

AGENDA



Date: July 8, 2022

The supplemental meeting of the Dallas Police and Fire Pension System Board of Trustees will be held at **8:30 a.m. on Thursday, July 14, 2022, in the Second Floor Board Room at 4100 Harry Hines Boulevard, Dallas, Texas and via telephone conference for audio at 214-271-5080 access code 588694 or Toll-Free (US & CAN): 1-800-201-5203 and Zoom meeting for visual <https://us02web.zoom.us/j/82614037801?pwd=OcsZNhrsscwpj0haynyLG0DjSQ3bQE.1> Passcode: 885614.** Items of the following agenda will be presented to the Board:

A. CONSENT AGENDA

Approval of Minutes

Regular meeting of June 2, 2022

B. DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION

January 1, 2022 Actuarial Valuation Assumptions

The term "possible action" in the wording of any Agenda item contained herein serves as notice that the Board may, as permitted by Texas Government Code, Section 551, in its discretion, dispose of any item by any action in the following non-exclusive list: approval, disapproval, deferral, table, take no action, and receive and file. At the discretion of the Board, items on this agenda may be considered at times other than in the order indicated in this agenda.

At any point during the consideration of the above items, the Board may go into Closed Executive Session as per Texas Government Code, Section 551.071 for consultation with attorneys, Section 551.072 for real estate matters, Section 551.074 for personnel matters, and Section 551.078 for review of medical records.

**Dallas Police and Fire Pension System
Thursday, June 2, 2022
8:30 a.m.
4100 Harry Hines Blvd., Suite 100
Second Floor Board Room Dallas, TX**

Supplemental meeting, Nicholas A. Merrick, Chairman, presiding:

ROLL CALL

Board Members

Present at 8:31 a.m. Nicholas A. Merrick, William F. Quinn, Armando Garza, Michael Brown, Robert B. French (by telephone), Gilbert A. Garcia (by telephone), Kenneth Haben, Tina Hernandez Patterson, Steve Idoux, Mark Malveaux (by telephone)

Present at 8:37 a.m. Gilbert A. Garcia (by telephone)

Absent: None

Staff

Kelly Gottschalk, Josh Mond, Brenda Barnes, Ryan Wagner, John Holt, Greg Irlbeck (by telephone), Michael Yan, Akshay Patel, Milissa Romero

Others

Aaron Lally, Richard O’Neil (by telephone), David Harper, Jason Jordan, Michael Taglienti, Tom Tull (by telephone)

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The Supplemental meeting was called to order and recessed at 8:31 a.m.

The Supplemental meeting was reconvened at 11:24 a.m.

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A. CONSENT AGENDA

Approval of Minutes

Regular meeting of May 12, 2022

After discussion, Mr. Quinn made a motion to approve the minutes of the meeting of May 12, 2022. Ms. Hernandez Patterson seconded the motion, which was unanimously approved by the Board.

**Supplemental Board Meeting
Thursday, June 2, 2022**

* * * * *

Ms. Gottschalk stated that there was no further business to come before the Board. On a motion by Mr. Haben and a second by Mr. Idoux, the meeting was adjourned at 11:25 a.m.

Nicholas A. Merrick
Chairman

ATTEST:

Kelly Gottschalk
Secretary

DRAFT



DISCUSSION SHEET

ITEM B

Topic: January 1, 2022 Actuarial Valuation Assumptions

Attendees: Jeff Williams, Vice President and Actuary, Segal Consulting


Discussion: An Actuarial Valuation is performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and it is an important part of the annual financial audit. Segal Consulting is preparing the January 1, 2022 Actuarial Valuation for the Regular Plan (Combined Plan) and the Supplemental Plan. Many economic and demographic assumptions are required to prepare the valuation. Pursuant to Article 16, Section 67 (f)(3) of the Texas Constitution, the Board determines the assumptions used in the valuation.

Segal believes the assumptions used for the January 1, 2021 Actuarial Valuation remain appropriate and has recommended only minor changes to the assumptions for the January 1, 2022 Actuarial Valuation.

Staff

Recommendation: Direct Segal to use its recommended assumptions in preparing the January 1, 2022 Actuarial Valuation for the Regular Plan (Combined Plan) and the Supplemental Plan.

Supplemental Board Meeting– Thursday, July 14, 2022



Dallas Police and Fire Pension System Summary of Actuarial Assumptions and Methods

July 14, 2022

Jeffrey S. Williams
Vice President and Consulting Actuary

Caitlin Grice
Consulting Actuary



Overview: Actuarial Assumptions and Methods



Demographic

- Death in active service
- Death after retirement
 - Non-disabled
 - Disabled
 - Contingent survivor
- Withdrawal
- Disability
- Retirement
 - DROP
 - Non-DROP
- Percent Married/Spouse Age



Economic

- Inflation
- Discount rate (Investment rate of return)
- Salary increases
- Payroll growth rate
- Administrative expenses
- COLA
- DROP annuitization rate



Methods

- Cost method
- Amortization method
- Asset method

2022 Actuarial Assumptions

- Current assumptions were set during the experience study for the period January 1, 2015 through December 31, 2019
- Current assumptions first implemented in January 1, 2020 valuation
- Next experience study will be for the period January 1, 2020 through December 31, 2024
- Only assumptions updated since the January 1, 2020 valuation are:
 - Discount rate: lowered from 7.00% to 6.50% in January 1, 2021 valuation
 - Ad-hoc COLA assumption: updated each year
 - Amortization methodology: updated in 2021 valuation, consistent with funding policy
- **Recommendations for 2022 Changes**
 - Update administrative expense assumption after FY 2021 assets are final
 - Other assumptions will be updated as needed after the next experience study, unless the Board has a desire to address specific assumptions prior to that time
 - The ad-hoc COLA assumption is updated with each valuation

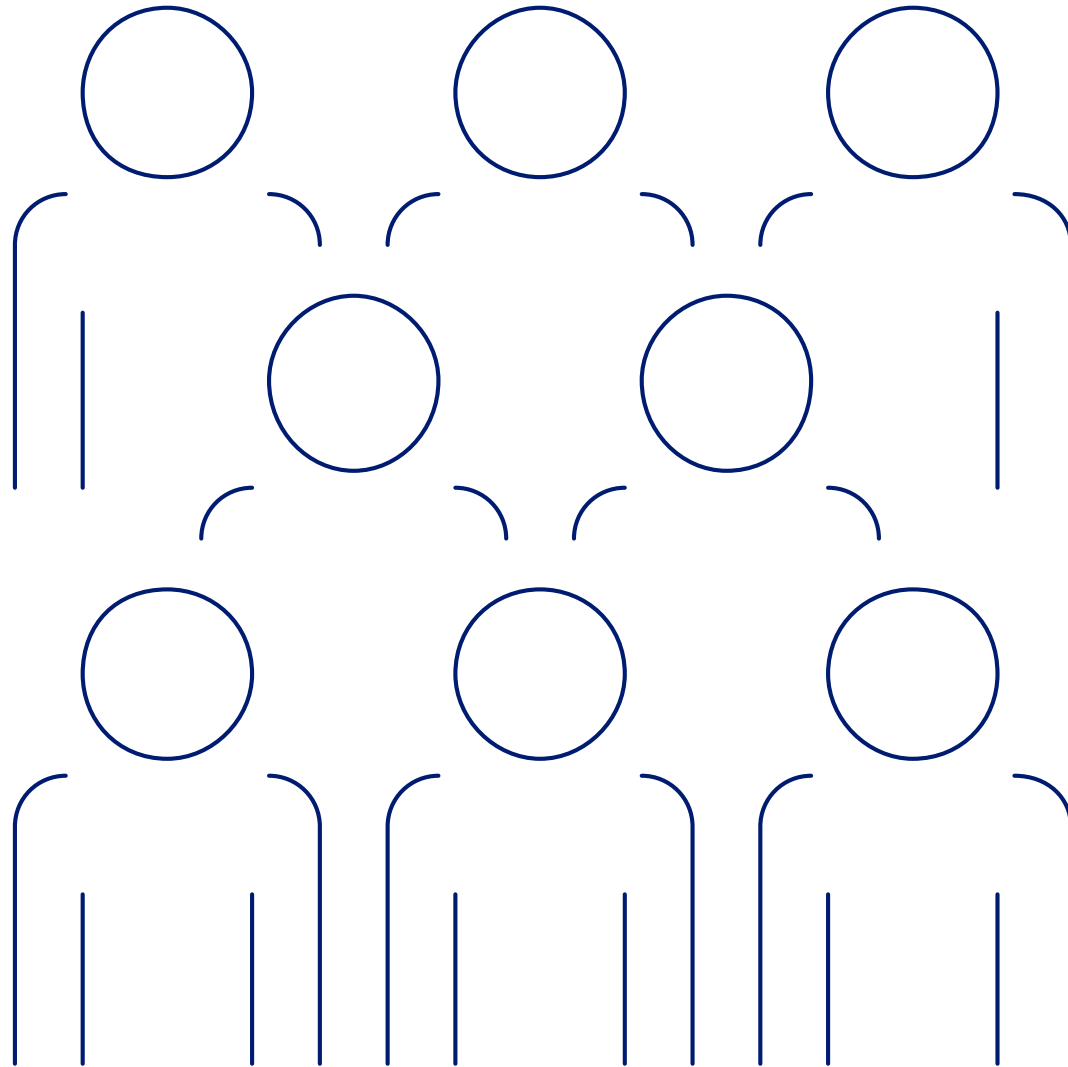
Summary of Current Assumptions

Assumption	Current Assumption
Healthy Retiree & Dependent Spouse Mortality	Pub-2010 Public Safety Retiree Amount-weighted Mortality Table, set back one year for females
Contingent Beneficiary Mortality	Pub-2010 Public Safety Contingent Survivor Amount-weighted Mortality Table, set back one year for females
Disabled Life Mortality	Pub-2010 Public Safety Disabled Retiree Amount-weighted Mortality Table, set forward four years for males and females
Pre-Retirement Mortality	Pub-2010 Public Safety Employee Amount-weighted Mortality Table, set forward five years for males
Mortality Improvement	Projected generationally with Scale M-2019
Turnover	Service-based rates for both Fire and Police; rates zero out after 24 years of service
Disability	Age-based rates; rates zero out after age 54
Service-Related Disability	100% of disabilities assumed service-related
DROP Retirement	Separate Police and Fire age-based rates, with 100% retirement at age 65 or ten years in DROP
DROP Utilization	No members are assumed to elect to enter the DROP

Summary of Current Assumptions

Assumption	Current Assumption
DROP Annuitization Interest	2.75% on account balances as of September 1, 2017, payable upon retirement
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
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 with a vested benefit prior to age 40 will cash out at age 40
Percent Married	75% for Males and Females
Spousal Age Difference	Females three years younger than males
Investment Return	6.50%
Payroll Growth/Inflation	2.50%
Salary Scale	Salary scales based on rank as stated in the 2019 Meet and Confer agreement with an ultimate rate of 2.50%
Administrative Expenses	Greater of \$8,500,000 per year or 1% of computation pay
Cost-of-Living Adjustment (COLA)	2.00% per year beginning the year System is projected to be 70% funded on a market value basis (currently, October 1, 2069)

Demographic Assumptions



Demographic Assumptions

Mortality

- **Healthy Pre-Retirement:** Pub-2010 Public Safety Employee Amount-weighted Mortality Table, set forward five years for males
- **Healthy Post-Retirement**
 - Retiree & Dependent Spouse: Pub-2010 Public Safety Retiree Amount-weighted Mortality Table, set back one year for females
 - Contingent Beneficiary: Pub-2010 Public Safety Contingent Survivor Amount-weighted Mortality Table, set back one year for females
- **Disabled Lives:** Pub-2010 Public Safety Disabled Retiree Amount-weighted Mortality Table, set forward four years for males and females

Mortality Improvement

- MP-2019 Improvement Scale

Demographic Assumptions

Turnover Rates

- Service-based rates with rates decreasing with longer service
- Rates differ for Fire and Police
- Rates for Police higher than for Fire
- No termination assumed for active participants in DROP
- Rates do not apply once eligible for normal retirement
- Terminating participants are assumed to take a deferred annuity if they are eligible unless their contribution refund has greater actuarial value

Service	Current Fire Rates	Current Police Rates
0	10.00%	20.00%
1	5.50%	5.50%
2	5.50%	5.50%
3	5.50%	5.50%
4	5.50%	5.50%
5	5.50%	5.50%
6	5.50%	3.50%
7	1.00%	3.50%
8	1.00%	3.50%
9	1.00%	3.50%
10	1.00%	3.50%
11 – 14	1.00%	2.00%
15 – 24	1.00%	1.00%
25 & over	0.00%	0.00%

Demographic Assumptions

Disability Rates

- Rates are age-based
- 100% of disabilities are assumed to be service-related

Age	Current Rates
20	0.010%
25	0.015%
30	0.020%
35	0.025%
40	0.030%
45	0.035%
50	0.040%

Demographic Assumptions

Retirement Rates for DROP Participants

- Separate rates for Fire and Police
- 100% retirement assumed at age 65 or 10 years in DROP

Age	Current Fire Rates
Under 50	0.75%
50 – 51	0.75%
52 – 54	10.00%
55 – 57	15.00%
58	40.00%
59 – 62	40.00%
63 – 64	50.00%
65	100.00%

Age	Current Police Rates
Under 50	1.00%
50	10.00%
51 – 52	15.00%
53	15.00%
54	25.00%
55	25.00%
56 – 57	25.00%
58 – 62	30.00%
63	40.00%
64	50.00%
65	100.00%

Demographic Assumptions

DROP Utilization and Annuitization Interest



- **DROP Utilization**

- No members are assumed to elect to enter the DROP

- **DROP Annuitization Interest**

- 2.75% on account balances as of September 1, 2017, payable upon retirement

Demographic Assumptions

Retirement Rates for non-DROP Participants

- Same rates for Fire and Police
- The retirement rate is set to 100% once benefit multiplier hits 90% maximum

Members hired prior to March 1, 2011 with at least 20 years of service as of September 1, 2017

Age	Current Rates
Under 50	1.00%
50	8.00%
51	8.00%
52	10.00%
53	15.00%
54	20.00%
55	35.00%
56 – 57	40.00%
58 – 61	75.00%
62	100.00%

Members hired prior to March 1, 2011 with less than 20 years of service as of September 1, 2017 & Members hired on or after March 1, 2011

Age	Current Rates
Under 50	1.00%
50	2.00%
51 – 53	2.00%
54	2.00%
55	2.00%
56	2.00%
57	2.00%
58	25.00%
59 – 60	25.00%
61	50.00%
62	100.00%

Demographic Assumptions

Retirement Rates – Terminated Vested Participants

- 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

• Lump Sum Assumption

- 75% of those who terminate with a vested benefit prior to age 40 take a lump sum cash out at age 40

Demographic Assumptions

Spousal Assumptions

- 75% of participants, regardless of sex, are assumed to have a spouse upon retirement or death from active status
- Males are assumed to be three years older than their spouses at retirement



Economic Assumptions

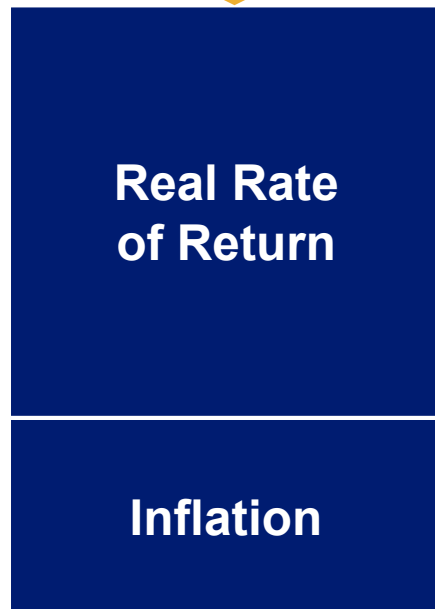


Economic Assumptions

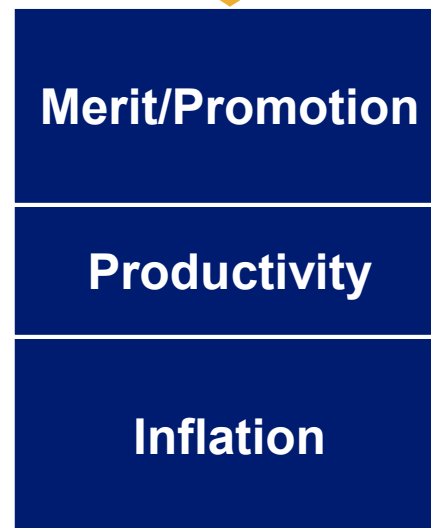
Building Blocks

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

**INVESTMENT RATE
OF RETURN
(Discount Rate)**



**SALARY
INCREASES**



**PAYROLL
GROWTH**



Building blocks must be consistent across all economic assumptions.

Economic Assumptions

Inflation

- **Assumption:** 2.50%
- 2022 OASDI Trustees Report: 1.8% for high-cost projection and 3.0% for low-cost projection
- Historical (through December 2021):

Average Annual Change in CPI-U	
Last 5 Years	2.92%
Last 10 Years	2.14%
Last 20 Years	2.31%
Last 30 Years	2.37%
Last 100 Years	2.82%



–Reasonable assumption based on OASDI Study and other public sector plans

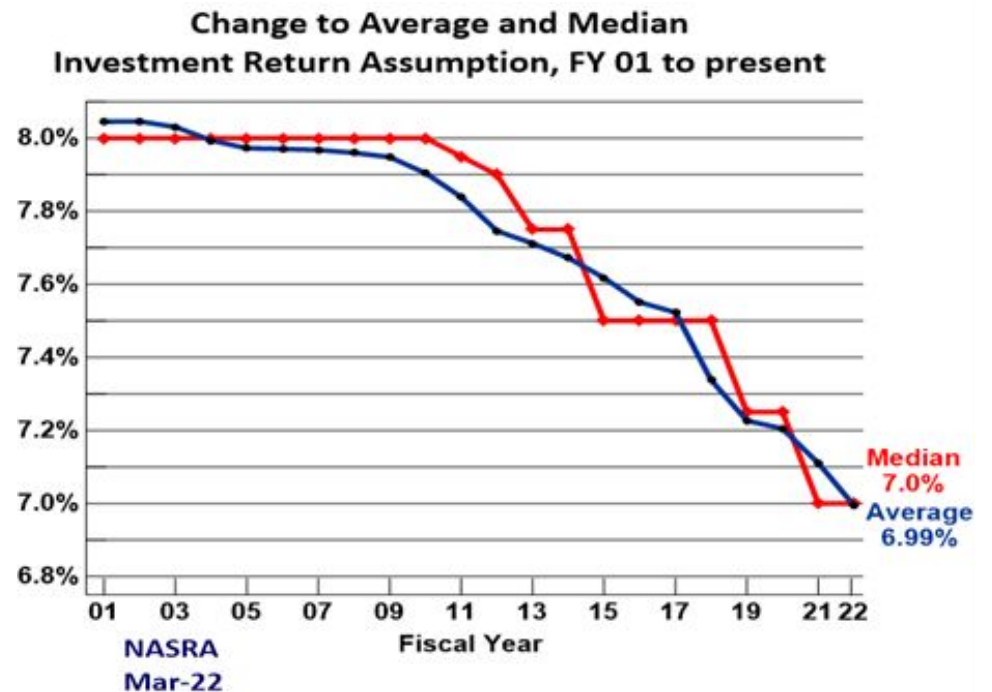
Economic Assumptions

Investment Return

- **Assumption:** 6.50%
- NASRA Survey, March 2022
 - Median has decreased to 7.00% (was 7.50% four years ago and 8.00% in 2010)
 - Average assumption is 6.99%

NASRA Issue Brief: Public Pension Plan Investment Return Assumptions

March 2022

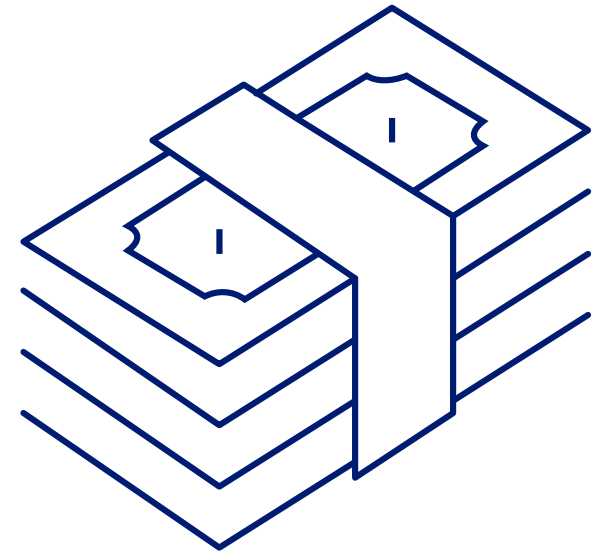


Source: Compiled by NASRA based on Public Fund Survey, March 2022

Economic Assumptions

Payroll Growth

- **Assumption:** 2.50% overall payroll growth
- **Comments**
 - Used to determine the amortization payment on the Unfunded Actuarial Accrued Liability (UAAL)
 - Payment on UAAL expected to increase at payroll growth rate
 - Usually equivalent to inflation assumption or inflation plus productivity



Economic Assumptions

Salary Scale

- Current rates based on 2019 Meet and Confer agreement
- The salary increase assumption will be reviewed upon completion of next Meet and Confer agreement

Year	Current Rates		
	Officers	Corporals, Drivers, Senior Officers & Chiefs	Sergeants, Lieutenants, Captains, Majors, Deputy Chiefs & Assistant Chiefs
2020 – 2022	3.25%	3.00%	2.50%
2023+	2.50%	2.50%	2.50%

Economic Assumptions

Administrative Expenses

- **Assumption:** Greater of \$8,500,000 per year or 1% of computation pay
- **Comments**
 - GASB Statements 67 and 68 require an explicit assumption for accounting purposes
 - Administrative expenses have been lower than assumed over the past five years

Four-year administrative expense history

Year Ended	Administrative Expenses	Assumption
December 31, 2016	\$9,492,445	\$10,000,000
December 31, 2017	8,089,584	Greater of \$10M or 1% comp. pay
December 31, 2018	5,861,410	Greater of \$8.5M or 1% comp. pay
December 31, 2019	6,445,251	Greater of \$8.5M or 1% of comp. pay
December 31, 2020	6,534,350	Greater of \$8.5M or 1% of comp. pay

Recommendation

Update assumption after FY2021 assets are available

Economic Assumptions

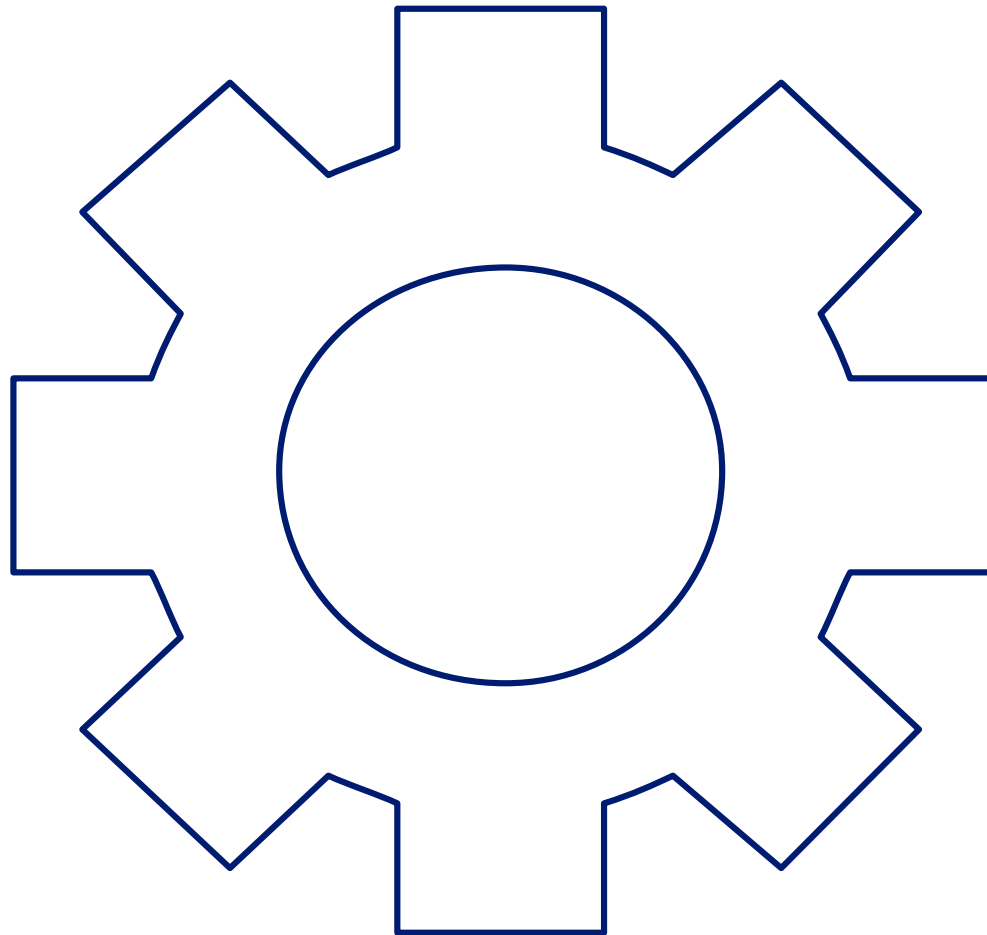
Cost-of-Living Adjustment (COLA)

- **Assumption**

- 2.00% increase per year beginning in the year the System is projected to be 70% funded on a market value basis after the COLA is reflected (currently, October 1, 2069)
- Updated annually



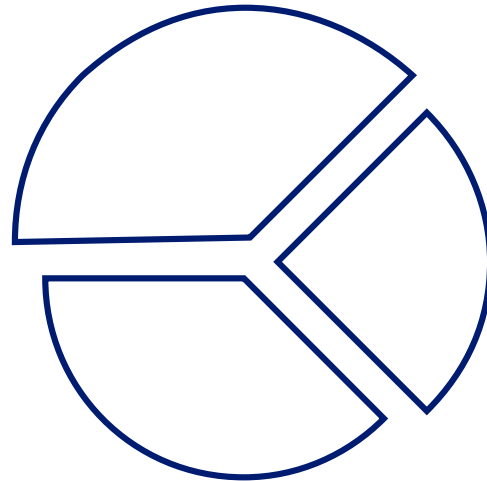
Actuarial Methods



Actuarial Methods

Funding Method

- Method is Traditional Entry Age
- Traditional Entry Age is the most common method used for public sector plans in the U.S., and is required for GASB 67 and 68 calculations



Actuarial Methods

Asset Smoothing Method

- 5-year straight-line amortization of each year’s market investment gain or loss
- 20% corridor around market
- Treats realized and unrealized losses equally
 - Sale of assets does not affect actuarial value
- GFOA funding policy guidelines recommend a recognition period of five years or less with recognition occurring over fixed periods.
- A corridor is recommended by GFOA if the period is greater than five years.
- Actuarial Standard of Practice No. 44 requires the use of a method that is “rational, systematic, and produces an actuarial value of assets that is expected to converge toward market value...assuming constant asset returns in future periods.”

Actuarial Methods

Amortization Method

- The Pension System is funded based on statutory contributions, rather than the results of the actuarial valuation.
- However, Texas Code Section 802.101 requires actuarial valuations of public sector retirement systems to include a recommended contribution rate based on an amortization period not to exceed 30 years.
- The actuarially determined contribution (ADC) shown in the valuations is calculated based on a closed, 24-year period using the level percent-of-payroll method for the January 1, 2020 unfunded liability, plus
- Effective with the January 1, 2021 actuarial valuation, future gains and losses, along with assumption, plan, and method changes, will be amortized over closed, 20-year periods.

Thank You!

Jeffrey S. Williams, FCA, ASA, MAAA, EA

Vice President and Consulting Actuary

jwilliams@segalco.com

T 678.306.3147

Caitlin Grice, FCA, ASA, MAAA

Consulting Actuary

cgrice@segalco.com

T 202.833.6481



segalco.com