

December 8, 2016

Ms. Susan Lenczewski, Executive Director
Legislative Commission on Pensions and Retirement
55 State Office Building
100 Rev. Dr. Martin Luther King Jr. Boulevard
St. Paul, MN 55155-1201

Dear Ms. Lenczewski:

The Minnesota State Retirement System (MSRS) Board of Directors met on September 15, 2016, and reviewed the results of the Combined Service Annuity (CSA) load factors study conducted by the Legislative Commission on Pensions and Retirement's (LCPR) actuary, Deloitte.

MSRS' actuarial firm, Gabriel Roeder Smith & Company (GRS) reviewed the Deloitte study and recommended the changes to the MSRS Board, which were approved as follows:

- For the General Plan, changing the load on active liability from 1.2 percent to 0.0 percent, vested termination liability from 40 percent to 4 percent, and non-vested termination liability from 40 percent to 5 percent.
- For the Correctional Plan, changing the load on vested termination liability from 30 percent to 17 percent and non-vested termination liability from 30 percent to 6 percent.
- For the State Patrol Plan, changing the load on vested termination liability from 30 percent to 13 percent and non-vested termination liability from 30 percent to 0 percent.
- For the Legislators Plan, changing the load on vested and non-vested terminated liability from 30 percent to 0 percent.

The MSRS Board requests that the LCPR approve the proposed recommendations. If approved by the LCPR by June 30, 2017, the information can be used for the July 1, 2017 actuarial valuation.

You may contact me at 651-284-7888 or dave.bergstrom@msrs.us before my retirement on December 13, or, if after, contact Erin Leonard at 651-284-7848 or erin.leonard@msrs.us.

Sincerely,


Dave Bergstrom
Executive Director

c: Erin Leonard

Public Employees Retirement Association of Minnesota

60 Empire Drive, Suite 200

Saint Paul, Minnesota 55103-2088

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December 15, 2016

Susan Lenczewski, Executive Director
Legislative Commission on Pensions and Retirement
55 State Office Building
100 Rev. Dr. Martin Luther King Jr. Blvd
St. Paul, MN 55155-1201

Dear Ms. Lenczewski:

In accordance with Minnesota Statutes Section 356.215, and the Legislative Commission on Pensions and Retirement's (LCPR) Standards for Actuarial Work, the Public Employees Retirement Association (PERA) Board of Trustees passed motions at their two most recent meetings to adopt several assumption changes to the General, Police & Fire, and Correctional Plans.

At their December 8, 2016, meeting, the Board passed a motion to recommend the most up-to-date future mortality improvement projections released by the Society of Actuaries (SOA). The MP-2016 Mortality Improvement Scale was adopted by the Board for the General, Police & Fire, and Correctional Plans. The MP-2016 Scale rates reflect updates to the SOA's model and include three additional years of data.

Previously the Board reviewed results from the Police & Fire Plan experience study completed by PERA's consulting actuary, Gabriel, Roeder, Smith & Company. (GRS). The study covered the four-year period from July 1, 2011, through June 30, 2015, and considered only demographic assumptions. Economic assumptions were reviewed in the General Plan experience study for the six-year period ending June 30, 2014, and adopted by the Board and LCPR previously. At their October 13, 2016, meeting, the Board passed a motion to recommend the assumption changes within the Police & Fire Plan experience study, including the following key changes:

<i>Assumption</i>	<i>Recommended Change</i>
Individual Salary Increases	Reduce rates by an average of 0.3 percent.
Normal Retirement Rates	Increased the assumed rates at ages 56 to 58; and, decrease the rates at ages 50, 60, and 62 to 64.
Early Retirement Rates	Decrease the rates at all ages except age 53.

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Termination Rates	Decrease the rates in the first 3 years of employment and for members younger than 29; and, increase the rates from ages 29 to 49.
Mortality Rates	Update to RP-2014 mortality rate table. ¹
Other	Minor changes to the percent married, age difference, and form of payment assumptions.

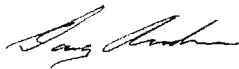
The Board weighed the value of an experience study for the Correctional Plan relative to the cost to perform the study at the same time the Police & Fire Plan study was considered. The Board decided only to pursue a study for the Police & Fire Plan given the relatively smaller size of the Correctional Plan and resulting limited amount of data and experience available for a separate study. Ultimately, GRS suggested that it was reasonable to apply the same mortality rate assumptions to the Correctional Plan as was recommended for the Police & Fire Plan. At their October 13, meeting, the Board passed a motion to recommend that the RP-2014 mortality rate table, and accompanying adjustments recommended in the Police & Fire Plan experience study, be applied to the Correctional Plan.

Finally, at their October 13 meeting, the Board passed a motion to recommend Deloitte's suggested changes in their report titled, "Minnesota Legislative Commission on Pensions and Retirement Combined Service Annuity and Coverage by More Than One Retirement System Provisions Study as of July 1, 2016." The updated combined service assumption recommendation applies to the General, Police & Fire, and Correctional Plans.

We respectfully request that the LCPR review these recommendations and approve the changes recommended by the PERA Board in a timely manner so that the revised assumptions may be used in the July 1, 2017, actuarial valuations. Absent action by the LCPR, Minnesota Statutes Section 356.215, subd. 18(b), provides that the recommended assumptions would become effective one year from the date of receipt of this letter, or in application, the July 1, 2018, valuation.

We are willing to arrange for our consulting actuary to be available to the LCPR or the LCPR's consulting actuary. If you have any questions, please contact me at (651) 201-2690 or Doug.Anderson@mnpera.org.

Sincerely,



Doug Anderson
Executive Director, PERA

cc: Bonnie Wurst, GRS

¹ GRS recommended MP-2015 Mortality Improvement Scale in the four-year experience study ending June 30, 2015; however, MP-2016 was released by the SOA in October 2016 and is considered to be the most up-to-date model with a larger data set.



Teachers Retirement Association

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November 18, 2016

Susan Lenczewski, Executive Director
Legislative Commission on Pensions and Retirement
55 State Office Building
100 Rev. Dr. Martin Luther King Jr. Boulevard
St. Paul, MN 55155-1201

Dear Ms. Lenczewski:

Your office recently provided us with a report from Deloitte Consulting, actuarial consultant for the LCPR. The report contained recommendations regarding the combined service annuity (CSA) load factors that are used in the annual actuarial valuations for TRA. We appreciate your efforts to complete this work.

The following table shows current CSA load factors used by TRA since 2001, and the revised factors recommended by Deloitte.

	Active Members	Vested Terminated Members	Non-vested Terminated Members
Current Load Factors	1.4%	4.0%	4.0%
Recommended Load factors	0.0%	7.0%	9.0%

At their November 16, 2016 meeting, the TRA Board of Trustees voted unanimously to adopt the load factors recommended by Deloitte.

We respectfully request that the Legislative Commission on Pensions and Retirement approve the changes adopted by the TRA Board. We hope the Commission will review and approve the recommended changes in time so that the revised assumptions may be used in the July 1, 2017 actuarial valuations.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Laurie Fiori Hacking
TRA Executive Director

LCPR NOV 22 2016

St. Paul Teachers' Retirement Fund Association

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December 22, 2016

Ms. Susan Lenczewski, Executive Director
Legislative Commission on Pensions and Retirement
55 State Office Building
100 Rev. Dr. Martin Luther King Jr. Boulevard
Saint Paul, MN 55155-1201

Dear Ms. Lenczewski:

The St. Paul Teachers' Retirement Fund Association (SPTRFA) Board of Trustees met on September 28, 2016 and reviewed the results of the Combined Service Annuity (CSA) load factors study conducted by the Legislative Commission on Pensions and Investments (LCPR) actuary, Deloitte.

SPTRFA's actuarial firm, Gabriel Roeder Smith & Company (GRS) reviewed the Deloitte study and recommended the changes to the SPTRFA Board, which were approved as follows:

- Reduce the active load factor to 0% (currently 7.0% for pre-1989 members and 2.0% for post-1989 members);
- Reduce the vested deferred load factor from 30% to 20%; and
- Reduce the non-vested deferred load factor from 30% to 9%

The SPTRFA Board requests that the LCPR approve the proposed recommendations. If approved by the LCPR by June 30, 2017, the information can be used for the July 1, 2017 actuarial valuation.

You may contact me at 651-642-2550 or jschurtz@sptrfa.org.

Sincerely,



Jill E. Schurtz
Executive Director

December 8, 2016

Ms. Susan Lenczewski, Executive Director
Legislative Commission on Pensions and Retirement
55 State Office Building
100 Rev. Dr. Martin Luther King Jr. Boulevard
St. Paul, MN 55155-1201

Dear Ms. Lenczewski:

The Minnesota State Retirement System (MSRS) Board of Directors met on September 15, 2016, and reviewed the results of the Experience Study reports of the State Patrol Plan, Correctional Plan, and Judges Plan. The studies were completed by MSRS' actuarial firm, Gabriel Roeder Smith & Company (GRS) and is based on the period from July 1, 2011, to June 30, 2015. Copies of the Experience Study reports have already been sent to the Legislative Commission on Pensions and Retirement (LCPR).

The Experience Study reports included recommended demographic assumption changes for three of MSRS retirement plans. The recommendations below were approved by the MSRS Board:

Correctional Plan

- **Adjust rates of merit and seniority, resulting in an overall increase to the assumed rates of merit and seniority increases:**
 - Proposed rates are 6.75% and 3.40% higher than the current rates in the first two years of employment; minor adjustments after the first two years.
 - Proposed rates average about 0.5% higher than the current rate.

- **Adjust assumed retirement rates:**
 - Increase the assumed unreduced retirements at ages 56 to 61 and decrease the assumed unreduced retirement at ages 55 and 62 to 69. The net effect is fewer unreduced retirements.
 - No change to the assumed reduced retirements (i.e. early retirement). While there were more early retirements than expected over the four-year period, we anticipate fewer early retirements in the future due to the change in the early retirement subsidy for retirements after June 30, 2015.

- Adjust assumed termination rates:
 - Decrease the assumed termination rates in the first two years of employment. Increase the assumed termination rate in the third year of employment.
 - Increase the assumed termination rates for males before age 43 and for females before age 35 and for ages 42 to 44.
- Decrease disability rates for ages 40 to 54; remove assumed disability incidence beyond age 54.
- Change the mortality table base to the RP-2014 mortality table, white collar adjustment, and with future improvement projected using scale MP-2015 from a base year of 2006.
- Minor changes to the assumed percent married, age difference and form of payment assumptions.

State Patrol Plan

- Adjust rates of merit and seniority, resulting in an overall increase to the assumed rates of merit and seniority increases:
 - Proposed rates are 7.75%, 2.25%, 1.25%, and 1.00% higher than the current rates in the first four years of employment; minor adjustments to the current rates after the fourth year of employment.
 - Proposed rates average about 0.25% higher than the current rate.
- Reduced rates of withdrawal during the first three years of employment.
- Adjust assumed retirement rates:
 - Increase the assumed retirement rates at age 59.
 - Decrease the assumed reduced retirement rates at ages 50 to 53 and increase the assumed reduced retirement at age 54. The net effect is fewer assumed early retirements.
- Increase disability rates for ages 35 to 51.
- Change the base mortality table to the RP-2014 mortality table, white-collar adjustment, and with future improvement projected using scale MP-2015 from a base year of 2006.
- Minor changes to the form of payment assumptions.

Judges Plan

- Adjust assumed retirement rates:
 - Increase the assumed unreduced retirements at ages 66, 67, and 69, and decrease the assumed retirement rates at ages 65 and 68. The net effect is later retirements.
 - Increase assumed early retirements at age 63 and reduce the assumed retirements at age 64.
- Decrease disability rates for males by making them the same as female rates.
- Change the mortality table to the RP-2014 mortality table, white-collar adjustment, with future improvement projected using the scale MP-2015 from a base year of 2006.

Legislators Plan

- An Experience Study was not completed for the Legislators Plan because the plan is too small to accurately assess changes; however, we are proposing to adopt the same mortality assumptions as the General Plan.

The MSRS Board requests that the LCPR approve these proposed recommendations for its plans. If approved by the LCPR by June 30, 2017, the information can be used for the July 1, 2017 actuarial valuation.

More detailed information about the recommendations are included in the full Experience Study reports. I have also enclosed letters from GRS showing the cost impact of the assumption changes. We would be happy to have our actuary present the Experience Study results to the Legislative Commission on Pensions and Retirement.

You may contact me at 651-284-7888 or dave.bergstrom@msrs.us before my retirement on December 13, or, if after, contact Erin Leonard at 651-284-7848 or erin.leonard@msrs.us.

Sincerely,



Dave Bergstrom
Executive Director

DB/sk

Enclosures

c: Erin Leonard