TEACHER RETIREMENT SYSTEM OF TEXAS

Actuarial Experience Study

As of August 31, 2025

P: 469.524.0000 | www.grsconsulting.com

February 6, 2026

Board of Trustees
Teacher Retirement System of Texas
4655 Mueller Blvd
Austin, TX 78723

Dear Members of the Board

Subject: Results of 2026 Experience Study

We are pleased to present our report on the results of the 2026 Experience Study for the Teacher Retirement System of Texas (TRS). It includes our recommendations for new actuarial assumptions to be effective for the August 31, 2026 actuarial valuation.

With the Board's approval of the recommendations in this report, we believe the actuarial condition of TRS will be more accurately portrayed. The Board's decisions should be based on the appropriateness of each recommendation, not on their collective effect on the funding period or the unfunded liability.

This study was conducted in accordance with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. The undersigned meet all of the Qualification Standards of the American Academy of Actuaries. In addition, the undersigned have extensive experience as retained public sector actuaries for several large, statewide public retirement systems.

We wish to thank the TRS staff for their assistance in providing data for this study.

Respectfully submitted,
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Section I – Executive Summary

In determining liabilities, contribution rates and funding periods for retirement plans, actuaries must make assumptions about the future. Overall, we have found that most of the assumptions used in the TRS valuations are currently reasonable or only need minor adjustments. The public education employer contributions have not been growing as fast as the overall payroll, and in fact have been growing slower than inflation. Thus, we have recommended assuming this contribution stream will grow at 2.25% per year, which is less than the projected growth in total payroll. We have also recommended segmenting turnover into two groups based on low and higher turnover positions instead of assessing TRS membership in one group. The net result of these changes is an increase in the funding period of one year. Our general findings and recommended changes to the current actuarial assumptions are be summarized as follows:

Economic Assumptions

1. We recommend increasing the underlying inflation assumption to 2.50%. While the inflation assumption is not directly used in the valuation process or determining benefits, it is a building block for the analysis of other assumptions.

2. We find the current 7.00% investment return assumption to be reasonable. Based on the current capital market assumptions from Meketa, TRS' investment consultant, and TRS' target asset allocation, the median expected geometric return is 7.3%. To verify those estimates we used twelve other independent sources and the average result from that survey was 7.2%. These forward-looking expectations for the same portfolio have varied from 6.0% to 7.2% over the last five years. This type of precision and volatility is appropriate for the use by Meketa and the TRS Investment Management Division (IMD) in its investment decisions because they are always interacting with current market prices and expectations over a specific investment cycle. However, for use in setting the contribution requirements and funding patterns over a number of investment cycles, consistency around a single number that is in the middle of the range is more appropriate.

3. We find the current method of assuming future administrative expenses as a percent of covered payroll will be equal to the average percent from the last three fiscal years.

4. This analysis finds the current general wage inflation (GWI) assumption of 2.90% to be reasonable and recommends no change. This assumption is comprised of price inflation (2.50%) and general productivity (0.40%). This assumption is used primarily to index each cohort of new entrants used in projections and as a starting point for the individual salary scales and the payroll growth assumption (amortization payment growth rate).

5. We recommend no change to the assumption for salary increases to individual members. Based on comparisons to historical experience, the current assumption is slightly high when adjusted for the recent higher inflation. However, the assumption is lower than experience from the past five years. In addition, legislation passed during the 2025 Legislative Session provided appropriations for salary increases for public educators beginning in fiscal year 2026 and beyond that are not reflected in the historical data.

6. We recommend assuming the public education employer contributions grow at 2.25% annually going forward rather than growing with total payroll. This is similar to assuming it will grow with wage

inflation over time but builds in a discount for the sporadic nature of the increases. This change will increase the funding period and increase the contribution rate needed to meet the Board's funding policy.

7. We recommend no change to the assumption there will either (i) be no cost-of-living increases (COLAs) or supplemental payments provided to retirees, or (ii) they will be fully-funded when they are provided.

Mortality Assumptions

Due to the impact of COVID-19 on mortality patterns in fiscal years 2020, 2021, and 2022, we did not utilize those years for the mortality patterns in this analysis.

8. We recommend updating the post-retirement mortality tables for non-disabled retirees to reflect recent TRS member experience. These tables will be labeled the 2025 TRS of Texas Healthy Pensioner Mortality Tables and reflect slightly lower longevity. We also recommend continuing to assume mortality rates will improve in the future using a fully generational approach and updating that assumption based on the ultimate rates of the most recently published projection scale MP-2021, which we will refer to as ("U–MP").

9. We recommend updating post-retirement mortality tables for disabled retirees to reflect recent TRS member experience, adding another year of forward to the current procedures. We also recommend continuing to assume mortality rates will improve in the future using a fully generational approach, with projection scale ("U–MP").

10. We recommend updating pre-retirement mortality tables for active employees to the recently published PUB-2016 mortality tables for teachers, using the below median table. We also recommend continuing to assume mortality rates will improve in the future using a fully generational approach, with projection scale ("U–MP").

Other Demographic Assumptions

11. For turnover we have segmented the data into two groups:

    (1) Professional/Administrative, Teacher/Full-Time Librarian, and Full-Time Nurse/Counselor for independent school districts are considered Low Turnover

    (2) All Other Employees are considered Higher Turnover

    We will only replace members from one group with recent new entrants from that specific group in the open group projections. This should produce a more adaptive model if the groups are growing at different paces. We have created new turnover patterns for the groups separately. These changes will slightly lower the liabilities and lower the funding period by one year.

12. We recommend small increases to the retirement probabilities for members prior to age 59 consistent with experience and future expectations.

13. We recommend no change to the assumed disability pattern.

14. For members that become disabled in the future, we recommend no change to the assumption that

20% of them will choose a 100% joint and survivor annuity option.

15. We recommend no change to the current marriage assumption and spousal age difference.

Actuarial Methods and Policies

16. We recommend no change to the current process of estimating the valuation payroll for the upcoming fiscal year, which is to use the actual known covered payroll for the previous fiscal year and increase it by one year's payroll growth assumption.

17. We recommend no change to the current asset smoothing method or the smoothing period.

18. We recommend no change to the use of the Individual Entry Age (IEAN) actuarial cost method.

19. We recommend continuing to use individual data records in the valuation process. However, the use of individual data extends the computer run time dramatically. Thus, we will continue to use celled data in legislative analyses and adjust for any difference between the two data sets.

Illustrated Impact of all recommended changes:

Item	2025 Actuarial Valuation Current Assumptions	Illustrated 2025 Actuarial Valuation Recommended Package of Assumptions
(1)	(2)	
Unfunded Actuarial Accrued Liability ($ in Billions)	$64.9	$64.3
Funded Ratio	77.5%	77.7%
Funding Period (years)	35	36

Section II – Introduction

A periodic review and selection of the actuarial assumptions is one of many important components of understanding and managing the financial aspects of TRS. Use of outdated or inappropriate assumptions can result in understated costs which will lead to higher future contribution requirements or perhaps an inability to pay benefits when due; or, on the other hand, produce overstated costs which place an unnecessarily large burden on the current generation of members, employers, and taxpayers.

A single set of assumptions is typically not expected to be suitable forever. As the actual experience unfolds or the future expectations change, the assumptions should be reviewed and adjusted accordingly.

It is important to recognize that the impact from various outcomes and the ability to adjust from experience deviating from the assumption are not symmetric. Due to compounding economic forces, legal limitations, and moral obligations, outcomes from underestimating future liabilities are much more difficult to manage than outcomes of overestimates, and that un-symmetric risk should be considered when the assumption set, investment policy and funding policy are created. As such, the assumption set used in the valuation process needs to represent the best estimate of the future experience of TRS and be at least as likely, if not more than likely, to overestimate the future liabilities versus underestimate them.

Using this strategic mindset, each assumption was analyzed compared to the actual experience of TRS and general experience of other large public employee retirement systems. Changes in certain assumptions and methods are suggested upon this comparison to remove any bias that may exist and to add in a slight margin for future adverse experience where appropriate. Next, the assumption set as a whole was analyzed for consistency and to ensure that the projection of liabilities was reasonable and consistent with historical trends.

The following report provides our recommended changes to the current actuarial assumptions.

Summary of Process

In determining liabilities and contribution rates for retirement plans, actuaries must make assumptions about the future. Among the assumptions that must be made include:

- Retirement patterns
- Mortality patterns
- Turnover patterns
- Disability patterns
- Investment return rate
- Salary increase patterns
- Inflation rate

For some of these assumptions, such as the mortality rates, past experience provides important evidence about the future. For others, such as the investment return assumption, the link between past and future results is much weaker. In either case, actuaries should review the plan's assumptions periodically and

determine whether these assumptions are consistent with actual past experience and with anticipated future experience.

The last such actuarial experience investigation was performed immediately following the August 31, 2021 actuarial valuation. For this experience study, we have added experience for the four-year period from August 31, 2021 through August 31, 2025 (FY 2022 – FY 2025) to the previous data.

In conducting experience studies, actuaries generally use data over a period of several years. This is necessary in order to gather enough data so that the results are statistically significant. In addition, if the study period is too short, the impact of the current economic conditions may lead to misleading results. It is known, for example, that the health of the general economy can impact salary increase rates and termination rates. Using results gathered during a short-term boom or bust will not be representative of the long-term trends in these assumptions. Also, the adoption of legislation, such as plan improvements or changes in salary schedules, will sometimes cause a short-term distortion in the experience. For example, if an early retirement window was opened during the study period, we would usually see a short-term spike in the number of retirements followed by a dearth of retirements for the following two to four years. Using a longer period prevents giving too much weight to such short-term effects. On the other hand, using a much longer period could dilute real changes that may be occurring, such as mortality improvement or a change in the ages at which members retire.

For this analysis, we used between five and twenty years of data, depending on the assumption being studied as follows:

Assumption	Data Used	Comment
Payroll Growth	20 Years	Long-term trends are needed, also prospective changes must be considered
Individual Salary Increases	10+ Years	Longer period will capture a longer economic cycle
Termination	10+ Years	Longer period will capture a longer economic cycle
Mortality	9 Years	Longer period allows for low volatility in the assumption
All other	5 Years	The assumptions react quicker to changing trends and are less correlated with the economic cycle

In an experience study, we first determine the number of deaths, retirements, etc. that occurred during the period. Then we determine the number expected to occur, based on the current actuarial assumptions. The number of “expected” decrements is determined by multiplying the probability of the occurrence at the given age, by the “exposures” at that same age. Finally, we calculate the A/E ratio, where "A" is the actual number (of retirements, for example) and "E" is the expected number. If the current assumptions were “perfect”, the A/E ratio would be 100%. When it varies much from this figure, it is a sign that new assumptions may be needed. (However, in some cases we prefer to set our assumptions to produce an A/E ratio a little above or below 100% to introduce some margin). Of course, we not only

look at the assumptions as a whole, but we also review how well they fit the actual results by gender, age, and service.

If the data leads the actuary to conclude that new tables are needed, the actuary may "graduate" or smooth the results, since the raw results can be quite uneven from age to age or from service to service.

Organization of Report

Section III contains our findings and recommendations for each actuarial assumption. The impact of adopting our recommendations on liabilities and contribution rates is shown in Section IV. Section V presents a summary of all the actuarial assumptions and methods, including the recommended changes.

Section III - Analysis of Experience and Recommendations

We will begin by discussing the economic assumptions: inflation, the investment return rate, the salary increase assumption, the cost-of-living increases, and the payroll growth rate. Then we will discuss the demographic assumptions: mortality, disability, termination and retirement. Finally, we will discuss the actuarial methods used.

Actuarial Standards of Practice for Setting Economic Assumptions

Actuarial Standards of Practice (ASOP) No. 27, Selection of Economic Assumptions for Measuring Pension Obligations, provides guidance to actuaries on giving advice on selecting economic assumptions for measuring obligations for defined benefit pension plans. As no one knows what the future holds, it is necessary for an actuary to estimate possible future economic outcomes. Recognizing that there is not one right answer, the current standard calls for an actuary to develop a reasonable economic assumption. A reasonable assumption is one that:

a. Is appropriate for the purpose of the measurement,
b. reflects the actuary's professional judgment,
c. takes into account historical and current economic data that is relevant as of the measurement date,
d. is an estimate of future experience; an observation of market data; or a combination thereof, and
e. has no significant bias except when provisions for adverse deviation or plan provisions that are difficult to measure are included.

However, the standard explicitly advises an actuary not to give undue weight to recent experience.

Each economic assumption should individually satisfy this standard. Furthermore, with respect to any particular valuation, each economic assumption should be consistent with every other economic assumption over the measurement period. Generally, the economic assumptions are much more subjective in nature than the demographic assumptions.

Inflation Assumption

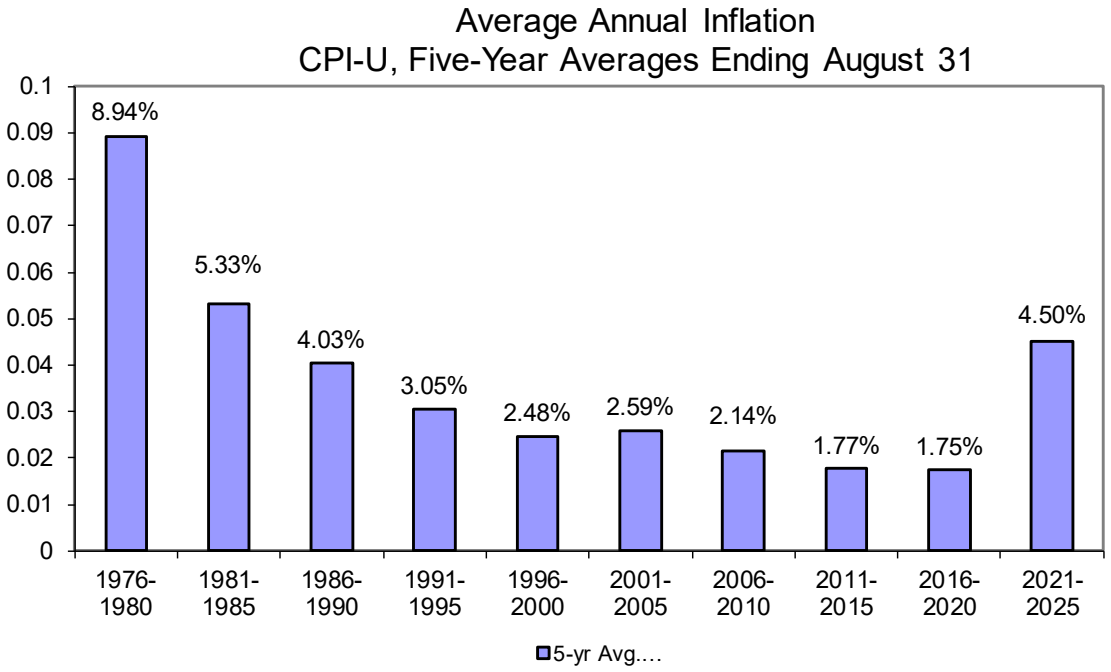
"Inflation" refers to price inflation, as measured by annual increases in the Consumer Price Index (CPI). This inflation assumption underlies all of the other economic assumptions employed, such as the investment return, the salary increase pattern, and the payroll growth assumption. The current annual inflation assumption is 2.30%.

The table below shows the average inflation over various periods, ending August 2025:

Periods Ending August 2025	Average Annual Increase in CPI-U
Last five (5) years	4.50%
Last ten (10) years	3.12%
Last fifteen (15) years	2.67%
Last twenty (20) years	2.53%
Last twenty-five (25) years	2.55%
Last thirty (30) years	2.53%
Since 1913	3.15%

Source: Bureau of Labor Statistics, CPI-U, all items, not seasonally adjusted

The chart below shows the average annual inflation in each of the ten consecutive five-year periods over the last fifty years:



As the table shows, inflation steadily declined until the last five years. Notice how there are relatively low periods followed by occasional spikes.

Forecasts from Investment Consulting Firms

We examined the 2025 capital market assumption sets for several investment consulting firms and found the average assumption for inflation over the next 10 years was 2.39%, with a range of 2.10% to 2.70%. This is 0.2% higher than the same survey during the previous experience study. For survey participants that provided longer term forecasts, the average was 2.48%. TRS' investment consultant, Meketa, has a prospective assumption of 2.30% over the next 10 years but 2.70% over the longer term.

Forecasts from Social Security Administration

In the Social Security Administration's "2025 Trustees Report", the Office of the Chief Actuary is projecting a long-term average annual inflation rate of 2.4% under the intermediate cost assumption. The low-cost and high-cost scenarios are 1.8% and 3.0%, respectively. All three of these numbers are the same as reported in the prior Actuarial Experience Study.

Survey of Professional Forecasters and Fed Policy

The Philadelphia Federal Reserve conducts a quarterly survey of the Society of Professional Forecasters. Their most recent forecast (third quarter of 2025) was for inflation over the next ten years (2026 to 2035) to average 2.31%. This is down 0.24% since the last study.

Recommendation

The current 2.30% assumption is at the low end of these sources. Historically, no look back period would produce an average inflation rate less than 2.50%. Also, given the nature of inflation experience with long periods of mild inflation followed by bursts of higher inflation, and the long-term nature of TRS' liabilities, we would rather have a higher assumption than the shorter-term forecasts to build in the higher likelihood of having a short-term burst during the longer projection period. We recommend increasing the assumption to 2.50%. While the inflation assumption is not directly used in the valuation process or determining benefits, it is a building block for the analysis of other assumptions.

INVESTMENT AND ADMINISTRATIVE EXPENSES

Since the trust fund pays expenses in addition to member benefits and refunds, assumptions must be made about these. Almost all actuaries treat investment expenses as an offset to the investment return assumption. That is, the investment return assumption represents expected return after payment of investment expenses.

In regards to investment expenses, investment consulting firms periodically issue reports that describe their capital market assumptions. The estimates for core investments (i.e., fixed income, equities, and real estate) are generally based on anticipated returns produced by passive index funds that are either net of or have very small investment-related fees. The investment return expectations for the alternative asset class such as private equity and hedge funds are also net of investment expenses. Therefore, we did not make any adjustments to account for investment-related expenses. Some of the retirement systems may also employ active management investment strategies that result in higher investment expenses compared to strategies that invest in passive index funds. For this analysis, we have assumed that active management strategies would result in the same returns, net of investment expenses, as passive management strategies.

On the other hand, for TRS, the practice for administrative expenses has been to explicitly add a load onto the normal cost. This is also our preferred approach and we recommend continuing this practice. Using an explicit load onto the normal cost maximizes transparency, aligns better with the standards of the Governmental Accounting Standards Board, and maintains a parallel between the investment returns used by the investment consultant and the actuary.

During each valuation, we have been using the average from the past three fiscal years as the forward-looking assumption, and we recommend no change to this process. As of fiscal year 2025, the average administrative expense load from the last three fiscal years as a percentage of payroll is 0.16%.

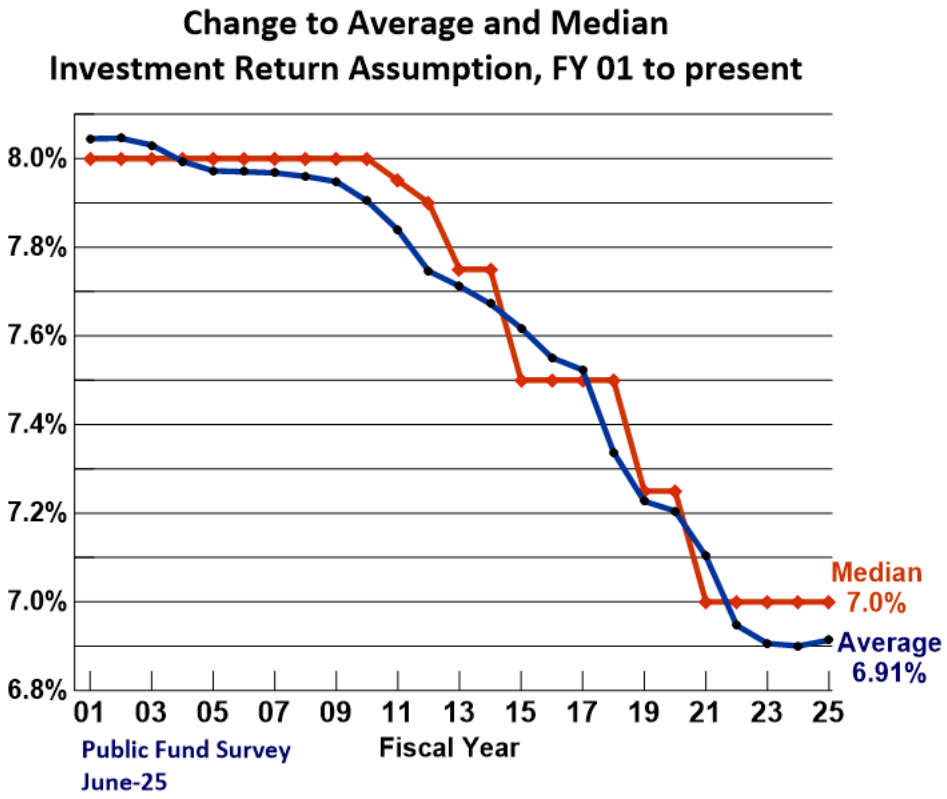
Investment Return Rate

The investment return assumption is one of the principal assumptions used in any actuarial valuation of a retirement plan. It is used to discount future expected benefit payments to the valuation date to determine the liabilities of the plan. Even a small change to this assumption can produce significant changes to the liabilities and contribution rates. Currently, it is assumed that future investment returns will average 7.00% per year, net of investment expenses.

Similar to the inflation assumption, past performance is not a reliable indicator of future performance, even when averaged over a long time period. Also, the actual asset allocation of the trust fund will significantly impact the overall performance, so returns achieved under a different allocation may not be meaningful.

Assumption Comparison to Peers

We do not recommend the selection of an investment return assumption based on peer information. However, it is still informative to identify where the investment return assumption for TRS is compared to its peers as it does inform about general future return expectations. The chart below shows the history of the average and median investment return assumptions in the NASRA Public Fund Data.



As shown, after the median and average rate of return dropped generally from 8.00% to 7.00% over the previous decade, they have remained mostly unchanged over recent years.

Asset Allocation

We believe the most appropriate approach to selecting an investment return assumption is to identify expected returns given the funds' asset allocation mapped to forward-looking capital market assumptions. We view the investment return assumption as having two components: the assumed rate of (price) inflation plus the real return net of inflation. This "building block" approach is one explicitly permitted under ASOP 27. The inflation assumption has already been discussed, so we will proceed with the analysis of the real rate of return assumption.

To do this, we will examine the results of applying a set of capital market assumptions to the plan's target asset allocation. Because GRS is a benefits consulting firm and does not develop or maintain our own capital market assumptions, we typically utilize the forward-looking return expectations developed by several investment consulting firms. The following is an excerpt from ASOP 27 on the topic of using experts:

> ***Section 3.5.6 Other Sources of Economic Data and Analyses****—When the actuary is responsible for selecting or giving advice on selecting economic assumptions, the actuary may incorporate economic data and analyses from a variety of other sources, including representatives of the plan sponsor and administrator, investment advisors, economists, and other professionals. However, the selection or advice should reflect the actuary's professional judgment.*

In our professional judgement, the consulting firms we included in our survey are experts with specialized knowledge and it is appropriate to incorporate their outlooks in our analysis.

We give higher emphasis to the estimates produced by Meketa, TRS' investment consultant as they are more familiar with TRS' specific investments, but we also verify with other independent sources.

Below is a table with the plan's long-term target asset allocation and the development of the plan's expected nominal investment returns using capital market assumptions provided by Meketa:

Asset Class	Long-Term Target Asset Allocation	Expected Geometric Rate of Return
(1)	(2)	(3)
All Country Public Equity	39%	6.7%
Non-US Developed	5%	7.2%
Emerging Markets	1%	7.5%
Private Equity	12%	9.8%
Government Bonds - Nominal	10%	5.0%
Government Bonds – Real	6%	4.3%
Stable Value Hedge Funds	5%	4.0%
Real Estate	15%	7.1%
Energy and Natural Resources	6%	7.4%
Risk Parity	5%	6.8%
Cash	2%	2.8%
Leverage	-6%	3.1%
Gross Expected Return		**7.3%**

As you can see, the expected return (geometric/compound) provides support that the current 7.00% assumption is expected to be achieved. However, even based on these expectations, there is only a 55% probability of achieving the 7.00% assumption.

Based on GRS' annual survey of twelve investment consulting firms and the TRS asset allocation, the expected compound return is 7.17%, with a range of 6.1% to 7.92%, and a 52% probability of achieving at least an annualized 7.00% return. This confirms Meketa's expectations as reasonable.

To show the volatility in these expectations, the following exhibit shows the median outcome from the GRS survey for the past five years for the current TRS portfolio.

Expected Return of Current Portfolio					
Determined by last 5 GRS Surveys					
2021	2022	2023	2024	2025	Average
(1)	(2)	(3)	(4)	(5)	(6)
6.3%	6.0%	7.2%	7.2%	7.2%	6.8%

The forward-looking expectations for the same portfolio have varied from 6.0% to 7.2%. This type of precision and volatility is appropriate for the use by Meketa and the IMD in its investment decisions because they are always interacting with current market prices and expectations over a specific investment cycle. However, for use in setting the contribution requirements and funding patterns over a number of investment cycles, consistency around a single number that is in the middle of the range is more appropriate.

RECOMMENDATION

In our opinion, the process above meets all of the requirements needed to use it as a basis for our analysis. The results were appropriate for the purpose of the measurement as the estimates were medium to longer term forecasts of market expectations, they took into account historical and current economic data that is relevant as of the measurement date, they represent an estimate of future experience and an observation of market data, and they had no significant bias (i.e., it is not significantly optimistic or pessimistic).

In our professional judgement, we believe a 7.00% assumption meets the requirements under ASOP 27 for being a reasonable assumption and is the most defendable of the choices. Thus, we find the current 7.00% investment return assumption reasonable and recommend no change.

COST-OF-LIVING INCREASE ASSUMPTION

We currently assume there will be no COLAs or supplemental payments provided to retirees. The statute does not allow for automatic COLAs for retired members. Before 2019, it had been the practice of the Legislature to periodically grant COLAs when it was determined that TRS could afford to absorb the cost in the existing contribution strategy. However, in the last few legislative sessions, when there has been a supplemental payment or COLA provided to retirees, there has been a lump-sum contribution to immediately pay the costs associated with those payments. Future COLAs require Legislative action and whether or not there will be contribution increases or lump-sum appropriations at the time is currently unknown. As there has not been an authorized COLA without additional financing for more than a decade, at this time we recommend continuing to assume no future COLAs in the annual valuations. If future Legislatures begin to authorize COLAs without additional funding, then this provision could be considered substantively automatic and would require some level of recognition in the actuarial liabilities as described under the ASOP No 4. "Measuring Pension Obligations and Determining Pension Plan Costs or Contributions" Section 3.5.3 Plan Provisions That are Difficult to Measure and an assumption of no future enhancement would no longer be appropriate.

General Wage Inflation

A General Wage Inflation (GWI) assumption represents the real wage growth over time in the general economy, or, is the assumption on how much the pay scales themselves will change year to year, not necessarily how much the pay increases received by individuals are, or even necessarily how the payroll in total may change, which can be impacted by population changes, etc. This assumption should be applicable to a local economy, not necessarily one group inside a retirement system. This assumption is used primarily to index the pay of each group of new entrants used in the open group projections. In an open group projection, projected terminations from the current active population are replaced with projected new entrants, and the starting salaries for those new members are expected to increase over time.

Historically, GWI has almost always exceeded price inflation. This is because wage inflation is in theory the result of (a) price inflation, and (b) productivity gains being passed through to wages. Since 1951, for the national economy as a whole, wage inflation has been about 1.00% larger than price inflation on average. For the last 20 years, for the national economy as a whole, wage inflation has been 3.42%, outpacing price inflation by about 0.86%.

For TRS specifically, the average salary has grown at an annualized rate of 2.63% for the past twenty years, or 0.10% above inflation. For the past decade, the value is 3.13%, which is higher than the 20-year growth rate, but so was inflation at 3.12%. The average salary for a new entrant has grown at 2.94% per year over the past decade.

For these reasons, we find the current 2.90% assumption, which is 0.40% above inflation, to be reasonable, as it is approximately half of the 0.86% average increase over inflation for the economy as a whole and it is equal to recent TRS experience. It is unlikely that the low overall salary growth for TRS members from the past 20 years can continue indefinitely and there will be reversion to more of a national mean. As discussed in the next section, there have already been adjustments in recent large salary increases for higher education members and there are anticipated higher salary levels for public education from recent legislation. We recommend no change to the 2.90% assumption.

SALARY INCREASE RATES

To project future benefits, the actuary must project future salary increases for individuals. Salaries may increase for a variety of reasons:

- Across-the-board increases for all employees;
- Across-the-board increases for a given group of employees;
- Increases to a minimum salary schedule;
- Additional pay for additional duties;
- Step or service-related increases;
- Increases for acquisition of advanced degrees or specialized training;
- Promotions; or
- Merit increases, if available.

Our salary increase assumption is meant to reflect all of these types of increases.

The actuary should not look at the overall increases in payroll in setting this assumption, because payroll can grow at a rate different from the average pay increase for individual members. To analyze salary increases, we examine the actual increase in salary for each member who is active in two consecutive fiscal years.

Most actuaries recommend salary increase assumptions that include an element that depends on the member's age or service, especially for large, public retirement systems. It is typical to assume larger pay increases for younger or shorter-service employees. This is done to reflect pay increases that accompany step increases, changes in job responsibility, promotions, demonstrated merit, etc. The experience shows salaries have been more closely correlated to service (rather than age), as promotions and productivity increases tend to be greater in the first few years of a career, even if the new employee is older than the average new hire.

We analyzed the salary increases based on the change in the member's reported pay from one year to the next. That is, we looked at each member who appeared as an active member in two consecutive valuations individually, and measured his/her salary increase. Then we grouped the increases for all members with the same service, and determined their average increase.

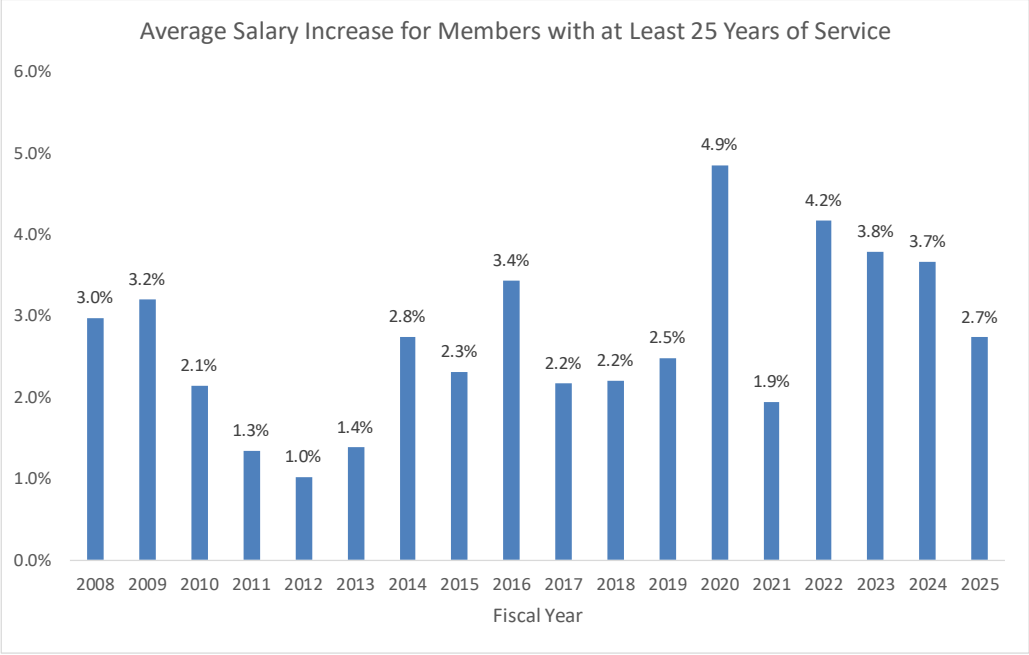
The current assumption is composed of the GWI assumption plus a merit and promotion component that is based on the service of an individual. The gross current schedule ranges from 9.20% for new members to 3.20% for members with 25 or more years of service and was created to reflect the legislation that was enacted during the 2025 Legislative Session that is anticipated to impact future compensation policies.

Salary increases for governmental employees can vary significantly from year to year. When the employer's tax revenues stall or increase slowly, salary increases often are small or nonexistent. During good times, salary increases can be larger. Our experience across many governmental plans also shows several occasions in which salary increases will be low for a period of several years followed by a significant increase in one year. Therefore, for this assumption in particular, we prefer to use data over a longer period in establishing our assumptions. We used a ten-year period for this analysis (but also looked back at older studies). The average pay increases for members active in both valuations with two years of service or more are as follows:

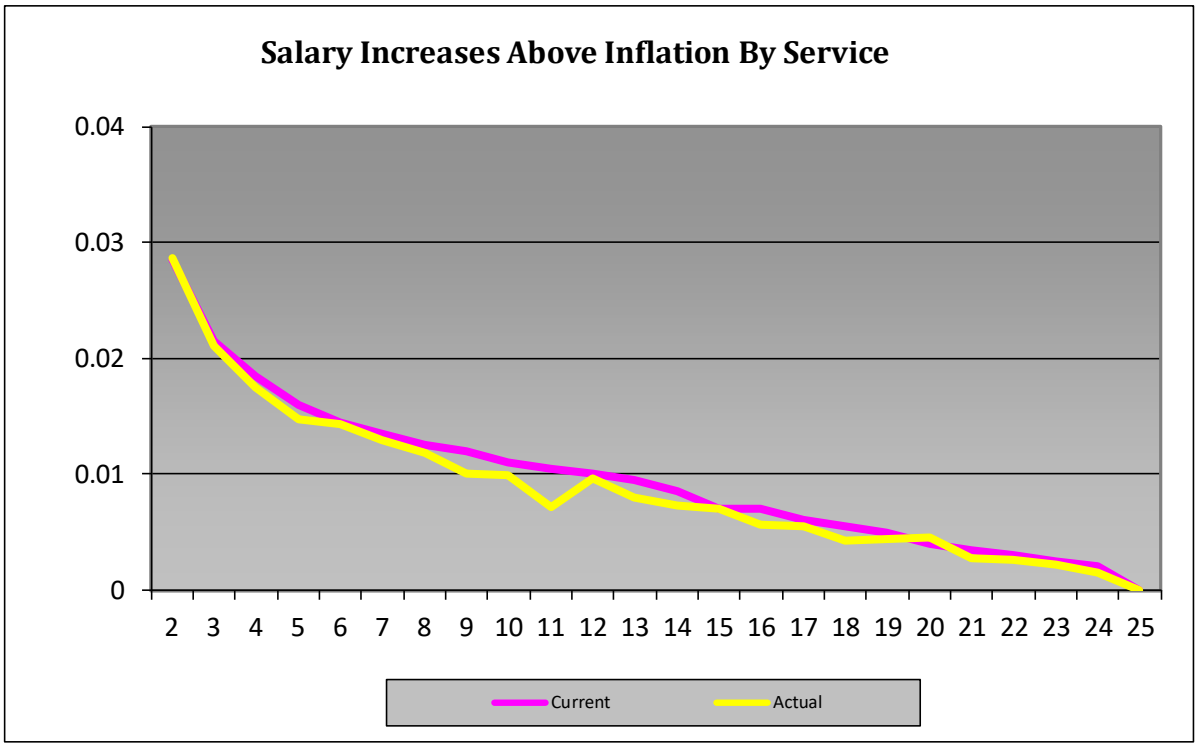
Average Pay Increases for Active Members with Two or More Years of Service			
Period	Increase	Inflation	Increase Above Inflation
FY 2015 to FY 2016	4.76%	1.06%	3.70%
FY 2016 to FY 2017	3.14%	1.94%	1.20%
FY 2017 to FY 2018	2.96%	2.70%	0.26%
FY 2018 to FY 2019	3.54%	1.75%	1.79%
FY 2019 to FY 2020	5.87%	1.31%	4.56%
FY 2020 to FY 2021	2.78%	5.25%	-2.47%
FY 2021 to FY 2022	5.69%	8.26%	-2.57%
FY 2022 to FY 2023	5.93%	3.67%	2.26%
FY 2023 to FY 2024	5.13%	2.53%	2.60%
FY 2024 to FY 2025	3.82%	2.92%	0.90%
Average	4.25%	3.12%	1.13%

The average increase has been 4.25% while the expected increase based on the current assumption is 4.17%, but inflation has been high during this decade, so the actual increases have been lower than current assumptions on real terms. However, salary increases tend to be sticky on a nominal basis over the long-term. Using the last 20 years, the average increase has been 4.08% when inflation has been very close to the 2.50% assumption.

To separate the steps, or promotional component of the schedule, we segregated members with more than 25 years of service. Most of these members should be past the promotional and step portions of their careers and therefore, only receive the general increases granted. The current assumption is that these members will receive average increases of 3.20% per year. The actual increase for this group over the last 10 years has been 3.15%. Since 2008, the increase for this group has averaged 2.70% per year.



Based on comparisons to historical experience, the current assumption is slightly high when adjusted for the recent higher inflation. However, the assumption is lower than experience from the past five years. Public sector wages tend to be sticky and be delayed compared to inflation, meaning higher inflation will lead to higher wages a year or two later. In addition, legislation passed during the 2025 Texas Legislative Session provided appropriations for salary increases for public educators beginning in fiscal year 2026 and ongoing that are not reflected in the data above. The current assumption was set during the 2025 Legislative Session in anticipation of the new policies for public educator salaries, thus we are not recommending a change at this time.



The above exhibit models the portion of the salary increases for short-term members that exceeded the salary increases for long-term members based on the current assumptions and the actual experience. As shown, the assumed pattern is similar to the experience. We are not recommending a change at this time.

Experience data from the first year of service is distorted as many new members do not work a full 12 months in their first year of service, so the increase from year one to year two reflects not only salary increases but a partial year to a full year of reported salary.

	Current Salary Scale		Actual Experience Fiscal Year 2016 through 2025			Proposed Salary Scale	
Years of Service	Total	Step Rate/ Promotional	Total	Above Inflation	Step Rate/ Promotional	Total	Step Rate/ Promotional
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	9.20%	6.00%	23.12%	20.01%	19.98%	9.20%	6.00%
2	6.05%	2.85%	6.38%	3.26%	3.23%	6.05%	2.85%
3	5.35%	2.15%	5.67%	2.55%	2.52%	5.35%	2.15%
4	5.05%	1.85%	5.24%	2.12%	2.10%	5.05%	1.85%
5	4.80%	1.60%	4.94%	1.82%	1.79%	4.80%	1.60%
6	4.65%	1.45%	4.89%	1.77%	1.74%	4.65%	1.45%
7	4.55%	1.35%	4.63%	1.51%	1.49%	4.55%	1.35%
8	4.45%	1.25%	4.52%	1.40%	1.37%	4.45%	1.25%
9	4.40%	1.20%	4.37%	1.25%	1.22%	4.40%	1.20%
10	4.30%	1.10%	4.28%	1.16%	1.13%	4.30%	1.10%
11	4.25%	1.05%	4.19%	1.07%	1.04%	4.25%	1.05%
12	4.20%	1.00%	4.12%	1.00%	0.97%	4.20%	1.00%
13	4.15%	0.95%	4.06%	0.95%	0.92%	4.15%	0.95%
14	4.05%	0.85%	3.97%	0.85%	0.82%	4.05%	0.85%
15	3.90%	0.70%	3.90%	0.78%	0.75%	3.90%	0.70%
16	3.90%	0.70%	3.86%	0.74%	0.72%	3.90%	0.70%
17	3.80%	0.60%	3.77%	0.65%	0.62%	3.80%	0.60%
18	3.75%	0.55%	3.67%	0.55%	0.53%	3.75%	0.55%
19	3.70%	0.50%	3.63%	0.52%	0.49%	3.70%	0.50%
20	3.60%	0.40%	3.64%	0.52%	0.50%	3.60%	0.40%
21	3.55%	0.35%	3.53%	0.41%	0.38%	3.55%	0.35%
22	3.50%	0.30%	3.43%	0.31%	0.29%	3.50%	0.30%
23	3.45%	0.25%	3.42%	0.31%	0.28%	3.45%	0.25%
24	3.40%	0.20%	3.41%	0.29%	0.27%	3.40%	0.20%
25	3.20%	0.00%	3.15%	0.03%	0.00%	3.20%	0.00%

The ultimate rate of increase (3.20%) is comprised of the inflation component of 2.50% and the productivity component of 0.70%.

PAYROLL GROWTH

The salary increase rates discussed above are assumptions applied to individuals. They are used in projecting future benefits. We also project overall payroll growth to determine the contributions needed to amortize the unfunded actuarial accrued liability. The "Funding Period" determined in the valuation is answering the question: "when is the current UAAL expected to be reduced to $0?" This calculation reflects the fact that contributions are received as a percentage of payroll, so as payroll increases over time, these contributions do too. Thus, the funding period is dependent on the rate at which payroll is assumed to increase.

Instead of having a fixed assumption per year, we use an open group projection that replaces members as they leave active service based on the current assumptions for turnover, retirement, etc. with new entrants, allowing the other assumptions used in projecting the liabilities to also project the payroll. Salaries for annual cohorts of new members are indexed at the 2.9% GWI assumption. This way any demographic abnormalities over a specific period of time would be reflected. For example, the current demographics of many pension plans have an abnormally high number of people eligible to retire. When those people retire, they will be replaced by members at the beginning of the pay scale. Thus, even if salary increases for individuals are changing as expected, overall payroll growth can be dampened over the short to medium term. TRS has had significant population growth over the last 20 years, and the demographics are expected to age for the next couple of decades, which will lead to higher overall payroll growth. This approach also incorporates salary increases that are built into projecting both the liabilities and the contributions, ensuring the development of both sides of the balance sheet are consistent in approach.

PUBLIC EDUCATION EMPLOYER CONTRIBUTION GROWTH RATE

The employee, public education employer, and State contribution rates are established by State law. The State's base rate is 8.25%, the same as the 8.25% paid by the members. These contribution rates are paid on all covered payroll though in some instances employers, not the State, are responsible for the state contribution.

Independent school districts, charter schools and regional education service centers contribute an additional 2.00%; however, this contribution does not apply to all covered payroll. Independent school districts only contribute 2.00% on salary up to the minimum salary schedule (MSS) for employees subject to the MSS, such as teachers, librarians, nurses, and counselors, and they do not pay the 2.00% contribution on compensation in excess of the MSS for these employees. For employees not subject to MSS, like those employed by charter schools and other positions not listed in statute as subject to the MSS, their employers pay the 2.00% contribution on all covered payroll. This means that salary increases for employees not subject to MSS are generally subject to the 2.00% contribution while salary increases for employees who are subject to the MSS will not generally be covered by the 2.00% contribution because these increases are likely in excess of the MSS (due to the sporadic changes in the MSS as described below).

In addition, the MSS itself does not change regularly. The last time the MSS changed materially was in fiscal year 2020, with the time before that in fiscal year 2010. While the changes to the schedule were large when they occurred, it is unclear when (or if) the next adjustment will occur and by how much.

Historically it has been assumed that these contributions will grow annually based on how overall wages grow. For example, the current GWI assumption of 2.9% assumes payroll will grow approximately 2.9% going forward, and this has also applied to the employer contributions. However, since most of the population growth has come from non-public education employers (higher education employers) and most of the salary growth for public educational employers has come from salary increases granted above the MSS, the payroll that the public education employer contribution rate applies to has not kept up with the rest of the payroll growth, growth in liabilities, or even the growth in inflation. For example, in fiscal year 2020, 63.3% of covered payroll was applicable for the 2.00% public education employer contribution. In fiscal year 2025, this was 57.1%, and is expected to decline further once the legislated salary increases go into effect in fiscal year 2026. This contribution source has only grown 2.2% annually since 2020 when adjusted for change in population. Between fiscal year 2024 and 2025, this contribution source only grew 0.5%, showing that its growth is heavily dependent on population growth and the population aging through the service schedule.

There must be an assumption made for how much growth to assume in this contribution stream. Even if the assumption was made that a full wage inflation adjustment was to be made every 10 years, the assumption cannot be that this revenue stream will grow annually at that amount because the revenue stream will stagnate and grow slower year to year until the next increase occurs.

We recommend assuming this public education employer contribution source grows at 2.25% annually going forward. This is similar to assuming it will grow with wage inflation over time but builds in a discount for the sporadic nature of the increases. This change will increase the funding period and increase the contribution rate needed to meet the Board's funding policy.

DEMOGRAPHIC ASSUMPTIONS

Actuaries are guided by the Actuarial Standards of Practice (ASOP) adopted by the Actuarial Standards Board (ASB). One of these standards is ASOP No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*. This standard provides guidance to actuaries giving advice on selecting noneconomic assumptions for measuring obligations under defined benefit plans. We believe the recommended assumptions in this report were developed in compliance with this standard.

POST-RETIREMENT MORTALITY PATTERN

The most critical demographic assumption used in pension valuations is post-retirement mortality. Rates of mortality affect our estimate of how long each individual is expected to live and consequently how long each individual is expected to receive a pension. Life expectancy in turn has a direct impact on pension plan liabilities.

Mortality rates have generally decreased over time in the U.S., meaning that life expectancies have generally increased over time. The assumption for future decreases in mortality is referred to as the mortality improvement assumption. In general, the current rates of mortality and mortality improvement assumption are two separate assumptions. We will discuss this in two parts, the recommended base mortality assumption, and the recommended mortality improvement assumption.

The relevant ASOP, ASOP 35, and published practice notes require pension actuaries to make and disclose an assumption as to expected mortality improvement after the valuation date. To meet this standard, the best practice actuarial model is to use mortality tables that explicitly incorporate projected mortality improvements over time. This type of table, or series of tables, is called "generational mortality." Specifically, mortality rates are assumed to decline each year in the future so that life expectancies for each annual cohort of retirees will be slightly higher than the previous year. Therefore, the life expectancy at age 60 for someone reaching that age in 2045 is longer than the life expectancy for someone reaching age 60 in 2035, and their life expectancy is longer than someone reaching age 60 now, etc.

Because of this assumption of continuous improvement, life expectancies for today's younger active members are expected to be materially longer than those of today's retirees. By utilizing generational mortality, the improvement over time is built into the contributions for individual members while they are employed.

The mortality table currently being used for non-disabled retirees and for beneficiaries receiving benefits is the 2021 TRS of Texas Healthy Pensioner Mortality Tables, which is a TRS-specific table created in the 2021 Actuarial Experience Study. The table has separate rates for males and females. Our strategy is to update this table with each experience study to ensure that our base tables are as current as possible, while leaving the projected improvement unchanged. This strategy allows for making minor, frequent adjustments instead of large adjustments every decade or so and minimizes the volatility that can come from changing mortality assumptions.

Approach and Data

We would typically use nine years of experience available to increase the credibility of the analysis and minimize any variance created by timing of data collection from year to year. However, fiscal years 2020 through 2022 of data were heavily impacted by the pandemic and since experience after 2022 has returned close to previous expectations, it is unlikely experience from the pandemic reflects ongoing expectations.

Thus, we have only included the six years, fiscal years 2017 through 2019 and then fiscal years 2023 through 2025 in the analysis. During this time, mortality improvement may have occurred and thus a general procedure is to adjust the actual experience for mortality improvements during the study period to the central year, in this case 2021.

The analysis uses only the retirees, not the beneficiaries, joint annuitants, or survivors as the vast majority of the liability is based on this category of members and data from the beneficiaries can often have a survivorship bias which would skew the results. We will use a liability-weighted approach by weighting members by the amount of their annuity. There are two reasons for using this approach. First, mortality experience across the U.S. has been shown to vary depending on income level and this takes into account differing benefit levels. Second, selecting an assumption based on headcount is consistent with estimating expected deaths, but selecting an assumption based on liability-weighting is consistent with minimizing the actuarial gains and losses associated with expected deaths. By weighting the data by annuity amounts, we are giving more emphasis to members who have larger annuities (and thus have larger liabilities).

Credibility

When choosing an appropriate mortality assumption, actuaries typically use standard mortality tables, unlike when choosing other demographic assumptions. They may choose to adjust these standard mortality tables, however, to reflect various characteristics of the covered group, and to provide for expectations of future mortality improvement (both ufp to and after the measurement date). If the plan population has sufficient credibility to justify its own mortality table, then the use of such a table also could be appropriate. Factors that may be considered in selecting and/or adjusting a mortality table include the demographics of the covered group, the size of the group, the statistical credibility of its experience, and the anticipated rate of future mortality improvement.

We first measured the credibility of the dataset to determine whether standard, unadjusted tables should be used or if statistical analysis of TRS specific data was warranted. The method for this approach can be found in the article *"Selecting Mortality Tables: A Credibility Approach" October 2008*. Statistical analysis suggests 1,082 deaths per gender is sufficient to be considered fully credible, as at that amount of experience we are 90% confident that the observed experience is within +/- 5% of the actual pattern. However, when weighting on benefit amounts, it should be even higher. The following table gives the number of deaths needed by gender to have a given level of confidence that the data is +/- X% of the actual pattern.

		Confidence Intervals				
Standard Score	Confidence	99% – 101%	97% – 103%	95% – 105%	90% – 110%	80% – 120%
0.674	75%	4,543	505	182	45	11
1.282	80%	16,435	1,826	657	164	41
1.645	90%	27,060	3,007	1,082	271	68
1.96	95%	38,416	4,268	1,537	384	96
2.576	99%	66,358	7,373	2,654	664	166

TRS had 18,851 male and 39,786 female observed deaths during the period analyzed. The following provides the full details with 95% confident (p=95%) that the observed experience is within +/- 5% of the actual pattern (r=5%).

Credibility Requirements Versus Actual Deaths		
	Male	**Female**
Actual Deaths	18,851	39,786
Deaths needed for full credibility		
Based on Count	1,537	1,537
Based on Annuity Amount	2,494	2,339
Z Factor		
Based on Count	100.0%	100.0%
Based on Annuity Amount	100.0%	100.0%

Considering there is no published table based on data similar to TRS in geography or exactly matching by occupation (would need to be a combination of published tables), and that the data from this experience study is much more recent than the data used to create the nationally published mortality tables, we will continue to develop client specific mortality tables utilizing the TRS data. This also allows for smaller, more frequent adjustments than waiting for the next series of published tables.

Summary of Experience

We begin by determining the expected number of weighted deaths in each year at each age for males and females. Then we compare the actual number to the expected number. The ratio of the actual deaths to the expected deaths (the A/E ratio) tells us whether the assumptions are reasonable. When using a generational approach for mortality improvement, an A/E of 100% is targeted.

The experience is a relatively good match to the current assumption. The following is a summary of the data.

Mortality Experience and Life Expectancy		
	Male	**Female**
Actual Deaths ($100,000 Annuities)	$4,509	$8,121
Expected Deaths based on Current Assumptions	$4,371	$7,888
A/E Ratio	103.2%	103.0%
Actual Deaths Static Life Expectancy for 65-Year Old	20.2	22.6
Expected Static Life Expectancy for 65-Year Old	20.2	22.9
A/E Ratio	100.0%	98.7%

The actual experience came in close to expected. The A/E ratios in total (across all ages) for males and females were 103.2% and 103.0%, respectively.

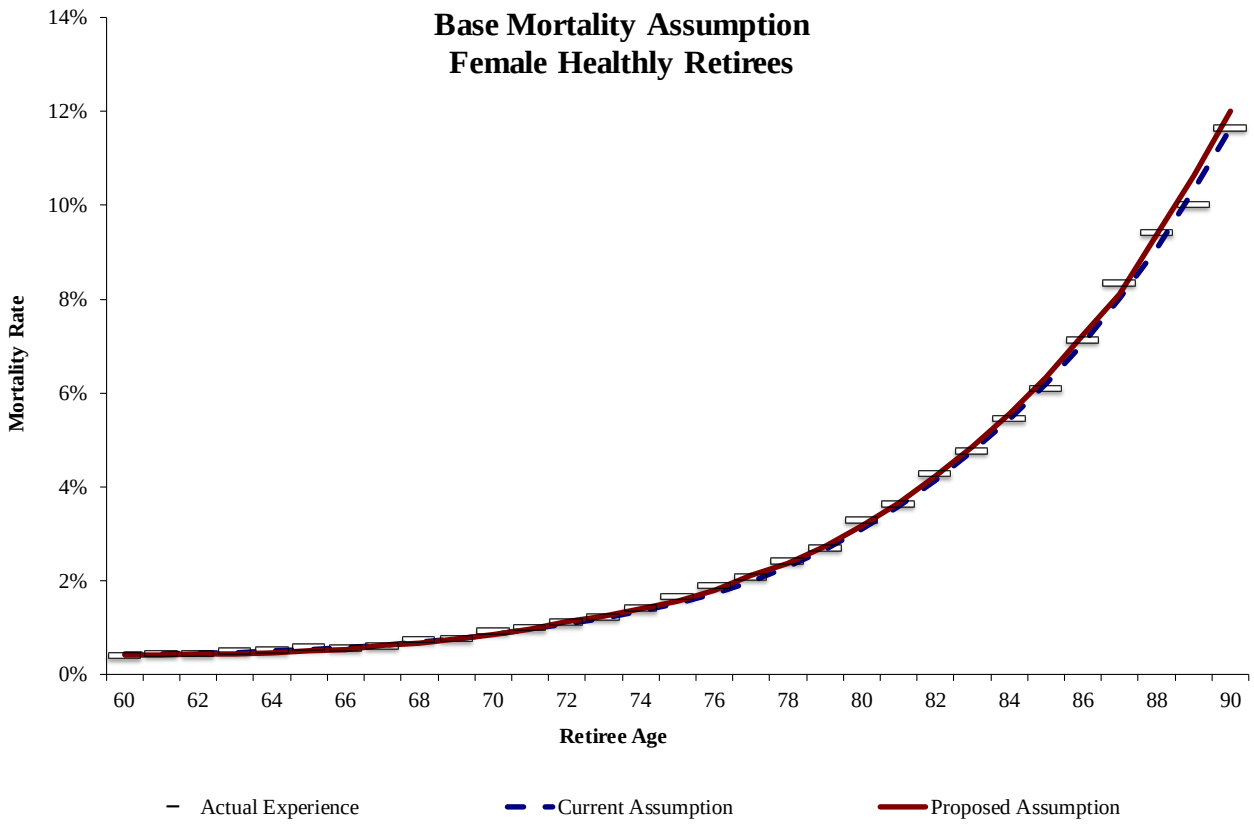
This is close enough that it is reasonable to leave the assumption unchanged. However, it is also close enough that any adjustments towards the actual data would not make a meaningful difference to the liabilities or contribution requirements. It is preferable to keep the assumption as current as possible and to follow the process that was established, which is to update the full assumption with each experience study, and so we are recommending a new base table. Data from the last three years of the study would have had a slightly higher A/E ratio than shown above, so the movement is in the direction of, but not as much as, the recent trend.

Recommended Base Mortality Assumption

To develop the recommended mortality assumptions, we grouped the data into five-year ages bands. Mortality rates for ages after 60 are based on TRS' experience, while mortality rates for ages under 60 and after age 95 are equal to a credibility adjusted version of the most recently published Pub-2016 mortality assumptions for teachers (adjusted forward to the central point of the experience period). These results were then graduated using a cubic spline method to provide a smooth fit to the experience. This produced an R^2 of 99.3% and 99.9% for males and females, respectively when compared to the underlying data.

The final step in the creation of the base mortality assumption was to project the preliminary table from the center point of the analysis period (i.e., 2021) to the year 2025 using the recommended projection scale below. We will refer to this new table as the 2025 TRS of Texas Healthy Pensioner Mortality Table.

The following is a chart that shows the actual mortality experience and assumption for females.



For the new assumptions, the A/E ratios in total (across all ages) for males and females would have been 103% and 101% at the core ages. A better way to examine the base table is to compare the life expectancies

created at various ages. The following table provides the life expectancies calculated from the given age based on the actual data, the current assumption, and the recommended tables.

Static Life Expectancy, in years – Females with Base Year 2021			
Retiree Age	Actual in Data	Current Assumption	Proposed Table
60	27.1	27.3	27.1
65	22.6	22.9	22.7
70	18.2	18.5	18.3
75	14.1	14.4	14.2
80	10.4	10.7	10.5

Overall, this change has a minimal impact to the current valuation results and is mostly just updating dates on the tables.

The tables on the following page show the actual mortality experience for health lives (males and females) during the study period.

POST-RETIREMENT MORTALITY - HEALTHY MALE
Weighted by Annual Benefits in $ in Millions

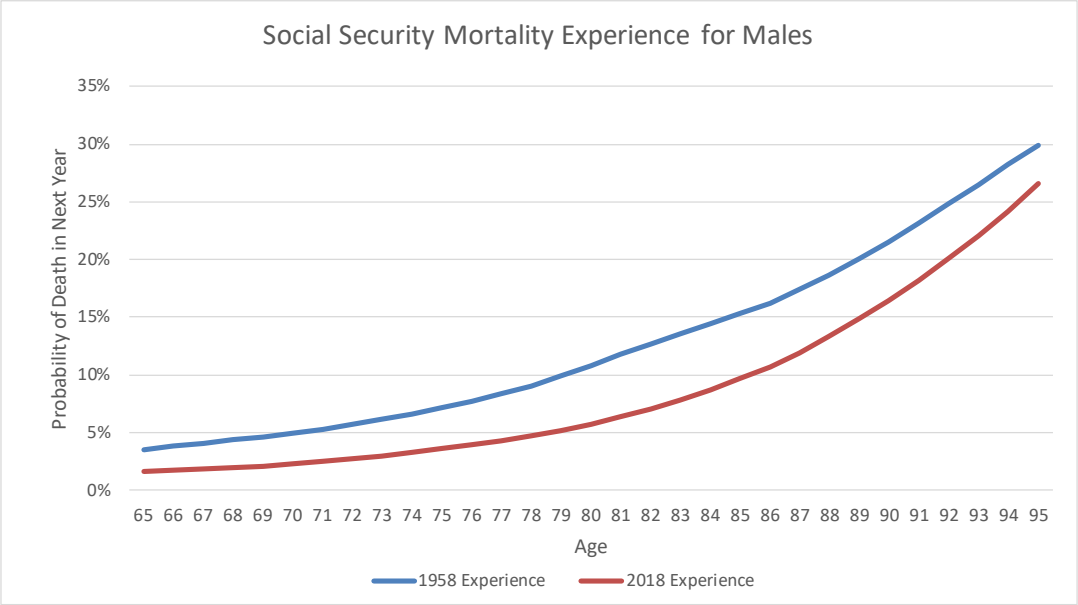
				Assumed Rate		Expected Deaths		Actual/Expected	
Age	Actual Death	Total Annuity	Actual Rate	Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
55-59	$7	$1,194	0.0062	0.0043	0.0061	$6	$7	134%	101%
60-64	19	2,472	0.0077	0.0074	0.0074	19	19	102%	100%
65-69	39	3,552	0.0109	0.0107	0.0108	38	38	101%	103%
70-74	58	3,443	0.0169	0.0163	0.0170	57	58	103%	101%
75-79	76	2,507	0.0304	0.0304	0.0311	75	74	101%	103%
80-84	86	1,477	0.0586	0.0576	0.0594	84	83	103%	104%
85-89	86	795	0.1083	0.1059	0.1101	83	83	104%	104%
90-94	59	305	0.1916	0.1962	0.1966	57	57	103%	103%
95-99	19	67	0.2796	0.2915	0.3014	19	19	102%	97%
Totals	$450	$15,813	0.0284	0.0276	0.0277	$437	$438	103%	103%
65-74	$97	$6,996	0.0139	0.0136	0.0136	$95	$95	102%	102%
75-84	$163	$3,983	0.0408	0.0399	0.0395	$159	$157	102%	103%
85-94	$145	$1,100	0.1314	0.1272	0.1267	$140	$139	103%	104%

POST-RETIREMENT MORTALITY - HEALTHY FEMALE
Weighted by Annual Benefits in $ in Millions

				Assumed Rate		Expected Deaths		Actual/Expected	
Age	Actual Death	Total Annuity	Actual Rate	Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
55-59	$11	$3,364	0.0033	0.0039	0.0032	$13	$11	85%	99%
60-64	34	7,575	0.0045	0.0045	0.0044	35	33	98%	104%
65-69	69	10,837	0.0064	0.0061	0.0063	68	67	101%	103%
70-74	109	9,835	0.0111	0.0108	0.0111	105	108	104%	101%
75-79	134	6,457	0.0207	0.0197	0.0211	126	132	106%	102%
80-84	146	3,523	0.0413	0.0414	0.0423	143	146	102%	100%
85-89	146	1,849	0.0792	0.0801	0.0811	145	149	101%	98%
90-94	112	771	0.1453	0.1440	0.1522	106	112	105%	100%
95-99	49	211	0.2337	0.2274	0.2463	46	50	108%	100%
Totals	$810	$44,421	0.0182	0.0177	0.0181	$788	$806	103%	101%
65-74	$178	$20,672	0.0086	0.0084	0.0084	$174	$174	103%	102%
75-84	$279	$9,980	0.0280	0.0269	0.0278	$269	$277	104%	101%
85-94	$258	$2,620	0.0986	0.0961	0.0994	$252	$261	103%	99%

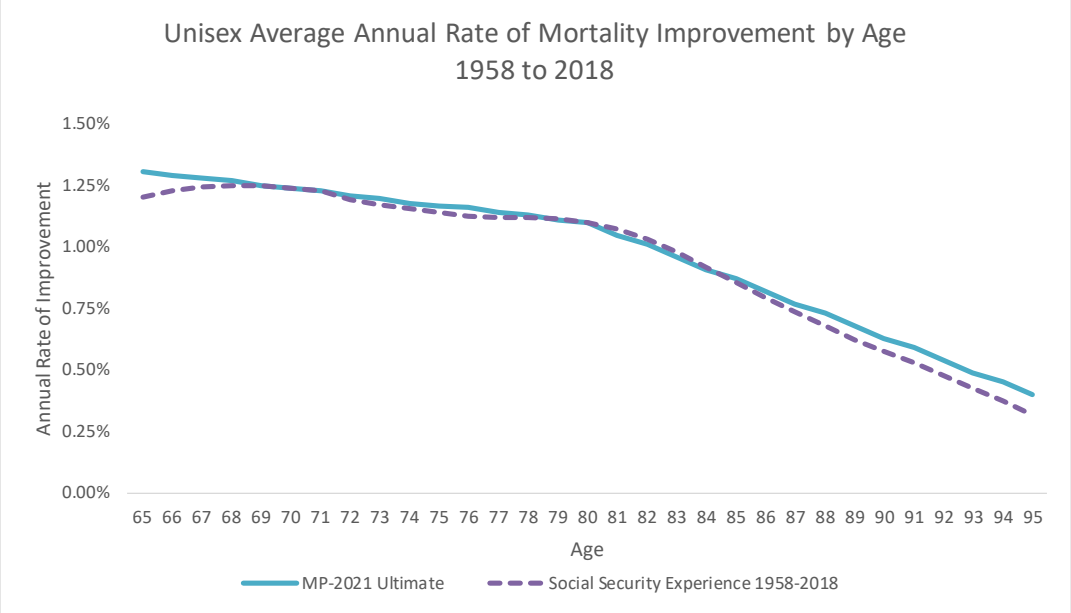
Recommended Mortality Improvement Assumption

We use a fully generational approach to this assumption. Because of this strategy of building-in continuous improvement, life expectancies for today's younger active members are expected to be materially longer than those of today's retirees, and this provides substantial stability and dependability on costs and liabilities. The following graph compares the probability of mortality by age in 1958 versus 2018. There has clearly been a significant amount of improvement in longevity over that time span.



The current mortality assumption includes annual improvements in mortality based on the MP-2021 Ultimate Projection Scale to reflect the expected mortality improvement. We are recommending no change in this assumption. The projection scales published by the Society of Actuaries (SOA) incorporate a complex two-dimensional matrix of rates of improvement that vary by age, gender, and year. Ultimately, the projection scale (Scale MP-2021) goes to an annual improvement that varies by age, but not gender or year, in years 2037 and later. We refer to these rates as the ultimate rates. Note that Scale MP-2021 is the most recent mortality improvement table published by the SOA. Our recommendation is to continue using the current mortality improvement scale. We believe the ultimate portion of the MP-2021 scale reflects a reasonable long-term forecast for mortality improvement and is consistent with historical trends.

Specifically, the pattern is 1.35% of the rate for ages 62 and younger, decreasing linearly to 1.10% at age 80, further decreasing linearly to 0.40% at age 95, and then decreasing linearly to 0.00% at age 115 (and thereafter). We have compared the recommended projection scale with actual mortality improvement from the most recent 60 years of experience of the U.S. Social Security system and found them (blue and green lines) to be reasonably consistent as shown in the following graph. Note that we have not shown years past 2018 to avoid any pandemic impact.



The following is a table with the life expectancy for a retired member who attains age 65 based on the proposed assumption set, by calendar year. As shown, the life expectancy is expected to increase into the future.

Current Mortality Assumption - Life Expectancy for an Age 65 Retiree in Years					
Group	**Year of Retirement**				
	2025	**2030**	**2035**	**2040**	**2045**
Male	21.5	21.9	22.2	22.6	22.9
Female	24.2	24.5	24.8	25.1	25.4

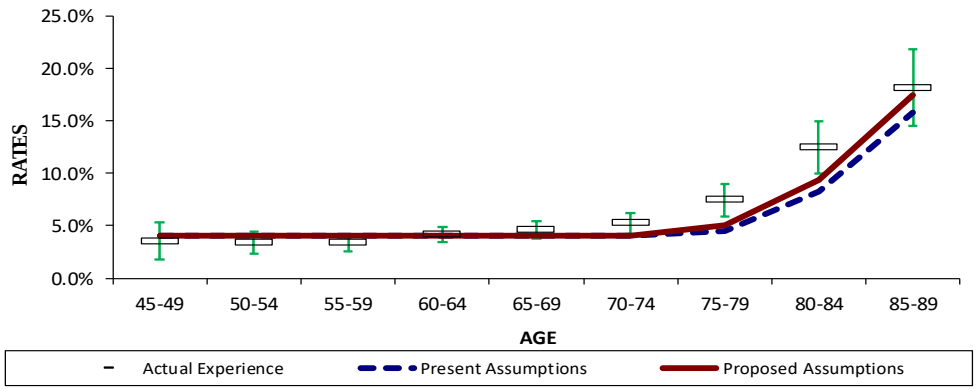
DISABLED MORTALITY PATTERN

This is a minor assumption, and it has little impact on the liabilities of TRS because TRS has very few disabilities in comparison to most other plans. The experience produced A/E ratios of 114% and 134% for males and females, respectively, which are conservative, reasonable matches in total considering this data has much less credibility (due to the much smaller number of disabled retirees). We currently assume members that live past normal retirement age will use the same table as healthy retirees, with a three-year set-forward, meaning a disabled member age 70 will use the same mortality rate as a healthy member age 73. In addition to the age set-forward, we are applying a minimum rate of 4% for males and 2% for females to reflect impaired mortality during those ages. Aside from the updating of the underlying healthy table, we are recommending to increase the set-forward to four years for both males and females. These changes are immaterial to the liabilities and contribution requirements.

POST-RETIREMENT MORTALITY - DISABLED MALE
Weighted by Annual Benefits in $ in 000s

				Assumed Rate		Expected Deaths		Actual/Expected	
Age	Death Weighted by Annuity	Total Annuity	Actual Rate	Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
45-49	$290	$8,208	0.0354	0.0400	0.0400	$328	$328	88%	88%
50-54	818	23,946	0.0342	0.0400	0.0400	958	958	85%	85%
55-59	1,295	38,707	0.0334	0.0400	0.0400	1,548	1,548	84%	84%
60-64	1,998	47,451	0.0421	0.0400	0.0400	1,898	1,898	105%	105%
65-69	1,765	38,346	0.0460	0.0400	0.0400	1,534	1,534	115%	115%
70-74	1,286	24,615	0.0523	0.0400	0.0400	985	985	131%	131%
75-79	1,220	16,418	0.0743	0.0448	0.0501	736	822	166%	148%
80-84	1,560	12,511	0.1247	0.0822	0.0932	1,029	1,166	152%	134%
85-89	1817	10,009	0.1816	0.1582	0.1746	1583	1,747	115%	104%
Totals	$12,049	$220,211	0.0547	0.0481	0.0499	$10,599	$10,987	114%	110%

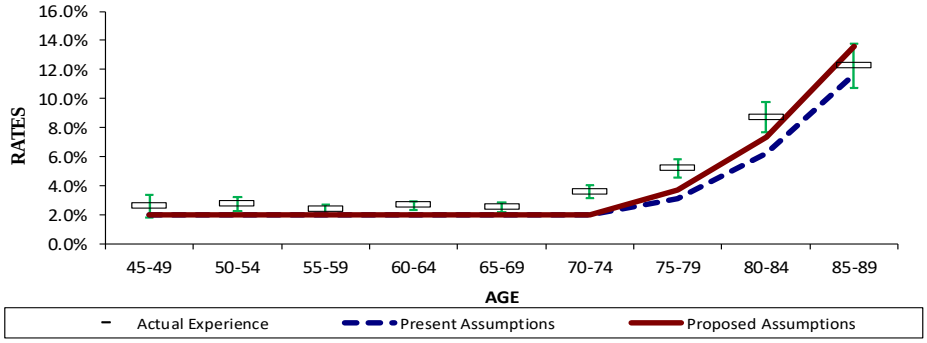
MALE POST-RETIREMENT MORTALITY: DISABLED



POST-RETIREMENT MORTALITY - DISABLED FEMALE
Weighted by Annual Benefits in $ in 000s

Age	Death Weighted by Annuity	Total Annuity	Actual Rate	Assumed Rate		Expected Deaths		Actual/Expected	
				Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
45-49	$745	$29,095	0.0256	0.0200	0.0200	$582	$582	128%	128%
50-54	2,187	81,213	0.0269	0.0200	0.0200	1,624	1,624	135%	135%
55-59	3,101	130,545	0.0238	0.0200	0.0200	2,611	2,611	119%	119%
60-64	4,122	157,535	0.0262	0.0200	0.0200	3,151	3,151	131%	131%
65-69	3,564	142,901	0.0249	0.0200	0.0200	2,858	2,858	125%	125%
70-74	3,601	100,736	0.0357	0.0200	0.0200	2,015	2,099	179%	172%
75-79	3,189	61,893	0.0515	0.0309	0.0367	1,886	2,241	169%	142%
80-84	3,510	40,362	0.0870	0.0620	0.0731	2,511	2,950	140%	119%
85-89	3469	28,302	0.1226	0.1166	0.1361	3235	3,796	107%	91%
Totals	$27,488	$772,581	0.0356	0.0265	0.0284	$20,472	$21,912	134%	125%

FEMALE POST-RETIREMENT MORTALITY: DISABLED



ACTIVE MORTALITY PATTERN

A separate mortality table is used for active members. It is typical for active mortality to be much lower than the retiree mortality. The current mortality assumption is the PUB-2010 mortality tables for teachers, using the below median table (based on a combination of the group including non-teachers and for teachers in Texas being one of the lowest paid in the country). For males, we use a two-year set-forward. We recommend updating pre-retirement mortality tables for active employees to the recently published PUB-2016 mortality tables for Teachers, using the below median table. We also recommend continuing to assume mortality rates will improve in the future using a fully generational approach. These changes are immaterial to the liabilities and contribution requirements.

PRE-RETIREMENT MORTALITY - MALE

				Assumed Rate		Expected Deaths		Actual/Expected	
Age	Actual Deaths	Total Exposure	Actual Rate	Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
20-24	7	25,263	0.0003	0.0002	0.0003	5	7	139%	100%
25-29	33	118,330	0.0003	0.0002	0.0003	29	36	113%	92%
30-34	66	161,912	0.0004	0.0003	0.0004	55	57	121%	117%
35-39	90	175,088	0.0005	0.0005	0.0004	82	79	110%	114%
40-44	128	178,073	0.0007	0.0007	0.0006	128	116	100%	111%
45-49	207	178,522	0.0012	0.0012	0.0010	212	179	98%	116%
50-54	287	174,054	0.0016	0.0019	0.0016	327	280	88%	103%
55-59	451	152,994	0.0029	0.0028	0.0026	436	392	103%	115%
60-64	492	118,985	0.0041	0.0046	0.0040	547	471	90%	104%
65-69	377	63,032	0.0060	0.0077	0.0061	469	378	80%	100%
70-74	268	29,215	0.0092	0.0119	0.0085	352	248	76%	108%
Totals	2,406	1,375,468	0.0017	0.0019	0.0016	2,642	2,242	91%	107%
35-44	218	353,161	0.0006	0.0006	0.0006	210	195	104%	112%
45-54	494	352,576	0.0014	0.0015	0.0013	539	459	92%	108%
55-64	943	271,979	0.0035	0.0036	0.0032	983	863	96%	109%

PRE-RETIREMENT MORTALITY - FEMALE

				Assumed Rate		Expected Deaths		Actual/Expected	
Age	Actual Deaths	Total Exposure	Actual Rate	Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
20-24	7	75,809	0.0001	0.0001	0.0001	8	9	93%	80%
25-29	48	364,863	0.0001	0.0001	0.0001	43	49	112%	97%
30-34	85	462,611	0.0002	0.0002	0.0002	83	80	103%	106%
35-39	129	520,455	0.0002	0.0003	0.0002	140	130	92%	99%
40-44	229	557,507	0.0004	0.0004	0.0004	232	214	99%	107%
45-49	350	572,475	0.0006	0.0006	0.0006	367	333	95%	105%
50-54	488	551,241	0.0009	0.0010	0.0009	525	482	93%	101%
55-59	611	460,222	0.0013	0.0014	0.0013	634	608	96%	101%
60-64	684	311,980	0.0022	0.0022	0.0021	670	636	102%	107%
65-69	422	128,412	0.0033	0.0038	0.0033	465	407	91%	104%
70-74	220	39,882	0.0055	0.0070	0.0053	275	207	80%	106%
Totals	3,273	4,045,457	0.0008	0.0009	0.0008	3,441	3,156	95%	104%
35-44	358	1,077,962	0.0003	0.0003	0.0003	372	344	96%	104%
45-54	838	1,123,716	0.0007	0.0008	0.0007	892	815	94%	103%
55-64	1,295	772,202	0.0017	0.0017	0.0016	1,304	1,244	99%	104%

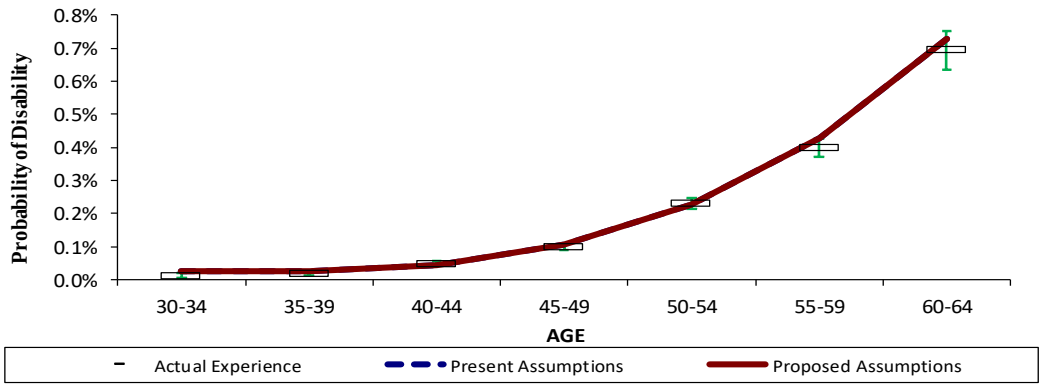
DISABILITY PATTERN

Disability incidence is also a minor assumption for TRS. We currently separate this assumption between members who have achieved 10 years of service and thus are eligible for a lifetime annuity and those with less than 10 years who would only receive a temporary annuity. We performed additional analysis on these reconciliations to capture members who appeared to have gone from active to terminated in one valuation, but then terminated to disabled in the next valuation, and was just a processing delay. Overall, the number of members qualifying for disability was very close to the number expected from the current assumptions. We will continue to add in a 1% load for members who reach the Rule of 80, but based on their benefit tier, are not eligible for unreduced benefits to reflect the fact that some members in our historical data would have qualified for disability but were eligible for unreduced retirement and thus did not apply.

DISABILITY INCIDENCE: AFTER 10 YEARS OF SERVICE

				Assumed Rate		Expected Disabilities		Actual/Expected	
Age	Actual Disabilities	Total Exposure	Actual Rate	Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
20-24	-	-	0.0000	0.0001	0.0001	-	-		
25-29	-	803	0.0000	0.0001	0.0001	-	-		
30-34	8	68,010	0.0001	0.0002	0.0002	17	17	49%	49%
35-39	45	239,260	0.0002	0.0002	0.0002	63	63	72%	72%
40-44	166	341,433	0.0005	0.0005	0.0005	161	161	103%	103%
45-49	379	385,178	0.0010	0.0011	0.0011	419	418	90%	91%
50-54	812	352,040	0.0023	0.0023	0.0023	786	786	103%	103%
55-59	808	203,324	0.0040	0.0043	0.0043	853	852	95%	95%
60-64	590	85,145	0.0069	0.0073	0.0073	587	588	101%	100%
Totals	2,809	1,675,193	0.0017	0.0017	0.0017	2,886	2,885	97%	97%
35-44	211	580,693	0.0004	0.0004	0.0004	224	224	94%	94%
45-54	1,191	737,218	0.0016	0.0016	0.0016	1,205	1,204	99%	99%
55-64	1,398	288,469	0.0048	0.0050	0.0050	1,440	1,440	97%	97%

DISABILITY INCIDENCE



RETIREMENT PATTERNS

We currently use retirement rates that vary by age, sex, and eligibility for reduced versus unreduced retirement. In this analysis, we have used data from the last five years.

For this assumption, we weight the analysis by the liability of the member, to better align the pattern with the amount of liability retiring each year, versus the number of retirees. This way, a member with 30 years of service would be reflected more in the probability than a member with 10 years of service.

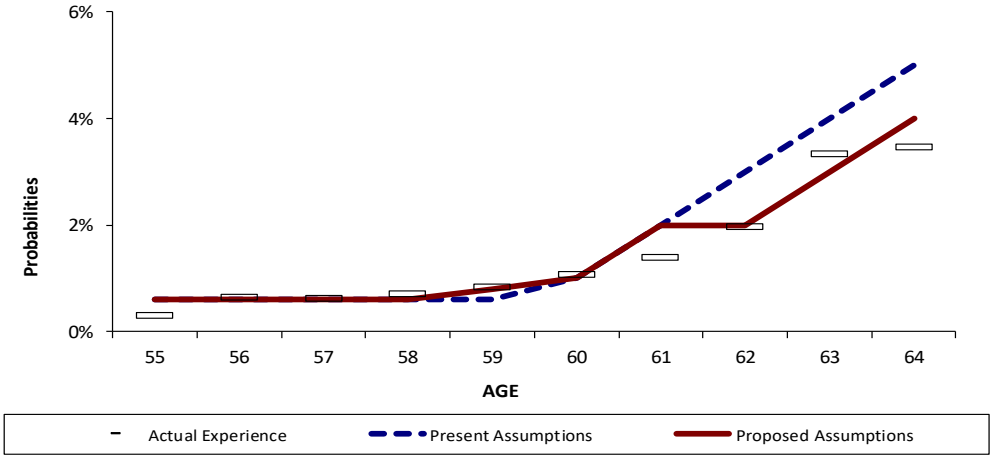
When we examine the core retirement ages (55 – 69) for unreduced retirement, $32.9 billion of liability retired during the five-year period compared to $32.6 billion expected. Using the weighted analysis, the A/E ratio for the core ages was approximately 100.9%, which is almost exact, but a little higher than our preferred range of 97-99%. However, the ratios were higher at the younger ages and lower at the later ages.

We have slightly increased our probabilities for unretirement below age 60 to decrease the overall A/E to 99.5%. For reduced retirement, we have lowered the probabilities to increase the A/E towards 100%. These changes are insignificant to the liabilities and contribution requirements.

REDUCED RETIREMENT
WEIGHTED BY LIABILITY in $MILLIONS

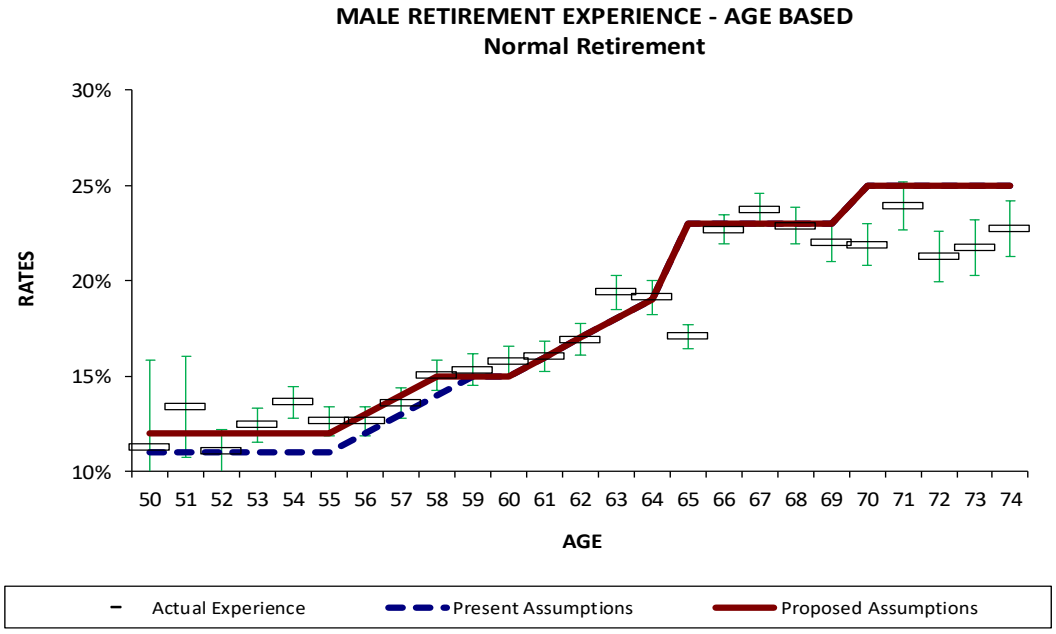
				Assumed Rate		Expected Retirement		Actual/Expected	
Age	Actual Retirement	Total Liability $M	Actual Rate	Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
55	$48	$16,739	0.003	0.60%	0.60%	$100	$100	48%	48%
56	90	14,196	0.006	0.60%	0.60%	85	85	105%	105%
57	72	12,135	0.006	0.60%	0.60%	73	73	99%	99%
58	73	10,446	0.007	0.60%	0.60%	63	63	117%	117%
59	74	9,029	0.008	0.60%	0.80%	54	72	137%	103%
60	78	7,505	0.010	1.00%	1.00%	75	75	104%	104%
61	86	6,230	0.014	2.00%	2.00%	125	125	69%	69%
62	96	4,936	0.019	3.00%	2.00%	148	99	65%	97%
63	127	3,830	0.033	4.00%	3.00%	153	115	83%	110%
64	101	2,929	0.034	5.00%	4.00%	146	117	69%	86%
Total	$846	$87,977	0.010			$1,023	$924	83%	92%

REDUCED RETIREMENT EXPERIENCE - AGE BASED



MALE NORMAL RETIREMENT
WEIGHTED BY LIABILITY in $MILLIONS

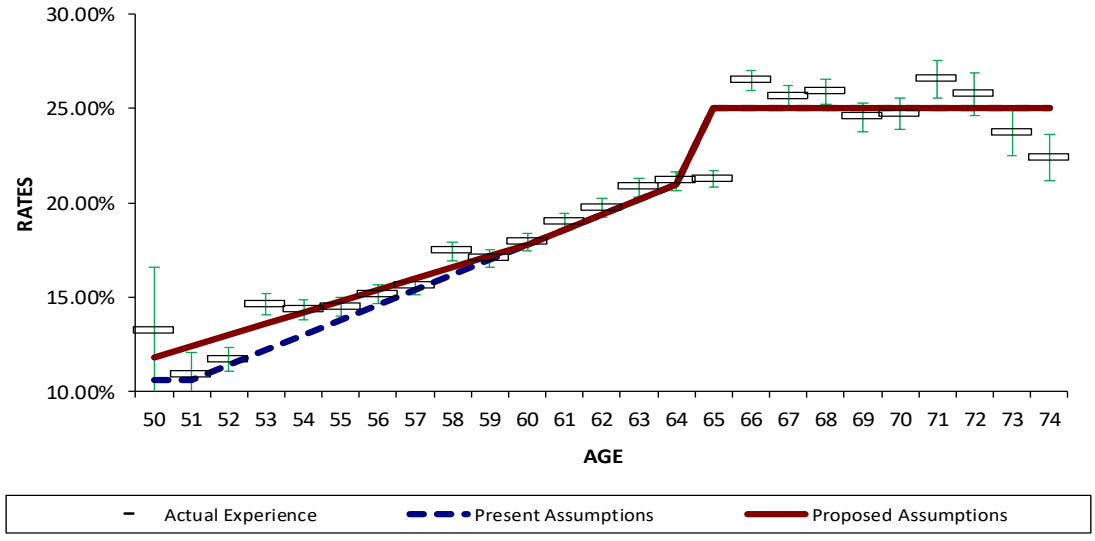
				Assumed Rate		Expected Retirement		Actual/Expected	
Age	Actual Retirement	Total Liability $M	Actual Rate	Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
50	$11	$94	0.112	11.00%	12.00%	$10	$11	103%	94%
51	49	370	0.134	11.00%	12.00%	41	44	122%	111%
52	202	1,826	0.111	11.00%	12.00%	201	219	101%	92%
53	390	3,140	0.124	11.00%	12.00%	345	377	113%	104%
54	526	3,860	0.136	11.00%	12.00%	425	463	124%	114%
55	531	4,202	0.126	11.00%	12.00%	462	504	115%	105%
56	537	4,248	0.126	12.00%	13.00%	510	552	105%	97%
57	573	4,216	0.136	13.00%	14.00%	548	590	105%	97%
58	619	4,112	0.150	14.00%	15.00%	576	617	108%	100%
59	615	4,011	0.153	15.00%	15.00%	602	602	102%	102%
60	619	3,925	0.158	15.00%	15.00%	589	589	105%	105%
61	603	3,758	0.160	16.00%	16.00%	601	601	100%	100%
62	603	3,567	0.169	17.00%	17.00%	606	606	99%	99%
63	644	3,322	0.194	18.00%	18.00%	598	598	108%	108%
64	568	2,968	0.191	19.00%	19.00%	564	564	101%	101%
65	601	3,517	0.171	23.00%	23.00%	809	809	74%	74%
66	682	3,009	0.227	23.00%	23.00%	692	692	99%	99%
67	570	2,401	0.237	23.00%	23.00%	552	552	103%	103%
68	430	1,879	0.229	23.00%	23.00%	432	432	100%	100%
69	328	1,490	0.220	23.00%	23.00%	343	343	96%	96%
70	258	1,181	0.219	25.00%	25.00%	295	295	88%	88%
71	222	928	0.239	25.00%	25.00%	232	232	96%	96%
72	149	698	0.213	25.00%	25.00%	175	175	85%	85%
73	117	540	0.217	25.00%	25.00%	135	135	87%	87%
74	100	442	0.227	25.00%	25.00%	111	111	91%	91%
Total	$10,547	$63,705	0.166			$10,453	$10,714	101%	98%



FEMALE NORMAL RETIREMENT
WEIGHTED BY LIABILITY in $MILLIONS

				Assumed Rate		Expected Retirement		Actual/Expected	
Age	Actual Retirement	Total Liability $M	Actual Rate	Current	Proposed	Current (3) * (5)	Proposed (3) * (6)	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
50	$26	$193	0.132	10.60%	11.80%	$21	$23	125%	112%
51	155	1,429	0.109	10.60%	12.40%	152	177	102%	88%
52	645	5,513	0.117	11.40%	13.00%	629	717	103%	90%
53	1,203	8,223	0.146	12.20%	13.60%	1,003	1,118	120%	108%
54	1,363	9,512	0.143	13.00%	14.20%	1,237	1,351	110%	101%
55	1,471	10,151	0.145	13.80%	14.80%	1,401	1,502	105%	98%
56	1,545	10,200	0.151	14.60%	15.40%	1,489	1,571	104%	98%
57	1,615	10,355	0.156	15.40%	16.00%	1,595	1,657	101%	97%
58	1,809	10,382	0.174	16.20%	16.60%	1,682	1,723	108%	105%
59	1,775	10,401	0.171	17.00%	17.20%	1,768	1,789	100%	99%
60	1,865	10,425	0.179	17.80%	17.80%	1,856	1,856	101%	101%
61	1,944	10,252	0.190	18.60%	18.60%	1,907	1,907	102%	102%
62	1,936	9,814	0.197	19.40%	19.40%	1,904	1,904	102%	102%
63	1,882	9,042	0.208	20.20%	20.20%	1,827	1,827	103%	103%
64	1,716	8,115	0.211	21.00%	21.00%	1,704	1,704	101%	101%
65	1,794	8,435	0.213	25.00%	25.00%	2,109	2,109	85%	85%
66	1,844	6,964	0.265	25.00%	25.00%	1,741	1,741	106%	106%
67	1,344	5,244	0.256	25.00%	25.00%	1,311	1,311	102%	102%
68	1,052	4,066	0.259	25.00%	25.00%	1,017	1,017	103%	103%
69	756	3,084	0.245	25.00%	25.00%	771	771	98%	98%
70	588	2,380	0.247	25.00%	25.00%	595	595	99%	99%
71	481	1,812	0.265	25.00%	25.00%	453	453	106%	106%
72	346	1,342	0.258	25.00%	25.00%	335	335	103%	103%
73	241	1,019	0.237	25.00%	25.00%	255	255	95%	95%
74	181	808	0.224	25.00%	25.00%	202	202	90%	90%
Total	$29,577	$159,163	0.186			$28,961	$29,614	102%	100%

FEMALE RETIREMENT EXPERIENCE - AGE BASED
Normal Retirement



TERMINATION PATTERNS

Termination rates reflect members who leave for any reason other than death, disability or service retirement. They apply whether the termination is voluntary or involuntary, and whether the member takes a refund or keeps his/her account balance on deposit in TRS. The current termination rates are composed of two distinct assumptions, one for the first ten years of service called the "select" period and a separate assumption for terminations after the ten-year period called the "ultimate." The select assumption reflects the member's service and we want to continue this practice. The ultimate assumption is based on the member's time from retirement eligibility and service, and we would also recommend continuing that practice. We have analyzed the two assumption periods separately. The current tables are not separated based on gender.

For this assumption, we used 10 years of data. In addition, we have weighted the experience by projected liability, meaning instead of counting members and the number of members that terminate, we have projected liabilities and the portion of the liability that terminates. A higher paid member has more liability than a lower paid member, and thus the termination pattern for the higher paid member will have more impact on the future liabilities of the plan.

Grouping by Tenure Characteristics

We noticed a pattern where certain positions in public education have much lower turnover (teachers, school administrators, etc.) than the other employee and employer groups (support staff, teacher aids, higher education, etc.). They also have much different ages of entry and career paths. While we researched this difference in a variety of ways, the significant difference is shown in the following table.

Annual Turnover by Employer Type and Position			
Employer Type	**Position Code**	**Count in 2025 Actuarial Data**	**% Annual Non-Retirement Turnover**
Public Education	Teacher, Full-Time Librarian	352,213	6.3%
Public Education	Support Staff	215,435	13.4%
Public Education	Professional/Administrative	69,885	5.1%
Medical Schools	Professional/Administrative	48,395	11.7%
Senior Colleges	Professional/Administrative	39,116	11.2%
Public Education	Food Service Workers	37,730	13.6%
Public Education	Full-Time Nurse/Counselor	20,670	7.0%
Charter Schools	Teacher, Full-Time Librarian	25,359	11.9%
All Others		167,601	12.3%

While there may be demographic variances that could confound the turnover metric shown above, it is clear that three of the groups have significantly lower turnover. They also as a group have a median entry age of 27 while the rest of the TRS membership has a median entry age above age 35.

We have grouped these three position codes in the data (Professional/Administrative, Teacher/Full-Time

Librarian, and Full-Time Nurse/Counselor) for public education employers into a Low Turnover (LT) group and grouped all other members into an All Other Employees (AO) group. Approximately 45% of the current active population would fall into the LT group, so the process bifurcates the data rather evenly. Over the past 10 years, 53% of members hired into the LT reached at least 10 years of service while only 40% of the AO group reached that milestone. We will also only replace LT members with recent new entrants from a LT group in the open group projections, and vice versa. This should produce a more adaptive model if the groups are growing at different paces.

Rehiring

TRS is made up of more than 1,300 employers spread out across a very large state. Members often move to another town in the State and can transfer to the local school district there, while maintaining their active membership in TRS. Members that leave employment can also leave their contributions on deposit with TRS and return to a covered employer at a later time, reestablishing their service and updating their salaries. Compared to a smaller, single employer plan where most new hires have never participated in the system, many of new active members in TRS each year have previous service with another TRS-covered employer. Put another way, many members that leave active service are replaced by an experienced member, not a member starting with no service.

For example, 6,507 members who were vested inactive in the 2024 data became active in the 2025 data. This can create actuarial losses if not anticipated. Of the 115,584 new active members in 2025, 15,081 of them had at least one year of previous service. This percentage has been consistent over the last several years and extends over the entire career with over 500 of the new members having in excess of 20 years of prior service.

To the valuation model, if a member leaves active service but is replaced by someone with the same amount of service, then the actuarial gain from the member leaving is offset by a loss from the new member rehiring. It is important to build this into the valuation process.

We have assumed 16% of all members that terminate employment (turnover) will be replaced by a member with similar demographic characteristics. This is similar to the percentages of recent behavior and the amount of margin that would be needed to offset the actuarial losses that would have been generated over the last few valuation cycles. All of the actuals in the following analysis have been reduced by 16%.

Analysis

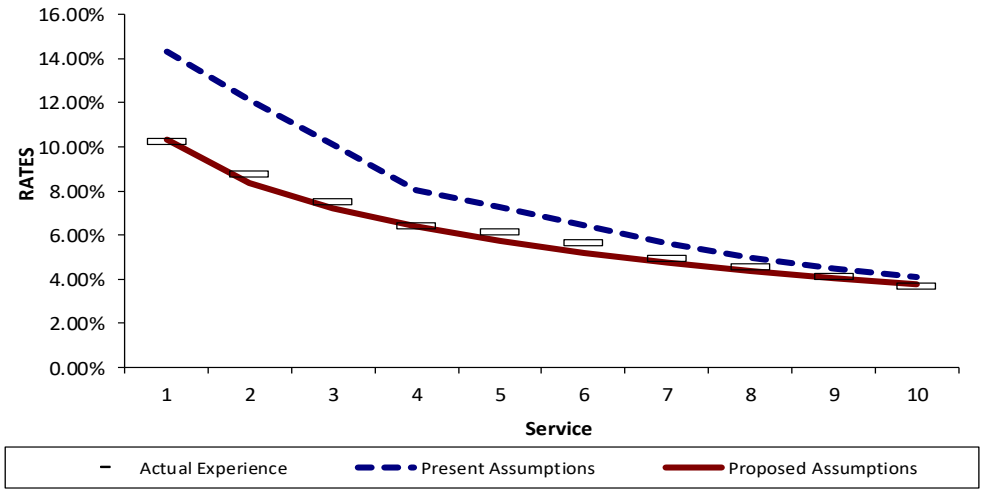
For the first 10 years (select period), the current assumptions produce an A/E ratio for the LT group of 81%, so overstated for this group, but 111% for AO. Likewise, for the ultimate period (after 10 years of service), the current assumptions produce an A/E ratio of 77% for the LT group but 114% for the AO group. Clearly the two groups have significantly different turnover patterns.

For this assumption, A/E ratios over 100% are conservative, and we prefer to be in the 101%-103% range. We have created new tables for the two groups. This actually lowers the assumed amount of turnover overall, but because of how the assumptions are applied to the different groups, these changes will slightly lower the liabilities and contribution requirements.

PUBLIC EDUCATION LOW TURNOVER
TERMINATION EXPERIENCE - DURING SELECT PERIOD
WEIGHTED BY LIABILITY in $MILLIONS

				Assumed Probability		Expected Terminations		Actual/Expected	
Years of service	Actual Terminations	Total Liabilities	Actual Probabilty	Current	Proposed	Current	Proposed	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	$1,392	$13,604	0.1023	0.1430	0.1031	$1,945	$1,402	72%	99%
2	1,475	16,838	0.0876	0.1210	0.0834	2,038	1,404	72%	105%
3	1,378	18,414	0.0749	0.1011	0.0719	1,862	1,323	74%	104%
4	1,227	19,146	0.0641	0.0802	0.0637	1,536	1,220	80%	101%
5	1,241	20,236	0.0613	0.0726	0.0574	1,469	1,161	85%	107%
6	1,190	21,157	0.0563	0.0646	0.0522	1,366	1,104	87%	108%
7	1,099	22,327	0.0492	0.0561	0.0478	1,252	1,067	88%	103%
8	1,065	23,591	0.0451	0.0499	0.0440	1,177	1,038	91%	103%
9	1,021	25,042	0.0408	0.0449	0.0407	1,124	1,018	91%	100%
10	974	26,406	0.0369	0.0410	0.0377	1,083	994	90%	98%
Totals	$12,063	$206,760				$14,852	$11,732	81%	103%

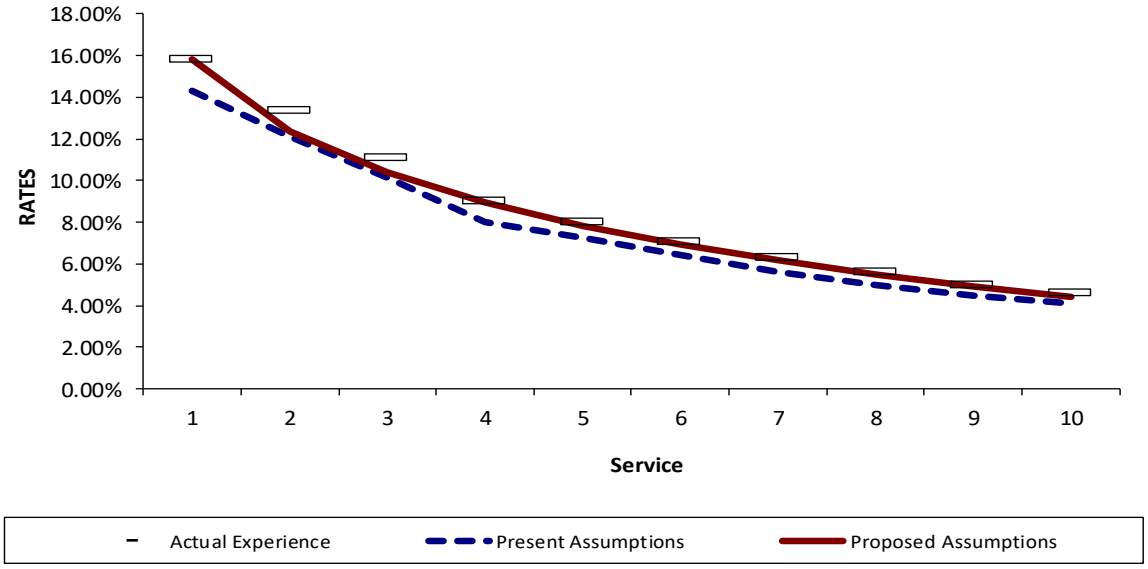
PUBLIC EDUCATION LOW TURNOVER
TERMINATION EXPERIENCE - DURING SELECT PERIOD



ALL OTHER EMPLOYEES
TERMINATION EXPERIENCE - DURING SELECT PERIOD
WEIGHTED BY LIABILITY in $MILLIONS

				Assumed Rate		Expected Termination Weighted By Salary		Actual/Expected	
Years of Service	Actual Termination Weighted By Liability $M	Total Liability $M	Actual Rate	Current	Proposed	Current	Proposed	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	$3,403	$21,528	0.1581	0.1430	0.1580	$3,079	$3,402	111%	100%
2	3,208	24,059	0.1333	0.1210	0.1237	2,912	2,977	110%	108%
3	2,529	22,758	0.1111	0.1011	0.1037	2,302	2,359	110%	107%
4	1,884	20,958	0.0899	0.0802	0.0894	1,681	1,874	112%	100%
5	1,665	20,883	0.0797	0.0726	0.0784	1,516	1,637	110%	102%
6	1,422	20,062	0.0709	0.0646	0.0694	1,295	1,392	110%	102%
7	1,243	19,713	0.0630	0.0561	0.0617	1,105	1,217	112%	102%
8	1,100	19,619	0.0561	0.0499	0.0551	979	1,082	112%	102%
9	971	19,594	0.0496	0.0449	0.0493	879	966	110%	100%
10	905	19,524	0.0463	0.0410	0.0441	801	861	113%	105%
Totals	$18,329	$208,699				$16,548	$17,767	111%	103%

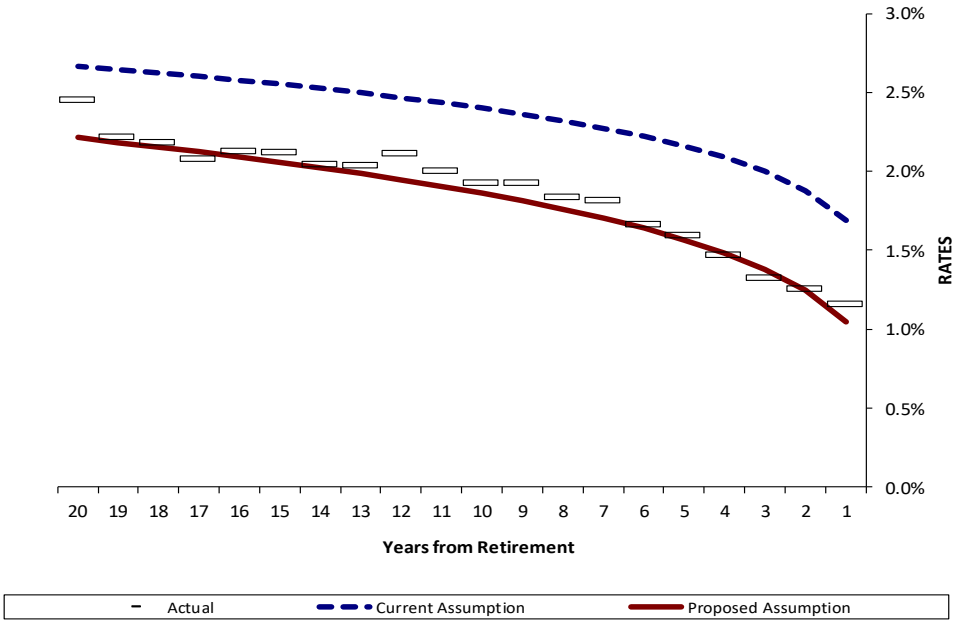
ALL OTHER EMPLOYEES
TERMINATION EXPERIENCE - DURING SELECT PERIOD



PUBLIC EDUCATION LOW TURNOVER
TERMINATION EXPERIENCE - YEARS FROM RETIREMENT
WEIGHTED BY LIABILITY in $MILLIONS

Years from Retirement	Actual Termination	Total Liabilities	Actual Probabilty	Assumed Probability		Expected Terminations		Actual/Expected	
				Current	Proposed	Current	Proposed	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	$399	$34,604	0.0115	0.0169	0.0105	$585	$363	68%	110%
2	435	34,748	0.0125	0.0188	0.0125	653	433	67%	101%
3	460	34,658	0.0133	0.0200	0.0138	692	478	66%	96%
4	502	34,185	0.0147	0.0209	0.0148	714	506	70%	99%
5	530	33,190	0.0160	0.0216	0.0157	717	520	74%	102%
6	525	31,609	0.0166	0.0222	0.0164	702	518	75%	101%
7	542	29,839	0.0182	0.0227	0.0170	678	508	80%	107%
8	515	28,112	0.0183	0.0232	0.0176	652	495	79%	104%
9	502	26,072	0.0193	0.0236	0.0181	616	473	82%	106%
10	459	23,830	0.0193	0.0240	0.0186	572	443	80%	104%
11	431	21,526	0.0200	0.0243	0.0191	524	410	82%	105%
12	387	18,302	0.0211	0.0247	0.0195	451	356	86%	109%
13	311	15,275	0.0204	0.0250	0.0199	381	303	82%	103%
14	261	12,758	0.0204	0.0252	0.0202	322	258	81%	101%
15	223	10,515	0.0212	0.0255	0.0206	268	216	83%	103%
16	183	8,625	0.0213	0.0258	0.0209	222	180	83%	102%
17	145	6,993	0.0208	0.0260	0.0212	182	149	80%	98%
18	137	6,294	0.0218	0.0262	0.0215	165	136	83%	101%
19	143	6,463	0.0222	0.0264	0.0218	171	141	84%	102%
20	162	6,597	0.0245	0.0267	0.0221	176	146	92%	111%
Totals	$7,252	$424,193				$9,443	$7,031	77%	103%

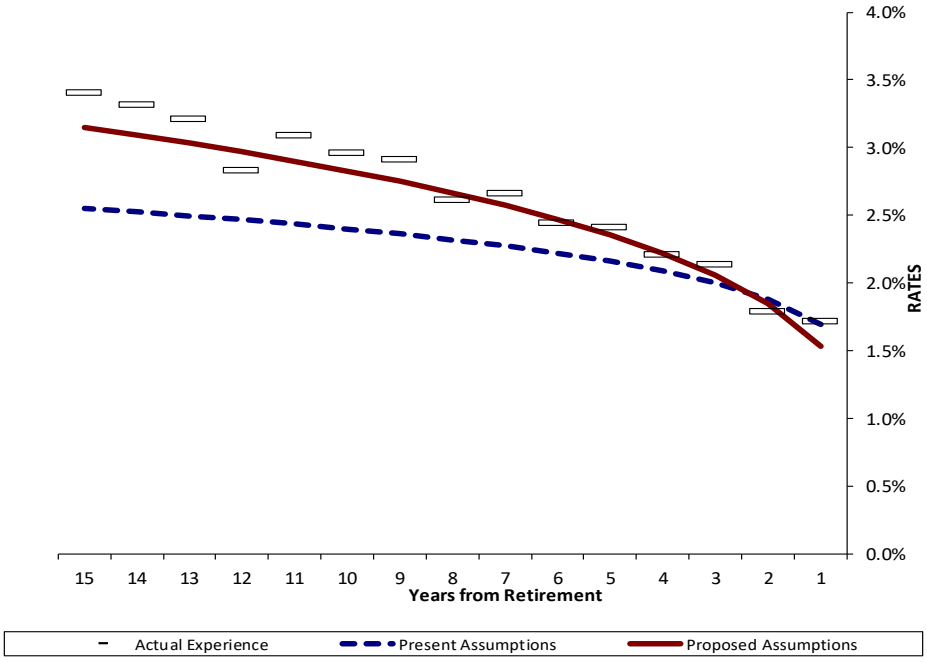
PUBLIC EDUCATION LOW TURNOVER
TERMINATION EXPERIENCE - YEARS FROM RETIREMENT



ALL OTHER EMPLOYEES
TERMINATION EXPERIENCE - YEARS FROM RETIREMENT
WEIGHTED BY LIABILITY in $MILLIONS

Years from Retirement	Actual Termination	Total Liabilities	Actual Rate	Assumed Rate		Expected Termination		Actual/Expected	
				Current	Proposed	Current	Proposed	Current (2) / (7)	Proposed (2) / (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	$334	$19,551	0.0171	0.0169	0.0153	$331	$300	101%	111%
2	343	19,229	0.0178	0.0188	0.0184	361	354	95%	97%
3	399	18,760	0.0213	0.0200	0.0205	375	385	106%	104%
4	400	18,158	0.0221	0.0209	0.0222	379	402	106%	99%
5	405	16,804	0.0241	0.0216	0.0235	363	395	112%	102%
6	375	15,381	0.0244	0.0222	0.0247	341	380	110%	99%
7	366	13,796	0.0265	0.0227	0.0257	314	355	117%	103%
8	323	12,371	0.0261	0.0232	0.0267	287	330	112%	98%
9	319	10,988	0.0290	0.0236	0.0275	259	302	123%	106%
10	288	9,749	0.0295	0.0240	0.0283	234	276	123%	104%
11	259	8,408	0.0308	0.0243	0.0290	205	244	127%	106%
12	201	7,106	0.0283	0.0247	0.0297	175	211	115%	95%
13	194	6,062	0.0320	0.0250	0.0303	151	184	128%	106%
14	173	5,207	0.0331	0.0252	0.0309	131	161	131%	107%
15	152	4,477	0.0339	0.0255	0.0315	114	141	133%	108%
16	127	3,804	0.0335	0.0258	0.0321	98	122	130%	104%
17	110	3,210	0.0342	0.0260	0.0326	83	105	132%	105%
18	95	2,806	0.0338	0.0262	0.0331	74	93	129%	102%
19	92	2,640	0.0348	0.0264	0.0336	70	89	132%	104%
20	94	2,486	0.0377	0.0267	0.0340	66	85	141%	111%
Totals	$5,047	$200,992				$4,412	$4,912	114%	103%

ALL OTHER EMPLOYEES
TERMINATION EXPERIENCE - YEARS FROM RETIREMENT



OTHER ASSUMPTIONS AND REFUNDS

There are other assumptions made in the course of a valuation, such as the percentage of members who are married, the age difference between members and spouses, the likelihood that a terminating employee will take a refund, etc. We reviewed these, and believe these are generally realistic or conservative, so we decided to recommend no changes to these other assumptions.

ACTUARIAL METHODS

We have received all of the actuarial methods, such as the funding method, the asset smoothing methods, and how contribution rates and funding period are determined. We recommend no changes to any of those methods.

SECTION IV – ACTUARIAL IMPACT OF RECOMMENDATIONS

Item	2025 Valuation Current Assumptions	2025 Valuation Recommended Package of Assumptions
(1)	(2)	(3)
1. Unfunded actuarial accrued liability	$64.9	$64.3
2. Total Normal Cost*	12.75%	12.89%
3. Funding period (years)	35	36
4. Funded ratio	77.5%	77.7%
5. Increase in contribution rate to achieve positive amortization in Fiscal Year 2028	1.50%	1.60%

All dollar amounts in $ billions.

Funding period is based on member, employer, and state contribution rates for fiscal year 2026 and beyond as specified by statute.

*Includes load for administrative expenses.

While the unfunded actuarial accrued liability decreased under the new assumptions, the decrease in the projected the rate of growth of future public education contributions lowered future contributions. The combined impact was an increase in the funding period.

Section V – Summary of Assumptions and Methods Incorporating the Recommended Assumptions

1. Investment Return Rate — 7.00% per annum, compounded annually, composed of an assumed 2.50% inflation rate and a 4.50% real rate of return, net of investment expenses

2. Active Mortality, Termination, Disability Retirement, and Service Retirement Rates:

   Rates and scales developed in the actuarial investigation as August 31, 2025, with values at select ages shown in the tables below:

   a. Active Mortality: Based on the PUB-2016, Amount-Weighted, Below-Median Income, Teacher, Male and Female tables. The rates are projected on a fully generational basis by the long-term rates of scale UMP 2021 to account for future mortality improvements. Below are the samples rates for 2025 and 2055.

2025 Mortality Rates			2055 Mortality Rates		
Age	**Male**	**Female**	**Age**	**Male**	**Female**
20	0.000230	0.000088	**20**	0.000153	0.000059
30	0.000301	0.000142	**30**	0.000200	0.000094
40	0.000513	0.000301	**40**	0.000341	0.000200
50	0.001230	0.000690	**50**	0.000818	0.000459
60	0.003132	0.001610	**60**	0.002083	0.001071
70	0.007543	0.004094	**70**	0.005188	0.002815
80	0.018051	0.014212	**80**	0.012953	0.010199
90	0.133431	0.102888	**90**	0.110386	0.085119

   b. Rates of Termination

   Low Turnover Group (Public Education Teachers, Administrators, and Nurses):

Probability of Decrement Due to Termination	
Years of Service	**Male/Female**
1	0.103096
2	0.083397
3	0.071873
4	0.063698
5	0.057356
6	0.052174
7	0.047793
8	0.043998
9	0.040651
10	0.037657

The following table is used for all years after the first ten years of employment.

Probability of Decrement Due to Termination Based on Years from Normal Retirement

Years from NR	Male/Female	Years from NR	Male/Female
1	0.010476	**17**	0.021242
2	0.012454	**18**	0.021547
3	0.013780	**19**	0.021840
4	0.014805	**20**	0.022121
5	0.015653	**21**	0.022392
6	0.016381	**22**	0.022653
7	0.017023	**23**	0.022906
8	0.017600	**24**	0.023150
9	0.018125	**25**	0.023387
10	0.018608	**26**	0.023617
11	0.019056	**27**	0.023841
12	0.019474	**28**	0.024058
13	0.019867	**29**	0.024270
14	0.020237	**30**	0.024476
15	0.020589	**31**	0.024677
16	0.020923	**32**	0.024873

Rest of TRS members

Probability of Decrement Due to Termination

Years of Service	Male/Female
1	0.158013
2	0.123723
3	0.103665
4	0.089433
5	0.078394
6	0.069375
7	0.061749
8	0.055143
9	0.049316
10	0.044104

The following table is used for all years after the first ten years of employment.

Probability of Decrement Due to Termination Based on Years from Normal Retirement

Years from NR	Male/Female	Years from NR	Male/Female
1	0.015326	**17**	0.032573
2	0.018430	**18**	0.033072
3	0.020530	**19**	0.033551
4	0.022163	**20**	0.034012
5	0.023519	**21**	0.034457
6	0.024689	**22**	0.034886
7	0.025722	**23**	0.035301
8	0.026653	**24**	0.035703
9	0.027501	**25**	0.036093
10	0.028283	**26**	0.036471
11	0.029010	**27**	0.036840
12	0.029689	**28**	0.037198
13	0.030328	**29**	0.037547
14	0.030932	**30**	0.037887
15	0.031506	**31**	0.038219
16	0.032051	**32**	0.038543

c. Rates of Disability Retirement

The disability retirement rates for members once they reach the Rule of 80 but not eligible for unreduced retirement are adjusted by an additional 1.0%.

Probability of Decrement Due to Disability

	For Service >= 10	For Service < 10
Age	Male/Female	Male/Female
20	0.000149	0.000006
30	0.000249	0.000010
40	0.000332	0.000013
50	0.001692	0.000068
60	0.005945	0.000238

d. Rates of Retirement

Probability of Decrement Due to Service Retirement					
	Normal Retirement			Early Retirement	
Age	Male	Female	Age	Male	Female
50	0.1200	0.1180	**45**	0.0060	0.0060
51	0.1200	0.1240	**46**	0.0060	0.0060
52	0.1200	0.1300	**47**	0.0060	0.0060
53	0.1200	0.1360	**48**	0.0060	0.0060
54	0.1200	0.1420	**49**	0.0060	0.0060
55	0.1200	0.1480	**50**	0.0060	0.0060
56	0.1300	0.1540	**51**	0.0060	0.0060
57	0.1400	0.1600	**52**	0.0060	0.0060
58	0.1500	0.1660	**53**	0.0060	0.0060
59	0.1500	0.1720	**54**	0.0060	0.0060
60	0.1500	0.1780	**55**	0.0060	0.0060
61	0.1600	0.1860	**56**	0.0060	0.0060
62	0.1700	0.1940	**57**	0.0060	0.0060
63	0.1800	0.2020	**58**	0.0060	0.0060
64	0.1900	0.2100	**59**	0.0060	0.0060
65	0.2300	0.2500	**60**	0.0100	0.0100
66	0.2300	0.2500	**61**	0.0200	0.0200
67	0.2300	0.2500	**62**	0.0200	0.0200
68	0.2300	0.2500	**63**	0.0300	0.0300
69	0.2300	0.2500	**64**	0.0400	0.0400
70	0.2500	0.2500			
71	0.2500	0.2500			
72	0.2500	0.2500			
73	0.2500	0.2500			
74	0.2500	0.2500			
75	1.0000	1.0000			

For members hired after August 31, 2007 and who are vested as of August 31, 2014, the retirement rates for members once they reach unreduced retirement eligibility at age 60 are increased 10% for each year the member is beyond the Rule of 80 (i.e., if the member reached the Rule of 80 at age 58 then the probability of retirement at age 60 is 120% of the rate shown above).

For members hired after August 31, 2007 and who are not vested as of August 31, 2014, or, for members hired after August 31, 2014, the retirement rates for members once they reach unreduced retirement eligibility at age 62 are increased 10% for each year the member is beyond the Rule of 80 (i.e., if the member reached the Rule of 80 at age 58 then the probability of retirement at age 62 is 140% of the rate shown above).

3. Rates of Salary Increase

Inflation rate of 2.50%, plus a merit and productivity component of 0.70%, plus step-rate/promotional component as shown:

Years of Service	Merit, Promotion, Longevity	General	Total
1	6.00 %	3.20 %	9.20 %
2	2.85	3.20	6.05
3	2.15	3.20	5.35
4	1.85	3.20	5.05
5	1.60	3.20	4.80
6	1.45	3.20	4.65
7	1.35	3.20	4.55
8	1.25	3.20	4.45
9	1.20	3.20	4.40
10	1.10	3.20	4.30
11	1.05	3.20	4.25
12	1.00	3.20	4.20
13	0.95	3.20	4.15
14	0.85	3.20	4.05
15	0.70	3.20	3.90
16	0.70	3.20	3.90
17	0.60	3.20	3.80
18	0.55	3.20	3.75
19	0.50	3.20	3.70
20	0.40	3.20	3.60
21	0.35	3.20	3.55
22	0.30	3.20	3.50
23	0.25	3.20	3.45
24	0.20	3.20	3.40
25 & up	0.00	3.20	3.20

4. Post-retirement Mortality The 2025 TRS of Texas Healthy Pensioner Mortality Tables. The rates are projected on a fully generational basis by the long-term rates of scale UMP 2021 to account for future mortality improvements. These tables are developed based on the experience in the actuarial investigation as of August 31, 2025. Below are the sample rates for 2025 and 2055.

2025 Mortality Rates			2055 Mortality Rates		
Age	**Male**	**Female**	**Age**	**Male**	**Female**
40	0.000604	0.000359	**40**	0.000402	0.000239
50	0.001517	0.001086	**50**	0.001009	0.000722
60	0.005558	0.003852	**60**	0.003731	0.002562
70	0.012668	0.008025	**70**	0.008873	0.005338
80	0.041382	0.029920	**80**	0.031456	0.019901
90	0.148103	0.116316	**90**	0.129361	0.077366
100	0.351504	0.333772	**100**	0.329030	0.222005
110	0.373342	0.492530	**110**	0.371108	0.327601
120	1.000000	1.000000	**120**	1.000000	1.000000

For disabled retirees, a four-year set forward of the above tables are used, with a minimum mortality rate of 0.0200 for female and 0.0400 for male.

2025 Mortality Rates			2055 Mortality Rates		
Age	**Male**	**Female**	**Age**	**Male**	**Female**
40	0.040000	0.020000	**40**	0.040000	0.020000
50	0.040000	0.020000	**50**	0.040000	0.020000
60	0.040000	0.020000	**60**	0.040000	0.020000
70	0.040000	0.020000	**70**	0.040000	0.020000
80	0.069034	0.053010	**80**	0.052476	0.035259
90	0.237091	0.180005	**90**	0.207087	0.119728
100	0.470388	0.444002	**100**	0.440313	0.295323
110	0.215373	0.494505	**110**	0.214085	0.328915
120	1.000000	1.000000	**120**	1.000000	1.000000

HANDLING OF ACTIVE DATA WITH MISSING INFORMATION:

As of the close of each fiscal year there may be records for whom no statistical data has been received. The only information TRS has are social security number and initial contributions. Any of these records that were in the prior year's data are treated as non-vested terminated members. The remaining records are treated as new entrants. These records are added to the count of active members, but have no liability.

There may be records provided by TRS that have missing gender and/or missing date of births. These records are handled as follows:

1. 80% of records with missing gender are assumed to be female. The overall male/female ratio of the active membership is used to set this assumption.

2. Records with missing dates of birth are assigned a date of birth that produces an entry age equal to the average entry age for the overall active population, based on the member's actual service.

ASSUMPTION FOR DROP PARTICIPATION

Current active members are not eligible to participate in the Deferred Retirement Option Plan (DROP); therefore, no new DROP members are assumed.

BENEFIT ELECTION OF VESTED TERMINATING MEMBERS:

In determining the liabilities developed for future terminating vested members, it is assumed that the member elects either a refund or a deferred vested benefit, whichever is more valuable. The deferred benefit is assumed to commence at the earliest age the member is eligible for unreduced retirement.

ELECTION RATES FOR ACTIVE MEMBER DEATH BENEFITS:

It is assumed that the beneficiary will elect the death benefit option with the greatest value.

DECREMENT TIMING:

Retirement is assumed to occur at the end of the fiscal year. Termination from service is assumed to occur at the beginning of the fiscal year. All other decrements are assumed to occur mid-year.

BENEFIT ELECTION OPTIONS:

It is assumed that future healthy retirees will select the normal form of payment. For disabled members, 80% are assumed to select the normal form of payment and 20% to select the 100% joint and survivor option.

MARRIAGE ASSUMPTION:

While not implicitly used in the valuation, 100% of active members are assumed to be married when setting other benefit election and eligibility assumptions.

SPOUSAL AGE DIFFERENCE:

Husbands are assumed to be three years older than their wives.

CLASSIFICATION OF WHO ARE ACTIVE MEMBERS:

Members who earned a year of service during the just-completed plan year but did not retire before August 31 are considered active.

AVERAGE SURVIVOR BENEFIT LIABILITY:

One of the options on the death of an active member, a disabled member, or a retired member is a survivor benefit. To determine the liability for this benefit the following average values are used.

		Males	Females
1.	Active member	$62,200	$59,000
2.	Disabled member	$13,000	$11,000
3.	Retired member	$12,000	$12,000

ACTUARIAL VALUE OF ASSETS:

A. The actuarial value of assets is equal to the market value of assets less a five-year phase in of the excess/(shortfall) between expected investment return and actual income. The actual calculation is based on the difference between actual market value and the expected actuarial value of assets each year, and recognizes the cumulative excess return (or shortfall) over a minimum rate of 20% per year. Each year a base is set up to reflect this difference. If the current year's base is of opposite sign to the deferred bases then it is offset dollar for dollar against the deferred bases. Any remaining bases are then recognized over the remaining period for the base (5 less the number of years between the bases year and the valuation year). This is intended to ensure the smoothed value of assets will converge towards the market value in a reasonable amount of time.

B. Expected earnings are determined using the assumed investment return rate and the beginning of year actuarial value of assets (adjusted for receipts and disbursements during the year). Beginning in fiscal year 2016, the returns are computed net of investment expenses.

ACTUARIAL COST METHOD:

The actuarial valuation is used to determine the adequacy of the State contribution rate (established by statute) and public education employer contribution rate (established by statute) and to describe the current financial condition of TRS.

The actuarial valuation uses the Entry Age Normal actuarial cost method. Under this method, the first step is to determine the contribution rate (level as a percentage of pay) required to provide the benefits to each member, or the normal cost rate. The normal cost rate consists of two pieces: (i) the member's contribution rate, and (ii) the remaining portion of the normal cost rate which is the employer's normal cost rate. The total normal cost rate is based on the benefits payable to each individual active member.

The Unfunded Actuarial Accrued Liability (UAAL) is the liability for future benefits which is in excess of (i) the actuarial value of assets, and (ii) the present value of future normal costs. The employer contribution provided in excess of the employer normal cost is applied to amortize the UAAL.

The funding period is calculated as the number of years required to fully amortize the UAAL, and is calculated with the use of an open group projection that takes into account: (a) future investment earnings, net of investment-related expenses, will equal 7.00% per year projected from the actuarial value of assets, (b) there will be no changes in assumptions, (c) the number of active members will remain unchanged, (d) active members who leave employment will be replaced by new entrants each year, and (e) State and employer contributions will remain the same percentage of payroll.

The Entry Age actuarial cost method is an "immediate gain" method (i.e., experience gains and losses are separately identified as part of the UAAL). However, they are amortized over the same period applied to all other components of the UAAL.

PROJECTED PAYROLL FOR CONTRIBUTIONS:

The aggregate projected payroll for the fiscal year following the valuation date is calculated by increasing the actual payroll paid during the previous fiscal year by the payroll growth rate.

PROJECTION OF CONTRIBUTIONS FOR FUNDING OF UNFUNDED ACTUARIAL ACCRUED LIABILITY:

Total payroll is projected based on the current demographics and assumptions, with members who leave active employment replaced by a new member. Salaries for each cohort of new members is indexed at the 2.9% annual GWI assumption. Members are replaced by new entrants in their respective turnover group. In addition, annually, the dollar amount of contributions received from public employers is divided by actual payroll for that fiscal year to determine an estimated effective rate of total payroll, and projected at a 2.25% annual growth rate.

USE OF CELLED DATA:

For valuation purposes, every record in the census is valued individually.

For legislative cost analyses purposes, the active valuation data is celled by benefit tier, gender, years of service, month and year of birth. Each individual cell is valued using the sum of the salary and account balances of the members in the cell. Every year we test this approach against using the individual records and the results are consistently less than 0.02% different in total present value of benefits.