September 1, 2022

Ms. Bethany Rhodes, Director
Ohio Retirement Study Council
30 East Broad Street, Suite 219
Columbus, OH 43215

Dear Ms. Rhodes:

Enclosed is the *Actuarial Valuation of Defined Benefit Allowances – Traditional, Combined and Member-Directed Plans as of December 31, 2021,* for the Ohio Public Employees Retirement System (OPERS or System) as required by Section 145.22 of the Ohio Revised Code. The purpose of the valuation is to measure the System's funding progress in accordance with previously established contribution rates and OPERS' funding objectives.

The report evaluates the System's financial position for the defined benefit components of OPERS' pension plans. In total, OPERS has three pension plans – the Traditional Pension Plan, which is a defined benefit plan; the Member-Directed Plan, which is a defined contribution plan; and the Combined Plan, which has a defined benefit component for the employer contributions and a defined contribution component for the member contributions. The format of this valuation report provides summary information for the ***total*** valuation results associated with the defined benefit allowances for the Traditional, Combined and Member-Directed Plans. The defined benefit portion of the Member-Directed Plan reflects the annuitization of the members' account balances upon retirement. Separate summaries are provided for the valuation results of the Traditional Plan and for the defined benefit component of the Combined and Member-Directed Plans.

Experience Study

During 2021, OPERS completed the experience study for the period 2016-2020. The results of this experience study led to changes to the actuarial valuation assumptions including a decrease to the assumed investment return (and valuation discount rate) from 7.20% to 6.90%. Under these new assumptions, the restated 12/31/20 valuation funded ratio decreased from 82.9% to 81.5% and the 12/31/20 amortization years increased from 18 years to 21 years. The 2021 investment return results discussed below more than made up for the negative impact associated with the assumption changes. For purposes of this letter, all comparative references will be to the revised 12/31/20 valuation results following the experience study and incorporating the impact of the assumption changes.

Key Results

The actuarial report's actual 2021 investment return of 15.46% exceeded the 6.90% (decreased from 7.20% for the prior year) assumed investment return. This favorable investment performance increased the funded ratio and decreased the amortization period. The December 31, 2021 revised funded ratio for the System improved from 81.5% at the end of 2020 to 84.1% at 2021 year-end. The System's amortization period as of December 31, 2021 decreased from 21 years at the end of 2020 to 16 at the end of 2021. As such, the System's amortization period continues to meet the 30-year amortization period required by Section 145.221 of the Ohio Revised Code. However, similar to last year, all employer contributions, which are at the statutory maximum allowed, are currently allocated to the defined benefit pension plan (no contributions to the health care plan). Future investment returns, therefore, must be favorable enough to ensure future compliance with the 30-year amortization period requirement.

2021 Investment Return

OPERS' actuarial market investment return in 2021 was 15.46% (or $15.0 billion). This compares to a market investment return of 11.60% in 2020 and 17.08% in 2019. The investment return in 2021 exceeded the 6.9% investment return assumption by $8.6 billion. Per the smoothing methodology, the $8.6 billion is recognized as a gain incrementally over a period of four years (rather than immediately). At 2021 year-end, a deferred investment gain of $10.5 billion is yet to be recognized in the funding asset value. This is reflected in the market asset value for December 31, 2021 valuation purposes of $110.2 billion exceeding the December 31, 2021 funding asset value of $99.7 billion by $10.5 billion.

Other Valuation Trends

Unlike the last five years' valuations, total salary increased more than expected. This result has a dual impact. While the higher-than-expected salary produces an increased liability, which lengthens the amortization period, it also produces higher than expected future contributions, which shortens the amortization period. Combined, the impact on the amortization period was negligible. Similar to the last five years' valuations, the number of members leaving active membership as a result of disability and death-in-service was less than expected during 2021, resulting in a liability gain which reduced the amortization period. However, similar to last year's valuation, the number of members leaving active membership as a result of retirement was greater than expected during 2021, resulting in a liability loss which increased the amortization period.

OPERS continues to be diligent in monitoring the funding progress of the System.
If you have any questions or need any additional information, please let me know.

Sincerely,

Karen E Carraher

Karen E. Carraher
Executive Director

Enclosure

cc: The Honorable Phil Plummer, Chair – ORSC
The Honorable Kirk Schuring, Vice Chair – ORSC
The Honorable Kristina D. Roegner, Chair – Senate Government Oversight and Reform Committee
The Honorable Kris Jordan, Chair – House Financial Institutions Committee
Kim Murnieks, Director – Office of Budget and Management