

**KNOX COUNTY RETIREMENT AND PENSION BOARD**

**December 20, 2021**

The Knox County Retirement and Pension Board met in regular session on Monday, December 20, 2021, at 3:00 P.M. in Room 640, City-County Building, Knoxville, Tennessee.

The following members were present: Chairman Chris Caldwell, Proxy for Mayor Jacobs, Commissioner Larsen Jay, Vice Chairman, Commissioner Randy Smith, Secretary, Commissioner Charles Busler, Commissioner Kyle Ward, Mr. Chris Simons, Ms. Janet Samar and Mr. Jim Snowden. Mr. Gabe Mullinax was absent.

Also present at the meeting were:

USI Consulting Group: Mr. Bob Cross and Mr. Ralph Leeman

Legal Counsel: Mr. Bill Mason, Ms. Ashley Trotto and Ms. Stephanie Coleman

Retirement Staff: Ms. Jennifer Schroeder, Ms. Terri Chase, Mr. Zack Cole, Ms. Mitzi Stooksbury and Ms. Savannah Russell

Others in Attendance: Mr. Allen Sheets, Nationwide, Mr. Mike Steely, Knox Focus, Mr. Ted Hotz, Pugh & Co., Mr. Gary Mitchell, Pugh & Co.

**IN RE: CALL TO ORDER**

Chairman Caldwell presided and called the meeting to order.

**IN RE: AMENDMENTS TO AGENDA**

Chairman Caldwell reported that there were agenda amendments to include applications to retire which were contained within the agendas passed out at the meeting.

**IN RE: APPROVAL OF MINUTES OF NOVEMBER 15, 2021**

Chairman Caldwell presented the minutes for the board meeting held on November 15, 2021. Commissioner Jay made a motion to approve the minutes for November 15, 2021, as written. The motion was seconded by Commissioner Smith. All members present voted in favor. The motion passed unanimously.

**IN RE: APPLICATIONS FOR DISABILITY BENEFIT – EMPLOYEE DISABILITY PLAN**

The following applications for disability were presented for consideration:

<b><u>NAME</u></b>	<b><u>DEPARTMENT</u></b>	<b><u>DATE OF RECOMMENDATION FROM REEDGROUP</u></b>
Frank Brown Jr.	Parks & Rec	December 6, 2021

A motion was made by Commissioner Jay to approve the applications for disability. The motion was seconded by Mr. Snowden. All members present voted in favor. The motion passed unanimously.

**IN RE: APPLICATIONS FOR RETIREMENT – DEFINED CONTRIBUTION PLAN AND AUTHORIZATION OF CREDITED SERVICE BENEFIT BASED ON COMPLETED YEARS OF SERVICE**

The following applications for retirement and the credited service benefit based upon completed years of credited service at the date of retirement, as provided in the Defined Contribution Plan, were presented for consideration:

<u>NAME</u>	<u>DEPARTMENT</u>	<u>CREDITED SERVICE</u>	<u>EFFECTIVE DATE</u>
Ronald Bosch	Sheriff	21 years 0 months	January 1, 2022
John Coker	Sheriff	18 years 5 months	January 1, 2022
James Cotham	CommSvcs	41 years 3 months	January 1, 2022
Patricia Davis	ChanceryCrt	16 years 7 months	January 1, 2022
Pamela O'Dell	Schools	12 years 4 months	January 1, 2022
Margaret Manning	Schools	7 years 7 months	January 1, 2022
Debra Mitchell	MPC	30 years 6 months	January 1, 2022
Betty Penson	Mayor	23 years 5 months	January 1, 2022
Carolyn Rodgers	Schools	39 years 3 months	January 1, 2022
John Sexton	EPW	14 years 7 months	January 1, 2022
Ricky Snyder	Schools	9 years 3 months	January 1, 2022
Chandra Truman	Sheriff	21 years 5 months	January 1, 2022

A motion was made by Ms. Samar to approve the applications for retirement under the Defined Contribution Plan as presented and to authorize the Directed Custodian, Charles Schwab, to make disposition of the benefits upon certification from USI and to authorize the Trustee, State Street Bank, to make payment of the credited service benefit. The motion was seconded by Mr. Simons. All members present voted in favor. The motion passed unanimously.

**IN RE: APPLICATION FOR RETIREMENT – UNIFORMED OFFICERS PENSION PLAN**

The following application for retirement, as provided in the Uniformed Officers Pension Plan, was presented for consideration:

<u>NAME</u>	<u>DEPARTMENT</u>	<u>CREDITED SERVICE</u>	<u>EFFECTIVE DATE</u>
Brian Bivens	Sheriff	27 years 10 months	January 1, 2022
Carleton Bryant	Sheriff	27 years 0 months	January 1, 2022
William Gillespie	Sheriff	25 years 0 months	January 1, 2022
Rebecca Holbert	Sheriff	27 years 8 months	January 1, 2022
Timothy Morgan	Sheriff	29 years 3 months	January 1, 2022
Steven Patrick	Sheriff	30 years 10 months	January 1, 2022
David Radocesky	Sheriff	29 years 11 months	January 1, 2022

A motion was made by Commissioner Jay to approve the application for retirement under the Uniformed Officers Pension Plan as presented and to authorize Trustee, State Street Bank, to make payment of the monthly benefits. The motion was seconded by Ms. Samar. All members present voted in favor. The motion passed unanimously.

**IN RE: REPORT OF FY20 AUDIT**

Mr. Ted Hotz of Pugh and Company stated that the audit for the Retirement and Pension Board is complete and an electronic copy is available in the Retirement and Pension Board Office. Mr. Hotz presented an overview of the audit for period ending June 30, 2021. Mr. Hotz reviewed the governance

letter and recapped the audit, stating overall the procedures and numbers are good and the audit ran smoothly. Mr. Hotz noted that the one control item mentioned in the management letter is being addressed. Mr. Hotz reported the Pugh had removed the prior years' limitation on its opinion related to pre-2011 DC plan balances as enough testing had been done to make Pugh confident in the reported amounts. Pugh issued a clean, unqualified opinion. A motion was made by Mr. Simons to approve the final audit. The motion was seconded by Mr. Snowden and unanimously approved.

**IN RE: REPORT OF EXECUTIVE DIRECTOR**

- **Funding Policy Approval Letters from the State** – Ms. Schroeder informed the Board the State letter for the change in funding policy was approved. There was a reduction in the State's interest rate assumption to 6.75% and the plans remain in compliance with associated legislation.
- **Board Meeting Calendar 2022** – Commissioner Jay made a motion to approve the board meeting schedule for 2022. The motion was seconded by Ms. Samar. All members present voted in favor. The motion passed unanimously. Jennifer informed the Board that the schedule will be posted and emailed.
- **MERP Enhancement Update** – Ms. Schroeder stated that Commission approved the MERP enhancement amendment and that there were approximately 250 MERP enrollments and changes combined since implementation of the same. Mr. Simons asked how many Schools employees took advantage of the opportunity. Ms. Schroeder said multiple were received from Schools.
- **MRD's Letters Mailed** – Minimum required distribution letters were mailed to participants over age 72.
- **BlueFin Update** – Ms. Schroeder updated the Board about the BlueFin conversion. She reminded the Board that the reason the Pension Board was considering replacing its software was because remote work capability would be improved by a web-based system, but BenXL was going to be costly to convert to a web-based system. The Board approved obtaining Bluefin instead. During the conversion process, however, the joint determination was made that the Bluefin product would not fit the Board's needs, and the contract with BlueFin was voided by USI due to the product being geared towards Defined Benefit plans primarily. Ms. Schroeder stated that BenXL was considering potential improvements, and that she is not currently looking for a replacement vendor.
- **Resignation of Mr. Gabe Mullinax as of 1/2/2022** – Ms. Schroeder informed the Board that Mr. Mullinax's last day will be January 2, 2022. A special election will be held for an open County position on the Board on February 10<sup>th</sup>. Notification of the election will be sent out on January 3<sup>rd</sup>.

A motion was made by Mr. Simons to approve the special election procedures and dates. The motion was seconded by Ms. Samar. All members present voted in favor. The motion passed unanimously. Mr. Caldwell appointed the Election Committee. The committee will be Ms. Schroeder, Commissioner Jay, Mr. Snowden, Ms. Allison Rogers and Mr. Ace Rule.

**IN RE: REPORT OF INVESTMENT COMMITTEE**

- **Monthly Rates of Return** – Commissioner Smith presented the rates of return for the Defined Contribution and Defined Benefit Plans and stated the overall rates of return are in line with respective markets.

**IN RE: REPORT OF LEGAL COUNSEL**

Ms. Coleman had no report.

Mr. Mason had no report.

**IN RE: REPORT OF ACTUARY**

As previously requested by Commissioner Smith, Mr. Cross summarized the attached COLA impact report.

**IN RE: APPROVAL OF PAYMENT – STATEMENT OF ACCOUNTS**

The following statement of accounts for professional services was presented for consideration and approval of payment, in accordance with agreements, audits and recommended for payment by Ms. Schroeder:

Invoices for DEC 2021 For FY 22 (Legal Invoices are approved for the previous Months Expense)	Fiscal 22 YTD Approved Invoices 11/30/2021	DEC Invoices For Approval	Fiscal 22 YTD Approved 12/31/2021	FY 22 Budget vs. Actual 12/31/2021
BENXL Invoice #		\$0.00		Budget \$50,000.00 From FY21 \$50,000.00 Expenses \$0.00 Remaining Budget \$100,000.00
<b>TOTAL BENXL</b>	\$0.00	\$0.00	\$0.00	
KENNERLY, MONTGOMERY & FINLEY, P.C. Invoice #		\$0.00		QDRO* \$2,000.00 Rec'd from Participai \$0.00 Expenses \$0.00 Remaining Budget \$2,000.00
<b>TOTAL KENNERLY, MONTGOMERY &amp; FINLEY, P.C.</b>	\$0.00	\$0.00	\$0.00	
Owings, Wilson & Coleman Invoice #		\$0.00		Budget \$100,000.00
Invoice # 9947M Glenn		\$0.00		
Invoice # 9942M Knox County vs. Etters	\$0.00	\$182.50		Expense -\$23,427.33
<b>*** TOTAL OWINGS, WILSON &amp; COLEMAN</b>	\$23,244.83	\$182.50	\$23,427.33	Remaining Budget \$76,572.67
USI CONSULTING GROUP Invoice # 90060112 Invoice #		\$6,789.00		Budget \$475,000.00
<b>TOTAL USI CONSULTING GROUP</b>	\$69,992.50	\$6,789.00	\$76,781.50	Expense -\$76,781.50 Remaining Budget \$398,218.50
<b>Invoices for DEC 2021 For FY 22</b>	<b>\$93,237.33</b>	<b>\$6,971.50</b>	<b>\$100,208.83</b>	

	Fiscal 22 YTD	
<b>*** Retainer not included in approved billings for the Board</b>		
Owings, Wilson & Coleman Retainer	\$4,000 per month	\$24,000.00
Kennerly Montgomery Retainer	\$12,000 per month	\$72,000.00
USI Quarterly Fee for DB Advisory Services	\$37,000 per quarter	\$74,000.00
Fees Received from QDRO* Participants	\$500 (DC Fee)	\$550.00
	\$2,000 (DB & UOPP Fee)	\$0.00

\*QDRO fee is Paid to Retirement Office which offsets the legal fee

After review of the statement of accounts and invoices, a motion was made by Commissioner Busler that the Board authorize the payment indicated above to be paid from the designated Retirement Plans. The motion was seconded by Commissioner Ward. All members present voted in favor. The motion passed unanimously.


**ADJOURNMENT**

Chairman Caldwell asked if there was a motion to adjourn. Commissioner Busler made a motion to adjourn, which was seconded by Commissioner Smith, and the meeting was adjourned.



---

MAYOR GLENN JACOBS, CHAIRMAN  
BY PROXY, CHRIS CALDWELL



---

COMMISSIONER RANDY SMITH, SECRETARY

Attachments:

1. COLA Impact Report

**KNOX COUNTY EMPLOYEE BENEFIT SYSTEM  
KNOX COUNTY BOARD OF EDUCATION RETIREMENT PLAN**

**Exhibit I  
Discount Rate =7.0%**

**Exhibit II  
Discount Rate =7.0%**

Plan Year Beginning	COLA = 2.50% for all years				Plan Year Beginning	COLA = 4.0% in year 1 and 2.50% thereafter			
	Actuarially Determined Contribution	Market Value of Assets (MVA)	Present Value of Accrued Benefits (PVAB)	Funded Ratio (PVAB/MVA)		Actuarially Determined Contribution	Market Value of Assets (MVA)	Present Value of Accrued Benefits (PVAB)	Funded Ratio (PVAB/MVA)
1/1/2021	1,200,000	53,511,000	61,227,000	87%	1/1/2021	1,200,000	53,511,000	61,227,000	87%
1/1/2022	1,200,000	53,165,000	58,862,000	90%	1/1/2022	1,200,000	53,165,000	59,477,000	89%
1/1/2023	1,200,000	51,443,000	56,383,000	91%	1/1/2023	1,200,000	51,367,000	56,964,000	90%
1/1/2024	1,200,000	49,674,000	53,799,000	92%	1/1/2024	1,200,000	49,519,000	54,347,000	91%
1/1/2025	1,200,000	47,874,000	51,123,000	94%	1/1/2025	1,200,000	47,637,000	51,638,000	92%
1/1/2026	1,200,000	46,061,000	48,370,000	95%	1/1/2026	1,200,000	45,738,000	48,851,000	94%
1/1/2027	1,200,000	44,256,000	45,556,000	97%	1/1/2027	1,200,000	43,844,000	46,003,000	95%
1/1/2028	575,000	42,480,000	42,696,000	99%	1/1/2028	1,200,000	41,976,000	43,110,000	97%
1/1/2029	0	40,110,000	39,810,000	101%	1/1/2029	340,000	40,157,000	40,191,000	100%
1/1/2030	0	37,179,000	36,916,000	101%	1/1/2030	0	37,523,000	37,266,000	101%
1/1/2031	0	34,264,000	34,036,000	101%	1/1/2031	0	34,576,000	34,355,000	101%
1/1/2032	0	31,386,000	31,190,000	101%	1/1/2032	0	31,667,000	31,478,000	101%
1/1/2033	0	28,565,000	28,397,000	101%	1/1/2033	0	28,817,000	28,657,000	101%
1/1/2034	0	25,822,000	25,680,000	101%	1/1/2034	0	26,045,000	25,912,000	101%
1/1/2035	0	23,176,000	23,056,000	101%	1/1/2035	0	23,372,000	23,263,000	100%
1/1/2036	0	20,645,000	20,545,000	100%	1/1/2036	0	20,816,000	20,727,000	100%
1/1/2037	0	18,246,000	18,163,000	100%	1/1/2037	0	18,393,000	18,322,000	100%
1/1/2038	0	15,994,000	15,925,000	100%	1/1/2038	0	16,119,000	16,062,000	100%
1/1/2039	0	13,900,000	13,843,000	100%	1/1/2039	0	14,005,000	13,961,000	100%
1/1/2040	0	11,975,000	11,927,000	100%	1/1/2040	0	12,061,000	12,027,000	100%
	8,975,000					9,940,000			

Census data is as of January 1, 2021.

The Market Value as of Assets as of June 30, 2021 has been used in these projections.

Contributions, benefit payments and administrative expenses assume mid-year timing.

Experience is assumed to exactly meet assumptions.

Expenses are assumed to be 0.2% of the beginning of year market value of assets.

The discount rate and return on asset assumptions are set at 7.0% for 2021+ for illustrative purposes only.

All other assumptions are consistent with those used to develop 1/1/2021 valuation results.

ASOP 51 risk analysis can be found in the to-be-issued 1/1/2021 actuarial report.

*These projections are estimates only. Future measures may differ significantly from the information shown here. Future measurements will be based on actual market value of assets, which varies based on the underlying portfolio experience, as well as Plan Sponsor contributions, benefit payments, and expenses paid from Plan assets. Liability calculations will be produced in accordance with current census data, as well as interest rates and mortality tables in effect at that time.*

**KNOX COUNTY EMPLOYEE BENEFIT SYSTEM  
UNIFORMED OFFICERS PENSION PLAN**

**Exhibit I  
Discount Rate = 7.25%**

Plan Year Beginning	COLA = 3% for participants under age 62 and 3.1% for participants over age 62 for all years				Plan Year Ending	COLA = 3% for participants under age 62 for all years and 4.0% for participants over age 62 for year 1 and 3.1% thereafter			
	Actuarially Determined Contribution	Market Value of Assets (MVA)	Present Value of Accrued Benefits (PVAB)	Funded Ratio (PVAB/MVA)		Actuarially Determined Contribution	Market Value of Assets (MVA)	Present Value of Accrued Benefits (PVAB)	Funded Ratio (PVAB/MVA)
1/1/2021	7,481,000	213,008,000	250,709,000	85%	1/1/2021	7,481,000	213,008,000	250,709,000	85%
1/1/2022	7,020,000	234,663,000	262,936,000	89%	1/1/2022	7,076,000	234,663,000	263,626,000	89%
1/1/2023	6,768,000	245,339,000	273,919,000	90%	1/1/2023	6,823,000	245,339,000	274,597,000	89%
1/1/2024	6,102,000	255,333,000	284,437,000	90%	1/1/2024	6,158,000	255,334,000	285,102,000	90%
1/1/2025	5,837,000	264,105,000	294,363,000	90%	1/1/2025	5,893,000	264,089,000	295,013,000	90%
1/1/2026	5,677,000	272,094,000	303,707,000	90%	1/1/2026	5,733,000	272,011,000	304,340,000	89%
1/1/2027	5,724,000	279,244,000	312,533,000	89%	1/1/2027	5,779,000	279,214,000	313,148,000	89%
1/1/2028	5,773,000	285,874,000	320,786,000	89%	1/1/2028	5,828,000	285,834,000	321,381,000	89%
1/1/2029	5,837,000	291,826,000	328,366,000	89%	1/1/2029	5,888,000	291,777,000	328,939,000	89%
1/1/2030	5,893,000	297,184,000	335,327,000	89%	1/1/2030	5,948,000	297,124,000	335,877,000	88%
1/1/2031	5,953,000	301,891,000	341,629,000	88%	1/1/2031	6,008,000	301,822,000	342,154,000	88%
1/1/2032	6,005,000	305,853,000	347,100,000	88%	1/1/2032	6,060,000	305,772,000	347,600,000	88%
1/1/2033	6,066,000	309,044,000	351,686,000	88%	1/1/2033	6,121,000	308,952,000	352,159,000	88%
1/1/2034	6,121,000	311,221,000	355,027,000	88%	1/1/2034	6,176,000	311,119,000	355,473,000	88%
1/1/2035	6,190,000	312,473,000	357,259,000	87%	1/1/2035	6,245,000	312,360,000	357,676,000	87%
1/1/2036	6,261,000	312,774,000	358,306,000	87%	1/1/2036	6,316,000	312,653,000	358,695,000	87%
1/1/2037	6,336,000	312,179,000	358,233,000	87%	1/1/2037	6,391,000	312,044,000	358,594,000	87%
1/1/2038	6,421,000	310,600,000	356,841,000	87%	1/1/2038	6,475,000	310,464,000	357,173,000	87%
1/1/2039	6,516,000	308,156,000	354,237,000	87%	1/1/2039	6,571,000	308,016,000	354,541,000	87%
1/1/2040	6,621,000	304,926,000	350,479,000	87%	1/1/2040	6,675,000	304,783,000	350,755,000	87%
	124,597,000					125,645,000			

Census data is as of January 1, 2021.  
The Market Value as of Assets as of November 3, 2021 has been used in these projections.  
Contributions, benefit payments and administrative expenses assume mid-year timing.  
Experience is assumed to exactly meet assumptions.  
Expenses are assumed to be 0.45% of the beginning of year market value of assets.  
The discount rate and return on asset assumptions are set at 7.25% for 2021+ for illustrative purposes only.  
All other assumptions are consistent with those used to develop 1/1/2021 actuarial results.  
ASOP 51 risk analysis can be found in the to-be-issued 1/1/2021 actuarial report.

*These projections are estimates only. Future measures may differ significantly from the information shown here. Future measurements will be based on actual market value of assets, which varies based on the underlying portfolio experience, as well as Plan Sponsor contributions, benefit payments, and expenses paid from Plan assets. Liability calculations will be produced in accordance with current census data, as well as interest rates and mortality tables in effect at that time.*

**Exhibit II  
Discount Rate = 7.00%**

Plan Year Beginning	COLA = 3% for participants under age 62 and 3.1% for participants over age 62 for all years				Plan Year Ending	COLA = 3% for participants under age 62 for all years and 4.0% for participants over age 62 for year 1 and 3.1% thereafter			
	Actuarially Determined Contribution	Market Value of Assets (MVA)	Present Value of Accrued Benefits (PVAB)	Funded Ratio (PVAB/MVA)		Actuarially Determined Contribution	Market Value of Assets (MVA)	Present Value of Accrued Benefits (PVAB)	Funded Ratio (PVAB/MVA)
1/1/2021	7,481,000	213,008,000	258,619,000	82%	1/1/2021	7,481,000	213,008,000	258,619,000	82%
1/1/2022	7,793,000	234,663,000	271,089,000	87%	1/1/2022	7,849,000	234,663,000	271,794,000	86%
1/1/2023	7,540,000	245,560,000	282,245,000	87%	1/1/2023	7,595,000	245,555,000	282,937,000	87%
1/1/2024	6,881,000	255,762,000	293,912,000	87%	1/1/2024	6,936,000	255,754,000	293,590,000	87%
1/1/2025	6,612,000	264,741,000	302,960,000	87%	1/1/2025	6,667,000	264,725,000	303,622,000	87%
1/1/2026	6,445,000	272,865,000	312,400,000	87%	1/1/2026	6,501,000	272,842,000	313,044,000	87%
1/1/2027	6,481,000	280,259,000	321,298,000	87%	1/1/2027	6,536,000	280,238,000	321,923,000	87%
1/1/2028	6,519,000	287,056,000	329,598,000	87%	1/1/2028	6,574,000	287,016,000	330,203,000	87%
1/1/2029	6,569,000	293,160,000	337,202,000	87%	1/1/2029	6,624,000	293,110,000	337,784,000	87%
1/1/2030	6,620,000	298,656,000	344,162,000	87%	1/1/2030	6,675,000	298,595,000	344,721,000	87%
1/1/2031	6,670,000	303,487,000	350,436,000	87%	1/1/2031	6,725,000	303,416,000	350,970,000	86%
1/1/2032	6,710,000	307,561,000	355,855,000	86%	1/1/2032	6,766,000	307,479,000	356,363,000	86%
1/1/2033	6,761,000	310,852,000	360,359,000	86%	1/1/2033	6,816,000	310,759,000	360,840,000	86%
1/1/2034	6,805,000	313,117,000	363,591,000	86%	1/1/2034	6,860,000	313,013,000	364,043,000	86%
1/1/2035	6,864,000	314,447,000	365,686,000	86%	1/1/2035	6,919,000	314,333,000	366,109,000	86%
1/1/2036	6,926,000	314,820,000	366,572,000	86%	1/1/2036	6,981,000	314,697,000	366,966,000	86%
1/1/2037	6,994,000	314,291,000	366,316,000	86%	1/1/2037	7,049,000	314,160,000	366,681,000	86%
1/1/2038	7,070,000	312,778,000	364,717,000	86%	1/1/2038	7,125,000	312,641,000	365,053,000	86%
1/1/2039	7,157,000	310,401,000	361,884,000	86%	1/1/2039	7,211,000	310,260,000	362,191,000	86%
1/1/2040	7,254,000	307,239,000	357,878,000	86%	1/1/2040	7,308,000	307,096,000	358,157,000	86%
	138,152,000					139,198,000			

Census data is as of January 1, 2021.  
The Market Value as of Assets as of November 3, 2021 has been used in these projections.  
Contributions, benefit payments and administrative expenses assume mid-year timing.  
Experience is assumed to exactly meet assumptions.  
Expenses are assumed to be 0.45% of the beginning of year market value of assets.  
The discount rate and return on asset assumptions are set at 7.25% for 2021 and 7.00% for 2022+ for illustrative purposes only.  
All other assumptions are consistent with those used to develop 1/1/2021 actuarial results.  
ASOP 51 risk analysis can be found in the to-be-issued 1/1/2021 actuarial report.

*These projections are estimates only. Future measures may differ significantly from the information shown here. Future measurements will be based on actual market value of assets, which varies based on the underlying portfolio experience, as well as Plan Sponsor contributions, benefit payments, and expenses paid from Plan assets. Liability calculations will be produced in accordance with current census data, as well as interest rates and mortality tables in effect at that time.*



**KNOX COUNTY EMPLOYEE BENEFIT SYSTEM  
UNIFORMED OFFICERS PENSION PLAN**

**Exhibit III  
Discount Rate = 7.25%**

Plan Year Beginning	COLA = 3% for participants under age 62 and 3.1% for participants over age 62 for all years				Funded Ratio (MVA/TPL)	Plan Year Ending	COLA = 3% for participants under age 62 for all years and 4.0% for participants over age 62 for year 1 and 3.1% thereafter				Funded Ratio (MVA/TPL)
	Pension Expense	Plan Fiduciary Net Position	Total Pension Liability	Total Pension Liability			Pension Expense	Plan Fiduciary Net Position	Total Pension Liability	Total Pension Liability	
6/30/2021	9,911,000	226,221,000	285,079,000	285,079,000	79%	6/30/2021	9,911,000	226,221,000	285,079,000	285,079,000	79%
6/30/2022	8,644,000	240,436,000	294,645,000	294,645,000	82%	6/30/2022	8,766,000	240,416,000	295,310,000	295,310,000	81%
6/30/2023	8,721,000	251,189,000	304,250,000	304,250,000	83%	6/30/2023	8,890,000	251,165,000	304,923,000	304,923,000	82%
6/30/2024	7,599,000	261,224,000	313,294,000	313,294,000	83%	6/30/2024	7,768,000	261,196,000	313,552,000	313,552,000	83%
6/30/2025	4,279,000	270,033,000	321,742,000	321,742,000	84%	6/30/2025	4,447,000	269,999,000	322,384,000	322,384,000	84%
6/30/2026	10,260,000	278,021,000	329,609,000	329,609,000	84%	6/30/2026	10,427,000	277,980,000	330,233,000	330,233,000	84%
6/30/2027	5,794,000	285,272,000	336,870,000	336,870,000	85%	6/30/2027	5,933,000	285,224,000	337,476,000	337,476,000	85%
6/30/2028	5,570,000	291,913,000	343,452,000	343,452,000	85%	6/30/2028	5,563,000	291,857,000	344,037,000	344,037,000	85%
6/30/2029	5,477,000	297,938,000	349,297,000	349,297,000	85%	6/30/2029	5,518,000	297,873,000	349,860,000	349,860,000	85%
6/30/2030	5,459,000	303,362,000	354,459,000	354,459,000	86%	6/30/2030	5,500,000	303,287,000	354,997,000	354,997,000	85%
6/30/2031	5,413,000	308,118,000	358,812,000	358,812,000	86%	6/30/2031	5,452,000	308,034,000	359,326,000	359,326,000	86%
6/30/2032	5,307,000	312,155,000	362,270,000	362,270,000	86%	6/30/2032	5,345,000	312,061,000	362,757,000	362,757,000	86%
6/30/2033	5,207,000	315,337,000	364,718,000	364,718,000	86%	6/30/2033	5,244,000	315,230,000	365,178,000	365,178,000	86%
6/30/2034	5,090,000	317,572,000	366,024,000	366,024,000	87%	6/30/2034	5,126,000	317,461,000	366,457,000	366,457,000	87%
6/30/2035	4,943,000	318,904,000	366,249,000	366,249,000	87%	6/30/2035	4,978,000	318,785,000	366,654,000	366,654,000	87%
6/30/2036	4,798,000	319,343,000	365,358,000	365,358,000	87%	6/30/2036	4,831,000	319,218,000	365,734,000	365,734,000	87%
6/30/2037	4,695,000	318,891,000	363,340,000	363,340,000	88%	6/30/2037	4,726,000	318,761,000	363,687,000	363,687,000	88%
6/30/2038	4,503,000	317,554,000	360,169,000	360,169,000	88%	6/30/2038	4,532,000	317,421,000	360,487,000	360,487,000	88%
6/30/2039	4,342,000	315,427,000	355,962,000	355,962,000	89%	6/30/2039	4,370,000	315,292,000	356,253,000	356,253,000	89%
6/30/2040	4,093,000	312,562,000	350,675,000	350,675,000	89%	6/30/2040	4,119,000	312,429,000	350,938,000	350,938,000	89%
	120,055,000						121,446,000				

Census data is as of January 1, 2021.  
The Market Value as of Assets as of November 3, 2021 has been used in these projections.  
Contributions, benefit payments and administrative expenses assume mid-year timing.  
Experience is assumed to exactly meet assumptions.  
Expenses are assumed to be 0.45% of the beginning of year market value of assets.  
The discount rate and return on asset assumptions are set at 7.25% for 2021+ for illustrative purposes only.  
All other assumptions are consistent with those used to develop 1/1/2021 valuation results.  
ASOP 51 risk analysis can be found in the to-be-issued 1/1/2021 actuarial report.

*These projections are estimates only. Future measures may differ significantly from the information shown here. Future measurements will be based on actual market value of assets, which varies based on the underlying portfolio experience, as well as Plan Sponsor contributions, benefit payments, and expenses paid from Plan assets. Liability calculations will be produced in accordance with current census data, as well as interest rates and mortality tables in effect at that time.*

**Exhibit IV  
Discount Rate = 7.00%**

Plan Year Beginning	COLA = 3% for participants under age 62 and 3.1% for participants over age 62 for all years				Funded Ratio (MVA/TPL)	Plan Year Ending	COLA = 3% for participants under age 62 for all years and 4.0% for participants over age 62 for year 1 and 3.1% thereafter				Funded Ratio (MVA/TPL)
	Pension Expense	Plan Fiduciary Net Position	Total Pension Liability	Total Pension Liability			Pension Expense	Plan Fiduciary Net Position	Total Pension Liability	Total Pension Liability	
6/30/2021	9,911,000	226,221,000	285,079,000	285,079,000	79%	6/30/2021	9,911,000	226,221,000	285,079,000	285,079,000	79%
6/30/2022	10,388,000	240,436,000	303,748,000	303,748,000	79%	6/30/2022	10,388,000	240,416,000	304,447,000	304,447,000	79%
6/30/2023	11,120,000	251,189,000	313,454,000	313,454,000	80%	6/30/2023	11,120,000	251,165,000	314,140,000	314,140,000	80%
6/30/2024	9,979,000	261,666,000	322,558,000	322,558,000	81%	6/30/2024	9,979,000	261,666,000	323,279,000	323,279,000	81%
6/30/2025	6,609,000	270,659,000	331,057,000	331,057,000	82%	6/30/2025	6,609,000	270,659,000	331,711,000	331,711,000	82%
6/30/2026	12,599,000	278,881,000	338,950,000	338,950,000	82%	6/30/2026	12,599,000	278,881,000	339,586,000	339,586,000	82%
6/30/2027	6,747,000	286,325,000	346,213,000	346,213,000	83%	6/30/2027	6,747,000	286,325,000	346,829,000	346,829,000	83%
6/30/2028	6,072,000	293,142,000	352,773,000	352,773,000	83%	6/30/2028	6,072,000	293,142,000	353,367,000	353,367,000	83%
6/30/2029	6,012,000	299,327,000	358,571,000	358,571,000	83%	6/30/2029	6,012,000	299,327,000	359,143,000	359,143,000	83%
6/30/2030	5,977,000	304,898,000	363,663,000	363,663,000	84%	6/30/2030	5,977,000	304,898,000	364,210,000	364,210,000	84%
6/30/2031	5,911,000	309,787,000	367,923,000	367,923,000	84%	6/30/2031	5,911,000	309,787,000	368,444,000	368,444,000	84%
6/30/2032	5,783,000	313,946,000	371,261,000	371,261,000	85%	6/30/2032	5,783,000	313,946,000	371,756,000	371,756,000	84%
6/30/2033	5,660,000	317,232,000	373,566,000	373,566,000	85%	6/30/2033	5,660,000	317,232,000	374,033,000	374,033,000	85%
6/30/2034	5,520,000	319,569,000	374,705,000	374,705,000	85%	6/30/2034	5,520,000	319,569,000	375,144,000	375,144,000	85%
6/30/2035	5,350,000	320,988,000	374,740,000	374,740,000	86%	6/30/2035	5,350,000	320,988,000	375,150,000	375,150,000	86%
6/30/2036	5,181,000	321,508,000	373,639,000	373,639,000	86%	6/30/2036	5,181,000	321,508,000	374,020,000	374,020,000	86%
6/30/2037	5,074,000	321,132,000	371,410,000	371,410,000	86%	6/30/2037	5,074,000	321,132,000	371,762,000	371,762,000	86%
6/30/2038	4,838,000	319,869,000	367,992,000	367,992,000	87%	6/30/2038	4,838,000	319,869,000	368,315,000	368,315,000	87%
6/30/2039	4,653,000	317,816,000	363,523,000	363,523,000	87%	6/30/2039	4,653,000	317,816,000	363,817,000	363,817,000	87%
6/30/2040	4,380,000	315,028,000	357,957,000	357,957,000	88%	6/30/2040	4,380,000	315,028,000	358,223,000	358,223,000	88%
	137,794,000						139,190,000				

Census data is as of January 1, 2021.  
The Market Value as of Assets as of November 3, 2021 has been used in these projections.  
Contributions, benefit payments and administrative expenses assume mid-year timing.  
Experience is assumed to exactly meet assumptions.  
Expenses are assumed to be 0.45% of the beginning of year market value of assets.  
The discount rate and return on asset assumptions are set at 7.25% for 2021 and 7.00% for 2022+ for illustrative purposes only.  
All other assumptions are consistent with those used to develop 1/1/2021 valuation results.  
ASOP 51 risk analysis can be found in the to-be-issued 1/1/2021 actuarial report.

*These projections are estimates only. Future measures may differ significantly from the information shown here. Future measurements will be based on actual market value of assets, which varies based on the underlying portfolio experience, as well as Plan Sponsor contributions, benefit payments, and expenses paid from Plan assets. Liability calculations will be produced in accordance with current census data, as well as interest rates and mortality tables in effect at that time.*