KENTUCKY PUBLIC PENSIONS AUTHORITY

David L. Eager, Executive Director

1260 Louisville Road • Frankfort, Kentucky 40601
kyret.ky.gov • Phone: 502-696-8800 • Fax: 502-696-8822

Kentucky Public Pensions Authority

January 25, 2023

Ms. Katie Carney
Office of Fiscal Statement Review
Legislative Research Commission
Capitol Annex, Room 104
Frankfort, KY 40601

RE: House Bill 114 (2023 RS BR 435)
AA Statement Required by KRS 6.350
AA Statement 1 of 2

Dear Ms. Carney:

House Bill 114 (2023 RS BR 435) would create new sections of Kentucky Revised Statute chapter 6 to close the Legislators' Retirement Plan (LRP) to new members effective July 1, 2023, and require new legislators participate in the Kentucky Employees Retirement System (KERS) for the duration of their legislative service; clarify that legislators who are also teachers contributing to the Teachers' Retirement System (TRS) may continue to participate in TRS while serving as a member of the General Assembly; provide that LRP members who entered the plan on or after January 1, 2014, and who are participating in LRP cash balance plan to transfer their account balance to the KERS hybrid cash balance plan and prospectively participate in KERS for the duration of their legislative service; amend KRS 6.505 to provide that legislative changes that are enacted on or after July 1, 2023, for the Legislators' Retirement Plan will not be part of the "inviolable contract" and to make conforming amendments; amend KRS 21.525 to provide that the Judicial Form Retirement System will not request nor receive any funding for the LRP, except for administrative expenses, until the LRP plan has an actuarial funding level equal to or less than the KERS nonhazardous pension fund; amend KRS 6.500, 6.525, 21.374, 21.402, and 61.680 to conform.

Kentucky Public Pensions Authority (KPPA) staff members have examined House Bill 114 (2023 RS BR 435). We have determined that House Bill 114 (2023 RS BR 435) will not change the actuarial liability of the KERS, CERS, or SPRS systems. Pertaining to KERS only, the bill would increase participation in benefits in the KERS nonhazardous plan as new legislators as of July 1, 2023, and legislators who entered the plan on or after January 1, 2014 and participate in the LRP cash balance plan will begin participating with KERS effective July 1, 2023.

In accordance with KRS 6.350 (2)(c), the Kentucky Public Pensions Authority certifies the following:

1. The estimated number of individuals potentially affected as of June 30, 2022 are 12,760 active; 30,665 inactive; and 44,537 retired members in the KERS Nonhazardous plan. According to the Legislators' Retirement Plan website, as of July 1, 2021 there were 43 members of the Legislators' Defined Benefit Plan, and 66 members of the Legislators Retirement Hybrid Cash Balance Plan.

2. There is no estimated change in benefit payments;

3. There is no estimated change to employer costs; and

4. There may be a minimal increase in administrative expenses for the Kentucky Public Pensions Authority to cover the added expense of calculating and providing information to the legislators required to transfer their hybrid cash balance account to the KERS nonhazardous plan.

We have not requested any further actuarial analysis of House Bill 114 (2023 RS BR 435) by the Authority's independent actuary.

Please let me know if you have any questions regarding our analysis of House Bill 114 (2023 RS BR 435).

Sincerely,

David Eager

David L. Eager.
Executive Director
Kentucky Public Pensions Authority

Actuarial Analysis Summary – 2023 House Bill 114/AA 2 of 2

BR or Bill Ref.	2023 House Bill 114	**Actuarial Analysis Conducted For:**	
Date:	1/20/2023	☐ KERS NH ☐ KERS Haz ☐ SPRS ☐ TRS	
Actuary:	USI Consulting Group	☐ CERS NH ☐ CERS Haz ☒ LRP ☐ JRP	

Section I: Executive Summary

In the opinion of the actuary, this bill would make the affected state-administered retirement system(s) actuarially:

☒ MORE SOUND ☒ LESS SOUND ☐ NO IMPACT

If actuarially MORE SOUND OR LESS SOUND, please summarize the factors leading to the actuary's opinion:

The bill contains provisions that make the plan both more and less actuarially sound.

The bill contains a provision that eliminates contributions to LRP until the plan has an actuarial funded level equal to or lower than the KERS nonhazardous pension fund, which makes the plan less actuarially sound. Even though the forecast is showing healthy funded percentages, keep in mind that this is based on assumptions that are applied consistently throughout the projection period. Shocks in actual experience could quickly change the funded position and therefore require cash contributions or else risk a compounding/growing unfunded liability. For example, when there is another large drop in the market, the funded position could decrease rapidly and, if cash contributions are not made, this could lead to even larger future contributions. Maintaining actuarial soundness would require making actuarial required contributions as they are developed to insure benefits are being funded as they are being accrued and to prevent the possibility of uncontrolled growth in any unfunded liability.

On the other hand, the provisions that close the plan to future participants and transfer out the hybrid pension and OPEB liabilities make the plan more actuarially sound.

Does this bill increase or decrease employer costs? ☐ **INCREASE** ☒ **DECREASE** ☐ **NO IMPACT**

Does this bill increase or decrease benefits? ☐ **INCREASE** ☒ **DECREASE** ☐ **NO IMPACT**

Does this bill increase or decrease benefit participation? ☐ **INCREASE** ☒ **DECREASE** ☐ **NO IMPACT**

If the bill impacts employer costs, benefits, or benefit participation, please explain and estimate the impact in Sections II and VI.

	Combined Pension and Retiree Health Plan			
	JRP		LRP	
	Current	Proposed	Current	Proposed
Projected Employer Cost*				
30-Yr Nominal $	n/a	n/a	$ 0	$ 0
30-Yr Net Present Value $	n/a	n/a	$ 0	$ 0
Proj. Normal Cost for New Hire	n/a	n/a	2.89% of pay	n/a
	Pension Plan			
	JRP		**LRP**	
	Current	Proposed	Current	Proposed
Projected UAL ($)				
Baseline (Year 1)	n/a	n/a	$ (13,800,000)	$ (13,800,000)
5 Years	n/a	n/a	$ (15,600,000)	$ (15,500,000)
10 Years	n/a	n/a	$ (19,300,000)	$ (19,800,000)
20 Years	n/a	n/a	$ (30,400,000)	$ (33,500,000)
30 Years	n/a	n/a	$ (49,100,000)	$ (58,100,000)
Projected Funding Ratio (%)				
Baseline (Year 1)	n/a	n/a	120%	120%
5 Years	n/a	n/a	124%	125%
10 Years	n/a	n/a	135%	138%
20 Years	n/a	n/a	185%	211%
30 Years	n/a	n/a	327%	540%
	Retiree Health Plan			
	JRP		**LRP**	
	Current	Proposed	Current	Proposed
Projected UAL ($)				
Baseline (Year 1)	n/a	n/a	$ (50,800,000)	$ (50,800,000)
5 Years	n/a	n/a	$ (64,500,000)	$ (64,800,000)
10 Years	n/a	n/a	$ (87,900,000)	$ (88,300,000)
20 Years	n/a	n/a	$ (163,700,000)	$ (164,600,000)

30 Years	n/a	n/a	$ (306,200,000)	$ (307,500,000)
Projected Funding Ratio (%)				
Baseline (Year 1)	n/a	n/a	422%	422%
5 Years	n/a	n/a	516%	529%
10 Years	n/a	n/a	702%	745%
20 Years	n/a	n/a	1523%	1815%
30 Years	n/a	n/a	3928%	6013%

Section III: Brief Summary of Bill

It is our understanding that 2023 House Bill 114 makes the following changes to LRP:

1. **LRP shall be closed to new members effective July 1, 2023. New legislators shall participate in the Kentucky Employees Retirement System (KERS).**

2. **Members who entered LRP on or after January 1, 2014 (members who are participating in the Hybrid Tier) shall have their account balance transferred to the KERS hybrid cash balance plan as of December 1, 2023 and shall prospectively participate in KERS. LRP shall transfer to KERS a cash amount equal to the total account balance for all transferring participants as of December 1, 2023.**

3. **The LRP OPEB benefits for members who entered on or after January 1, 2014 will also be transferred to KERS. However, it is our understanding that no assets will be transferred from LRP to fund those benefits as the bill is currently written.**

4. **The Judicial Form Retirement System shall not request nor receive any funding for LRP, except for administrative expenses, until such time that LRP has an actuarial funded ratio equal to or less than the KERS nonhazardous pension fund.**

Section IV: Statement of Assumptions and Methods

Did the analysis rely solely upon the same assumptions & methods previously established and utilized by the actuary in the retirement system's most recent ☒ **YES** ☒ **NO** actuarial valuation?

If NO, please describe each new assumption or method utilized, the basis for selecting the revised assumption or method, and whether each new assumption or method increased or decreased projected employer costs:
Aside from the following, this analysis relied solely upon the same assumptions & methods previously established and utilizes in the most recent actuarial valuation.

1) **Effective with the calculation of the contribution requirement as of July 1, 2023, our analysis has reflected the change in the method (based on Senate Bill 32) for amortizing any**

unfunded liability to use a 20 year closed amortization method.

Section V: Comment from Actuary

Adopting the changes put forth under 2023 House Bill 114 will:

1. **Close LRP to new entrants and move all current LRP Hybrid Tier participants to KERS. Based upon this, LRP will have no future liability for the Hybrid Tier. Future liabilities for the current Hybrid plan populations will accrue under the KERS Hybrid plan. To understand an apples to apples comparison of the legislation, we recommend that KERS actuaries analyze the impact to the KERS Hybrid plan of adding this population of employees.**

2. **Transfer approximately $1.2M in pension liability and assets as of December 1, 2023 and increase the projected pension funded ratio at the end of the 30 year forecast from 327% to 540%.**

3. **Transfer approximately $200,000 in OPEB liability and $0 in assets as of December 1, 2023 and increase the projected OPEB funded ratio at the end of the 30 year forecast from 3,928% to 6,013%.**

4. **Reduce future pension benefit accruals under LRP.**

5. **Eliminate future LRP employer contributions. Because the LRP pension and OPEB plans did not have any projected contributions under either the current or proposed scenarios, this change does not have an effect on the results.**

6. **It is our understanding that assets designated for pension benefits cannot be used to pay for OPEB benefits and vice versa.**

Section VI: Detailed Actuarial Analysis and Projections *(May be attached as Appendix)*

Attached as an Appendix.

MEMORANDUM REPORT

ACTUARY: USI Consulting Group

DATE: January 20, 2023

RE: Actuarial Analysis of 2023 House Bill 114

Additional Comments

1) It is assumed that all members in the Traditional Defined Benefit plan of LRP will remain in the plan. Members in the LRP Hybrid Tier will move to the KERS hybrid cash balance plan as of December 1, 2023 and will be due no further benefit from LRP. New legislators who would otherwise enter on or

after July 1, 2023 will participate in the KERS hybrid cash balance plan and will not receive any benefit from LRP.

2) Because both the LRP Traditional Defined Benefit plan and the Traditional OPEB plan are both projected to be over 100% funded for the projected 30 year period, no further contributions are assumed to be made in either of these plans, as they are expected to maintain a higher funded ratio than the KERS nonhazardous pension fund.

3) We have included contributions for expenses in our calculation of the contribution requirement in our projections. Due to the projected funded status of the plan, there is no contribution requirement projected in any of the future 30 years of the projections.

Additional Assumption Notes

Future results will vary from projections to the extent future experience varies from the assumptions used in the projections. The longer the period of the forecast, the more variation is likely to occur and the less likely future results will match projections.

1. Except as mentioned herein, all data, methods, assumptions, and plan provisions are consistent with those used for the July 1, 2021 valuation report.
2. Asset information as of July 1, 2022 has been reflected in our projections.
3. Future experience assumptions are consistent with the July 1, 2021 valuation assumptions.
4. The LRP Traditional Defined Benefit plan is closed to new entrants.
5. Under 2023 House Bill 114, LRP is closed to new entrants effective July 1, 2023 and current hybrid plan members are transferred to KERS effective December 1, 2023. Based on these effective dates, the first year in the projections impacted by these changes is the year beginning July 1, 2024.
6. It is assumed that 100% of the recommended contribution will be made for each year in the current columns of the forecast. In the proposed columns for LRP, no future contributions are assumed to be made. However, since there is no projected contribution requirement in the current or proposed projections in the next 30 years, there is no effect on the results due to this.
7. In accordance with KRS 21.405, this study does not recognize cost of living increases effective after the most recent valuation date.
8. Certain changes under 2023 House Bill 114, may or may not be allowed under state law. Whether or not all changes under 2023 House Bill 114 are permissible is a legal issue, and we provide no opinion in this regard. For purposes of the attached projections, we have assumed such changes are allowable.
9. This report provides actuarial advice and does not constitute legal advice.

Additional Comments on Actuarially Soundness

A plan that has adopted a reasonable funding method, uses reasonable assumptions and contributes at a rate at or above the recommended contribution rate (based on these reasonable methods and assumptions), could be considered to be actuarially sound. The "actuarial soundness" of LRP will be impacted by whether or not the changes reflected in this bill are or are not adopted.

In order to ensure LRP is funded in an "actuarially sound manner", we would recommend:

1. Reflect a 1.5% future COLA assumption when calculating the funding requirement for LRP, to the extent future cost-of-living increases are expected to occur, or intended to be provided.
2. Contributing at least the minimum recommended contribution each year.

Deviations from these recommendations could result in an "actuarially unsound" approach to funding LRP and may eventually result in LRP becoming insolvent – that is, exhausting assets at which time all future benefits would be made on a pay as you go basis.

Although the Actuarial Standards of Practice 4 “Measuring Pension Obligations” allows for plan liabilities to be calculated under a legally prescribed method, the statement goes on to say,

> “If, in the actuary’s professional judgment, such an actuarial cost method or amortization method is significantly inconsistent with the plan accumulating adequate assets to make benefit payments when due, assuming that all actuarial assumptions will be realized and that the plan sponsor or other contributing entity will make contributions when due, the actuary should disclose this.”

It is our professional actuarial opinion that the current legally prescribed method, which (per KRS 21.405) does not recognize cost of living increases effective after the most recent valuation (assuming future increases are expected), is inconsistent with the plan accumulating adequate assets to make benefit payments when due, assuming all actuarial assumptions are realized. Additionally, the provision of 2023 House Bill 114, which states that actuarially determined contributions would not be funded until the funding level of KRS is equal to or less the funding level of the KERS nonhazardous plan, would not be actuarially sound.

ASOP 51 Risk Assessment

Risk Factor	Initial Risk Assessment Language
Investment	Due to the plan's substantial equity exposure, investment returns will likely be much more volatile than the measurements of plan liabilities. Therefore, there is a risk that the funded status of the plan, as well as required plan contributions, could be volatile.
Assumed Rate of Return	Due to the plan's estimated duration of 8 to 10, a 1% decrease in the assumed rate of investment return would increase the measurement of the liability by 8% to 10%.
Longevity	Since nearly all of the plan liability is projected to be paid as annuities, the plan is sensitive to changes in overall population longevity. As a result, the liabilities will fluctuate with changes in longevity. The ratio of retired life liability to total liability is 72%, suggesting there is less sensitivity to long-term changes in overall mortality improvement than a less mature plan.
Other demographic factors	Due to the eligibility for unreduced and subsidized retirement benefits, employees continuing in service for longer than expected will accrue additional benefits which may or may not result in larger liabilities. Conversely, employees retiring sooner than anticipated will accrue smaller benefits which may or may not result in smaller liabilities.
Lump sums	No significant known risks. However, as the Hybrid Tier becomes a larger percentage of the total liability, this risk will become more significant. Since lump sum benefits are equal to the cash balance for the Hybrid Tier, lump sum payments have a comparable effect on both assets and liabilities.
Inflation	Inflation is a component of future interest rates and investment returns over a long period. As a result, changes to inflation can affect funded percentages.
Non-Legislative Salaries	Pension benefits can be increased by future non-legislative salaries and the liability for active and deferred vested participants has been increased by 40% to reflect his possibility. The effect of non-legislative salaries may have a larger or smaller impact than is reflected by the 40% load factor. Additionally, future legislation may eliminate or reduce the effect of this provision.
Other Factors	Due to recent and ongoing attempts to pass pension reform legislation at a state level, the plan could be modified in the future. Future legislation may affect benefit levels or future contribution levels and could result in increases or decreases in the plan liabilities or funding status.

USI Consulting Group can perform more detailed assessments of these risks as desired by the plan sponsor to provide a better understanding of the risks.

Definitions

Accrued Liability – based on the methods and assumptions used, the amount of assets that would be needed to satisfy future projected benefit payments based on service as of the valuation date.

Normal Cost – cost of benefits earned in the year following the valuation for current active members

Actuarial Asset Value – A smoothed asset value which smoothes in asset gains and losses over a 5 year period (for purposes of this study). For projection years 5 or more years in the future, the actuarial and market value would be the same (assuming assets earn the 6.5% rate of return, which is assumed). As the Plan has experienced consistent gains over the past few years, the current Actuarial Asset Value is smaller than the market value since all prior gains have not yet been recognized.

Current – projections reflecting current rules and regulations, without regard to 2023 House Bill 114 Proposed –

projections reflecting 2023 House Bill 114

Professional Qualifications

This report has been prepared under the supervision of Matthew Widick. Matthew is a member of the American Academy of Actuaries, a Fellow of the Society of Actuaries, and a consulting actuary with USI Consulting Group, who has met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions herein. To the best of my knowledge this report has been prepared in accordance with generally accepted actuarial standards, including the overall appropriateness of the analysis, assumptions, and results and conforms to appropriate Standards of Practice as promulgated from time to time by the Actuarial Standards Board, which standards form the basis for the actuarial report. I am not aware of any direct or material indirect financial interest or relationship, including investment management or other services that could create, or appear to create, a conflict of interest that would impair the objectivity of this work.

Matthew Widick

January 20, 2023
Date

Matthew S. Widick
Associate, Society of Actuaries
Enrollment No. 20-08159
Phone 615.895.7863

Kentucky Legislators Retirement Plan
Cost Projections - HB 114
Prepared by USI Consulting Group
January 20, 2023
Pension Plan Only

	Contribution ($M)		Contribution (%)		Accrued Liability ($M)		Unfunded Liability ($M)		Funded Ratio (Assets/Liabilities)	
Year Beginning July 1	Current	Proposed	Current	Proposed	Current	Proposed	Current	Proposed	Current	Proposed
2022	$ 0.00	$ 0.00	0.0%	0.0%	$ 71.60	$ 71.60	$ (11.30)	$ (11.30)	116%	116%
2023	$ 0.00	$ 0.00	0.0%	0.0%	$ 70.50	$ 70.50	$ (13.80)	$ (13.80)	120%	120%
2024	$ 0.00	$ 0.00	0.0%	0.0%	$ 69.30	$ 68.00	$ (15.60)	$ (15.20)	123%	122%
2025	$ 0.00	$ 0.00	0.0%	0.0%	$ 67.70	$ 66.30	$ (17.40)	$ (17.20)	126%	126%
2026	$ 0.00	$ 0.00	0.0%	0.0%	$ 66.10	$ 64.50	$ (15.00)	$ (14.80)	123%	123%
2027	$ 0.00	$ 0.00	0.0%	0.0%	$ 64.50	$ 62.60	$ (15.60)	$ (15.50)	124%	125%
2028	$ 0.00	$ 0.00	0.0%	0.0%	$ 62.80	$ 60.70	$ (16.30)	$ (16.30)	126%	127%
2029	$ 0.00	$ 0.00	0.0%	0.0%	$ 61.00	$ 58.70	$ (17.00)	$ (17.10)	128%	129%
2030	$ 0.00	$ 0.00	0.0%	0.0%	$ 59.20	$ 56.60	$ (17.70)	$ (17.90)	130%	132%
2031	$ 0.00	$ 0.00	0.0%	0.0%	$ 57.40	$ 54.50	$ (18.50)	$ (18.80)	132%	134%
2032	$ 0.00	$ 0.00	0.0%	0.0%	$ 55.40	$ 52.20	$ (19.30)	$ (19.80)	135%	138%
2033	$ 0.00	$ 0.00	0.0%	0.0%	$ 53.50	$ 50.00	$ (20.10)	$ (20.80)	138%	142%
2034	$ 0.00	$ 0.00	0.0%	0.0%	$ 51.60	$ 47.70	$ (21.00)	$ (21.90)	141%	146%
2035	$ 0.00	$ 0.00	0.0%	0.0%	$ 49.50	$ 45.40	$ (22.00)	$ (23.10)	144%	151%
2036	$ 0.00	$ 0.00	0.0%	0.0%	$ 47.50	$ 43.20	$ (23.00)	$ (24.30)	148%	156%
2037	$ 0.00	$ 0.00	0.0%	0.0%	$ 45.50	$ 40.90	$ (24.10)	$ (25.60)	153%	163%
2038	$ 0.00	$ 0.00	0.0%	0.0%	$ 43.50	$ 38.70	$ (25.20)	$ (27.00)	158%	170%
2039	$ 0.00	$ 0.00	0.0%	0.0%	$ 41.50	$ 36.50	$ (26.40)	$ (28.50)	164%	178%
2040	$ 0.00	$ 0.00	0.0%	0.0%	$ 39.40	$ 34.30	$ (27.70)	$ (30.10)	170%	188%
2041	$ 0.00	$ 0.00	0.0%	0.0%	$ 37.50	$ 32.20	$ (29.00)	$ (31.80)	177%	199%
2042	$ 0.00	$ 0.00	0.0%	0.0%	$ 35.60	$ 30.10	$ (30.40)	$ (33.50)	185%	211%
2043	$ 0.00	$ 0.00	0.0%	0.0%	$ 33.80	$ 28.00	$ (31.90)	$ (35.40)	194%	226%
2044	$ 0.00	$ 0.00	0.0%	0.0%	$ 32.10	$ 26.00	$ (33.40)	$ (37.40)	204%	244%
2045	$ 0.00	$ 0.00	0.0%	0.0%	$ 30.60	$ 24.20	$ (35.00)	$ (39.50)	214%	263%
2046	$ 0.00	$ 0.00	0.0%	0.0%	$ 29.20	$ 22.30	$ (36.80)	$ (41.70)	226%	287%
2047	$ 0.00	$ 0.00	0.0%	0.0%	$ 27.80	$ 20.60	$ (38.60)	$ (44.10)	239%	314%
2048	$ 0.00	$ 0.00	0.0%	0.0%	$ 26.50	$ 19.00	$ (40.50)	$ (46.60)	253%	345%
2049	$ 0.00	$ 0.00	0.0%	0.0%	$ 25.10	$ 17.40	$ (42.50)	$ (49.20)	269%	383%
2050	$ 0.00	$ 0.00	0.0%	0.0%	$ 23.90	$ 15.90	$ (44.60)	$ (52.00)	287%	427%
2051	$ 0.00	$ 0.00	0.0%	0.0%	$ 22.70	$ 14.50	$ (46.80)	$ (55.00)	306%	479%
2052	$ 0.00	$ 0.00	0.0%	0.0%	$ 21.60	$ 13.20	$ (49.10)	$ (58.10)	327%	540%
Sum of Contributions	$ 0.00	$ 0.00								
Net Present Value	$ 0.00	$ 0.00								

Assumes 6.5% future asset returns.

In the Current column, Assumes 100% of the recommended contribution is contributed each year. However, in the Proposed column, assumes no employer contribution is made in any year.

Unfunded Liability is calculated as Accrued Liability minus the Actuarial Assets Value.

Funded Ratio is calculated as Actuarial Value of Assets divided by Accrued Liability.

Contribution(%) is calculated as the Contribution($) divided by total payroll in the Traditional plan.

Kentucky Legislators Retirement Plan
Cost Projections - HB 114
Prepared by USI Consulting Group
January 20, 2023
OPEB Plan Only

Year Beginning July 1	Contribution ($M) Current	Contribution ($M) Proposed	Contribution (%) Current	Contribution (%) Proposed	Accrued Liability ($M) Current	Accrued Liability ($M) Proposed	Unfunded Liability ($M) Current	Unfunded Liability ($M) Proposed	Funded Ratio (Assets/Liabilities) Current	Funded Ratio (Assets/Liabilities) Proposed
2022	$ 0.00	$ 0.00	0.0%	0.0%	$ 15.70	$ 15.70	$ (46.30)	$ (46.30)	395%	395%
2023	$ 0.00	$ 0.00	0.0%	0.0%	$ 15.80	$ 15.80	$ (50.80)	$ (50.80)	422%	422%
2024	$ 0.00	$ 0.00	0.0%	0.0%	$ 15.80	$ 15.50	$ (54.90)	$ (55.10)	447%	455%
2025	$ 0.00	$ 0.00	0.0%	0.0%	$ 15.70	$ 15.40	$ (59.30)	$ (59.50)	478%	486%
2026	$ 0.00	$ 0.00	0.0%	0.0%	$ 15.60	$ 15.20	$ (60.70)	$ (60.90)	489%	501%
2027	$ 0.00	$ 0.00	0.0%	0.0%	$ 15.50	$ 15.10	$ (64.50)	$ (64.80)	516%	529%
2028	$ 0.00	$ 0.00	0.0%	0.0%	$ 15.40	$ 14.90	$ (68.60)	$ (68.90)	545%	562%
2029	$ 0.00	$ 0.00	0.0%	0.0%	$ 15.30	$ 14.60	$ (73.00)	$ (73.30)	577%	602%
2030	$ 0.00	$ 0.00	0.0%	0.0%	$ 15.10	$ 14.40	$ (77.60)	$ (78.00)	614%	642%
2031	$ 0.00	$ 0.00	0.0%	0.0%	$ 14.80	$ 14.00	$ (82.60)	$ (83.00)	658%	693%
2032	$ 0.00	$ 0.00	0.0%	0.0%	$ 14.60	$ 13.70	$ (87.90)	$ (88.30)	702%	745%
2033	$ 0.00	$ 0.00	0.0%	0.0%	$ 14.40	$ 13.40	$ (93.50)	$ (94.00)	749%	801%
2034	$ 0.00	$ 0.00	0.0%	0.0%	$ 14.10	$ 13.00	$ (99.50)	$ (100.00)	806%	869%
2035	$ 0.00	$ 0.00	0.0%	0.0%	$ 13.80	$ 12.60	$ (105.80)	$ (106.40)	867%	944%
2036	$ 0.00	$ 0.00	0.0%	0.0%	$ 13.60	$ 12.30	$ (112.60)	$ (113.20)	928%	1020%
2037	$ 0.00	$ 0.00	0.0%	0.0%	$ 13.30	$ 11.90	$ (119.90)	$ (120.50)	1002%	1113%
2038	$ 0.00	$ 0.00	0.0%	0.0%	$ 13.00	$ 11.50	$ (127.60)	$ (128.20)	1082%	1215%
2039	$ 0.00	$ 0.00	0.0%	0.0%	$ 12.60	$ 11.00	$ (135.80)	$ (136.50)	1178%	1341%
2040	$ 0.00	$ 0.00	0.0%	0.0%	$ 12.30	$ 10.60	$ (144.50)	$ (145.30)	1275%	1471%
2041	$ 0.00	$ 0.00	0.0%	0.0%	$ 11.90	$ 10.10	$ (153.80)	$ (154.60)	1392%	1631%
2042	$ 0.00	$ 0.00	0.0%	0.0%	$ 11.50	$ 9.60	$ (163.70)	$ (164.60)	1523%	1815%
2043	$ 0.00	$ 0.00	0.0%	0.0%	$ 11.10	$ 9.10	$ (174.30)	$ (175.20)	1670%	2025%
2044	$ 0.00	$ 0.00	0.0%	0.0%	$ 10.70	$ 8.60	$ (185.50)	$ (186.50)	1834%	2269%
2045	$ 0.00	$ 0.00	0.0%	0.0%	$ 10.40	$ 8.20	$ (197.50)	$ (198.50)	1999%	2521%
2046	$ 0.00	$ 0.00	0.0%	0.0%	$ 10.00	$ 7.70	$ (210.30)	$ (211.30)	2203%	2844%
2047	$ 0.00	$ 0.00	0.0%	0.0%	$ 9.70	$ 7.30	$ (223.90)	$ (224.90)	2408%	3181%
2048	$ 0.00	$ 0.00	0.0%	0.0%	$ 9.40	$ 6.90	$ (238.30)	$ (239.50)	2635%	3571%
2049	$ 0.00	$ 0.00	0.0%	0.0%	$ 9.00	$ 6.40	$ (253.70)	$ (254.90)	2919%	4083%
2050	$ 0.00	$ 0.00	0.0%	0.0%	$ 8.70	$ 6.00	$ (270.10)	$ (271.40)	3205%	4623%
2051	$ 0.00	$ 0.00	0.0%	0.0%	$ 8.30	$ 5.60	$ (287.60)	$ (288.90)	3565%	5259%
2052	$ 0.00	$ 0.00	0.0%	0.0%	$ 8.00	$ 5.20	$ (306.20)	$ (307.50)	3928%	6013%
Sum of Contributions	$ 0.00	$ 0.00								
Net Present Value	$ 0.00	$ 0.00								

Assumes 6.5% future asset returns.
In the Current column, Assumes 100% of the recommended contribution is contributed each year. However, in the Proposed column, assumes no employer contribution is made in any year.
Unfunded Liability is calculated as Accrued Liability minus the Actuarial Assets Value.
Funded Ratio is calculated as Actuarial Value of Assets divided by Accrued Liability.
Contribution(%) is calculated as the Contribution($) divided by total payroll of participants in the Traditional OPEB plan.