

_____ moves that the Legislative Commission on Pensions and Retirement approve, under Minnesota Statutes, Section 356.215, Subdivision 18, the changes in the actuarial assumptions, other than the interest rate assumption, as adopted by the governing boards of the Minnesota State Retirement System, the Public Employees Retirement Association, and the Teachers Retirement Association for the following retirement plans, effective beginning with the July 1, 2016, actuarial valuations:

1. for the general state employees retirement plan of the Minnesota State Retirement System, as recommended by the plan's actuary, Gabriel Roeder, Smith & Co., and approved by the Board of Directors on July 16, 2015, and November 19, 2015, as presented to the Commission by letters from the executive director of MSRS, dated September 3, 2015, and December 28, 2015;
2. for the general employees retirement plan of the Public Employees Retirement Association, as recommended by the plan's actuary, Gabriel Roeder, Smith & Co., and approved by the Board of Trustees on October 8, 2015, and November 12, 2015, as presented to the Commission by letters from the executive director of PERA, dated October 9, 2015, and December 16, 2015; and
3. for the Teachers Retirement Association, as recommended by the plan's actuary, Cavanaugh Macdonald, and approved by the Board of Trustees on August 18, 2015, and November 18, 2015, as presented to the Commission by letters from the executive director of TRA, dated September 2, 2015, and November 19, 2015.

December 28, 2015

Susan Lenczewski, Executive Director
 Legislative Commission on Pensions and Retirement
 55 State Office Building
 St. Paul, MN 55155

Dear Ms. Lenczewski:

As I discussed during a prior meeting of the Legislative Commission on Pensions and Retirement, our actuary recently recommended adopting the MP 2015 mortality improvement tables. The MSRS Board had previously adopted the MP 2014 tables, and the updated tables were issued subsequent to that approval. The MSRS Board adopted the 2015 tables at its November 19, 2015 meeting.

I request that the Legislative Commission on Pensions and Retirement formally approve using the MP 2015 to replace the MP 2014 tables that were previously submitted to the Legislative Commission on Pensions and Retirement. The estimated financial impact is shown in the table below:

Market Value of Assets	July 1, 2015 using MP 2014 Tables	July 1, 2015 using MP 2015 Tables
Actuarial Accrued Liability	\$13.8 billion	\$13.73 billion
Market Value of Assets	\$11.6 billion	\$11.6 billion
Funding Ratio	83.9%	84.5%
Normal Cost plus Expenses	8.6%	8.6%
Amortization of Unfunded Liabilities	5.2%	5.0%
Total Required Contributions	13.8%	13.6%
Employee plus Employer Contributions	11.0%	11.0%
Contribution Deficiency	(2.8%)	(2.6%)

If you have any questions, please feel free to call me at 651-284-7888.

Sincerely,



Dave Bergstrom
 MSRS Executive Director

September 3, 2015

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

Dear Ms. Lenczewski:

The MSRS Board of Directors met on July 16, 2015, to review the results of the General Employees Retirement Plan actuarial *Experience Study* completed by MSRS' actuarial firm, Gabriel Roeder Smith & Company. The *Experience Study* covered the period from July 1, 2008, through June 30, 2014. A copy of the study was already sent to the Legislative Commission on Pensions and Retirement (LCPR). The MSRS Board approved the recommendations presented at the meeting.

The recommendations adopted by the Board are as follows:

- Decrease the current 8.0% select/8.5% ultimate investment return assumption (which was lowered to 8% during the 2015 Legislative Session) to an investment return assumption in the range of 7.00% to 8.00%.
- Decrease the price inflation assumption from 3.00% to 2.75%
- Decrease the wage inflation assumption from 3.75% to 3.50%
- Adjust rates of merit and seniority salary increases
- Adjust assumed retirement rates
- Change the assumed rates of withdrawal
- Lower rates of disability
- Change the base mortality table to the RP-2014 mortality table, white collar adjustment, with rates age-adjusted for some tables to better fit plan experience and with future improvement projected. The changes result in a decrease in assumed mortality rates at almost all ages.
- No change in actuarial funding method
- No change in amortization policy
- A change to the post-retirement benefit increase funding policy
- Change Minnesota Standard for Actuarial Work requirements related to projected payroll
- Change the assumed married percentage for male members from 85% to 80%, and from 70% to 65% for female members
- Minor change to the form of payment assumptions

More detail on each of the recommendations is included in the full *Experience Study*.

LCPR SEP 08 2015

The MSRS Board requests that the LCPR approve the recommendations adopted by the MSRS Board. The 8 percent investment assumption will be used in the July 1, 2015, *Actuarial Valuation*, and we hope to receive approval to use the remaining assumption changes for the July 1, 2016, *Actuarial Valuation*.

We would be happy to have our actuary present the results of the *Experience Study* to the LCPR if you would like. Please feel free to call me directly at 651-284-7888 if you have any questions or would like to set up a presentation.

Respectfully,

A handwritten signature in blue ink, appearing to read "Dave Bergstrom", with a stylized flourish extending to the right.

Dave Bergstrom
Executive Director

File

Public Employees Retirement Association of Minnesota

60 Empire Drive, Suite 200

Saint Paul, Minnesota 55103-2088

Member Information Services: 651-296-7460 or 1-800-652-9026

Employer Response Lines: 651-296-3636 or 1-888-892-7372

PERA Fax Number: 651-296-8392 ◆ PERA Website: www.mnpera.org



December 16, 2015

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:

On October 9, 2015, we sent you a letter notifying you that PERA's board of trustees had approved several actuarial assumption changes as recommended by our actuary, Gabriel, Roeder, Smith & Co., following a recent experience study of PERA's General Plan. Subsequent to that letter, a new mortality improvement scale, referred to as the MP-2015 improvement scale, was issued by the Society of Actuaries. Our actuary reviewed the new improvement scale and has recommended that PERA adopt it along with the RP-2014 mortality table.

This letter is to supplement the letter we previously sent you. At the board meeting held November 12, 2015, PERA's board adopted use of the MP-2015 mortality improvement scale to be used along with the RP-2014 mortality table, which was adopted in October.

If you have any questions, please feel free to contact me at (651) 201-2690.

Sincerely,

A handwritten signature in black ink, appearing to read 'Doug Anderson', is written over a thin horizontal line.

Doug Anderson
Executive Director, PERA

Public Employees Retirement Association of Minnesota

60 Empire Drive, Suite 200
Saint Paul, Minnesota 55103-2088
Member Information Services: 651-296-7460 or 1-800-652-9026
Employer Response Lines: 651-296-3636 or 1-888-892-73
PERA Fax Number: 651-297-2547 ◆ PERA Website: www.mnpera.org



October 9, 2015

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:

At the October 8, 2015 meeting of the PERA Board of Trustees, the results of the 2008 – 2014 Experience Study of the General Employees Retirement Fund were reviewed and discussed. A copy of the complete report was forwarded to you earlier. The corresponding page reference to the report discussion and recommendation is noted below. A copy of the experience study is enclosed again for your reference.

The Board approved the following with respect to the assumption changes recommended by Gabriel, Roeder, Smith & Co., PERA's consulting actuary, as a result of the study:

- Salary – adjust the merit/seniority pay increase assumption (pages C1 – C4)
- Retirement Rates – make minor changes to retirement rates for normal retirement, Rule of 90 (unreduced) retirement, and early retirement (reduced); provide distinct early retirement rates for Tier 1 and Tier 2 members (pages D1 – D8)
- Withdrawal Rates – change from the current select and ultimate table to a service-based table (pages E1 – E6)
- Disability Retirement – lower the rates of disability at every age (pages F1 – F3)
- Post-retirement, Disability and Pre-retirement Mortality – change to a more recent mortality (RP-2014) table to better anticipate current and future mortality patterns (pages G1 – G9)
- Optional Annuity Elections – change the assumed number of males who are married for purposes of projecting who may elect optional annuity forms, and modify the assumptions about which of the payment forms are selected (pages I1 – I4)

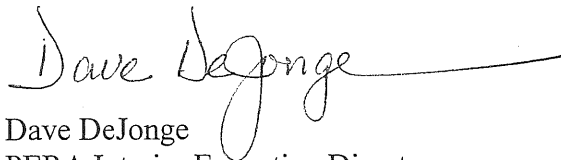
The PERA Board of Trustees respectfully requests that the Legislative Commission on Pensions and Retirement (LCPR) review the experience study recommendations and approve the changes adopted by the PERA Board. We hope the Commission will have sufficient time to review and approve the recommended changes so that the revised assumptions may be used in the July 1, 2016 actuarial valuations. We understand that in accordance with Minnesota Statutes Section 356.215, subd. 18(b), our recommended assumption changes will become effective one year from the date of receipt of this letter should the LCPR not take action on these recommendations.

LCPR OCT 12 2015

I am enclosing information from our actuarial consultant that shows the financial impact of adopting the assumption changes. In total, the assumption changes add \$1.2 billion to PERA's actuarial accrued liability. We would be more than happy to make arrangements for our actuarial consultants to be available to the LCPR to present and explain the results of their report at an upcoming hearing. If you have any questions, please do not hesitate to contact us.

By the way, the PERA Board has also directed staff to have a limited-scope experience study of the PERA Police and Fire Plan and the Local Government Correctional Service Retirement Plan conducted by the end of this fiscal year by PERA's actuarial consultant. Results will be provided to you at the end of the study.

Sincerely,

A handwritten signature in cursive script that reads "Dave DeJonge". The signature is written in black ink and includes a long horizontal line extending to the right from the end of the name.

Dave DeJonge
PERA Interim Executive Director



Teachers Retirement Association

60 Empire Drive • Suite 400 • St Paul MN 55103-4000

An Equal Opportunity Employer

November 19, 2015

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:

This letter is to supplement the letter we previously sent to you dated September 2, 2015. That letter was notification that the TRA board of trustees had approved a number of actuarial assumption changes that were recommended by our actuary, Cavanaugh Macdonald, as a result of our recent experience study. Subsequent to the date of that letter, the Society of Actuaries published a new mortality improvement scale, referred to as the MP-2015 improvement scale. Cavanaugh Macdonald has reviewed the new improvement scale and has recommended that the TRA adopt it along with the "base" RP-2014 mortality table. Additionally, on November 3, 2015 Michael de Leon testified at the LCPR hearing that Deloitte was recommending adoption of the MP-2015 improvement scale.

This is to notify you that at their board meeting on November 18, 2015, the TRA board of trustees adopted use of the MP-2015 mortality improvement scale to be used along with the RP-2014 mortality table.

If you have any questions or need any additional information, please contact me at 651/296-6523, or Deputy Executive Director Jay Stoffel at 651/205-4252.

Sincerely,

A handwritten signature in black ink that reads "Laurie Fiori Hacking". The signature is written in a cursive, flowing style.

Laurie Fiori Hacking
Executive Director



September 2, 2015

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:

At their August 18, 2015, meeting, the TRA Board of Trustees reviewed the results of the experience study completed by TRA's actuarial consultant, Cavanaugh Macdonald. The actuarial experience study covered the period July 1, 2008, through June 30, 2014, and was transmitted to you this past June. A copy of the experience study is enclosed again for your reference. For each assumption change we are recommending, we have included the corresponding page reference in the study.

In accordance with Minnesota Statutes Section 356.215, subd. 8 and 9, the TRA Board passed a motion to support implementation of the recommendations summarized on pages 1 through 5 of the Cavanaugh Macdonald's Experience Study Report 2008 – 2014, dated June 5, 2015. Further descriptions of the recommendations are contained in the report in Appendix B starting on page 69.

The key recommendations are to:

- **Reduce price inflation assumption from 3.00 percent to 2.75 percent** [see pages 15-17 of the experience study for this recommendation]
- **Reduce long-term investment return from the current "Select and Ultimate" return (8.00 percent until 2017 and 8.50 percent thereafter) to 8.00 percent for all years** [see pages 18-24 of the experience study for this recommendation]
- **Maintain the long-term assumed real wage inflation remain at 0.75 percent per year** [see pages 24-26 of the experience study for this recommendation]
- **Reduce payroll growth assumption from 3.75% to 3.50%** [see page 27 of study for this recommendation]
- **Modify the salary increase assumption by implementing minor changes to the merit scale at certain durations and a 0.25% increase in the merit scale at all service durations** [see page 27-28 of the experience study for this recommendation]

LCPR SEP 03 2015

- *Replace the current active, retiree and disabled mortality assumptions with newer life insurance industry tables, reflecting improved mortality experience and therefore longer life expectancy* [see pages 35-43 of the experience study for this recommendation]
- *Make adjustments to several other current demographic assumptions (retirement rates, annuity forms, and termination) as specified in the experience study so that they more closely match actual experience* [see pages 45-51 for proposed retirement rate assumption changes; see pages 52-54 for recommended changes to the annuity selection assumption; see page 55 for recommended changes in disability assumptions; and see page 57-60 for recommended changes in termination assumptions]

The TRA Board of Trustees respectfully requests that the Legislative Commission on Pensions and Retirement (LCPR) review these experience study recommendations and approve of the changes recommended by the TRA Board. We hope the Commission will have sufficient time to review and approve the recommended changes so that the revised assumptions may be used in the July 1, 2016, actuarial valuations. If that is not possible, we understand that, under Minnesota Statutes Section 356.215, subd 18(b), our recommended assumption changes would become effective for the July 1, 2016, valuation should the LCPR not take action on these recommendations by one year from the date of receipt of this letter.

We would be glad to arrange for our actuarial consultants to be available to the LCPR to present and explain the results of their report at an upcoming hearing. If you have any questions, please do not hesitate to contact us.

Sincerely,



Laurie Fiori Hacking
TRA Executive Director

Attachments