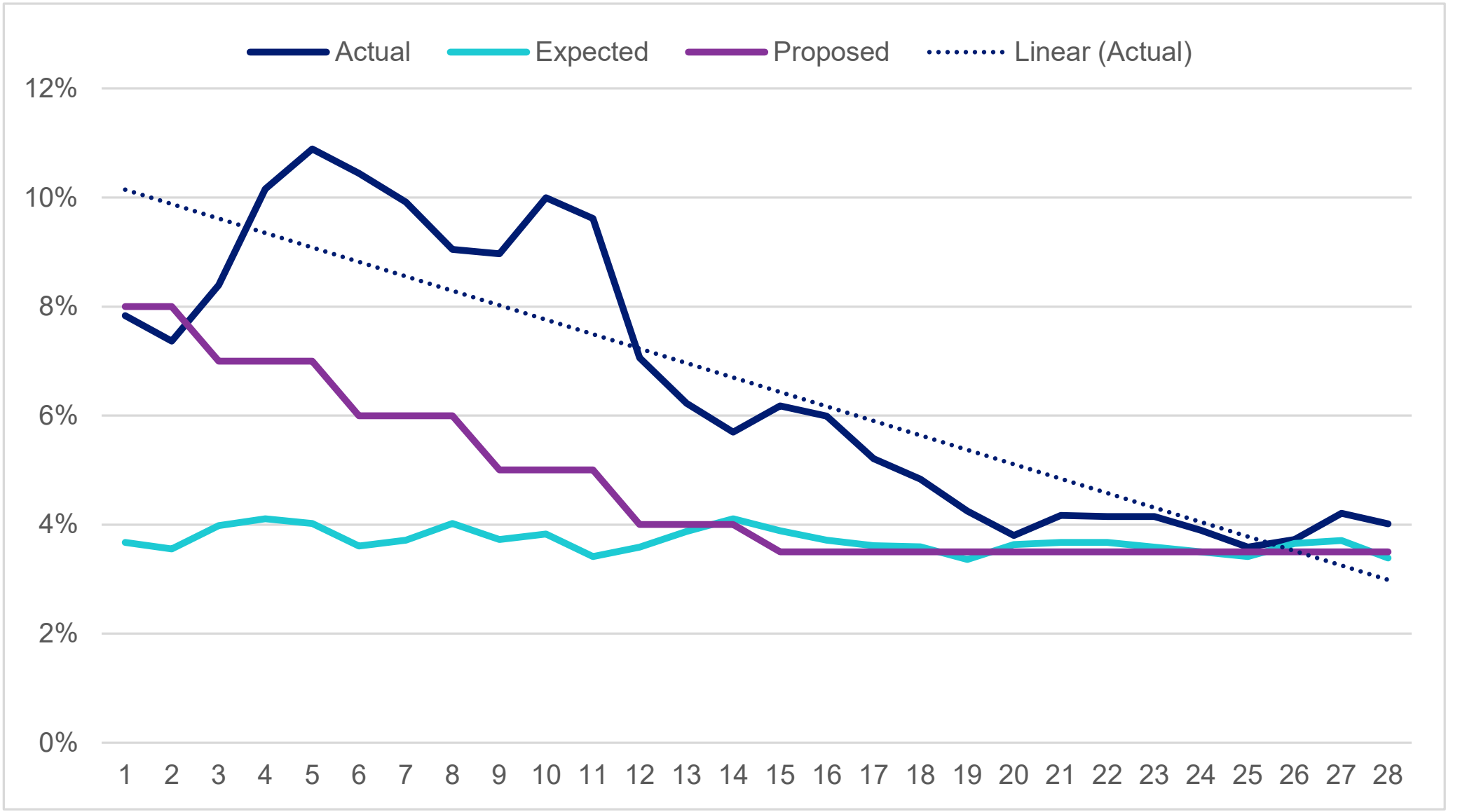
Findings

- Actual increases over the period were much higher than assumed, with an average increase of almost 9.5% per year

Recommendation

- Update to service-based table with rates ranging from 8% to 3.5%
- Assume initial 10% or 14% increase based on rank in 2025 to reflect the increased 2025 Pay Scales

Salary Scale



Administrative Expenses

Current Assumption

- The administrative expenses are assumed to be $7,000,000 a year and are occasionally updated to coincide with recent experience

Recommendation

- No Change

Year	Assumed Expenses	Actual Expenses
2020	$8,500,000	$6,534,350
2021	7,000,000	6,390,829
2022	7,000,000	6,361,999
2023	7,000,000	5,974,248
2024	7,000,000	7,408,894
Total	**$36,500,000**	**$32,670,320**
Average	**$7,300,000**	**$6,534,064**

Cost-of-Living Adjustment (COLA)

Current Assumption

- Beginning October 1, 2025, 0.85% on original benefit for first five years, 1.00% for years six through 10, 1.25% for years 11 through 15, 1.5% thereafter
- As part of the plan changes adopted by the Board on August 8, 2024, a partial COLA is payable while the Plan is under 70% funded on a market value basis

Recommendation

- Maintain assumption
- Will review as needed if plan changes or System and City agree to alternative funding plan

Actuarial Methods

Actuarial Cost Method

Current Method: Traditional Entry Age

- Entry Age is the most common method used for public sector plans in the U.S.
- Normal cost stays constant as a percentage of payroll for each member.
- Provides more stable normal cost calculation, when assumptions are met
- Actuarial Standard of Practice #4 (ASOP 4) requires disclosure under the “Traditional” Entry Age approach, as does the GASB.

Recommendation

Maintain current method.

Actuarial Asset Smoothing Method

Current Method

- Reflects 5-year straight-line amortization of each year's market value investment gain or loss
- 20% corridor around market
- Treats realized and unrealized losses equally
  – Sale of assets does not affect actuarial value.

Recommendation

Maintain current method.

Amortization of the Unfunded Actuarial Accrued Liability

Current Method

- Two initial amortization bases established as of January 1, 2023
  - First amortization base for $2.25 billion and is amortized over 30 years on a level percent of pay basis
  - Second amortization base for $1.33 billion and has a three-year step up of the amortization payment, with the outstanding balance after three years to be amortized over 27 years on a level percent of pay basis
- Beginning January 1, 2024, new bases established based on plan's experience and are amortized over the amortization period remaining on the initial 2023 bases
- Beginning in 2033, newly established bases will be set at a period of 20 years

Recommendation

- Maintain current method and amortization periods
- Revisit assumption if System and City agree to alternative funding plan

Questions

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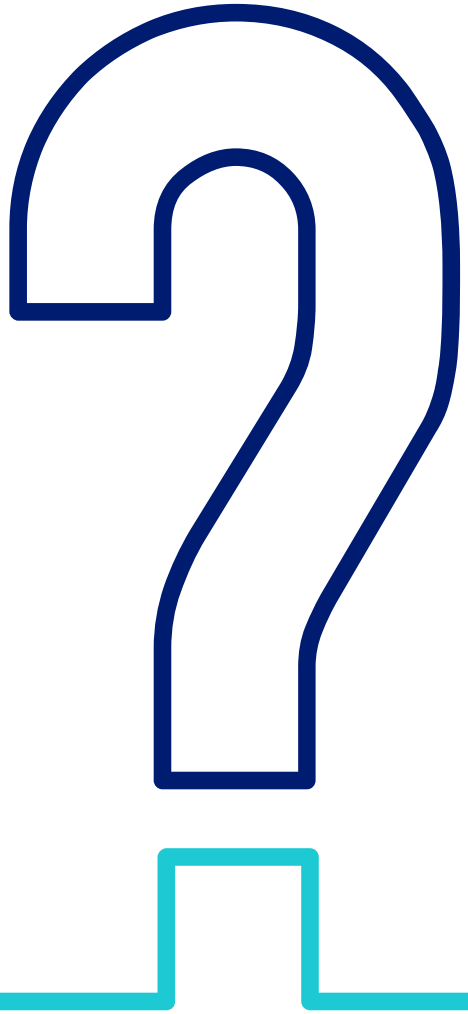

Actuarial Certification

- This document was prepared in accordance with generally accepted actuarial principles as prescribed by the Actuarial Standards Board and the American Academy of Actuaries at the request of the Board to assist in administering the System.
- The actuarial calculations included in this document were performed under the supervision of Jeffrey S. Williams, ASA, FCA, MAAA, EA with the assistance of Caitlin Grice and Justin Cash. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.
- To the best of my knowledge, the information supplied in this presentation is complete and accurate.
- The results in this document are based on the preliminary January 1, 2025 valuation results. Use of the information in this document is subject to the caveats and limitations of use as described in the January 1, 2024 valuation report and upcoming January 1, 2025 valuation report. Please refer to the valuation report for a description of Segal's actuarial modeling software, the risks associated with these results, disclosure of Low-Default-Risk Obligation Measure information as required under Actuarial Standards of Practice No. 4, as well as the assumptions, methods, and plan provisions. The report also includes more comprehensive information regarding the Plan's membership, assets, and experience during the most recent plan year.
- This document was prepared as part of a presentation made to the Board of the Dallas Police & Fire Pension System on August 14, 2025 and is not complete without the upcoming January 1, 2025 valuation report. Except as may be required by law, this document should not be shared, copied, or quoted, in whole or in part, without the consent of Segal.

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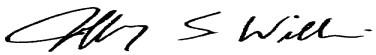

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Vice President and Consulting Actuary

Appendix 1 - Assumptions

Healthy Post-Retirement Mortality

Beneficiary Mortality

Disabled Post-Retirement Mortality

Active/Pre-Retirement Mortality

Retirement

Disability

Turnover

Salary Scale

Appendix 1

Healthy Post-Retirement Mortality

Males

Age	Current Mortality Rate	Proposed Mortality Rate
55	0.31%	0.37%
60	0.51%	0.57%
65	0.88%	0.93%
70	1.57%	1.68%
75	2.83%	3.15%
80	5.10%	5.81%
85	9.14%	10.43%
90	15.86%	18.26%

Females

Age	Current Mortality Rate	Proposed Mortality Rate
55	0.23%	0.20%
60	0.40%	0.32%
65	0.69%	0.54%
70	1.19%	0.93%
75	2.06%	1.68%
80	3.55%	3.07%
85	6.13%	5.57%
90	10.59%	10.09%

Mortality rates shown above include applicable set forwards and are unprojected. For actuarial valuation purposes, the proposed mortality rates will be projected from 2016 on a generational basis using the MP-2021 improvement scale.

Appendix 1

Healthy Beneficiary Mortality

Males

Age	Current Mortality Rate	Proposed Mortality Rate
55	0.82%	0.97%
60	1.01%	1.16%
65	1.38%	1.45%
70	2.13%	2.06%
75	3.38%	3.42%
80	5.36%	6.06%
85	8.74%	10.56%
90	14.42%	18.28%

Females

Age	Current Mortality Rate	Proposed Mortality Rate
55	0.42%	0.51%
60	0.58%	0.72%
65	0.83%	1.05%
70	1.24%	1.61%
75	1.95%	2.59%
80	3.21%	4.45%
85	5.61%	8.06%
90	10.15%	14.4%

Mortality rates shown above include applicable set forwards and are unprojected. For actuarial valuation purposes, the proposed mortality rates will be projected from 2016 on a generational basis using the MP-2021 improvement scale.

Appendix 1

Disabled Post-Retirement Mortality

Males

Age	Current Mortality Rate	Proposed Mortality Rate
55	0.67%	0.70%
60	1.08%	1.07%
65	1.73%	1.78%
70	2.89%	3.01%
75	5.06%	5.40%
80	8.31%	9.60%
85	14.24%	15.78%
90	22.31%	24.40%

Females

Age	Current Mortality Rate	Proposed Mortality Rate
55	0.64%	0.46%
60	0.98%	0.60%
65	1.48%	0.99%
70	2.25%	1.75%
75	3.55%	2.99%
80	6.13%	5.35%
85	10.59%	8.02%
90	17.40%	12.61%

Mortality rates shown above include applicable set forwards and are unprojected. For actuarial valuation purposes, the proposed mortality rates will be projected from 2016 on a generational basis using the MP-2021 improvement scale.

Appendix 1

Pre-Retirement Mortality

Males

Age	Current Mortality Rate	Proposed Mortality Rate
20	0.04%	0.03%
25	0.04%	0.04%
30	0.05%	0.05%
35	0.06%	0.06%
40	0.08%	0.08%
45	0.12%	0.12%
50	0.18%	0.18%
55	0.26%	0.29%
60	0.41%	0.47%

Females

Age	Current Mortality Rate	Proposed Mortality Rate
20	0.02%	0.01%
25	0.02%	0.01%
30	0.03%	0.02%
35	0.04%	0.03%
40	0.05%	0.04%
45	0.07%	0.06%
50	0.09%	0.09%
55	0.12%	0.13%
60	0.17%	0.19%

Mortality rates shown above include applicable set forwards and are unprojected. For actuarial valuation purposes, the proposed mortality rates will be projected from 2016 on a generational basis using the MP-2021 improvement scale.

Appendix 1

DROP Retirement Rates

Police

Age	Current Rate	Proposed Rate
Under 50	1.00%	0.00%
50	10.00%	0.00%
51	15.00%	0.00%
52-53	15.00%	11.00%
54-56	25.00%	11.00%
57	25.00%	20.00%
58-59	30.00%	20.00%
60-61	30.00%	30.00%
62	30.00%	10.00%
63	40.00%	10.00%
64	50.00%	10.00%
65 & over	100.00%	100.00%

Fire

Age	Current Rate	Proposed Rate
Under 50	0.75%	0.00%
50-51	0.75%	0.00%
52-54	10.00%	5.00%
55-56	15.00%	5.00%
57	15.00%	20.00%
58-60	40.00%	30.00%
61-62	40.00%	20.00%
63-64	50.00%	20.00%
65 & over	100.00%	100.00%

Appendix 1

Non-DROP Retirement Rates

Service >=20 as of September 1, 2017

Age	Current Rate	Proposed Rate
Under 50	1%	1%
50-51	8%	11%
52	10%	15%
53	15%	15%
54	20%	15%
55	35%	15%
56-57	40%	15%
58	75%	15%
59-61	75%	30%
62 & over	100%	100%

Service <20 as of September 1, 2017

Age	Current Rate	Proposed Rate
Under 50	1%	1%
50-53	2%	4%
54-56	2%	7%
57	2%	8%
58-60	25%	8%
61	50%	8%
62 & over	100%	100%

Appendix 1

Disability Rates

Age	Current	Proposed
20	0.010%	0.004%
21	0.011%	0.005%
22	0.012%	0.006%
23	0.013%	0.007%
24	0.014%	0.008%
25	0.015%	0.009%
26	0.016%	0.010%
27	0.017%	0.011%
28	0.018%	0.012%
29	0.019%	0.013%
30	0.020%	0.014%
31	0.021%	0.015%
32	0.022%	0.016%
33	0.023%	0.017%
34	0.024%	0.018%
35	0.025%	0.019%
36	0.026%	0.020%
37	0.027%	0.021%
38	0.028%	0.022%
39	0.029%	0.023%

Age	Current	Proposed
40	0.030%	0.024%
41	0.031%	0.025%
42	0.032%	0.026%
43	0.033%	0.027%
44	0.034%	0.028%
45	0.035%	0.029%
46	0.036%	0.030%
47	0.037%	0.031%
48	0.038%	0.032%
49	0.039%	0.033%
50	0.040%	0.034%
51	0.041%	0.035%
52	0.042%	0.036%
53	0.043%	0.037%
54	0.044%	0.038%

Appendix 1

Turnover Rates

Police

Service	Current	Proposed
0	20.0%	15.0%
1	5.5%	9.0%
2-4	5.5%	6.5%
5	5.5%	4.0%
6-7	3.5%	4.0%
8-10	3.5%	2.0%
11-14	2.0%	1.5%
15-20	1.0%	1.5%
21-24	1.0%	1.0%
25 & over	0.0%	0.0%

Fire

Service	Current	Proposed
0	10.00%	12.00%
1	5.50%	9.00%
2-4	5.50%	7.00%
5	5.50%	5.00%
6	5.50%	2.50%
7-8	1.00%	2.50%
9-24	1.00%	1.00%
25 & over	0.00%	0.00%

Appendix 1

Salary Scale

Current Rates

Year	Officers	Corporals, Drivers & Senior Officers	Sergeants, Lieutenants, Captains, Majors, Deputy Chiefs, Assistant Chiefs & Chiefs
2023	7.25%	6.75%	6.25%
2024+	3.00%	3.00%	2.50%

Proposed Rates

Year	Officers	Corporals, Drivers & Senior Officers	Sergeants, Lieutenants, Captains, Majors, Deputy Chiefs, Assistant Chiefs & Chiefs
2025	10.00%	14.00%	10.00%
2026+	Service based rates	Service based rates	Service based rates

Service	Rate
0-2	8.00%
3-5	7.00%
6-8	6.00%
9-11	5.00%
12-14	4.00%
15+	3.50%

Appendix 2 - Experience

Healthy Post-Retirement Mortality

Beneficiary Mortality

Disabled Post-Retirement Mortality

Active/Pre-Retirement Mortality

Retirement

Disability

Turnover

Salary

Appendix 2 – Healthy Retiree Mortality Experience

Males

Average Age	Number Exposed	Actual Deaths	Actual Mortality Rate	Expected Deaths	Expected Mortality Rate	Ratio of Actual Rate to Expected Rate	Proposed Deaths	Proposed Mortality Rate	Ratio of Actual Rate to Proposed Rate
Under 55	885	2	0.23%	1.99	0.22%	100.45%	2.56	0.29%	78.17%
55-59	2,119	10	0.47%	8.26	0.39%	121.06%	9.31	0.44%	107.39%
60-64	3,248	27	0.83%	21.40	0.66%	126.16%	22.49	0.69%	120.04%
65-69	3,015	37	1.23%	32.87	1.09%	112.58%	35.61	1.18%	103.91%
70-74	3,317	58	1.75%	60.70	1.83%	95.55%	69.56	2.10%	83.38%
75-79	2,155	84	3.90%	68.11	3.16%	123.33%	80.52	3.74%	104.32%
80-84	1,308	92	7.03%	75.50	5.77%	121.86%	90.03	6.88%	102.18%
85-89	613	86	14.03%	63.64	10.38%	135.14%	76.03	12.40%	113.11%
90 & over	232	58	25.00%	41.05	17.69%	141.29%	51.26	22.10%	113.15%
Total	16,892	454	2.69%	373.52	2.21%	121.55%	437.38	2.59%	103.80%

Females

Average Age	Number Exposed	Actual Deaths	Actual Mortality Rate	Expected Deaths	Expected Mortality Rate	Ratio of Actual Rate to Expected Rate	Proposed Deaths	Proposed Mortality Rate	Ratio of Actual Rate to Proposed Rate
Under 55	224	0	0.00%	0.36	0.16%	0.00%	0.32	0.14%	0.00%
55-59	473	0	0.00%	1.52	0.32%	0.00%	1.17	0.25%	0.00%
60-64	615	1	0.16%	3.11	0.51%	32.14%	2.42	0.39%	41.29%
65-69	332	2	0.60%	2.63	0.79%	75.98%	2.13	0.64%	94.10%
70-74	247	6	2.43%	3.30	1.33%	182.05%	2.73	1.11%	219.48%
75-79	130	1	0.77%	2.87	2.21%	34.81%	2.48	1.90%	40.40%
80-84	22	1	4.55%	0.78	3.56%	127.54%	0.70	3.20%	142.05%
85-89	0	0	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%
90 & over	2	2	100.00%	0.22	10.76%	929.76%	0.21	10.48%	953.79%
Total	2,045	13	0.64%	14.79	0.72%	87.89%	12.16	0.59%	106.92%
Grand Total	**18,937**	**467**	**2.47%**	**388.31**	**2.05%**	**120.27%**	**449.54**	**2.37%**	**103.88%**

Appendix 2 – Beneficiary Mortality Experience

Males

Average Age	Number Exposed	Actual Deaths	Actual Mortality Rate	Expected Deaths	Assumed Mortality Rate	Ratio of Actual Rate to Expected Rate	Proposed Deaths	Proposed Mortality Rate	Ratio of Actual Rate to Proposed Rate
Under 55	61	0	0.00%	0.39	0.65%	0.00%	0.47	0.76%	0.00%
55-59	17	0	0.00%	0.16	0.94%	0.00%	0.18	1.05%	0.00%
60-64	31	1	3.23%	0.35	1.14%	282.23%	0.39	1.25%	257.75%
65-69	19	0	0.00%	0.28	1.50%	0.00%	0.30	1.57%	0.00%
70-74	12	1	8.33%	0.29	2.41%	345.75%	0.30	2.53%	329.77%
75-79	7	0	0.00%	0.26	3.70%	0.00%	0.29	4.12%	0.00%
80-84	8	0	0.00%	0.47	5.90%	0.00%	0.58	7.19%	0.00%
85-89	4	1	25.00%	0.40	10.09%	247.84%	0.52	12.91%	193.67%
90 & over	3	1	33.33%	0.55	18.35%	181.67%	0.71	23.52%	141.75%
Total	162	4	2.47%	3.17	1.96%	126.25%	3.72	2.30%	107.55%

Females

Average Age	Number Exposed	Actual Deaths	Actual Mortality Rate	Expected Deaths	Assumed Mortality Rate	Ratio of Actual Rate to Expected Rate	Proposed Deaths	Proposed Mortality Rate	Ratio of Actual Rate to Proposed Rate
Under 55	416	2	0.48%	1.33	0.32%	150.80%	1.52	0.37%	131.70%
55-59	383	0	0.00%	1.96	0.51%	0.00%	2.20	0.57%	0.00%
60-64	560	2	0.36%	3.86	0.69%	51.78%	4.74	0.85%	42.17%
65-69	605	3	0.50%	5.55	0.92%	54.04%	7.39	1.22%	40.59%
70-74	833	14	1.68%	11.24	1.35%	124.54%	15.32	1.84%	91.40%
75-79	855	31	3.63%	18.47	2.16%	167.88%	25.51	2.98%	121.51%
80-84	806	42	5.21%	30.63	3.80%	137.12%	43.93	5.45%	95.60%
85-89	654	71	10.86%	44.11	6.75%	160.95%	64.34	9.84%	110.35%
90 & over	421	101	23.99%	55.79	13.25%	181.03%	80.81	19.20%	124.98%
Total	5,533	266	4.81%	172.94	3.13%	153.81%	245.77	4.44%	108.23%
Grand Total	**5,695**	**270**	**4.74%**	**176.11**	**3.09%**	**153.32%**	**249.48**	**4.38%**	**108.22%**

Appendix 2– Disabled Retiree Mortality Experience

Males

Average Age	Number Exposed	Actual Deaths	Actual Mortality Rate	Expected Deaths	Assumed Mortality Rate	Ratio of Actual Rate to Expected Rate	Proposed Deaths	Proposed Mortality Rate	Ratio of Actual Rate to Proposed Rate
Under 55	41	1	2.44%	0.17	0.42%	580.79%	0.20	0.49%	499.91%
55-59	48	1	2.08%	0.39	0.82%	254.40%	0.39	0.81%	258.12%
60-64	51	1	1.96%	0.70	1.37%	143.35%	0.68	1.34%	146.10%
65-69	53	2	3.77%	1.10	2.07%	182.26%	1.18	2.22%	170.10%
70-74	73	5	6.85%	2.46	3.37%	203.54%	2.69	3.69%	185.73%
75-79	47	4	8.51%	2.62	5.58%	152.53%	3.04	6.48%	131.38%
80-84	78	8	10.26%	7.51	9.63%	106.48%	8.96	11.49%	89.27%
85 & over	66	12	18.18%	11.95	18.10%	100.42%	13.70	20.75%	87.61%
Total	457	34	7.44%	26.90	5.89%	126.39%	30.84	6.75%	110.23%

Females

Average Age	Number Exposed	Actual Deaths	Actual Mortality Rate	Expected Deaths	Assumed Mortality Rate	Ratio of Actual Rate to Expected Rate	Proposed Deaths	Proposed Mortality Rate	Ratio of Actual Rate to Proposed Rate
Under 55	45	0	0.00%	0.18	0.40%	0.00%	0.14	0.31%	0.00%
55-59	18	0	0.00%	0.15	0.82%	0.00%	0.09	0.51%	0.00%
60-64	18	1	5.56%	0.21	1.15%	482.00%	0.13	0.71%	781.46%
65-69	17	0	0.00%	0.28	1.62%	0.00%	0.21	1.21%	0.00%
70-74	13	0	0.00%	0.30	2.34%	0.00%	0.26	1.98%	0.00%
75-79	6	0	0.00%	0.23	3.91%	0.00%	0.21	3.45%	0.00%
80-84	4	0	0.00%	0.31	7.65%	0.00%	0.25	6.32%	0.00%
85 & over	1	1	100.00%	0.10	9.95%	1005.28%	0.08	7.77%	1287.44%
Total	122	2	1.64%	1.76	1.44%	113.96%	1.36	1.12%	146.98%
Grand Total	**579**	**36**	**6.22%**	**28.66**	**4.95%**	**125.62%**	**32.20**	**5.56%**	**111.79%**

Appendix 2 – Pre-Retirement Mortality Experience

Males

Average Age	Number Exposed	Actual Deaths	Actual Mortality Rate	Expected Deaths	Assumed Mortality Rate	Ratio of Actual Rate to Expected Rate	Proposed Deaths	Proposed Mortality Rate	Ratio of Actual Rate to Proposed Rate
Under 55	21,050	24	0.11%	22.18	0.11%	108.20%	21.74	0.10%	110.42%
55-59	1,462	7	0.48%	4.49	0.31%	156.03%	4.90	0.34%	142.80%
60-64	354	4	1.13%	1.79	0.51%	223.12%	2.00	0.56%	200.24%
65-69	76	0	0.00%	0.71	0.93%	0.00%	0.83	1.09%	0.00%
70 & over	34	0	0.00%	0.62	1.84%	0.00%	0.74	2.17%	0.00%
Total	22,976	35	0.15%	29.79	0.13%	117.48%	30.20	0.13%	115.89%

Females

Average Age	Number Exposed	Actual Deaths	Actual Mortality Rate	Expected Deaths	Assumed Mortality Rate	Ratio of Actual Rate to Expected Rate	Proposed Deaths	Proposed Mortality Rate	Ratio of Actual Rate to Proposed Rate
Under 55	3,481	0	0.00%	1.99	0.06%	0.00%	1.57	0.04%	0.00%
55-59	217	0	0.00%	0.32	0.15%	0.00%	0.31	0.14%	0.00%
60-64	60	0	0.00%	0.11	0.19%	0.00%	0.13	0.22%	0.00%
65-69	19	0	0.00%	0.05	0.26%	0.00%	0.06	0.32%	0.00%
70 & over	0	0	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%
Total	3,777	0	0.00%	2.46	0.07%	0.00%	2.07	0.05%	0.00%
Grand Total	**26,753**	**35**	**0.13%**	**32.26**	**0.12%**	**108.50%**	**32.27**	**0.12%**	**108.46%**

Appendix 2 – Active DROP Police Retirement Experience

Age	Total Exposures	Actual	Actual Rate	Expected	Current Assumed Rate	Ratio of Actual Rate to Expected Rate	Proposed Retirements	Proposed Rate
50	2	0	0.00%	0.16	8.00%	0.00%	0.00	0.00%
51	8	1	12.50%	0.92	11.50%	108.70%	0.00	0.00%
52	29	3	10.34%	4.00	13.79%	75.00%	3.19	11.00%
53	58	8	13.79%	8.70	15.00%	91.95%	6.38	11.00%
54	83	9	10.84%	20.20	24.34%	44.55%	9.13	11.00%
55	97	14	14.43%	24.75	25.52%	56.57%	10.67	11.00%
56	108	9	8.33%	27.80	25.74%	32.37%	11.88	11.00%
57	110	19	17.27%	28.15	25.59%	67.50%	22.00	20.00%
58	101	22	21.78%	41.55	41.14%	52.95%	20.20	20.00%
59	77	16	20.78%	24.45	31.75%	65.44%	15.40	20.00%
60	63	19	30.16%	31.05	49.29%	61.19%	18.90	30.00%
61	41	12	29.27%	16.35	39.88%	73.39%	12.30	30.00%
62	26	2	7.69%	7.80	30.00%	25.64%	2.60	10.00%
63	19	2	10.53%	9.00	47.37%	22.22%	1.90	10.00%
64	14	1	7.14%	7.00	50.00%	14.29%	1.40	10.00%
65+	55	5	9.09%	55.00	100.00%	9.09%	55.00	100.00%
Total	891	142	15.94%	306.88	34.44%	46.27%	190.95	21.43%

Appendix 2 – Active DROP Fire Retirement Experience

Age	Total Exposures	Actual	Actual Rate	Expected	Current Assumed Rate	Ratio of Actual Rate to Expected Rate	Proposed Retirements	Proposed Rate
50	1	0	0.00%	0.01	0.75%	0.00%	0.00	0.00%
51	3	0	0.00%	0.10	3.17%	0.00%	0.00	0.00%
52	11	1	9.09%	1.10	10.00%	90.91%	0.55	5.00%
53	14	0	0.00%	1.45	10.36%	0.00%	0.70	5.00%
54	35	1	2.86%	3.90	11.14%	25.64%	1.75	5.00%
55	48	3	6.25%	7.20	15.00%	41.67%	2.40	5.00%
56	75	5	6.67%	12.95	17.27%	38.61%	3.75	5.00%
57	96	21	21.88%	15.25	15.89%	137.70%	19.20	20.00%
58	94	24	25.53%	46.35	49.31%	51.78%	28.20	30.00%
59	71	29	40.85%	29.45	41.48%	98.47%	21.30	30.00%
60	37	10	27.03%	21.45	57.97%	46.62%	11.10	30.00%
61	27	4	14.81%	12.90	47.78%	31.01%	5.40	20.00%
62	18	3	16.67%	7.90	43.89%	37.97%	3.60	20.00%
63	20	6	30.00%	10.25	51.25%	58.54%	4.00	20.00%
64	12	2	16.67%	6.00	50.00%	33.33%	2.40	20.00%
65+	43	12	27.91%	43.00	100.00%	27.91%	43.00	100.00%
Total	605	121	20.00%	219.25	36.24%	55.19%	147.35	24.36%

Appendix 2 – Active Non-DROP Retirement Experience of Participants with less than 20 years of service as of 9/1/2017

Age	Total Exposures	Actual	Actual Rate	Expected	Current Assumed Rate	Ratio of Actual Rate to Expected Rate	Proposed retirements	Proposed Rate
Under 50	1,695	27	1.59%	16.95	1.00%	159.29%	16.95	1.00%
50	430	21	4.88%	8.60	2.00%	244.19%	17.20	4.00%
51	359	15	4.18%	7.18	2.00%	208.91%	14.36	4.00%
52	280	14	5.00%	5.60	2.00%	250.00%	11.20	4.00%
53	240	10	4.17%	4.80	2.00%	208.33%	9.60	4.00%
54	189	13	6.88%	3.78	2.00%	343.92%	13.23	7.00%
55	140	9	6.43%	2.80	2.00%	321.43%	9.80	7.00%
56	99	7	7.07%	1.98	2.00%	353.54%	6.93	7.00%
57	81	7	8.64%	1.62	2.00%	432.10%	6.48	8.00%
58	61	5	8.20%	15.25	25.00%	32.79%	4.88	8.00%
59	54	7	12.96%	13.50	25.00%	51.85%	4.32	8.00%
60	37	3	8.11%	9.25	25.00%	32.43%	2.96	8.00%
61	48	3	6.25%	33.50	69.79%	8.96%	3.84	8.00%
62+	46	5	10.87%	46.00	100.00%	10.87%	46.00	100.00%
Total	3,759	146	3.88%	170.81	4.54%	85.48%	167.75	4.46%

Appendix 2 – Active Non-DROP Retirement Experience of Participants with greater than 20 years of service as of 9/1/2017

Age	Total Exposures	Actual	Actual Rate	Expected	Current Assumed Rate	Ratio of Actual Rate to Expected Rate	Proposed retirements	Proposed Rate
Under 50	340	4	1.18%	3.40	1.00%	117.65%	3.40	1.00%
50	199	26	13.07%	15.92	8.00%	163.32%	21.89	11.00%
51	241	24	9.96%	20.20	8.38%	118.81%	26.51	11.00%
52	237	37	15.61%	27.30	11.52%	135.53%	35.55	15.00%
53	225	29	12.89%	38.85	17.27%	74.65%	33.75	15.00%
54	177	26	14.69%	43.40	24.52%	59.91%	26.55	15.00%
55	145	23	15.86%	56.60	39.03%	40.64%	21.75	15.00%
56	96	18	18.75%	44.40	46.25%	40.54%	14.40	15.00%
57	62	10	16.13%	29.60	47.74%	33.78%	9.30	15.00%
58	37	5	13.51%	28.25	76.35%	17.70%	5.55	15.00%
59	23	6	26.09%	17.75	77.17%	33.80%	6.90	30.00%
60	11	4	36.36%	8.25	75.00%	48.48%	3.30	30.00%
61	9	3	33.33%	7.25	80.56%	41.38%	2.70	30.00%
62+	7	2	28.57%	7.00	100.00%	28.57%	7.00	100.00%
Total	1,809	217	12.00%	348.17	19.25%	62.33%	218.55	12.08%

Appendix 2 – Disability Experience

Average Age	Number Exposed	Actual Awards	Actual Disability Rate	Expected Awards	Expected Disability Rate	Ratio of Actual Rate to Expected Rate	Proposed Disabilities	Proposed Disability Rate
Under 25	805	0	0.00%	0.11	0.01%	0.00%	0.06	0.01%
25-29	3,464	0	0.00%	0.60	0.02%	0.00%	0.39	0.01%
30-34	4,332	0	0.00%	0.95	0.02%	0.00%	0.69	0.02%
35-39	4,559	0	0.00%	1.23	0.03%	0.00%	0.95	0.02%
40-44	3,822	1	0.03%	1.22	0.03%	81.84%	0.99	0.03%
45-49	3,457	3	0.09%	1.28	0.04%	234.87%	1.07	0.03%
50-54	2,878	1	0.03%	0.03	0.00%	3073.14%	1.03	0.04%
55 & over	2,214	1	0.05%	0.00	0.00%	32467.53%	0.84	0.04%
Total	25,531	6	0.02%	5.42	0.02%	110.72%	6.03	0.02%

Appendix 2 – Turnover Experience - Police

Average Service	Total Exposures	Actual Turnover	Actual Turnover Rate	Expected Turnover	Current Expected Rate	Ratio of Actual Rate to Expected Rate	Proposed Turnover	Proposed Rate
0	484	72	14.88%	96.66	19.97%	74.49%	72.60	15.00%
1	842	75	8.91%	46.60	5.53%	160.94%	75.78	9.00%
2	830	50	6.02%	45.65	5.50%	109.53%	53.95	6.50%
3	736	48	6.52%	40.48	5.50%	118.58%	47.84	6.50%
4	695	46	6.62%	38.23	5.50%	120.34%	45.18	6.50%
5	573	29	5.06%	31.52	5.50%	92.02%	22.92	4.00%
6	570	18	3.16%	20.03	3.51%	89.87%	22.80	4.00%
7	550	24	4.36%	19.25	3.50%	124.68%	22.00	4.00%
8	493	9	1.83%	17.26	3.50%	52.16%	9.86	2.00%
9	445	7	1.57%	15.58	3.50%	44.94%	8.90	2.00%
10	486	11	2.26%	16.98	3.49%	64.78%	9.72	2.00%
11-20	4,370	61	1.40%	66.51	1.52%	91.72%	65.55	1.50%
21-24	57	10	17.54%	0.57	1.00%	1754.39%	0.57	1.00%
Total	11,131	460	4.13%	455.30	4.09%	101.03%	457.67	4.11%

Appendix 2 – Turnover Experience - Fire

Average Service	Total Exposures	Actual Turnover	Actual Turnover Rate	Expected Turnover	Current Expected Rate	Ratio of Actual Rate to Expected Rate	Proposed Turnover	Proposed Rate
0	358	43	12.01%	35.80	10.00%	120.11%	42.96	12.00%
1	549	52	9.47%	30.24	5.51%	171.96%	49.41	9.00%
2	574	40	6.97%	31.57	5.50%	126.70%	40.18	7.00%
3	549	43	7.83%	30.20	5.50%	142.41%	38.43	7.00%
4	527	43	8.16%	28.99	5.50%	148.35%	36.89	7.00%
5	518	26	5.02%	28.49	5.50%	91.26%	25.90	5.00%
6	450	13	2.89%	24.75	5.50%	52.53%	11.25	2.50%
7	355	6	1.69%	3.55	1.00%	169.01%	8.88	2.50%
8	386	8	2.07%	3.86	1.00%	207.25%	9.65	2.50%
9-24	3,285	34	1.04%	32.85	1.00%	103.50%	32.85	1.00%
Total	7,551	308	4.08%	250.29	3.31%	123.06%	296.40	3.93%

Appendix 2 – Salary Experience

Average Service	Total Exposures	Prior Year Average Salary	Current Year Expected Average Salary	Expected Rate	Current Year Average Salary	Actual Rate	Proposed Average Salary	Proposed Rate
0	1,315	$28,584	$29,448	3.02%	$67,993	137.87%	$30,871	8.00%
1	1,329	$64,333	$66,697	3.67%	$69,371	7.83%	$69,480	8.00%
2	1,332	$66,208	$68,561	3.55%	$71,086	7.37%	$71,505	8.00%
3	1,197	$68,257	$70,976	3.98%	$73,988	8.40%	$73,035	7.00%
4	1,130	$70,861	$73,771	4.11%	$78,056	10.15%	$75,821	7.00%
5	1,076	$73,287	$76,232	4.02%	$81,267	10.89%	$78,417	7.00%
6	937	$75,552	$78,279	3.61%	$83,445	10.45%	$80,085	6.00%
7	858	$77,624	$80,507	3.71%	$85,324	9.92%	$82,281	6.00%
8	832	$82,171	$85,474	4.02%	$89,607	9.05%	$87,102	6.00%
9	809	$84,996	$88,162	3.73%	$92,617	8.97%	$89,246	5.00%
10	833	$83,862	$87,074	3.83%	$92,245	10.00%	$88,055	5.00%
11	960	$84,874	$87,769	3.41%	$93,036	9.62%	$89,118	5.00%
12	995	$87,272	$90,402	3.59%	$93,430	7.06%	$90,763	4.00%
13	1,021	$90,237	$93,732	3.87%	$95,852	6.22%	$93,847	4.00%
14	986	$92,343	$96,138	4.11%	$97,606	5.70%	$96,037	4.00%
15+	8,441	$95,968	$99,436	3.61%	100,398	4.62%	$99,327	3.50%
Total	24,051	$81,404	$84,423	3.71%	$89,063	9.41%	$85,406	4.92%