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NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEM

COUNTY EQUAL RETIREMENT BENEFIT FUND

Actuarial Valuation Results as of January 1, 2019

for State Fiscal Year Ending June 30, 2020

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March 5, 2019

Public Employees Retirement Board
Nebraska Public Employees Retirement Systems
1526 "K" Street
Suite 400
Lincoln, NE 68509-4816

**RE: Certification of Actuarial Valuation
County Equal Retirement Benefit Fund**

Members of the Board:

At your request, we have prepared an actuarial valuation of the County Equal Retirement Benefit Fund as of January 1, 2019 for the purpose of determining the funded status of the Plan and any required contributions for the plan year. Funding required from each participating County for current plan members, as approved by the Retirement Board, is equal to an amount necessary to fully fund the benefit obligation, or alternatively, an annual payment which would amortize the unfunded liability over a period of twenty years commencing January 1, 1999. The initial twenty-year amortization period has elapsed so the current valuation reflects a one-year amortization period.

There were no changes to the plan provisions or actuarial methods from the prior valuation. The only change to the actuarial assumptions was the annual update of the annuity conversion interest rate for members retiring from the Defined Contribution Plan.

The actuarial valuation is based on unaudited financial data provided by the System and member data provided by Ameritas, the record keeper for the Plan. We found this information to be reasonably consistent and comparable with the information used in the prior report. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete, our results may be different and our calculations may need to be revised. The benefits considered are those delineated in Nebraska State Statutes as of January 1, 2019.

We further certify that all costs, liabilities, rates of interest and other factors for the County Equal Retirement Benefit Fund have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer the best estimate of anticipated experience affecting the System. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. The Public Employees Retirement Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix B.

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. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

The consultants who worked on this assignment are pension actuaries. CMC's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. We are available to answer any questions on the material contained in the report or to provide explanations or further details as may be appropriate.

We respectfully submit the following report and look forward to discussing it with you.

Respectfully submitted,

Patrice Beckham

Brent A. Banister

Patrice Beckham, FSA, FCA, EA, MAAA
Principal and Consulting Actuary

Brent Banister, PhD, FSA, FCA, EA, MAAA
Chief Actuary

EXECUTIVE SUMMARY

The County Equal Retirement Benefit Fund provides a benefit for members who had account balances on January 1, 1984 and elect to convert those balances to monthly income (annuity) at retirement. The Fund was established to protect members who might be negatively affected by the legal requirement to change from sex-distinct annuity factors to unisex annuity factors. As such, the characteristics of the liability of the Fund and the funding requirements are different from the other traditional defined benefit plans managed by the Nebraska Public Employees Retirement System (NPERS). This report determines the contribution requirements for the counties who still have members in the Fund as well as providing statistical information that may provide insight into the Fund's longer term financial health. The initial amortization period, which was set at 20 years on January 1, 1999, has elapsed so a one year period was used in this valuation. There was an actuarial loss of $32,000 on Plan assets due to the actual return of -4.8% for 2018, compared to the 7.5% assumption. However, there was a liability gain that offset part of the actuarial loss on assets. While there is insufficient data to quantify the sources of liability experience, the actuarial gain is likely from fewer members electing monthly income than expected. Note that if a member elects a lump sum distribution, it eliminates the liability under this Plan. Due to the aggregate experience on assets and liabilities, the amount of surplus in this valuation declined to $280,937 from $297,295 in the January 1, 2018 valuation. However, the assets still remain greater than the liabilities of the Plan and there is no additional contribution for any of the counties.

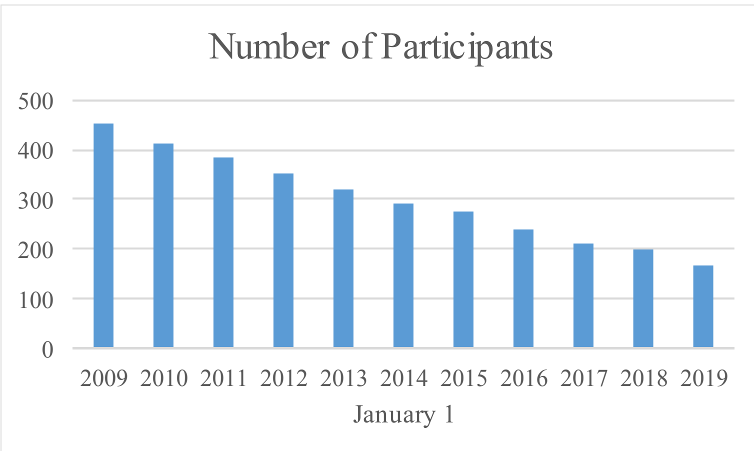
There are several risk factors that are key to the Fund's financial status over time. One of the most significant of these factors is the proportion of retirees that elect to take an annuity rather than a lump sum. An individual member's choice is based on their own personal situation and may consider different factors compared to other individuals who are also making this choice. The funding assumption is that 25% of the account balances of retiring members, in aggregate, will be converted to monthly income (an annuity). While we believe this assumption is reasonable, there are other assumptions that could also be considered reasonable that would result in a different funded status and contribution amount. In particular, if a greater portion of account balances are annuitized at retirement, the liability of the Fund would be higher than estimated in this report. The possible volatility in the amount of liability, especially at the individual county level, is a risk that should be considered and evaluated. To assist with this analysis, we have included an exhibit in the report that shows the impact of a higher annuity election by retiring members (Exhibit 4). Liability results are shown assuming 50% or 75% of the aggregate account balances are annuitized rather than the 25% assumed in the basic valuation calculations. Although these alternatives assumptions may or may not be reasonable in the aggregate, because most counties have relatively few members, the alternative results provide some measure of the possible downside risk.

Other factors and assumptions affecting the results include the following:

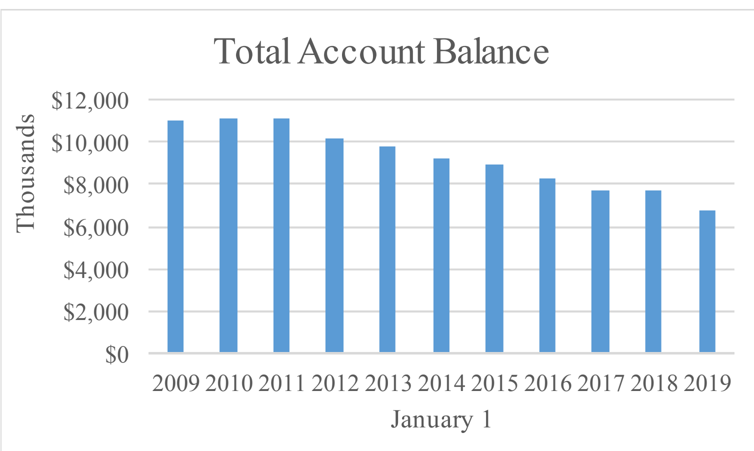
- Account growth – the account balances for both the cash balance and defined contribution members are assumed to increase at 7.50% annually. To the extent actual investment returns (or interest credits and dividends in the cash balance accounts) are lower, the benefits assumed to be paid from the Fund are lower and the liabilities are lower.
- Annuity factor interest rate – the defined contribution balances are assumed to be annuitized at the current applicable interest rate (3.84% as of January 1, 2019). If interest rates decrease in the future, the difference in the liability of a benefit determined using a unisex annuity factor and the benefit determined using a male annuity factor increases, and so the liabilities of the Fund would increase.

- General economic conditions – there are connections between the growth in the members' account balances, the interest rate environment (affecting the annuity factor interest rate), the investment return on the assets of the Fund, and the way in which potential retirees view the financial ramifications of retiring and electing an annuity. The exact interplay of these variables is extremely complex, but the fact that there is a connection means that the possible variability of the Fund's financial situation is potentially greater than it might otherwise appear. **Consequently, we urge caution in concluding that the current strong financial health of the Fund will continue indefinitely.**

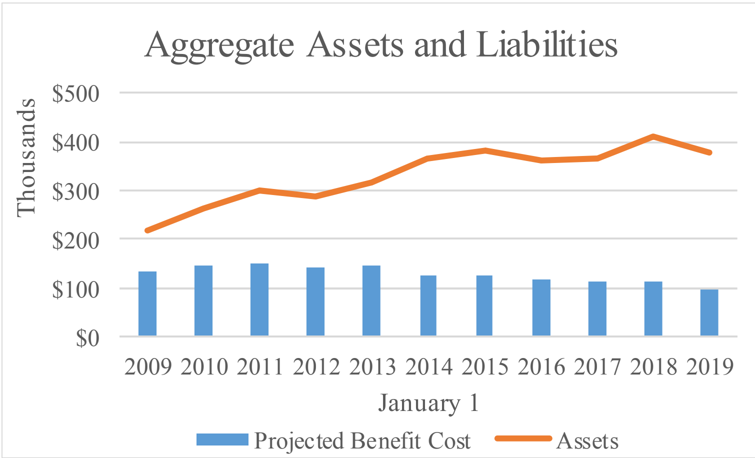
It is important to note that an unfunded liability is not, by itself, an indication of whether or not the Fund has sufficient assets to meet future liabilities. Further, the presence of an unfunded liability or surplus is not an indication of what future contributions may be required to fund the benefits.The following graphs show trends in the Fund over recent years:



Because there are no new members in the Fund, the number of participants has declined in past years and is expected to continue to decline in future years. Eventually, there will be no participants remaining.



When comparing the total account balances in the current and past years, the growth in account balances due to investment earnings partially offsets the impact of a declining membership.



While an individual county may occasionally need to make a contribution to avoid a shortfall between liabilities and assets, the combined assets of the Fund are well above the aggregate liabilities.

EXHIBIT 1 – SUMMARY OF ACTUARIAL RESULTS

Below is a comparison of the aggregate results of the current and prior year's actuarial valuations.

Results	Actuarial Valuation as of January 1 2019	Actuarial Valuation as of January 1 2018
Number of Members		
Cash Balance	87	107
Defined Contribution	80	92
Total	167	199
Pre-1984 Account Balance with Interest, Beginning of Year		
Cash Balance	$3,955,420	$4,319,189
Defined Contribution	2,845,254	3,347,680
Total	$6,800,674	$7,666,869
Projected Benefit Cost*		
a. Amount	$98,342	$112,857
b. As a Percent of the Account Balance	1.446%	1.472%
c. Annuity Factor Interest Rate – Cash Balance	7.75%	7.75%
d. Annuity Factor Interest Rate – Defined Contribution	3.84%	3.14%
Market Value of Assets		
a. Asset Value as of Prior Year's Valuation	$410,152	$363,637
b. Deposits During the Year	0	0
c. Withdrawals During the Year	11,426	7,378
d. Investment Return or (Loss)	(19,447)	53,893
e. Other	0	0
f. Market Value of Assets as of Valuation Date [a. + b. - c. + d + e.]	$379,279	$410,152
Unfunded Liability/(Surplus)	($280,937)	($297,295)
Total Contribution Amount (All Counties)	$0	$0

*Cost is based on the assumption that 75% of all members will elect a lump sum or installment payments instead of an annuity. To the extent that actual experience in the future deviates from this assumption, the costs in future years could vary as well, perhaps significantly.

EXHIBIT 2 – SUMMARY OF FUND ASSETS BY COUNTY

County Name	Beginning Balance January 1, 2018	Employer Contributions for 2018	Withdrawals	Investment Return	Other	Ending Balance December 31, 2018
1. Adams	$ 20,157	$ 0	$ 0	$ (983)	$ 0	$ 19,174
2. Box Butte	8,019	0	0	(391)	0	7,628
3. Buffalo	20,160	0	0	(983)	0	19,177
4. Cass	1,332	0	0	(65)	0	1,267
5. Cheyenne	2,007	0	0	(97)	0	1,910
6. Cuming	15,139	0	0	(738)	0	14,401
7. Custer	13,769	0	0	(671)	0	13,098
8. Dawson	30,626	0	2,738	(1,367)	0	26,521
9. Dodge	24,011	0	0	(1,170)	0	22,841
10. Gage	10,895	0	1,793	(449)	0	8,653
11. Gosper	1,540	0	0	(75)	0	1,465
12. Hall	34,413	0	0	(1,679)	0	32,734
13. Harlan	4,180	0	0	(203)	0	3,977
14. Hitchcock	9,093	0	0	(444)	0	8,649
15. Jefferson	15,837	0	0	(772)	0	15,065
16. Kimball	14,097	0	384	(670)	0	13,043
17. Lincoln	5,089	0	0	(248)	0	4,841
18. Madison	11,682	0	851	(512)	0	10,319
19. Morrill	14,672	0	0	(715)	0	13,957
20. Platte	33,557	0	1,740	(1,548)	0	30,269
21. Polk	3,499	0	2,386	(71)	0	1,042
22. Red Willow	4,509	0	0	(220)	0	4,289
23. Richardson	9,689	0	0	(473)	0	9,216
24. Saline	4,500	0	0	(219)	0	4,281
25. Sarpy	29,853	0	1,534	(1,378)	0	26,941
26. Saunders	18,930	0	0	(923)	0	18,007
27. Scottsbluff	11,901	0	0	(580)	0	11,321
28. Seward	8,425	0	0	(411)	0	8,014
29. Washington	15,859	0	0	(773)	0	15,086
30. York	12,712	0	0	(619)	0	12,093
Totals	$ 410,152	$ 0	$ 11,426	$ (19,447)	$ 0	$ 379,279

EXHIBIT 3 – ACTUARIAL RESULTS AND CONTRIBUTION ALTERNATIVES BY COUNTY

County Name	Number of Members	Projected Benefit Cost*	Assets	2018 Full Contribution	2019 Full Contribution
1. Adams	5	$ 1,944	$ 19,174	$ 0	$ 0
2. Box Butte	4	1,169	7,628	0	0
3. Buffalo	15	6,944	19,177	0	0
4. Cass	1	204	1,267	0	0
5. Cheyenne	2	466	1,910	0	0
6. Cuming	1	198	14,401	0	0
7. Custer	8	3,898	13,098	0	0
8. Dawson	6	4,340	26,521	0	0
9. Dodge	9	8,096	22,841	0	0
10. Gage	10	5,058	8,653	0	0
11. Gosper	3	1,067	1,465	0	0
12. Hall	8	3,100	32,734	0	0
13. Harlan	3	2,160	3,977	0	0
14. Hitchcock	2	1,288	8,649	0	0
15. Jefferson	3	1,894	15,065	0	0
16. Kimball	2	554	13,043	0	0
17. Lincoln	3	607	4,841	0	0
18. Madison	12	5,911	10,319	0	0
19. Morrill	0	0	13,957	0	0
20. Platte	14	8,501	30,269	0	0
21. Polk	2	721	1,042	0	0
22. Red Willow	2	122	4,289	0	0
23. Richardson	3	2,200	9,216	0	0
24. Saline	2	543	4,281	0	0
25. Sarpy	17	13,797	26,941	0	0
26. Saunders	8	7,606	18,007	0	0
27. Scottsbluff	7	8,431	11,321	0	0
28. Seward	6	3,741	8,014	0	0
29. Washington	6	1,576	15,086	0	0
30. York	3	2,206	12,093	0	0
Totals	167	$ 98,342	$ 379,279	$ 0	$ 0

* Cost is based on the assumption that 75% of retiring members will choose a lump sum or installment payments instead of an annuity. To the extent that actual experience in the future deviates from this assumption, the costs in future years could vary as well, at times significantly.

EXHIBIT 4 – RISK MEASURES BY COUNTY

This exhibit compares the Projected Benefit Cost (liability) assuming 25% of the account balances of retiring members are converted to an annuity (the funding assumption) with alternative assumptions of 50% and 75%. As the table below indicates, greater utilization of the annuity option by members could significantly increase the liability of the plan and, therefore, the unfunded liability and contribution amount. If a county has assets exceeding the liability of one or both of the alternative assumption scenarios, it indicates it is in a better position to withstand possible adverse experience.

County Name	Number of Members	Projected Benefit Cost 25% Annuitize	Projected Benefit Cost 50% Annuitize	Projected Benefit Cost 75% Annuitize	Assets
1. Adams	5	$ 1,944	$ 3,888	$ 5,832	$ 19,174
2. Box Butte	4	1,169	2,338	3,507	7,628
3. Buffalo	15	6,944	13,888	20,832	19,177
4. Cass	1	204	408	612	1,267
5. Cheyenne	2	466	932	1,398	1,910
6. Cuming	1	198	396	594	14,401
7. Custer	8	3,898	7,796	11,694	13,098
8. Dawson	6	4,340	8,680	13,020	26,521
9. Dodge	9	8,096	16,192	24,288	22,841
10. Gage	10	5,058	10,116	15,174	8,653
11. Gosper	3	1,067	2,134	3,201	1,465
12. Hall	8	3,100	6,200	9,300	32,734
13. Harlan	3	2,160	4,320	6,480	3,977
14. Hitchcock	2	1,288	2,576	3,864	8,649
15. Jefferson	3	1,894	3,788	5,682	15,065
16. Kimball	2	554	1,108	1,662	13,043
17. Lincoln	3	607	1,214	1,821	4,841
18. Madison	12	5,911	11,822	17,733	10,319
19. Morrill	0	0	0	0	13,957
20. Platte	14	8,501	17,002	25,503	30,269
21. Polk	2	721	1,442	2,163	1,042
22. Red Willow	2	122	244	366	4,289
23. Richardson	3	2,200	4,400	6,600	9,216
24. Saline	2	543	1,086	1,629	4,281
25. Sarpy	17	13,797	27,594	41,391	26,941
26. Saunders	8	7,606	15,212	22,818	18,007
27. Scottsbluff	7	8,431	16,862	25,293	11,321
28. Seward	6	3,741	7,482	11,223	8,014
29. Washington	6	1,576	3,152	4,728	15,086
30. York	3	2,206	4,412	6,618	12,093
Totals	167	$ 98,342	$ 196,684	$ 295,026	$ 379,279

EXHIBIT 4 (CONTINUED) – RISK MEASURES BY COUNTY

County Name	Number of Members	Unfunded Liability 25% Annuitize	Unfunded Liability 50% Annuitize	Unfunded Liability 75% Annuitize
1. Adams	5	$ 0	$ 0	$ 0
2. Box Butte	4	0	0	0
3. Buffalo	15	0	0	1,655
4. Cass	1	0	0	0
5. Cheyenne	2	0	0	0
6. Cuming	1	0	0	0
7. Custer	8	0	0	0
8. Dawson	6	0	0	0
9. Dodge	9	0	0	1,447
10. Gage	10	0	1,463	6,521
11. Gosper	3	0	669	1,736
12. Hall	8	0	0	0
13. Harlan	3	0	343	2,503
14. Hitchcock	2	0	0	0
15. Jefferson	3	0	0	0
16. Kimball	2	0	0	0
17. Lincoln	3	0	0	0
18. Madison	12	0	1,503	7,414
19. Morrill	0	0	0	0
20. Platte	14	0	0	0
21. Polk	2	0	400	1,121
22. Red Willow	2	0	0	0
23. Richardson	3	0	0	0
24. Saline	2	0	0	0
25. Sarpy	17	0	653	14,450
26. Saunders	8	0	0	4,811
27. Scottsbluff	7	0	5,541	13,972
28. Seward	6	0	0	3,209
29. Washington	6	0	0	0
30. York	3	0	0	0
Totals	167	$ 0	$ 10,572	$ 58,839

EXHIBIT 5 – SUMMARY OF MEMBER DATA

Age Range	Data	Gender Male	Female	Total
Less Than 55	Count of Members	0	0	0
	Average of Total Balance	$ 0	$ 0	$ 0
	Sum of Total Balance	$ 0	$ 0	$ 0
55-59	Count of Members	0	1	1
	Average of Total Balance	$ 0	$ 25,535	$ 25,535
	Sum of Total Balance	$ 0	$ 25,535	$ 25,535
60-64	Count of Members	38	31	69
	Average of Total Balance	$ 31,872	$ 23,690	$ 28,196
	Sum of Total Balance	$ 1,211,132	$ 734,396	$ 1,945,528
65-69	Count of Members	28	28	56
	Average of Total Balance	$ 48,698	$ 31,363	$ 40,030
	Sum of Total Balance	$ 1,363,545	$ 878,155	$ 2,241,700
70-74	Count of Members	10	10	20
	Average of Total Balance	$ 75,335	$ 57,632	$ 66,484
	Sum of Total Balance	$ 753,350	$ 576,322	$ 1,329,672
75 and Above	Count of Members	15	6	21
	Average of Total Balance	$ 73,041	$ 27,104	$ 59,916
	Sum of Total Balance	$ 1,095,618	$ 162,621	$ 1,258,239
Total Members		91	76	167
Average of Total Balance		$ 48,611	$ 31,277	$ 40,723
Grand Total Balance		$ 4,423,645	$ 2,377,029	$ 6,800,674

EXHIBIT 6 – SUMMARY OF MEMBER DATA BY COUNTY

County	Data	Gender Male		Female		Total	
Adams	Count of Members		4		1		5
	Sum of Total Balance	$	131,171	$	11,164	$	142,335
Box Butte	Count of Members		2		2		4
	Sum of Total Balance	$	65,406	$	21,002	$	86,408
Buffalo	Count of Members		7		8		15
	Sum of Total Balance	$	236,776	$	238,295	$	475,071
Cass	Count of Members		1		0		1
	Sum of Total Balance	$	17,423	$	0	$	17,423
Cheyenne	Count of Members		0		2		2
	Sum of Total Balance	$	0	$	37,609	$	37,609
Cuming	Count of Members		0		1		1
	Sum of Total Balance	$	0	$	14,603	$	14,603
Custer	Count of Members		5		3		8
	Sum of Total Balance	$	198,245	$	76,403	$	274,648
Dawson	Count of Members		6		0		6
	Sum of Total Balance	$	306,387	$	0	$	306,387
Dodge	Count of Members		5		4		9
	Sum of Total Balance	$	269,582	$	273,136	$	542,718
Gage	Count of Members		6		4		10
	Sum of Total Balance	$	294,440	$	67,649	$	362,089
Gosper	Count of Members		2		1		3
	Sum of Total Balance	$	27,638	$	40,745	$	68,383
Hall	Count of Members		3		5		8
	Sum of Total Balance	$	100,896	$	105,851	$	206,747
Harlan	Count of Members		1		2		3
	Sum of Total Balance	$	147,642	$	9,167	$	156,809
Hitchcock	Count of Members		2		0		2
	Sum of Total Balance	$	75,897	$	0	$	75,897
Jefferson	Count of Members		1		2		3
	Sum of Total Balance	$	77,028	$	64,202	$	141,230
Kimball	Count of Members		0		2		2
	Sum of Total Balance	$	0	$	44,505	$	44,505
Lincoln	Count of Members		1		2		3
	Sum of Total Balance	$	29,031	$	13,342	$	42,373
Madison	Count of Members		6		6		12
	Sum of Total Balance	$	184,805	$	193,730	$	378,535
Morrill	Count of Members		0		0		0
	Sum of Total Balance	$	0	$	0	$	0

EXHIBIT 6 (Continued) – SUMMARY OF MEMBER DATA BY COUNTY

County	Data	Gender Male	Female	Total
Platte	Count of Members	10	4	14
	Sum of Total Balance	$ 484,615	$ 117,597	$ 602,212
Polk	Count of Members	1	1	2
	Sum of Total Balance	$ 27,110	$ 14,175	$ 41,285
Red Willow	Count of Members	2	0	2
	Sum of Total Balance	$ 9,848	$ 0	$ 9,848
Richardson	Count of Members	2	1	3
	Sum of Total Balance	$ 100,744	$ 27,204	$ 127,948
Saline	Count of Members	2	0	2
	Sum of Total Balance	$ 45,405	$ 0	$ 45,405
Sarpy	Count of Members	8	9	17
	Sum of Total Balance	$ 647,728	$ 328,133	$ 975,861
Saunders	Count of Members	6	2	8
	Sum of Total Balance	$ 289,263	$ 196,890	$ 486,153
Scottsbluff	Count of Members	4	3	7
	Sum of Total Balance	$ 550,025	$ 60,196	$ 610,221
Seward	Count of Members	1	5	6
	Sum of Total Balance	$ 37,750	$ 215,202	$ 252,952
Washington	Count of Members	2	4	6
	Sum of Total Balance	$ 50,628	$ 60,740	$ 111,368
York	Count of Members	1	2	3
	Sum of Total Balance	$ 18,162	$ 145,489	$ 163,651
	Members			
	Cash Balance	48	39	87
	Defined Contribution	43	37	80
	Total	91	76	167
Grand Total Balance				
Cash Balance		$ 2,605,769	$ 1,349,651	$ 3,955,420
Defined Contribution		1,817,876	1,027,378	2,845,254
Total		$ 4,423,645	$ 2,377,029	$ 6,800,674

APPENDIX A – SUMMARY OF BENEFIT PROVISIONS

Member	Any person employed by a County participating in either the Defined Contribution or Cash Balance Benefit under the County Employees Retirement System who has an accumulated account balance based on contributions which were made prior to January 1, 1984.
Contributions	Each participating County shall make contributions to the fund on an actuarial basis as approved by the Retirement Board.
Eligibility for Benefits	Any member who retires or terminates service and elects to convert to an annuity using their accumulated account balance, with interest, commencing on or after age 55, is eligible to receive a benefit from the fund.
Benefit Amount	The fund shall provide the Actuarially Equivalent amount required to purchase the additional monthly annuity, if any, which is equal to: a. the income provided by the accumulated contributions made prior to January 1, 1984 with interest, based on male annuity conversion factors in effect on the annuity starting date, Less b. the income provided by the accumulated contributions made prior to January 1, 1984 with interest, which are based on 50% male / 50% female annuity conversion factors in effect on the annuity starting date.
Cash Balance Conversion	Any member who elected to transfer his or her account balance to the Nebraska County Cash Balance Plan as of January 1, 2003, January 1, 2008 or January 2, 2013 will have his or her Benefit Amount determined using the annuity conversion interest rate applicable to the County Employees Retirement System (Cash Balance Benefit), which is 7.75%. Any other member will have his or her Benefit amount determined using the annuity conversion interest rate applicable to the County Employees Retirement System (Defined Contribution benefit), which for 2019 is 3.84%.
Cost of Living Adjustment (COLA)	Any member who elects an annuity has the option to purchase a 2.50% COLA, compounded annually.

Changes in Benefit Provisions Since the Prior Year

There were no changes in the benefit provisions since the last valuation.

APPENDIX B – SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

Economic Assumptions

1. Investment Return	7.50% per annum, compounded annually, net of expenses.
2. Consumer Price Inflation	2.75% per annum, compounded annually.
3. Interest on accumulated contribution balances (contributions made before January 1, 1984)	7.50% per annum, compounded annually.
4. Annuity Conversion Interest Rates	7.75% for annuities from the Cash Balance Plan 3.84% for annuities from the Defined Contribution Plan

Demographic Assumptions

1. Mortality	
a. Pre-retirement	None.
b. Post-retirement	1994 Group Annuity Mortality (based on Actuarial Equivalence definition in statute).
2. Withdrawal	None.
3. Disability	None.

4. Retirement

Rates vary by age as follows:

Age	County Annual Rates
55	4.5%
56	4.5
57	4.5
58	4.5
59	4.5
60	4.5
61	5.0
62	10.0
63	10.0
64	10.0
65	20.0
66	20.0
67	15.0
68	15.0
69	15.0
70-79	20.0
80	100.0

Other Assumptions

1. Payment election

75% of the account balances of retiring members are assumed to be paid as a lump sum distribution or installment payment, and 25% of the account balances of retiring members are assumed to be paid as an annuity form of distribution.

2. Form of Annuity Payment

Of members electing an annuity, 80% of those members were assumed to elect a 5-year certain and life annuity without COLA, and 20% of those members were assumed to elect a 5-year certain and life with a 2.5% annual COLA.

Methods

1. Funding Method — The present value of future benefits or Projected Benefit Cost, less the Market Value of Assets, equals the Unfunded Liability or Surplus. The minimum recommended contribution is equal to an annual amount necessary to amortize the Unfunded Liability over twenty years from January 1, 1999.

2. Asset Valuation Method — Fair market value.

Changes in Assumptions Since the Prior Year

The assumed interest rate used for Defined Contribution annuity calculations is equal to the lesser of (i) the Pension Benefit Guaranty Corporation initial interest rate for valuing annuities for terminating plans as of the beginning of the year during which payment begins plus 0.75% or (ii) the interest rate used in the actuarial valuation as recommended by the actuary and approved by the board. The rate has changed from 3.14% to 3.84%.