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April 30, 2020

Mr. Shawn Graham
Executive Director
Teachers Retirement System of Montana
100 N. Park Ave, Suite 110
Helena, MT 59601

RE: ACTUARIAL AUDIT RESULTS

Dear Mr. Graham:

We have received a copy of the Actuarial Audit of the Teachers Retirement System of Montana dated April 29, 2020 which was produced by Gabriel Roeder Smith & Company (GRS) to detail their findings of the review of our July 1, 2019 valuation, as well as our latest experience study report.

We are, of course, pleased that GRS's overall findings conclude that our results are reasonable and performed in accordance with generally accepted actuarial principles and practices.

GRS has detailed a number of suggestions that will allow us to fine-tune future valuations and experience studies. We have reviewed each suggestion (in bold) and, as appropriate, provided our comments on the following pages.

We want to thank GRS for the professional and courteous manner in which they conducted their review.

Sincerely,

Todd B. Green, ASA, FCA, MAAA
President

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Actuarial Assumptions

As part of the next actuarial experience study, we recommend that the retained actuary consider the applicability and appropriateness of a “generational” mortality assumption to eliminate the need to periodically update the “static” mortality assumption to include a margin for future mortality improvement.

We are preliminarily exploring the idea of updating the mortality assumption from “static” to “generational” using the recently published Pub-2010 Public Retirement Plans Mortality Tables in the next valuation.

As part of the next experience study, we recommend that the retained actuary closely review the behavior of active members in their first year of eligibility to confirm there is sufficient evidence to anticipate a lower rate of retirements in the first year of eligibility and to explore the potential causes of this behavior.

We will take these comments into consideration in the next experience study, however, in the recently completed experience study we analyzed retirement experience separately in three distinct categories:

- Reduced Benefits
- First Eligible for an Unreduced Benefits
- Beyond first year eligibility for an unreduced benefits

The recommended retirement rates for members who are first eligible for retirement were supported by actual experience during the experience period.

In order to mitigate the reoccurring actuarial losses generated by the key demographic assumptions, we recommend that the retained actuary explore the sources of the demographic losses and consider an amount-weighted approach during the next actuarial experience study.

We will consider this in our next experience study.

Actuarial Valuation Results

The retained actuary should consider preparing an open group projection along with future actuarial valuations to explore the impact of future Tier Two members on the estimated funding period.

We do not include open group projections in the annual valuation, however, we prepare open group projections for internal use to help facilitate discussion and commentary on the valuation results. At the request of Board, we can include these as part of the annual valuation.



We recommend that MTRS and the retained actuary review the data and procedures for including Family Law Orders (FLOs) into the actuarial valuation and ensure that the calculations are as reasonable as possible.

We will review the data and procedures for Family Law Orders to ensure that the calculations are as reasonable as possible.

Content of Valuation Report

In order to improve the ability of the report to communicate the assumptions, methods and plan provisions incorporated into the actuarial valuation of MTRS, we recommend that the retained actuary incorporate the noted enhancements to future actuarial valuation reports.

We will incorporate the noted enhancements in future actuarial reports.