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NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEM

COUNTY EQUAL RETIREMENT BENEFIT FUND

Actuarial Valuation Results as of January 1, 2020

for State Fiscal Year Ending June 30, 2021

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TABLE OF CONTENTS

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April 23, 2020

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, 2020 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, 2020.

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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

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

Brent A. Banister

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 gain of $33,000 on Plan assets due to the actual return of 20.9% for 2019, compared to the 7.5% assumption. There was also a gain on liabilities of $5,000. 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 full lump sum distribution, it eliminates the liability under this Plan and a liability gain occurs. Due to the aggregate experience on assets and liabilities, the amount of surplus in this valuation increased to $339,993 from $280,937 in the January 1, 2019 valuation. Overall, the combined assets for all counties remain greater than the combined liabilities for the County Equal Retirement Benefit Fund. Harlan County is the only county in the current valuation with an unfunded liability, resulting in a required contribution for the 2020 plan year of $185.

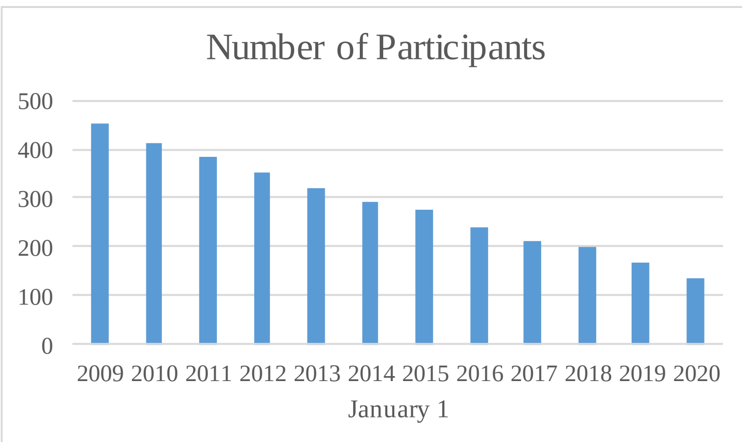
There are several risk factors that are key to the Fund's financial status over time. One of the most significant of these factors is the proportion of retirees that elect to take an annuity rather than a lump sum. An individual member's choice is based on their own personal situation and may consider 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 potential 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:

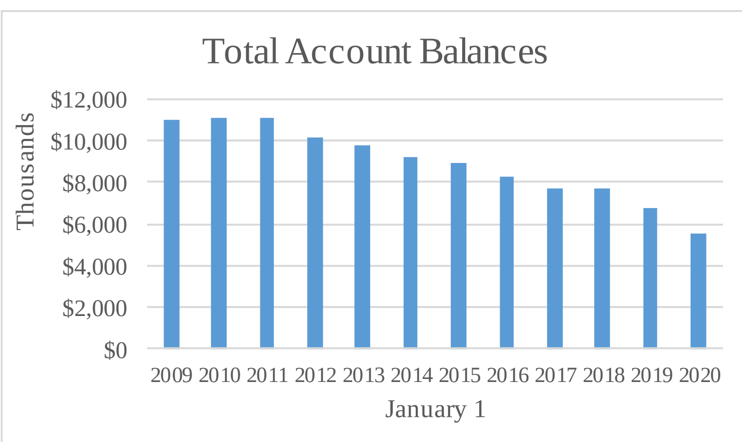
- Account growth – the account balances for both the cash balance and defined contribution members are assumed to increase at 7.50% annually. To the extent actual investment returns (or interest credits and dividends in the cash balance accounts) are lower, the benefits assumed to be paid from the Fund 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 (2.87% as of January 1, 2020). 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. **Although the current financial health of the Fund is very strong, that does not automatically imply this will continue indefinitely. There are potential economic scenarios that could adversely impact the Fund's current financial condition. As time goes on, this risk decreases because the Plan has been closed for many years and the number of members and the aggregate account balances are declining over time.**

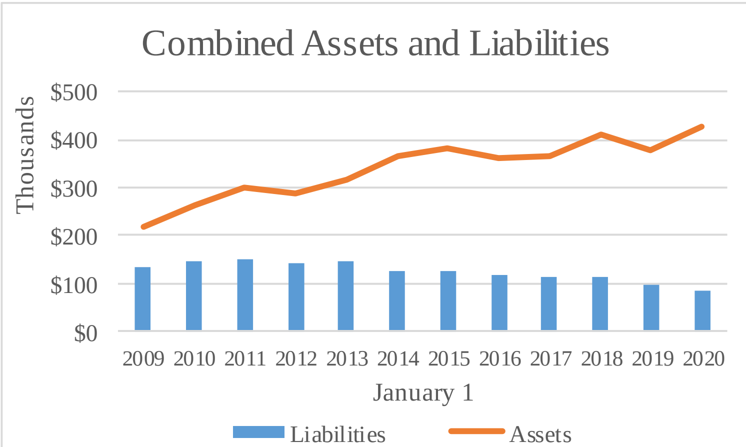
It is important to note that an unfunded liability is not, by itself, an indication of whether or not the Fund has sufficient assets to meet future liabilities. Further, the presence of an unfunded liability or surplus is not an indication of what future contributions may be required to fund the benefits. 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 fund the 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 2020	Actuarial Valuation as of January 1 2019
Number of Members		
Cash Balance	67	87
Defined Contribution	69	80
Total	136	167
Pre-1984 Account Balance with Interest, Beginning of Year		
Cash Balance	$2,935,496	$3,955,420
Defined Contribution	2,617,802	2,845,254
Total	$5,553,298	$6,800,674
Projected Benefit Cost*		
a. Amount	$85,049	$98,342
b. As a Percent of the Account Balance	1.532%	1.446%
c. Annuity Factor Interest Rate – Cash Balance	7.75%	7.75%
d. Annuity Factor Interest Rate – Defined Contribution	2.87%	3.84%
Market Value of Assets		
a. Asset Value as of Prior Year's Valuation	$379,279	$410,152
b. Deposits During the Year	60	0
c. Withdrawals During the Year	15,262	11,426
d. Investment Return or (Loss)	76,173	(19,447)
e. Other	(15,208)	0
f. Market Value of Assets as of Valuation Date [a. + b. - c. + d + e.]	$425,042	$379,279
Unfunded Liability/(Surplus)	($339,993)	($280,937)
Total Contribution Amount (All Counties)	$185	$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, 2019	Employer Contributions for 2019	Withdrawals	Investment Return	Other	Ending Balance December 31, 2019
1. Adams	$ 19,174	$ 0	$ 2,917	$ 3,676	$ 0	$ 19,933
2. Box Butte	7,628	0	0	1,596	0	9,224
3. Buffalo	19,177	0	0	4,011	0	23,188
4. Cass	1,267	0	0	265	0	1,532
5. Cheyenne	1,910	0	1,099	273	0	1,084
6. Cuming	14,401	0	867	2,934	0	16,468
7. Custer	13,098	0	0	2,739	0	15,837
8. Dawson	26,521	0	0	5,546	0	32,067
9. Dodge	22,841	0	0	4,777	0	27,618
10. Gage	8,653	0	1,121	1,649	0	9,181
11. Gosper	1,465	0	0	306	0	1,771
12. Hall	32,734	0	0	6,848	0	39,582
13. Harlan	3,977	60	4,374	337	0	0
14. Hitchcock	8,649	0	0	1,810	0	10,459
15. Jefferson	15,065	0	0	3,151	0	18,216
16. Kimball	13,043	0	0	2,728	0	15,771
17. Lincoln	4,841	0	0	1,012	0	5,853
18. Madison	10,319	0	0	2,159	0	12,478
19. Morrill	13,957	0	0	1,251	(15,208)	0
20. Platte	30,269	0	3,005	6,235	0	33,499
21. Polk	1,042	0	0	218	0	1,260
22. Red Willow	4,289	0	0	897	0	5,186
23. Richardson	9,216	0	0	1,928	0	11,144
24. Saline	4,281	0	0	895	0	5,176
25. Sarpy	26,941	0	0	5,635	0	32,576
26. Saunders	18,007	0	0	3,766	0	21,773
27. Scottsbluff	11,321	0	0	2,368	0	13,689
28. Seward	8,014	0	0	1,676	0	9,690
29. Washington	15,086	0	1,879	2,958	0	16,165
30. York	12,093	0	0	2,529	0	14,622
Totals	$ 379,279	$ 60	$ 15,262	$ 76,173	$ (15,208)	$ 425,042

EXHIBIT 3 – ACTUARIAL RESULTS AND CONTRIBUTION ALTERNATIVES BY COUNTY

County Name	Number of Members	Projected Benefit Cost*	Assets	2019 Full Contribution	2020 Full Contribution
1. Adams	4	$ 1,222	$ 19,933	$ 0	$ 0
2. Box Butte	4	1,340	9,224	0	0
3. Buffalo	14	6,986	23,188	0	0
4. Cass	1	217	1,532	0	0
5. Cheyenne	1	204	1,084	0	0
6. Cuming	0	0	16,468	0	0
7. Custer	6	2,826	15,837	0	0
8. Dawson	4	2,947	32,067	0	0
9. Dodge	9	9,368	27,618	0	0
10. Gage	8	4,559	9,181	0	0
11. Gosper	3	1,314	1,771	0	0
12. Hall	8	3,613	39,582	0	0
13. Harlan	2	185	0	0	185
14. Hitchcock	2	1,718	10,459	0	0
15. Jefferson	1	563	18,216	0	0
16. Kimball	1	297	15,771	0	0
17. Lincoln	3	684	5,853	0	0
18. Madison	9	6,364	12,478	0	0
19. Platte	11	6,726	33,499	0	0
20. Polk	2	808	1,260	0	0
21. Red Willow	2	130	5,186	0	0
22. Richardson	3	2,697	11,144	0	0
23. Saline	2	579	5,176	0	0
24. Sarpy	14	11,175	32,576	0	0
25. Saunders	5	6,030	21,773	0	0
26. Scottsbluff	5	6,110	13,689	0	0
27. Seward	5	3,111	9,690	0	0
28. Washington	4	1,136	16,165	0	0
29. York	3	2,140	14,622	0	0
Totals	136	$ 85,049	$ 425,042	$ 0	$ 185

* 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 stronger financial position to withstand potential 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	4	$ 1,222	$ 2,444	$ 3,666	$ 19,933
2. Box Butte	4	1,340	2,680	4,020	9,224
3. Buffalo	14	6,986	13,972	20,958	23,188
4. Cass	1	217	434	651	1,532
5. Cheyenne	1	204	408	612	1,084
6. Cuming	0	0	0	0	16,468
7. Custer	6	2,826	5,652	8,478	15,837
8. Dawson	4	2,947	5,894	8,841	32,067
9. Dodge	9	9,368	18,736	28,104	27,618
10. Gage	8	4,559	9,118	13,677	9,181
11. Gosper	3	1,314	2,628	3,942	1,771
12. Hall	8	3,613	7,226	10,839	39,582
13. Harlan	2	185	370	555	0
14. Hitchcock	2	1,718	3,436	5,154	10,459
15. Jefferson	1	563	1,126	1,689	18,216
16. Kimball	1	297	594	891	15,771
17. Lincoln	3	684	1,368	2,052	5,853
18. Madison	9	6,364	12,728	19,092	12,478
19. Platte	11	6,726	13,452	20,178	33,499
20. Polk	2	808	1,616	2,424	1,260
21. Red Willow	2	130	260	390	5,186
22. Richardson	3	2,697	5,394	8,091	11,144
23. Saline	2	579	1,158	1,737	5,176
24. Sarpy	14	11,175	22,350	33,525	32,576
25. Saunders	5	6,030	12,060	18,090	21,773
26. Scottsbluff	5	6,110	12,220	18,330	13,689
27. Seward	5	3,111	6,222	9,333	9,690
28. Washington	4	1,136	2,272	3,408	16,165
29. York	3	2,140	4,280	6,420	14,622
Totals	136	$ 85,049	$ 170,098	$ 255,147	$ 425,042

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	4	$ 0	$ 0	$ 0
2. Box Butte	4	0	0	0
3. Buffalo	14	0	0	0
4. Cass	1	0	0	0
5. Cheyenne	1	0	0	0
6. Cuming	0	0	0	0
7. Custer	6	0	0	0
8. Dawson	4	0	0	0
9. Dodge	9	0	0	486
10. Gage	8	0	0	4,496
11. Gosper	3	0	857	2,171
12. Hall	8	0	0	0
13. Harlan	2	185	370	555
14. Hitchcock	2	0	0	0
15. Jefferson	1	0	0	0
16. Kimball	1	0	0	0
17. Lincoln	3	0	0	0
18. Madison	9	0	250	6,614
19. Platte	11	0	0	0
20. Polk	2	0	356	1,164
21. Red Willow	2	0	0	0
22. Richardson	3	0	0	0
23. Saline	2	0	0	0
24. Sarpy	14	0	0	949
25. Saunders	5	0	0	0
26. Scottsbluff	5	0	0	4,641
27. Seward	5	0	0	0
28. Washington	4	0	0	0
29. York	3	0	0	0
Totals	136	$ 185	$ 1,833	$ 21,076

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		0		0
	Average of Total Balance	$	0	$	0	$	0
	Sum of Total Balance	$	0	$	0	$	0
60-64	Count of Members		22		21		43
	Average of Total Balance	$	25,615	$	21,231	$	23,474
	Sum of Total Balance	$	563,534	$	445,852	$	1,009,386
65-69	Count of Members		33		28		61
	Average of Total Balance	$	51,030	$	34,570	$	43,474
	Sum of Total Balance	$	1,683,975	$	967,964	$	2,651,939
70-74	Count of Members		5		9		14
	Average of Total Balance	$	61,322	$	57,177	$	58,657
	Sum of Total Balance	$	306,610	$	514,593	$	821,203
75 and Above	Count of Members		11		7		18
	Average of Total Balance	$	68,495	$	45,332	$	59,487
	Sum of Total Balance	$	753,444	$	317,326	$	1,070,770
Total Members			71		65		136
Average of Total Balance		$	46,585	$	34,550	$	40,833
Grand Total Balance		$	3,307,563	$	2,245,735	$	5,553,298

EXHIBIT 6 – SUMMARY OF MEMBER DATA BY COUNTY

County	Data	Gender		
		Male	Female	Total
Adams	Count of Members	3	1	4
	Sum of Total Balance	$ 72,815	$ 12,473	$ 85,288
Box Butte	Count of Members	2	2	4
	Sum of Total Balance	$ 68,664	$ 25,821	$ 94,485
Buffalo	Count of Members	6	8	14
	Sum of Total Balance	$ 170,018	$ 264,995	$ 435,013
Cass	Count of Members	1	0	1
	Sum of Total Balance	$ 18,292	$ 0	$ 18,292
Cheyenne	Count of Members	0	1	1
	Sum of Total Balance	$ 0	$ 15,248	$ 15,248
Cuming	Count of Members	0	0	0
	Sum of Total Balance	$ 0	$ 0	$ 0
Custer	Count of Members	4	2	6
	Sum of Total Balance	$ 179,374	$ 18,096	$ 197,470
Dawson	Count of Members	4	0	4
	Sum of Total Balance	$ 206,825	$ 0	$ 206,825
Dodge	Count of Members	5	4	9
	Sum of Total Balance	$ 301,903	$ 298,061	$ 599,964
Gage	Count of Members	4	4	8
	Sum of Total Balance	$ 255,600	$ 73,177	$ 328,777
Gosper	Count of Members	2	1	3
	Sum of Total Balance	$ 29,939	$ 48,061	$ 78,000
Hall	Count of Members	3	5	8
	Sum of Total Balance	$ 111,811	$ 115,217	$ 227,028
Harlan	Count of Members	0	2	2
	Sum of Total Balance	$ 0	$ 10,316	$ 10,316
Hitchcock	Count of Members	2	0	2
	Sum of Total Balance	$ 93,152	$ 0	$ 93,152
Jefferson	Count of Members	0	1	1
	Sum of Total Balance	$ 0	$ 30,358	$ 30,358
Kimball	Count of Members	0	1	1
	Sum of Total Balance	$ 0	$ 24,693	$ 24,693
Lincoln	Count of Members	1	2	3
	Sum of Total Balance	$ 30,477	$ 15,229	$ 45,706
Madison	Count of Members	4	5	9
	Sum of Total Balance	$ 148,203	$ 219,763	$ 367,966

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

County	Data	Gender Male		Gender Female		Total	
Platte	Count of Members		7		4		11
	Sum of Total Balance	$	307,514	$	129,433	$	436,947
Polk	Count of Members		1		1		2
	Sum of Total Balance	$	28,441	$	15,005	$	43,446
Red Willow	Count of Members		2		0		2
	Sum of Total Balance	$	10,339	$	0	$	10,339
Richardson	Count of Members		2		1		3
	Sum of Total Balance	$	114,776	$	31,021	$	145,797
Saline	Count of Members		2		0		2
	Sum of Total Balance	$	47,666	$	0	$	47,666
Sarpy	Count of Members		6		8		14
	Sum of Total Balance	$	493,229	$	281,652	$	774,881
Saunders	Count of Members		3		2		5
	Sum of Total Balance	$	113,813	$	247,379	$	361,192
Scottsbluff	Count of Members		3		2		5
	Sum of Total Balance	$	387,119	$	47,893	$	435,012
Seward	Count of Members		1		4		5
	Sum of Total Balance	$	38,589	$	172,817	$	211,406
Washington	Count of Members		2		2		4
	Sum of Total Balance	$	59,936	$	7,257	$	67,193
York	Count of Members		1		2		3
	Sum of Total Balance	$	19,068	$	141,770	$	160,838
	Members						
	Cash Balance		36		31		67
	Defined Contribution		35		34		69
	Total		71		65		136
Grand Total Balance							
Cash Balance		$	1,757,117	$	1,178,379	$	2,935,496
Defined Contribution			1,550,446		1,067,356		2,617,802
Total		$	3,307,563	$	2,245,735	$	5,553,298

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 2020 is 2.87%.
Cost of Living Adjustment (COLA)	Any member who elects an annuity has the option to purchase a 2.50% COLA, compounded annually.

<u>Changes in Benefit Provisions Since the Prior Year</u>

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

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 2.87% 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 3.84% to 2.87%.