December 3, 2024

Ms. Bethany Rhodes
Executive Director
Ohio Retirement Study Council

Subject: Review of Ohio Police and Fire Proposed Bill HB 296 – Expanded

Dear Bethany:

We have conducted an analysis of the Committee Substitute of Proposed Bill HB 296.

Substitute House Bill 296 (Sub. HB 296) – Background

Sub HB 296 would increase employer contributions made to the Ohio Police & Fire Pension Fund (OP&F) on behalf of police members and member contributions made on behalf of both police and firefighter members as indicated in the following table:

Salaries Earned for Pay Period	Police	Firefighters	Members
Beginning before July 1, 2025 (Current Rates)	19.50%	24.00%	12.25%
July 1, 2025 – June 30, 2026	20.25%	24.00%	12.25%
July 1, 2026 – June 30, 2027	21.00%	24.00%	12.25%
July 1, 2027 – June 30, 2028	21.75%	24.00%	12.25%
July 1, 2028 – June 30, 2029	22.50%	24.00%	12.25%
July 1, 2029 – June 30, 2030	23.25%	24.00%	12.25%
On or after July 1, 2030	24.00%	24.00%	12.50%

Note that the employer contribution rate for firefighters remains unchanged under Sub. HB 296 at 24%.

I. We have conducted a preliminary review of the adequacy of the current statutory contribution rates and have found them adequate to fund the statutory benefits over a period of 29.77 years as of January 1, 2024. This is consistent with the calculation performed by the OP&F actuary (Cavanaugh MacDonald, or CMC). Our full analysis will be provided in a separate report to the ORSC.

II. Based on the contribution rates anticipated by Sub. HB 296, the funding period is estimated to decrease from **29.77 years to 24.57** years as of January 1, 2024.

While the 29.77 and 24.57 year figures are the ordinary actuarial calculation of the remaining funding period based on the January 1, 2024 actuarial valuation, the actual full funding period will be longer or shorter than these calculations due to experience after January 1, 2024 which is not reflected in these calculations. Some of this experience will likely be favorable and some will likely be unfavorable. Among these are:

Potential unfavorable experience:

I. The funding period calculations were based on the "Actuarial Value of Assets" (AVA) of approximately $18.0 billion as of January 1, 2024 and assuming a rate return on assets of 7.5%. But we know that the true "Market Value of Assets" (MVA) is only $16.9 billion as of that date. That difference of more than $1 billion is not reflected in any manner in the traditional calculation. We know that the $1 billion will be recognized in the AVA in the next four years which would extend the funding period absent some unanticipated favorable experience. If the determination of funding period were made based on the true MVA of $16.9 billion as of January 1, 2024, the funding period would extend by about 6 years from 24.57 years to 30.40 years.

II. The actuarial calculations are based on an expected rate of return on assets of 7.50%. As discussed previously, although this assumed rate of return was decreased in the January 1, 2022 actuarial valuation, it is still among the highest used by statewide retirement systems in the US. A May 2024 NASRA survey indicated that only three of 131 systems surveyed (about 2.3%) use an assumption as high as 7.50%. Unless the national interest rate environment changes materially, it is likely that OP&F's actuary will feel compelled to move its assumption closer to the mainstream average assumption of 6.9%. If the assumed rate was 7.25% instead of 7.50%, we estimate that the funding period of 24.57 years would extend by about 3 years from 24.57 years to 27.34 years.

III. Currently, 0.50% of pension payroll is allocated to the Health Care Stabilization Fund with the remainder used for normal cost and paydown of the unfunded liability. If this 0.50% allocation were to increase to 1.00% of payroll, the funding period of 24.57 years would increase by about one year to 25.73 years.

IV. All calculations assume that OP&F covered payroll will grow by 3.25% per year. This assumption is reasonable based on prior experience. However, as a result of the new unfunded mandate on the Ohio cities who employ police officers and firefighters, it is possible that they will offset the 4.50% of payroll increase in police pension costs by reducing other payroll expenses. For example, if they reduce total payroll by 1%, the funding period of 24.57 years would increase by about one-half of one year to 25.00 years.

Potential favorable experience:

I. Many investors are experiencing favorable investment experience in 2024. If OP&F is also experiencing favorable investment experience, then some of the $1 billion (about 6.3%) of deferred asset losses would be offset by favorable investment experience. For example, if the OP&F return for 2024 comes in at 10.0%, that is an excess return of 2.5% over the 7.5% assumed. This 2.5% offsets about two years of the excess cited above, resulting in a funding period of 28.07 years.

II. The OP&F actuary makes many actuarial assumptions pertaining to future experience. One of these assumptions which challenges many actuaries is the future amount of mortality improvement. Some have opined that actuaries are overstating the impact of future increases in longevity. CMC presently assumes mortality improvement in line with the Society of Actuaries MP-2021 improvement scale. It is possible that this assumption or other actuarial assumptions overstates the actuarial liability. If this overstatement amounts to 1%, then the funding period of 24.57 years would decrease by about one year to 23.31 years.

Combining Potential Experience

The actuarial calculations are not as simple as adding and subtracting changes in funding periods, but the following table is a useful compilation of potential favorable and unfavorable experience and their impact on funding period. Note that each of these is one discrete alteration off of the baseline funding period assuming implementation of Sub HB296.

Potential Future Experience	**Impact on Funding Period**	**Resultant Funding Period**
All actuarial experience as anticipated (including recovery of $1 billion disparity between AVA and MVA)	0.00	24.57
Recognize $1 billion disparity between AVA and MVA	+5.83	30.40
Reduce 7.50% rate to 7.25%	+2.77	27.34
Increase HCSF from 0.50% to 1.00%	+1.16	25.73
Reduce total payroll by 1%	+0.43	25.00
10% investment return in 2024, but $1 billion AVA-MVA otherwise not recovered	+3.50	28.07
Actuarial assumptions are 1% too conservative	-1.26	23.31

We reiterate that these figures are not precisely additive. But our best anticipation is that the unfavorable considerations would outweigh the favorable considerations. It is very possible that even if HB296 contribution increases are put into effect, OP&F would exceed a 30-year funding period in the next decade.

We also wish to reiterate our recommendation from our 2012 and 2013 reports:

> *PTA/KMS agrees with the 30-year funding target for the retirement systems as a reasonable funding standard as noted in our report. However, we also recommended that the 30-year period begin in 2013 and decline by one year each year in the future so that Unfunded Liabilities are fully amortized by 2043. In other words, the funding period would decline to 29 years in 2014, 28 years in 2015, etc.*

As this did not occur, and OP&F continues to hover close to a thirty-year funding period, we again recommend that:

> *the 30-year period begin in 2025 and decline by one year each year in the future so that Unfunded Liabilities are fully amortized by 2055. In other words, the funding period would decline to 29 years in 2026, 28 years in 2027, etc.*

In this manner, the unfunded liability would be truly fully funded at some date. If this approach had been taken, the MVA-based unfunded liability as of January 1, 2024, according to our 2015 adequacy report, would have been $5.3 billion, rather than the $9.5 billion recently calculated.

We are Members of the American Academy of Actuaries and qualified to render this actuarial opinion.

We look forward to discussing these findings in more detail.

Sincerely,

William B. Fornia, FSA

Linda L. Bournival, FSA

Cc: Jeff Bernard – ORSC
Tom Vicente – Bolton