February 11, 2021

Ms. Maria Walden
Director of Legislation and Policy
PSRS and PEERS of Missouri
3210 W. Truman Blvd.
Jefferson City, MO 65109

Re: Public Education Employee Retirement System of Missouri - Critical Shortage Modifications - HB 812

Dear Maria:

As requested and pursuant to our engagement letter with the Public School and Education Employee Retirement Systems of Missouri ("PSRS and PEERS of Missouri") dated July 11, 2019, we have estimated the fiscal impact of proposed changes to the Public Education Employee Retirement System ("PEERS", or "System"). The proposed changes are described in 2021 House Bill 812 ("HB 812"), a copy of which was provided to us by PSRS and PEERS of Missouri on February 10, 2021.

The remainder of this letter includes our understanding of the proposed changes, a description of the analysis we performed, and the results of our analysis. Our assessment of risk and summaries of the actuarial assumptions, actuarial methods, benefit provisions, and other disclosures related to our analysis can be found in the following enclosed exhibits:

- Exhibit I - Assessment and Disclosure of Risk
- Exhibit II - Summary of Actuarial Assumptions and Methods
- Exhibit III - Summary of Plan Provisions
- Exhibit IV - Disclosures

<u>Summary of Proposed Change</u>

Currently, retired members may be rehired in any capacity without suspension of their retirement allowance for up to two years if they are rehired pursuant to a critical shortage declaration that meets the following requirements under RSMo Section 169.596:

1) In order to hire retired non-certificated employees pursuant to the critical shortage provision, the school district shall:
  - Show a good faith effort to fill positions with non-retired non-certificated employees;
  - Post the vacancy for at least one month;
  - Have not offered early retirement incentives for either of the previous two years;
  - Solicit applications through the local newspaper, other media, or teacher education programs;
  - Determine there is an insufficient number of eligible applicants for the advertised position; and
  - Declare a critical shortage of non-certificated employees that is active for one year.

2) The employer's contribution rate shall be paid by the hiring school district.

3) The total number of retired non-certificated employees hired under the critical shortage declaration shall not exceed the lesser of ten percent of the total non-certificated staff for that school district, or five non-certificated employees.

Summary of Proposed Changes (continued)

It is our understanding that the proposed changes would amend the critical shortage provisions under RSMo Section 169.596 as follows:

- Expand the length of time that a retired member may be rehired in any capacity without a suspension of their retirement allowance from two years to four years.

The current statute requires school districts to contribute to PEERS based on rehired retiree payroll, but the rehired member is not required to contribute to PEERS, does not earn an additional retirement allowance, and no suspension of retirement allowance will occur, to the extent the limitations noted above are not exceeded. The proposals do not change the required contribution for critical shortage.

The proposed changes are assumed to take effect immediately and on a prospective basis only.

The above is our summary of the changes and is not intended to be a comprehensive outline of the provisions of the proposed bill.

Critical Shortage - HB 812 - 4 Years (PEERS) Analysis

The critical shortage modifications proposed will increase the length of time that retired members can be rehired in any capacity from two years to four years. This proposal will expand the potential pool of eligible retired members that employers may hire, or retain, under an established critical shortage declaration.

However, we would not expect a change in active member retirement patterns as a result of employers utilizing a critical shortage declaration to fill vacant positions due to the various limiting conditions established, including:

- Employers must first make the good faith efforts noted above to fill open positions with non-retired members.

- PEERS employers are required to contribute 6.86% of covered payroll for PEERS retirees that are rehired under critical shortage. So, in addition to good faith efforts to fill open positions with non-retired members required above, employers would have a financial incentive to seek new full-time members that are not limited in the term of their employment, or part-time retirees under the current WAR limitations where no contribution rate would be required.

In summary, due to the limiting conditions noted above, we would expect the proposed changes to have little or no impact on active member retirement patterns or enable a change in hiring practices by employers to favor retirees over new employees. As a result, contributions to PEERS as a result of the critical shortage modifications would result in an actuarial gain as no additional benefits would be accrued and since employer contributions would be made on all earnings for each retiree rehired under a critical shortage declaration. Therefore, we estimate the impact of the proposed critical shortage modifications to be an **insignificant fiscal gain** to PEERS.

Please see the enclosed exhibits for summaries of identified risks associated with the proposed change and summaries of the assumptions, methods, and plan provisions reflected in our analysis.

Please call if you have any questions or if you require additional information.

Sincerely,

Cindy Fraterrigo

Brandon A. Robertson

Cindy Fraterrigo, FSA, EA, MAAA

Brandon Robertson, ASA, EA, MAAA

cc: Dearld Snider - PSRS and PEERS of Missouri
Anita Brand - PSRS and PEERS of Missouri
Becky Stanton - PwC
Nathan Benya - PwC

Assessment and Disclosure of Risk

A. Assessment of Risk - June 30, 2020 Valuation

Please see the June 30, 2020 actuarial valuation report, dated November 12, 2020, for an assessment of the risks associated with the measurement of pension liability and contributions.

Assessment and Disclosure of Risk

B. Assessment of Risk - Critical Shortage - HB 812 - 4 Years (PEERS)

We do not believe the proposed changes would introduce new risks, or significantly alter the level of the risks, identified in our June 30, 2020 actuarial valuation report for the System overall. However, below is an assessment of risks specific to our estimatation of the fiscal impact of the proposed changes.

- Demographic Risk - Our estimated fiscal impact of the proposed change is a function of assumed retirement behavior. The actual fiscal impact of the proposed change would be based on actual future retirement behavior. If active member retirement patterns begin to shift significantly due to the new critical shortage requirements, PEERS could experience a decrease in covered payroll available to amortize the UAAL and Normal Cost. A lower covered payroll could lead to an increase in the ADC rate.

  Additionally, instead of members and employers each paying a 6.86% contribution to PEERS, only employers would pay a 6.86% contribution into PEERS. If active member retirement patterns shift significantly, PEERS could experience a shortfall of contributions to the System.

Summary of Actuarial Assumptions and Methods

A. Actuarial Assumptions - June 30, 2020 Valuation

Please see the June 30, 2020 actuarial valuation report, dated November 12, 2020, for a complete disclosure of all actuarial assumptions.

Summary of Actuarial Assumptions and Methods

B. Actuarial Assumptions - Critical Shortage - HB 812 - 4 Years (PEERS)

All assumptions are the same as the June 30, 2020 valuation.

Summary of Actuarial Assumptions and Methods

C. Actuarial Methods - June 30, 2020 Valuation

Please see the June 30, 2020 actuarial valuation report, dated November 12, 2020, for a complete disclosure of all actuarial methods.

Summary of Actuarial Assumptions and Methods

D. Actuarial Methods - Critical Shortage - HB 812 - 4 Years (PEERS)

All methods are the same as the June 30, 2020 valuation.

Summary of Plan Provisions

A. Plan Provisions - June 30, 2020 Valuation

Please see the June 30, 2020 actuarial valuation report, dated November 12, 2020, for a complete disclosure of all plan provisions that are pertinant to the valuation. Plan provisions reflected in the June 30, 2020 valuation that will be modified by the proposed changes, if any, are presented below to allow for comparison with the modifed provisions.

Critical Shortage

Suspension of Benefits

A retired member may be rehired in any capacity without suspension of their retirement allowance for up to two years if they are rehired pursuant to a critical shortage declaration that meets the following requirements under RSMo Section 169.596:

1. The school district meets ALL of the following requirements:

    a. Show a good faith effort to fill positions with non-retired non-certificated employees
    b. Post the vacancy for at least one month
    c. Have not offered early retirement incentives for either of the previous two years
    d. Solicit applications through the local newspaper, other media, or teacher education programs
    e. Determine there is an insufficient number of eligible applicants for the advertised position
    f. Declare a critical shortage of non-certificated employees that is active for one year

2. The school district contributes to PEERS on behalf of the member at the current rate set by statute for a critical shortage declaration.

3. The retired PEERS member is employed for no more than 2 years under a critical shortage declaration.

4. The total number of retired PEERS members employed under these critical shortage provisions shall not exceed the lesser of (a) 10 percent of the total non-certificated employees for that school district, or (b) 5 employees.

5. To the extent that either the requirements set forth above are not met or a member's employment exceeds the threshold noted above (and the member satisfies other statutory eligibility requirements) resulting in suspension of the member's retirement allowance, both the member and their employer are required to contribute to PEERS and the member earns an additional retirement allowance from PEERS for their service.

B. Plan Provisions - Critical Shortage - HB 812 - 4 Years (PEERS)

Our understanding of the plan provisions, as modified by the proposed changes, are presented below.

Critical Shortage

Suspension of Benefits

A retired member may be rehired in any capacity without suspension of their retirement allowance for up to four years if they are rehired pursuant to a critical shortage declaration that meets the following requirements under RSMo Section 169.596:

1. The school district meets ALL of the following requirements:
   a. Show a good faith effort to fill positions with non-retired non-certificated employees
   b. Post the vacancy for at least one month
   c. Have not offered early retirement incentives for either of the previous two years
   d. Solicit applications through the local newspaper, other media, or teacher education programs
   e. Determine there is an insufficient number of eligible applicants for the advertised position
   f. Declare a critical shortage of non-certificated employees that is active for one year

2. The school district contributes to PEERS on behalf of the member at the current rate set by statute for a critical shortage declaration.

3. The retired PEERS member is employed for no more than 4 years under a critical shortage declaration.

4. The total number of retired PEERS members employed under these critical shortage provisions shall not exceed the lesser of (a) 10 percent of the total non-certificated employees for that school district, or (b) 5 employees.

5. To the extent that either the requirements set forth above are not met or a member's employment exceeds the threshold noted above (and the member satisfies other statutory eligibility requirements) resulting in suspension of the member's retirement allowance, both the member and their employer are required to contribute to PEERS and the member earns an additional retirement allowance from PEERS for their service.

Disclosures

The information herein has been prepared pursuant to our engagement letter with PSRS and PEERS of Missouri, dated July 11, 2019. Our analysis was performed based on our understanding of the current PEERS benefit provisions as set forth in RSMo Chapter 169, as well as the modification to those statutes proposed in HB 812.

Our analysis of the impact of HB 812 reflects the proposed changes in plan provisions and changes in actuarial assumptions shown in Exhibit II and III. Our analysis was performed by measuring the impact of the change at June 30, 2020, the most recent date that we collected member census data from PSRS and PEERS of Missouri and performed a valuation of PEERS. Our estimates do not incorporate the impact of future employees who may become members of PEERS. Please refer to our actuarial valuation report dated November 12, 2020 for a summary of the census data. Otherwise, our analysis reflects the same census data, assumptions, methods, and plan provisions used in the June 30, 2020 actuarial valuation of PEERS. While the scope of our engagement did not call for us to perform an audit or independent verification of this information, we have reviewed this information for reasonableness. The accuracy of the results presented in this letter is dependent upon the accuracy and completeness of the underlying information.

The results of our analysis presented herein were computed using assumptions and methods that are consistent with the funding policy adopted by the Board of Trustees of PSRS and PEERS of Missouri. The results do not reflect application of Governmental Accounting Standards applicable to pension plans.

Our analysis illustrates the estimated change in the Actuarially Determined Contribution Rate (“ADC Rate”), which may or may not affect the actual contribution rates set by the Board. Our analysis does not include any additional administrative cost that may be incurred by PSRS and PEERS of Missouri to implement this change. A stochastic model of potential results on a forecasted basis was not completed due to the limited scope of our engagement.

In preparing the results presented herein, we have used and evaluated actuarial models in accordance with Actuarial Standards of Practice (“ASOP”) No. 56. PwC uses the ProVal valuation system developed by Winklevoss Technologies, LLC in performing valuations of pension and postretirement benefit plans. We have utilized the ProVal software to prepare the valuation results presented herein. ProVal is used to value participant data through projecting retirement benefits and applying plan specific assumptions, methods and plan provisions under applicable accounting and funding standards. PwC is not aware of any material limitations or known weaknesses in the ProVal software.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan’s funded status); and changes in plan provisions or applicable law.

No statement in this letter is intended as a recommendation in favor, or in opposition, of the proposed changes. Except as otherwise noted, potential impacts on other benefit plans were not considered.

The analysis presented herein is based upon assumptions regarding future events. However, the plan’s long term costs will be determined by actual future events, which may differ materially from the assumptions that were made. The calculations are also based upon present and proposed plan provisions that are outlined in the letter. If you have reason to believe that the assumptions used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, please contact the author of this letter prior to relying on information in the letter.

If you have reason to believe that the information provided in this letter is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this letter, please contact the author of this letter prior to making such decision.

In the event that more than one plan change is being considered, it should be noted that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater or less than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

Disclosures

To the best of our knowledge this actuarial statement is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. Our calculations are also consistent with our understanding of Missouri state law. The undersigned actuaries are members of the Society of Actuaries and other professional organizations, including the American Academy of Actuaries, and meet the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States relating to pension plans. There is no relationship between the PwC practitioners involved in this engagement and PSRS and PEERS of Missouri that may impair our objectivity.

The content of this document is limited to the matters specifically addressed herein and does not address any other potential tax consequences, or the potential application of tax penalties, to any matter other than as set forth herein. Our conclusions are not binding upon any taxing authority or the courts and there is no assurance that any relevant taxing authority will not successfully assert a contrary position. In addition, no exceptions (including the reasonable cause exception) are available for any federal or state penalties imposed if any portion of a transaction is determined to lack economic substance or fails to satisfy any similar rule of law, and our advice will not protect you from any such penalties. This document supersedes all prior written or oral advice with respect to the issues addressed in this document and all such prior communications should not be relied upon by any person for any purpose. This document has been prepared pursuant to an engagement letter between PSRS and PEERS of Missouri and PwC, and is intended solely for the use and benefits of PSRS and PEERS of Missouri and not for reliance by any other person.