



**Cavanaugh Macdonald**  
CONSULTING, LLC

*The experience and dedication you deserve*



**Seventieth  
Annual Actuarial Report**

**OMAHA SCHOOL EMPLOYEES'  
RETIREMENT SYSTEM**

**as of January 1, 2022**





# Cavanaugh Macdonald

CONSULTING, LLC

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April 27, 2022

OSERS Board of Trustees  
Board of Education  
Omaha School Employees' Retirement System  
3215 Cuming Street  
Omaha, NE 68131

## **Re: Seventieth Annual Actuarial Report**

Dear Board Members:

At your request, we have performed an actuarial valuation of the Omaha School Employees' Retirement System (OSERS) as of January 1, 2022. The major findings of the valuation are contained in this report, including the actuarial contribution rate and the additional School District contribution for the valuation year ending December 31, 2022. Several changes to the actuarial assumptions and methods have been adopted by the Board as a result of the quadrennial experience study completed in 2021. In addition, Legislative Bill 147 (LB 147), which was passed by the 2021 Nebraska Legislature, modified the eligibility requirements to participate in the System. These changes, and their impact on the current valuation results, are discussed in further detail in the Executive Summary of this report

In preparing this report, we relied, without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, member data and financial information. While we found this information to be reasonably consistent and comparable with information used in prior years, we did not audit the data. 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.

In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results. 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; 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 report, we did not perform an analysis of the potential range of future measurements. The Board of Education has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix C based on the experience study performed in 2021.

The actuarial computations presented in this report are for purposes of determining the actuarial contribution rate for the System, as set out in the Nebraska State Statutes. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes. For example, actuarial computations for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standards No. 67 and No. 68 are presented in separate reports.

We note that as we prepare this report, the world is still recovering from the Covid-19 pandemic. We have considered all available information, but do not believe there is sufficient data yet to warrant the modification of any of our assumptions at this time. We will continue to monitor the situation and advise the Board in the future of any adjustments we believe would be appropriate.

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

This is to certify that the independent consulting actuaries have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System. We, Patrice A. Beckham, FSA and Bryan K. Hoge, FSA, 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 this report or to provide explanations or further details as may be appropriate.

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

Respectfully Submitted,

Cavanaugh Macdonald Consulting, LLC

A handwritten signature in black ink that reads 'Patrice Beckham' in a cursive script.

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

A handwritten signature in black ink that reads 'Bryan K. Hoge' in a cursive script.

Bryan K. Hoge, FSA, EA, FCA, MAAA  
Consulting Actuary



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## EXECUTIVE SUMMARY

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The primary purposes of performing the actuarial valuation are as follows:

- to calculate the actuarial required contribution (ARC) rate necessary to maintain the solvency of the System, as set out in the Board of Education’s Funding Policy,
- to determine the additional School District contribution amount, if any, given the fixed statutory contribution rates for members, the School District (101% of members’ contributions), and the State of Nebraska;
- to evaluate the funded status of the System and disclose various asset and liability measures as of the valuation date;
- to evaluate and disclose the key risks to funding the System pursuant to Actuarial Standard of Practice Number 51;
- to determine the actual versus expected experience of the System since the last valuation; and
- to analyze and report on trends in System contributions, assets, and liabilities over the past several years.

By state statute, an experience study must be performed for all Nebraska public retirement plans, which includes the Omaha School Employees Retirement System, at least every four years. As a result of the 2021 quadrennial experience study, several changes to the actuarial assumptions and methods were recommended and adopted by the Board at their January 20, 2022 meeting. Please see the experience study report, dated December 6, 2021 for complete details and discussion on all of the actuarial assumption and method changes.

The key assumption changes include:

- Economic assumptions (phased in over four years):
  - Price inflation assumption was lowered from 2.75% to 2.35%.
  - Investment return assumption was lowered from 7.50% to 7.00%.
  - Payroll growth assumption was lowered from 3.25% to 2.85%.
  - Individual salary increase assumption was changed to reflect the lower general wage inflation, as well as changes to the merit salary scale to better reflect the observed experience.
- Demographic assumptions:
  - Mortality assumption was changed to the Pub-2010 General Employees Median Mortality Table. Generational mortality improvements will be modeled using the NPERS projection scale. No generational mortality improvement is reflected for disabled members.
  - Retirement rates and termination of employment rates for both Certificated and Classified members were adjusted to partially reflect observed experience.
  - The probability of a vested member electing a refund upon termination was adjusted for both Certificated and Classified members. The assumption is now based on years of service.
  - Active member marriage assumption was reduced from 100% to 85%.
- An explicit assumption for administrative expenses of 0.24% of payroll is included as a component of the actuarial contribution rate.
- Amortization period was reduced from 30 to 25 years for future amortization bases.



## EXECUTIVE SUMMARY

The changes to the economic assumptions are being phased in over four years, beginning with the January 1, 2022 valuation, as follows:

	Current (2022 Valuation)	2023 Valuation	2024 Valuation	2025 Valuation
<b>Price Inflation</b>	2.70%	2.60%	2.55%	2.35%
<b>Real Return</b>	4.70%	4.70%	4.65%	4.65%
<b>Investment Return</b>	7.40%	7.30%	7.20%	7.00%
<b>General Wage Inflation</b>	3.20%	3.10%	3.05%	2.85%
<b>Covered Payroll Growth</b>	3.20%	3.10%	3.05%	2.85%

The impact of the changes in the actuarial assumption and methods on the January 1, 2022 valuation results is summarized in the following table (\$ in millions). The net impact was an increase in both the actuarial accrued liability (\$0.1 million) and the actuarial required contribution rate (0.08% of payroll).

(\$ in millions)	Prior Assumptions and Methods	Current Assumptions and Methods	Difference
Actuarial Accrued Liability (AAL)	\$2,475.9	\$2,476.1	\$0.1
Actuarial Value of Assets	<u>1,562.8</u>	<u>1,562.8</u>	<u>0.0</u>
Unfunded AAL (UAAL)	\$ 913.2	\$ 913.3	\$0.1
Funded Ratio	63.12%	63.12%	0.00%
Normal Cost Rate	12.69%	12.59%	(0.10%)
Administrative Expenses	0.00%	0.24%	0.24%
UAAL Amortization Rate	<u>14.42%</u>	<u>14.36%</u>	<u>(0.06%)</u>
Total Actuarial Required Contribution	27.11%	27.19%	0.08%
Total Statutory Contribution Rate	21.66%	21.66%	0.00%
Additional Required District Contribution	\$21.5	\$21.8	\$0.3

Note: Numbers may not add/subtract due to rounding.

While the current valuation results reflect only a modest change to both the actuarial accrued liability and the actuarial required contribution rate, the continued phase-in of the economic assumptions is expected to increase both the unfunded actuarial accrued liability (UAAL) and the additional required contribution by the District over the next three years, absent the impact of future favorable experience. For example, if the ultimate set of economic assumptions was fully recognized in this valuation, it would increase the UAAL by an additional \$98.8 million and the total actuarial contribution rate by 2.27% of pay. The resulting additional required District contribution would increase to \$30.6 million.



## EXECUTIVE SUMMARY

In addition to the changes to the actuarial assumptions and methods, Legislative Bill 147 (LB 147), passed by the 2021 Legislature, modified the eligibility requirements to participate in the System. Previously, an employee had to be hired on a full-time basis, which constituted a work week of no less than 30 hours. LB 147 provided employees who are contracted for less than 30 hours per week to participate in the System, if they average more than 30 hours per week during any three calendar months of a fiscal year. We did not receive census data that would allow us to quantify the impact of LB 147 on the January 1, 2022 valuation.

This report presents the results of the January 1, 2022 actuarial valuation of the Omaha School Employees' Retirement System (OSERS). The actuarial valuation results provide a "snapshot" view of the System's financial condition on January 1, 2022 based on the System's membership, benefit structure, and assets on that date. Key results are shown in the following table:

(\$ in millions)	January 1, 2022	January 1, 2021	Change
Actuarial Accrued Liability (AAL)	\$2,476.1	\$2,381.4	\$94.7
Actuarial Value of Assets	<u>1,562.8</u>	<u>1,467.8</u>	95.0
Unfunded AAL (UAAL)	\$913.3	\$913.5	(\$0.2)
Funded Ratio	63.12%	61.64%	1.48%
Normal Cost Rate	12.59%	12.76%	(0.17%)
Administrative Expense Rate	0.24%	0.00%	0.24%
UAAL Contribution Rate	<u>14.36%</u>	<u>14.77%</u>	<u>(0.41%)</u>
Total Actuarial Contribution Rate	27.19%	27.53%	(0.34%)
Statutory Contribution Rate	<u>(21.66%)</u>	<u>(21.66%)</u>	<u>0.00%</u>
Contribution Shortfall	5.53%	5.87%	(0.34%)
Additional District Contribution*	\$21.8	\$22.2	(\$0.4)

\* Contribution amount is calculated as of August 31

The valuation results reflect net favorable actuarial experience for the 2021 valuation year as demonstrated by an unfunded actuarial accrued liability that was less than expected, based on the results of the prior valuation. The rate of return on the market value of assets during 2021 was 17.8%, higher than the assumed rate of return for that period of 7.50%. Due to the use of an asset smoothing method, all of the 2021 investment experience is not reflected immediately in the valuation. As a result, the return on the actuarial value of assets for 2021 was 8.9%, which resulted in an actuarial gain of \$21.1. The favorable asset experience was partially offset by a net actuarial loss of \$15.3 million on liabilities. During calendar year 2021, the additional contribution by the School District of \$24.1 million was higher than the additional actuarial contribution of \$22.2 million. Which resulted in a \$1.9 million decrease in the unfunded actuarial accrued liability.



## EXECUTIVE SUMMARY

### Membership

Over the last decade, there have been multiple changes to the benefit structure for OSERS members although all members contribute at the same rate of 9.78%. A summary of the key provision changes is below:

Provision	Tier 1 (Pre July 1, 2013)	Tier 2 (July 1, 2013)	Tier 3 (July 1, 2016)	Tier 4 (July 1, 2018)
Final Average Compensation (FAC)	Average of highest 3 fiscal years	Average of highest 5 fiscal years	Average of highest 5 fiscal years	Average of highest 5 fiscal years
Benefit formula	2.0% * FAC * Years of Creditable Service	2.0% * FAC * Years of Creditable Service	2.0% * FAC * Years of Creditable Service	2.0% * FAC * Years of Creditable Service
Cost of Living Adjustment	Lesser of 1.5% and actual CPI  Medical COLA starting 10 years after retirement	Lesser of 1.0% and actual CPI.  Medical COLA starting 10 years after retirement	Lesser of 1.0% and actual CPI.  No medical COLA	Lesser of 1.0% and actual CPI.  No medical COLA
Form of payment	5 years certain and life	5 years certain and life	5 years certain and life	5 years certain and life
Normal Retirement	35 Years of Service  Age 65 and 5 Years of Omaha Service  Age 62 and 10 Years of Service  Rule of 85 (Min age of 55)	35 Years of Service  Age 65 and 5 Years of Omaha Service  Age 62 and 10 Years of Service  Rule of 85 (Min age of 55)	Age 65 and 5 Years of Omaha Service  Rule of 85 (Min age of 55)	Age 65 and 5 Years of Omaha Service  Rule of 85 (Min age of 60)
State Service Annuity	\$3.50 * Years of Service	\$3.50 * Years of Service	No state service annuity	No state service annuity

Each benefit tier has a slightly lower cost than the prior tier as evidenced in a lower normal cost rate (see Exhibit 4). Over time, as current active members covered by benefit Tiers 1 through 3 leave covered employment and are replaced by Tier 4 members the cost of the System is expected to decrease slightly. However, it is expected to take another 10 to 15 years before the impact on the valuation results is material.





## EXECUTIVE SUMMARY

The following table summarizes the System's membership, by group, in the current and prior valuation. The active member count decreased from 7,182 to 7,086 (1.3%) and the number of members receiving a benefit increased from 5,089 to 5,238 (2.9%). The total projected payroll increased by 4.3% from \$373.7 million in the January 1, 2021 valuation to \$389.6 million in the current valuation.

SYSTEM MEMBERSHIP	Jan. 1, 2022	Jan. 1, 2021	% Chg
1. Active Members			
a. Certificated			
(1) Tier 1	2,422	2,628	(7.8)
(2) Tier 2	619	684	(9.5)
(3) Tier 3	453	514	(11.9)
(4) Tier 4	<u>1,190</u>	<u>954</u>	24.7
<b>(5) Total</b>	<b>4,684</b>	<b>4,780</b>	<b>(2.0)</b>
b. Classified			
(1) Tier 1	892	1,030	(13.4)
(2) Tier 2	278	323	(13.9)
(3) Tier 3	238	285	(16.5)
(4) Tier 4	<u>994</u>	<u>764</u>	30.1
<b>(5) Total</b>	<b>2,402</b>	<b>2,402</b>	<b>0.0</b>
c. Total			
(1) Tier 1	3,314	3,658	(9.4)
(2) Tier 2	897	1,007	(10.9)
(3) Tier 3	691	799	(13.5)
(4) Tier 4	<u>2,184</u>	<u>1,718</u>	27.1
<b>(5) Total</b>	<b>7,086</b>	<b>7,182</b>	<b>(1.3)</b>
2. Retirees and Disabled Members	4,954	4,829	2.6
3. Beneficiaries	284	260	9.2
4. Inactive Vested Members			
(1) Tier 1	1,156	1,108	4.3
(2) Tier 2	171	115	48.7
(3) Tier 3	<u>34</u>	<u>0</u>	
<b>(4) Total</b>	<b>1,361</b>	<b>1,223</b>	<b>11.3</b>
5. Nonvested Terminations			
(1) Tier 1	253	272	(7.0)
(2) Tier 2	122	146	(16.4)
(3) Tier 3	227	239	(5.0)
(4) Tier 4	<u>550</u>	<u>260</u>	111.5
<b>(5) Total</b>	<b>1,152</b>	<b>917</b>	<b>25.6</b>
6. Total	14,837	14,411	3.0



## EXECUTIVE SUMMARY

### Assets

As of January 1, 2022, the System had total assets of \$1.626 billion measured on a market value basis. This was an increase of \$220.7 million from the prior valuation and represents an annualized net rate of return, as provided by the Nebraska Investment Council, of 17.8%.

The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability (UAAL) and actuarial contribution rate. An asset valuation method, which smooths the effect of market fluctuations, is used to determine the value of assets used in the valuation. This amount, called the “actuarial value of assets”, is equal to the expected asset value, based on the actuarial value in the prior valuation and the assumed investment return of 7.5% for 2021, plus 25% of the difference between the actual market value and the expected asset value. The resulting value must be no less than 80% of market value and no more than 120% of market value (referred to as a “corridor”). The corridor did not apply this year as the actuarial value of assets was 96% of market value. The actuarial value of assets as of January 1, 2022 was \$1.563 billion, an increase of \$95.0 million from the prior year. The components of change in the actuarial and market values of assets from January 1, 2021 to January 1, 2022 are shown in the following table.

	Asset Values (\$M)	
	Market	Actuarial
<b>Net Assets, as of January 1, 2021</b>	\$1,405.4	\$1,467.8
• Adjustment for Late Reporting	<u>0.0</u>	<u>0.0</u>
<b>Adjusted Net Assets, as of January 1, 2021</b>	\$1,405.4	\$1,467.8
• District, State and Member Contributions	108.4	108.4
• Benefits Payments and Refunds	(143.2)	(143.2)
• Investment Return, Net of Expenses	<u>255.4</u>	<u>129.8</u>
<b>Preliminary Assets, January 1, 2021</b>	\$1,626.0	\$1,562.8
• Application of Corridor	N/A	0.0
<b>Final Assets, as of January 1, 2022</b>	\$1,626.0	<b>\$1,562.8</b>

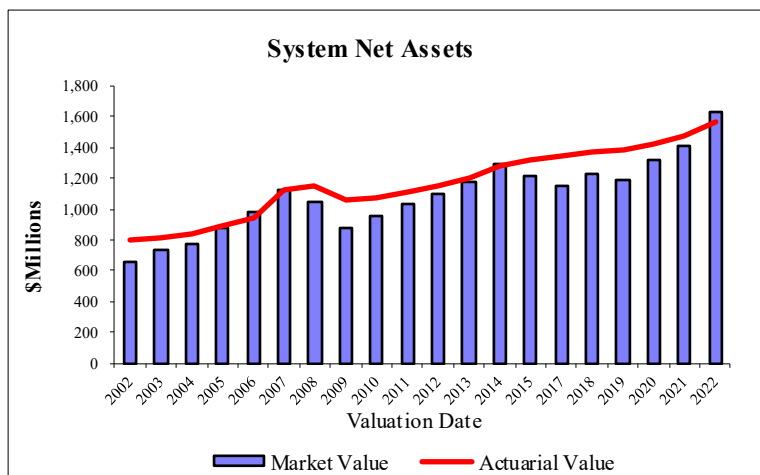
The dollar-weighted annualized rate of return, net of investment and administrative expenses, measured on the actuarial value of assets was approximately 8.9%. A comparison of asset values on both the market and actuarial basis is shown below:

	1/1/2018	1/1/2019	1/1/2020	1/1/2021	1/1/2022
Market Value of Assets	\$1,234	\$1,194	\$1,324	\$1,405	\$1,626
Actuarial Value of Assets	1,365	1,379	1,418	1,468	1,563
Actuarial Value/ Market Value	111%	115%	107%	104%	96%

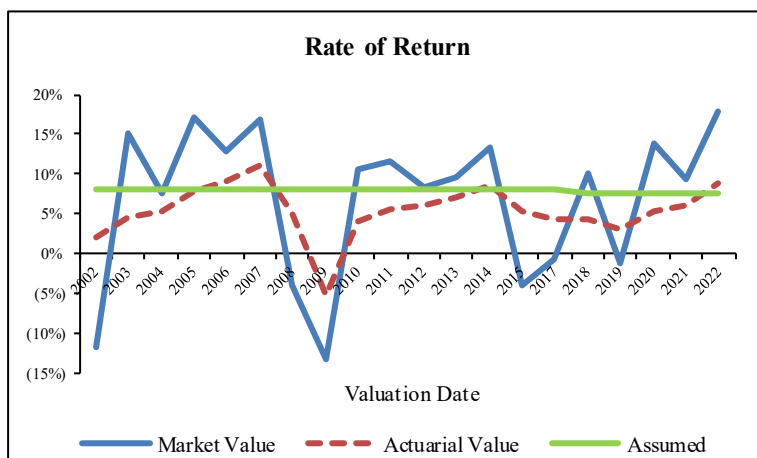


## EXECUTIVE SUMMARY

Due to the strong investment performance during calendar year 2021, the System has a deferred asset gain (market value of assets exceeds the actuarial value) for the first time since the 2014 valuation. Absent unfavorable investment experience in future years to offset the recognition of this deferred gain, it will work through the asset smoothing method and increase the System's funded ratio and decrease the actuarial contribution rate. The recognition of the deferred investment gain in future years would be expected to lower the additional School District contributions as well if no other changes were made.



*With the use of an asset smoothing method, the actuarial value is expected to be both above and below the market value of assets over a long period of time. However, for most of this period, the actuarial value of assets has exceeded the market value of assets.*



*The historical estimated rate of return on both the actuarial and market value of assets is shown in this graph. The asset smoothing method mitigates the volatility of market value returns as shown in the rates of return on the actuarial versus market value of assets.*

## Liabilities

The actuarial accrued liability is that portion of the present value of future benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and asset values at the same date is referred to as the unfunded actuarial accrued liability. The unfunded actuarial accrued liability will be reduced if the employer's contributions exceed the employer's normal cost for the year, after allowing for interest earned on the prior balance of the unfunded actuarial accrued liability. Benefit improvements, experience gains and losses, and changes in actuarial assumptions and methods also impact the total actuarial accrued liability and the unfunded portion thereof.



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The unfunded actuarial accrued liability as of January 1, 2022 is shown below:

Actuarial Accrued Liability	\$ 2,476,073,000
Actuarial Value of Assets	<u>1,562,787,000</u>
Unfunded Actuarial Accrued Liability	\$ 913,286,000

Numerous factors contributed to the change in the System’s UAAL during the 2021 plan year. The components are examined in the following discussion.

Actuarial gains (or losses) result from actual experience that is more (or less) favorable than anticipated based on the actuarial assumptions. These “experience” (or actuarial) gains or losses are reflected in the UAAL and are measured as the difference between the expected unfunded actuarial accrued liability and the actual unfunded actuarial accrued liability, taking into account any changes due to assumption, method or benefit provision changes. Overall, the System experienced an actuarial gain of \$5.8 million. The investment return on the actuarial value of assets of 8.9% was higher than the assumed return of 7.5% for 2021, resulting in an actuarial gain of \$21.1 million. This was partially offset by a net actuarial loss of \$15.3 million on the actuarial accrued liability. The largest source of unfavorable liability experience was larger salary increases than expected by the actuarial assumptions. Exhibit 9 shows a breakdown of the various sources of liability experience during the 2021 plan year.

The change in the unfunded actuarial accrued liability between January 1, 2021 and January 1, 2022 is shown in the following table (in millions):

<b>Change in Unfunded Actuarial Accrued Liability (\$M)</b>	
<b>Unfunded Actuarial Accrued Liability, January 1, 2021</b>	<b>\$914</b>
• Expected Change in UAAL	
- Amortization Method	11
- Contributions greater than the actuarial required contribution	(2)
• Investment Experience	(21)
• Liability Experience	15
• Assumption Changes	0
• Other Experience	<u>(4)</u>
<b>Unfunded Actuarial Accrued Liability, January 1, 2022</b>	<b>\$913</b>

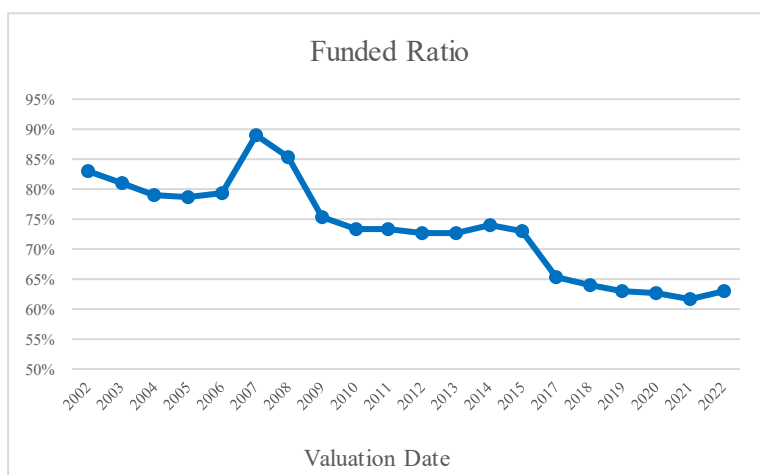
An evaluation of the unfunded actuarial accrued liability on a pure-dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both large numbers) is reflected. Another way to evaluate the unfunded actuarial accrued liability and the progress made in its funding is to track the funded status, the ratio of the actuarial value of assets to the actuarial accrued liability. Note that the funded ratio does not necessarily indicate whether or not additional funding is needed, nor does it indicate whether or not the plan has sufficient funds to settle all current obligations.



## EXECUTIVE SUMMARY

The funded status of OSERS is shown below (in millions):

	1/1/17	1/1/18	1/1/19	1/1/20	1/1/21	1/1/22
<b>Using Actuarial Value of Assets:</b>						
Funded Ratio (AVA/AAL)	65%	64%	63%	63%	62%	63%
Unfunded AAL (AAL - AVA)	\$713	\$771	\$814	\$848	\$914	\$913
<b>Using Market Value of Assets:</b>						
Funded Ratio (MVA/AAL)	56%	58%	54%	58%	59%	66%
Unfunded AAL (AAL - MVA)	\$902	\$902	\$999	\$942	\$976	\$850



*Changes in actuarial assumptions and methods, coupled with investment returns below the assumed rate and contributions below the actuarial rate significantly reduced the funded ratio over much of this period. However, with the Board's current funding policy and the statutory requirement for the full actuarial contribution to be made, the funded ratio is expected to increase in the future, assuming all assumptions are met.*

## Contributions

The actuarial contribution rate for the System consists of:

- a “normal cost” for the portion of projected liabilities allocated by the actuarial cost method to service of members during the year following the valuation date,
- an “administrative expense contribution rate” for the expenses expected to be paid from the trust during the year following the valuation date,
- an “unfunded actuarial accrued liability contribution” for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

The actuarial contribution rate is computed based on the Board of Education’s Funding Policy. On that basis, the actuarial contribution rate (Item 4 in the following table) is equal to the sum of the normal cost rate, the administrative expense rate, and the amortization payment on the UAAL. Effective with the January 1, 2017 valuation, OSERS began to amortize the UAAL using a “layered” approach. Under this method, the UAAL is split into pieces or layers; the initial or legacy UAAL was amortized, as a level-percent of payroll, over a closed 30-year period that began with the September 1, 2013 valuation (27 years remained as of the January 1, 2017 valuation). All ensuing UAAL bases were to be amortized, as a level-percent of payroll, over a new 25-year period commencing on the respective valuation date. At the March 6, 2019 meeting, the OSERS Board of Trustees modified the System’s Funding Policy to reset the legacy



## EXECUTIVE SUMMARY

amortization base to the unfunded actuarial accrued liability (UAAL) as of January 1, 2019 with payments calculated as a level percentage of payroll over a closed 30-year period. New layers of UAAL that occurred in the future were also to be amortized over new 30-year periods. As a result of the quadrennial experience study performed in 2021, effective with the January 1, 2022 valuation, new amortization bases will be amortized as a level-percent of pay over a closed 25-year period.

The actuarial contribution rate for the plan year ending December 31, 2022, and the resulting additional School District contribution, is computed based on the January 1, 2022 actuarial valuation. The ongoing, fixed contributions to the System are set by state statute and are shown below in item 5, "Statutory Contribution Rate". They include the member contribution rate of 9.78%, the State contribution rate of 2.00%, and the School District contribution rate which is 101% of the member contribution rate.

Based on the results of this valuation, the District's additional contribution for the 2022 plan year is 5.53%, or \$21.8 million, as shown in the table below:

Contribution Rate	Actuarial Valuation	
	1/1/2022	1/1/2021
1. Normal Cost	12.59%	12.76%
2. Administrative Expenses	0.24%	0.00%
3. UAAL Contribution	<u>14.36%</u>	<u>14.77%</u>
4. Total Actuarial Contribution Rate	27.19%	27.53%
5. Statutory Contribution Rate	21.66%	21.66%
6. Contribution Shortfall / (Margin) (4)-(5)	5.53%	5.87%
7. Additional District Contribution (\$M)	\$21.8	\$22.2

Various factors resulted in a net decrease in the actuarial contribution rate from the prior valuation. Overall, the total contribution rate has decreased by 0.34%, as shown in the following table.

Total Actuarial Contribution Rate	
Total Contribution Rate as of January 1, 2021	27.53%
• Contributions Different Than Actuarial Rate	(0.03%)
• Investment Experience	(0.32%)
• Liability Experience	0.23%
• Change in Normal Cost Rate	(0.07%)
• Payroll Growth Different Than Expected	(0.17%)
• Assumption Changes	0.08%
• Other Experience	<u>(0.06%)</u>
Total Contribution Rate as of January 1, 2022	27.19%



## EXECUTIVE SUMMARY

The difference in the actuarial contribution rate and the statutory contribution rate results in a contribution shortfall for 2022 of 5.53% of covered payroll, or \$21.8 million. Due to the favorable investment experience on the market value of assets for the year ending December 31, 2021, the \$62.4 million of deferred investment loss in the prior valuation has been eliminated and a deferred investment gain of \$63.3 million currently exists (market value exceeds the actuarial value of assets). Absent unfavorable investment experience in future years to offset the recognition of the deferred investment gain, the actuarial contribution rate is expected to decrease as the deferred investment experience is reflected through the asset smoothing method. If this occurs, the System's funded status is expected to increase and the actuarial contribution rate shortfall is expected to decrease. The following table illustrates the impact of the deferred investment experience and the phase-in of the economic assumptions on the District's additional contribution, if all assumptions are met in the future (\$ in millions):

Year Ended December 31,	Total Payroll	Actuarial Recommended Contribution	Member and State Statutory	District Statutory	District Additional	District Additional (August 31)
2022	\$389.6	27.19%	11.78%	9.88%	5.53%	\$21.8
2023	402.0	27.32%	11.78%	9.88%	5.66%	23.0
2024	414.8	27.58%	11.78%	9.88%	5.92%	24.8
2025	424.9	28.40%	11.78%	9.88%	6.74%	29.0
2026	437.5	28.16%	11.78%	9.88%	6.50%	28.8
2027	449.9	27.97%	11.78%	9.88%	6.31%	28.7
2028	462.4	27.81%	11.78%	9.88%	6.15%	28.8

Favorable/unfavorable experience such as future investment returns above/below the assumed rate of return will decrease/increase the amount of the additional District Contribution.

### Comments

The System's unfunded actuarial accrued liability decreased slightly from \$913.5 million in the January 1, 2021 valuation to \$913.3 million in the January 1, 2022 actuarial valuation, and the funded ratio increased from 62% to 63%. Net favorable experience occurred during the 2021 valuation year, the result of a \$21.1 million actuarial gain on assets and a \$15.3 million actuarial loss on liabilities. This experience decreased the unfunded actuarial accrued liability and the payment thereon. The additional contribution made by the School District in 2021 was \$24.1 million, \$1.9 million higher than the additional actuarial contribution of \$22.2 million. The higher contribution by the District served to decrease the unfunded actuarial accrued liability more quickly than scheduled by the System's funding policy.

The Nebraska statutes provide that the School District shall contribute the greater of (a) one hundred and one percent of the contributions made by the employees or (b) such amount as may be necessary to maintain the solvency of the System, as determined annually by the Board of Education upon recommendation of the actuary. The Board of Education has adopted a Funding Policy that sets the criteria for determining the contribution amount necessary to maintain the solvency of the System. On this basis, the Actuarial Contribution Rate for the valuation year ending December 31, 2022 is 27.19% of payroll. The total of contributions expected to be paid by members, the State, and the School District for valuation year ending December 31, 2022 is 21.66% of payroll, so the actuarial contribution rate for 2022



## EXECUTIVE SUMMARY

exceeds the statutory contribution rates by 5.53% of payroll, or \$21.8 million. This contribution shortfall of \$21.8 million represents the additional required contribution by the School District needed for the 2022 plan year. Given the System’s current funded status, the additional District contribution is expected to be needed for many years.

The deferred investment gain (market value less actuarial value of assets) is \$63.3 million as of January 1, 2022. Absent unfavorable investment experience in future years, the deferred investment gain will eventually be reflected in the actuarial value of assets in future years. While the use of an asset smoothing method is common for public retirement systems, it is important to identify the potential impact of the deferred investment experience. This is accomplished by comparing the key valuation results using both the actuarial and market value of assets:

	Using Actuarial Value of Assets	Using Market Value of Assets
Actuarial Accrued Liability	\$2,476,073,000	\$2,476,073,000
Asset Value	<u>1,562,787,000</u>	<u>1,626,049,000</u>
Unfunded Actuarial Accrued Liability	\$913,286,000	\$850,024,000
Funded Ratio	63.12%	65.67%
Normal Cost Rate	12.59%	12.59%
Administrative Expense Rate	0.24%	0.24%
UAAL Contribution Rate	<u>14.36%</u>	<u>13.32%</u>
Actuarial Contribution Rate	27.19%	26.15%
Total Statutory Contribution Rate	<u>(21.66%)</u>	<u>(21.66%)</u>
Contribution Shortfall	5.53%	4.49%
Additional District Contribution	\$21,801,926	\$17,701,745

A typical retirement plan faces many different risks. The term “risk” is most commonly associated with an outcome with undesirable results. However, in the actuarial world risk can be translated as uncertainty. The actuarial valuation process uses many actuarial assumptions to project how future contributions and investment returns will meet the cash flow needs for future benefit payments. Of course, we know that actual experience will not unfold exactly as anticipated by the assumptions and that uncertainty, whether favorable or unfavorable, creates risk. Actuarial Standard of Practice Number 51 defines risk as the potential of actual future measurements to deviate from expected results due to actual experience that is different than the actuarial assumptions. Risk evaluation is an important part of managing a defined benefit plan. Please see the Risk Considerations section of this report for an in-depth discussion of the specific risks facing OSERS.

We conclude this executive summary by presenting comparative statistics and actuarial information from both the January 1, 2021 and January 1, 2022 valuations.





**EXECUTIVE SUMMARY**

	<b>Jan. 1, 2022</b>	<b>Jan. 1, 2021</b>	<b>% Chg</b>
<b>SYSTEM MEMBERSHIP</b>			
1. Active Membership			
- Number of Members	7,086	7,182	(1.3)
- Projected Payroll for Upcoming Fiscal Year	\$389.6M	\$373.7M	4.3
- Average Projected Salary	54,980	52,027	5.7
2. Inactive Membership			
- Number Not in Pay Status	2,513	2,140	17.4
- Number of Retirees/Beneficiaries/Disableds	5,238	5,089	2.9
- Total Annual Benefits in Pay	\$140.2M	\$137.0M	2.3
<b>ASSETS AND LIABILITIES</b>			
1. Net Assets			
- Market Value	\$1,626M	\$1,405M	15.7
- Actuarial Value	1,563M	1,468M	6.5
2. Projected Liabilities			
- Retired Members	\$1,459M	\$1,409M	3.5
- Inactive Members	70M	57M	22.8
- Active Members	<u>1,386M</u>	<u>1,335M</u>	3.8
- Total Liability	2,915M	2,801M	4.1
3. Actuarial Accrued Liability (AAL)	\$2,476M	\$2,381M	4.0
4. Unfunded Actuarial Accrued Liability	\$913M	\$914M	(0.1)
5. Funded Ratio			
a. Actuarial Value Assets/AAL	63.12%	61.64%	2.4
b. Market Value Assets/AAL	65.67%	59.02%	11.3
<b>SYSTEM CONTRIBUTIONS</b>			
1. Total Actuarial Contribution Rate	27.19%	27.53%	(1.2)
2. Statutory Contribution Rate			
a. Member Contribution Rate	9.78%	9.78%	0.0
b. Employer Contribution Rate	9.88%	9.88%	0.0
c. State Contribution Rate	<u>2.00%</u>	<u>2.00%</u>	0.0
d. Total	21.66%	21.66%	0.0
3. Contribution Shortfall/(Margin) (1.) - (2.d.)	5.53%	5.87%	(5.8)
4. Additional District Contribution*	\$21,801,926	\$22,199,627	(1.8)

M = (\$)Millions

Numbers may not add due to rounding.

\* Contribution amount is calculated as of August 31



**EXECUTIVE SUMMARY**

**HISTORICAL CHANGES IN THE OSERS UNFUNDED ACTUARIAL ACCRUED LIABILITY**

*(dollars in millions)*

	Valuation Date											
	9/1/03	9/1/04	9/1/05	9/1/06	9/1/07	9/1/08	9/1/09	9/1/10	9/1/11	9/1/12	9/1/13	9/1/14
<b>Prior Valuation UAAL</b>	163	191	223	240	246	138	198	349	390	406	437	455
Amortization Method	4	5	6	7	5	3	4	6	2	8	9	10
Actual Contributions												
Less than ARC	0	0	2	0	3	0	0	2	4	0	2	0
More than ARC	0	0	0	(2)	0	(7)	(2)	0	0	(4)	0	(4)
Actual vs Expected Experience												
Investment	27	23	1	(10)	(29)	33	151	42	26	20	12	(6)
Salary	(5)	(6)	(1)	4	1	1	0	(13)	(15)	(12)	(6)	(8)
Retirement	3	0	3	2	2	3	(2)	(4)	(1)	4	4	6
Mortality	2	5	4	3	3	1	(2)	0	(2)	2	(2)	(1)
Termination of Employment	(4)	(1)	2	3	1	7	2	3	2	0	1	(1)
Other	1	3	0	(1)	(3)	(1)	0	0	0	13	(8)	(5)
Benefit Changes	0	0	0	0	(3) <sup>2</sup>	0	0	0	0	0	(4)	0
Assumption Changes	0	0	0	0	0	20	0	0	0	0	10	0
Change to Actuarial Methods	0	3 <sup>1</sup>	0	0	(88) <sup>3</sup>	0	0	5	0	0	0	0
Data Refinement	0	0	0	0	0	0	0	0	0	0	0	0
Total Change for Year End	28	32	17	6	(108)	60	151	41	16	31	18	(9)
<b>UAAL on Valuation Date</b>	<b>191</b>	<b>223</b>	<b>240</b>	<b>246</b>	<b>138</b>	<b>198</b>	<b>349</b>	<b>390</b>	<b>406</b>	<b>437</b>	<b>455</b>	<b>446</b>

<sup>1</sup>Included part-time members who are vested

<sup>2</sup>Increase in member contribution rate

<sup>3</sup>Actuarial asset value reset to market value



EXECUTIVE SUMMARY

HISTORICAL CHANGES IN THE OSERS UNFUNDED ACTUARIAL ACCRUED LIABILITY (CONT.)

(dollars in millions)

	Valuation Date							Total
	9/1/15	1/1/17	1/1/18	1/1/19	1/1/20	1/1/21	1/1/22	
<b>Prior Valuation UAAL</b>	446	486	713	771	814	848	914	
Amortization Method	9	12	7	7	12	11	11	138
Actual Contributions								
Less than ARC	0	0	3	0	0	0	0	16
More than ARC	(5)	(4)	0	0	(3)	(2)	(2)	(35)
Actual vs Expected Experience								
Investment	34	63	44	62	31	21	(21)	524
Salary	(3)	*	3	(29)	(12)	(10)	19	(92)
Retirement	9	*	7	6	8	8	5	63
Mortality	2	*	(1)	6	6	(4)	(1)	21
Termination of Employment	(2)	*	(1)	(6)	(8)	(5)	(13)	(20)
Other	(4)	(6)	(4)	(3)	0	(2)	2	(18)
Benefit Changes	0	0	0	0	0	0	0	(7)
Assumption Changes	0	138	0	0	0	0	0	168
Change to Actuarial Methods	0	0	0	0	0	0	0	(80)
Data Refinement	0	0	0	0	0	49	0	49
Total Change for Year End	40	227*	58	43	34	66	(1)	
<b>UAAL on Valuation Date</b>	<b>486</b>	<b>713</b>	<b>771</b>	<b>814</b>	<b>848</b>	<b>914</b>	<b>913</b>	

\* Not calculated. Total liability experience was a \$24 million loss, which is included in the total change at year end.

Note: Although a total column is shown, the amounts in each year are not additive because they are calculated on each valuation date and, therefore, represent a value at a different point in time.



**EXHIBIT 1 – SUMMARY OF FUND ACTIVITY (MARKET VALUE OF ASSETS)**

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**SUMMARY OF FUND ACTIVITY  
(Market Value Basis)**

For Period Ended December 31, 2021

<b>NET ASSETS ON JANUARY 1, 2021</b>	<b>\$</b>	<b>1,405,393,000</b>
<b>ADJUSTMENT FOR LATE REPORTING*</b>		<b>0</b>
<b>ADJUSTED NET ASSETS ON JANUARY 1, 2021</b>	<b>\$</b>	<b>1,405,393,000</b>
<b><u>ADDITIONS</u></b>		
Salary deductions	\$	37,352,000
School District payroll-related contributions		37,727,000
School District additional contributions		24,145,000
Purchases of service		289,000
State service annuity receipts		1,625,000
Sec. 79-916 deposits		7,290,000
Income from investments, including realized and unrealized gains		257,723,000
Total additions	\$	<u>366,151,000</u>
<b><u>DEDUCTIONS</u></b>		
Retirement benefits	\$	(136,807,000)
Refunds to employees		(6,392,000)
Investment fees		(1,388,000)
Administrative expenses		(319,000)
Other		(82,000)
Personnel costs		(507,000)
Total deductions	\$	<u>(145,495,000)</u>
<b>NET ASSETS ON JANUARY 1, 2022*</b>	<b>\$</b>	<b>1,626,049,000</b>

\* As provided by the Nebraska Investment Council (NIC). Please note that December 31 statements for a few of OSERS' investment managers are typically not available when the NIC investment reports are prepared. If that is the case, it is necessary for the NIC to subsequently adjust the market values in their reports to account for the late data. These adjustments, if any, are shown as an "adjustment for late reporting" in this exhibit.



## EXHIBIT 2 – ACTUARIAL VALUE OF NET ASSETS

---

### ACTUARIAL VALUE OF NET ASSETS

As of January 1, 2022

1. Actuarial Value of Assets as of January 1, 2021	\$	1,467,834,000
2. Adjustment for Late Reporting		0
3. Adjusted Actuarial Value of Assets as of January 1, 2021	\$	1,467,834,000
4. Actual Contributions/Disbursements		
a. Contributions	\$	108,428,000
b. Benefit payments		(143,199,000)
c. Net change	\$	<u>(34,771,000)</u>
5. Expected Value of Assets as of January 1, 2022	\$	1,541,700,000
6. Market Value of Assets as of January 1, 2022	\$	1,626,049,000
7. Difference between Market and Expected Values (6) – (5)	\$	84,349,000
8. Initial Actuarial Value of Assets as of January 1, 2022 (5) + [(7) x 25%]	\$	1,562,787,000
9. Corridor as of January 1, 2022		
a. 120% of Market Value of Assets as of January 1, 2022	\$	1,951,259,000
b. 80% of Market Value of Assets as of January 1, 2022	\$	1,300,839,000
10. Final Actuarial Value of Assets as of January 1, 2022* (8), but not greater than (9a), nor less than (9b)	\$	1,562,787,000
11. Actuarial value divided by market value (10) / (6)		96.1%
12. Market value less actuarial value	\$	63,262,000

\* The estimated annualized rate of return on the actuarial value of assets for the period ended December 31, 2021 is about 8.9%



## ACTUARIAL BALANCE SHEET

As of January 1, 2022

### ASSETS

Actuarial Value of Assets	\$	1,562,787,000
Present Value of Contributions for Unfunded Actuarial Accrued Liability		913,286,000
Present Value of Future Normal Costs		<u>438,747,000</u>
<b>Total Assets</b>	<b>\$</b>	<b>2,914,820,000</b>

### LIABILITIES

<u>Present Value of Future Benefits</u>		
Retirees, Beneficiaries, and Disableds	\$	1,459,396,000
Inactive Vesteds		63,154,000
Nonvested Terminations		6,490,000
Active Members		
Retirement benefits	\$	1,309,280,000
Termination benefits		66,895,000
Death benefits		<u>9,605,000</u>
		<u>1,385,780,000</u>
<b>Total Liabilities</b>	<b>\$</b>	<b>2,914,820,000</b>



**EXHIBIT 4 – NORMAL COST RATE**

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**NORMAL COST RATE**

As of January 1, 2022

	<u><b>Tier 1</b></u>	<u><b>Tier 2</b></u>	<u><b>Tier 3</b></u>	<u><b>Tier 4</b></u>	<u><b>Total</b></u>
1. Normal Cost Amount					
a. Retirement	\$21,620,421	\$4,557,157	\$3,104,123	\$8,063,541	\$37,345,242
b. Termination	4,353,933	939,416	610,329	1,733,715	7,637,393
c. Mortality	<u>213,233</u>	<u>45,801</u>	<u>33,245</u>	<u>102,280</u>	<u>394,559</u>
e. Total	\$26,187,587	\$5,542,374	\$3,747,697	\$9,899,536	\$45,377,194
2. Expected Payroll for Current Actives During 2022	\$200,584,658	\$43,622,281	\$30,604,018	\$85,690,879	\$360,501,836
3. Normal Cost Rate (1.e.) ÷ (2)	13.06%	12.71%	12.25%	11.55%	12.59%



**EXHIBIT 5 – UNFUNDED ACTUARIAL ACCRUED LIABILITY**

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**UNFUNDED ACTUARIAL ACCRUED LIABILITY**

As of January 1, 2022

1. Present Value of Future Benefits	\$ 2,914,820,000
2. Present Value of Future Normal Costs	\$ <u>438,747,000</u>
3. Actuarial Accrued Liability (1) – (2)	\$ 2,476,073,000
4. Actuarial Value of Assets	\$ <u>1,562,787,000</u>
5. Unfunded Actuarial Accrued Liability (3) – (4)	\$ 913,286,000





**EXHIBIT 6 – AMORTIZATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)**

**AMORTIZATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)**

Effective with the January 1, 2017 valuation, OSERS began to amortize the UAAL using a “layered” approach. Under this method, the UAAL is split into pieces or layers; the initial or legacy UAAL was amortized, as a level-percent of payroll, over a closed 30-year period that began with the September 1, 2013 valuation (27 years remained as of the January 1, 2017 valuation). All ensuing UAAL bases were to be amortized, as a level-percent of payroll, over a new 25-year period commencing on the respective valuation date. At the March 6, 2019 meeting, the OSERS Board of Trustees modified the System’s Funding Policy to reset the legacy amortization base to the unfunded actuarial accrued liability (UAAL) as of January 1, 2019 with payments calculated as a level percentage of payroll over a closed 30-year period. New layers of UAAL that occur in the future are also amortized over new 30-year periods. As a result of the quadrennial experience study performed in 2021, effective with the January 1, 2022 valuation, future bases will be amortized, as a level-percent of pay, over a closed 25-year period.

<b>Amortization Bases</b>	<b>Original Amount</b>	<b>1/1/2022 Remaining Payments</b>	<b>Date of Last Payment</b>	<b>Outstanding Balance as of 1/1/2022</b>	<b>Annual Contribution*</b>
2019 UAAL Base	\$ 814,069,000	27	1/1/2048	\$ 847,080,005	\$ 52,061,694
2020 Experience Base	21,863,793	28	1/1/2049	22,476,095	1,354,035
2021 Experience Base	54,475,149	29	1/1/2050	55,262,041	3,267,016
2022 Assumption Change Base	130,000	25	1/1/2046	130,000	8,348
2022 Experience Base	(11,662,141)	25	1/1/2046	(11,662,141)	(748,882)
<b>Total</b>				<b>\$ 913,286,000</b>	<b>\$ 55,942,211</b>

\* Contribution amount reflects mid-year timing.

1. Total UAAL Amortization Payments	\$ 55,942,211
2. Projected Payroll for plan year ending December 31, 2022	\$ 389,585,114
3. UAAL Amortization Payment Rate	14.36%



## EXHIBIT 7 – ANALYSIS OF CONTRIBUTION RATE

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### ANALYSIS OF CONTRIBUTION RATE

The System is financed by contributions from the members, the School District and the State. Effective September 1, 2013, the members contribute 9.78% of pay. The District is obligated to pay the greater of (a) one hundred and one percent of the member contributions or (b) such amount as may be necessary to maintain the solvency of the System. Under the Funding Policy adopted by the Board in May, 2013, the Actuarial Recommended Contribution rate (ARC) is the normal cost rate plus the contribution necessary to amortize the UAAL. Effective July 1, 2014, the State of Nebraska contributes 2.0% of pay.

1. Normal Cost Rate	12.59%
2. Administrative Expenses	0.24%
3. UAAL Contribution Rate	14.36%
4. Actuarial Recommended Contribution Rate (1) + (2) + (3)	27.19%
5. Statutory Contribution Rate:	
(a) Member	9.78%
(b) District	9.88%
(c) State	<u>2.00%</u>
(d) Total	21.66%
6. Contribution Shortfall (4) - (5d)	5.53%
7. Additional District Contribution at August 31, 2022 (6) * \$389,585,114 * (1.074 ^ (2/12))	\$ 21,801,926



**EXHIBIT 8 – PROJECTION OF ADDITIONAL DISTRICT CONTRIBUTIONS**

**PROJECTION OF ADDITIONAL DISTRICT CONTRIBUTIONS**

The projections below are based on the open group projection model prepared in conjunction with the January 1, 2022 actuarial valuation. It is assumed that all actuarial assumptions are met each year in the future, including the assumed rate of return on the market value of assets. The projections also assume the number of active members remains constant in the future. To the extent actual experience differs from that assumed, the actual valuation results in future years will also differ and the additional contribution required by the District will vary from the amounts shown below. The projections are not intended to predict the specific amount of the additional District contributions in the future, but rather to indicate the general trend and magnitude of such contributions if the actuarial assumptions are met.

Year Ended December 31,	Total Payroll	Actuarial Recommended Contribution	Member and State Statutory	District Statutory	District Additional	District Additional (August 31)
2022	\$389,585,114	27.19%	11.78%	9.88%	5.53%	\$21,801,926
2023	402,002,440	27.32%	11.78%	9.88%	5.66%	23,022,107
2024	414,809,112	27.58%	11.78%	9.88%	5.92%	24,842,910
2025	424,948,422	28.40%	11.78%	9.88%	6.74%	28,966,326
2026	437,545,594	28.16%	11.78%	9.88%	6.50%	28,762,986
2027	449,898,657	27.97%	11.78%	9.88%	6.31%	28,710,539
2028	462,384,213	27.81%	11.78%	9.88%	6.15%	28,759,108

Favorable/unfavorable experience such as future investment returns above/below the assumed rate of return will decrease/increase the amount of the additional District Contribution.



## EXHIBIT 9 – CALCULATION OF ACTUARIAL GAIN/(LOSS)

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### CALCULATION OF ACTUARIAL GAIN/(LOSS)

The overall actuarial gain/(loss) is comprised of both a liability gain/(loss) and an actuarial asset gain/(loss). Each of these represents the difference between the expected and actual values as of January 1, 2022.

1.	Expected Actuarial Accrued Liability	
	a. Actuarial Accrued Liability as of January 1, 2021	\$ 2,381,356,000
	b. Normal Cost for plan year ending December 31, 2021	43,862,000
	c. Benefit payments for plan year ending December 31, 2021	(143,199,000)
	d. Additional liability for state service annuities and service purchases	1,914,000
	e. Interest on a., b., c., and d. to end of year	176,689,000
	f. Assumption changes	130,000
	g. Expected Actuarial Accrued Liability	\$ <u>2,460,752,000</u>
2.	Actuarial Accrued Liability as of January 1, 2022	\$ 2,476,073,000
3.	Liability Gain/(Loss) (1.g.) – (2)	\$ (15,321,000)
4.	Liability Gain/(Loss) as a Percent of Actuarial Accrued Liability	(0.62%)
5.	Expected Actuarial Value of Assets	
	a. Adjusted actuarial value of assets as of January 1, 2021	\$ 1,467,834,000
	b. Contributions for plan year ending December 31, 2021 (including state service annuities and service purchases)	108,428,000
	c. Benefit payments for plan year ending December 31, 2021	(143,199,000)
	d. Interest on a., b., and c. to end of year	108,637,000
	e. Expected actuarial value of assets	\$ <u>1,541,700,000</u>
6.	Actuarial Value of Assets as of January 1, 2022	\$ 1,562,787,000
7.	Asset Gain/(Loss) (6) – (5.e.)	\$ 21,087,000
8.	Asset Gain/(Loss) as a Percent of Actuarial Value of Assets	1.35%
9.	Overall Actuarial Gain/(Loss) (3) + (7)	\$ 5,766,000



## EXHIBIT 9 – CALCULATION OF ACTUARIAL GAIN/(LOSS)

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### Gain/(Loss) By Source

The System experienced a net actuarial loss on liabilities of \$15.3 million during the plan year ended December 31, 2021. The major components of this overall loss are shown below:

<b>Liability Sources</b>	<b><u>\$Millions</u></b>
Salary Increases	\$ (19.3)
Mortality	1.0
Terminations	12.7
Retirements	(4.6)
Disability	0.1
New Entrants/Rehires	(5.5)
Miscellaneous	<u>0.3</u>
<b>Total Liability Gain/(Loss)</b>	<b>\$ (15.3)</b>
<b>Asset Gain/(Loss)</b>	<b>\$ 21.1</b>
<b>Net Actuarial Gain/(Loss)</b>	<b>\$ 5.8</b>

### Comments

The purpose of conducting an actuarial valuation of a retirement system is to determine the costs and liabilities for the benefits under the system, to determine the annual level of contribution required to support these benefits and, finally, to analyze the system's overall experience as it compares with the actuarial assumptions used in the valuation. The costs and liabilities of a retirement system reported in the valuation depend not only upon the level of benefits provided, but also upon factors such as investment return on invested funds, mortality rates for active and retired members, withdrawal rates among active members, rates at which salaries increase, and rates of retirement for ages at which members retire. The actuarial assumptions employed as to these and other contingencies in the current valuation are set forth in Appendix C of this report.

Net demographic actuarial experience for the year was a loss of \$15.3 million, about 0.6% of actuarial accrued liability. The largest source of unfavorable experience was a \$19.3 million loss due to higher salaries than expected.

Another significant component of the experience for the year ending December 31, 2021 was the investment experience. The rate of return on the market value of assets during 2021 was 17.8%, which is significantly higher than the assumed 7.5% during that period. Due to the asset smoothing method, the rate of return on the actuarial value of assets was 8.9% during 2021, resulting in an experience gain. As of January 1, 2022, there is a deferred investment gain of \$63.3 million. Absent unfavorable investment experience, the deferred gain will flow through the valuation over the next few years and decrease both the UAAL and the actuarial contribution rate. Our analysis shows that a return of about 2.7% on the market value of assets would result in a 7.4% return on the actuarial value of assets, and eliminate the deferred gains.



SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYER AND OTHER CONTRIBUTING ENTITIES

HISTORICAL FUNDING INFORMATION

Table with 4 columns: Year Ending, Annual Required Contribution (a), Total Employer Contribution\* (b), and Percentage of ARC Contribution (b) / (a). Rows range from 8/31/2005 to 12/31/2021.

\* Includes State and School District contributions.

\*\* For the short Plan Year from September 1, 2016 through December 31, 2016.

Note: The Total Employer Contribution for fiscal year ending 8/31/2014 was changed because during our work on the GASB reports, we discovered the Service Annuity contribution was different from what was initially reported to us. This figure now matches the number found in the GASB reports.



EXHIBIT 11 – SCHEDULE OF FUNDING PROGRESS

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b - a)/c]
9/1/2005	\$ 887,165,000	\$ 1,126,967,000	\$ 239,802,000	78.72%	\$ 231,708,783	103.49%
9/1/2006	948,938,000	1,195,354,000	246,416,000	79.39%	248,759,070	99.06%
9/1/2007	1,117,628,000 *	1,255,527,000	137,899,000	89.02%	272,844,149	50.54%
9/1/2008	1,149,289,000	1,346,999,000	197,710,000	85.32%	272,720,007	72.50%
9/1/2009	1,061,326,000	1,410,318,000	348,992,000	75.25%	287,770,291	121.27%
9/1/2010	1,078,269,000	1,467,850,000	389,581,000	73.46%	302,229,282	128.90%
9/1/2011	1,110,033,000	1,516,284,000	406,251,000	73.21%	310,228,916	130.95%
9/1/2012	1,155,495,000	1,592,738,000	437,243,000	72.55%	307,258,065	142.30%
9/1/2013	1,205,265,000	1,660,287,000	455,022,000	72.59%	313,946,237	144.94%
9/1/2014	1,277,546,000	1,723,970,000	446,424,000	74.10%	323,077,710	138.18%
9/1/2015	1,312,905,000	1,798,706,000	485,801,000	72.99%	333,166,135	145.81%
1/1/2017	1,337,983,000	2,050,581,000	712,598,000	65.25%	351,940,122 **	202.48%
1/1/2018	1,365,013,000	2,136,385,000	771,372,000	63.89%	359,359,507	214.65%
1/1/2019	1,378,824,000	2,192,893,000	814,069,000	62.88%	375,598,301	216.74%
1/1/2020	1,417,961,000	2,265,653,000	847,692,000	62.59%	364,799,331	232.37%
1/1/2021	1,467,834,000	2,381,356,000	913,522,000	61.64%	364,310,430	250.75%
1/1/2022	1,562,787,000	2,476,073,000	913,286,000	63.12%	381,926,844	239.13%

\* The actuarial value of assets was reset to market value as of 9/1/2007.

\*\* Covered Payroll was annualized for the short Plan Year in 2016.



**EXHIBIT 12 – SOLVENCY TEST**

**SOLVENCY TEST**

A short-term solvency test, which is one method of determining a system’s progress under its funding program, compares the plan’s present assets with: 1) the liability for active member contributions on deposit; 2) the liability for future benefits to present retirees; and (3) the liability for service already rendered by active members. In a system that has been following the level-percent of payroll financing discipline, the obligation for active member contributions on deposit (Item 1) and the liabilities for future benefits to present retired lives (Item 2) will be fully covered by present assets with the exception of rare circumstances. The obligation for service already rendered by active members (Item 3) will be partially covered by the remainder of present assets. Absent any significant benefit changes, if the system has been using level cost financing, the funded portion of Item 3 usually will increase over a period of time.

Actuarial Valuation*	Active Member Contributions	Retirees, Beneficiaries, and Inactives	Active Members Employer Financed Portion	Actuarial Value of Assets	Portion of Liabilities Covered by Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
2012	\$249,903,000	\$955,399,000	\$387,436,000	\$1,155,495,000	100%	95%	0%
2013	272,347,000	1,001,953,000	385,987,000	1,205,265,000	100%	93%	0%
2014	281,672,000	1,058,156,000	384,142,000	1,277,546,000	100%	94%	0%
2015	292,731,000	1,129,399,000	376,576,000	1,312,905,000	100%	90%	0%
2017	306,276,000	1,266,557,000	477,748,000	1,337,983,000	100%	81%	0%
2018	316,337,000	1,311,949,000	508,099,000	1,365,013,000	100%	80%	0%
2019	326,524,000	1,356,615,000	509,754,000	1,378,824,000	100%	78%	0%
2020	334,253,000	1,414,441,000	516,959,000	1,417,961,000	100%	77%	0%
2021	338,589,000	1,465,905,000	576,862,000	1,467,834,000	100%	77%	0%
2022	338,431,000	1,529,040,000	608,602,000	1,562,787,000	100%	80%	0%

\* The actuarial valuation date for years prior to 2017 was September 1.





**EXHIBIT 13 – ESTIMATED BENEFIT PAYMENTS**

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**ESTIMATED BENEFIT PAYMENTS\***

<u>Year End</u>	<u>Currently In-Pay</u>	<u>Currently Not-In-Pay</u>	<u>Total</u>
2022	\$139,504,000	\$ 6,065,000	\$145,569,000
2023	139,157,000	10,827,000	149,984,000
2024	138,662,000	15,770,000	154,432,000
2025	137,998,000	20,981,000	158,979,000
2026	137,047,000	26,884,000	163,931,000
2027	135,789,000	33,507,000	169,296,000
2028	134,396,000	40,390,000	174,786,000
2029	132,806,000	47,699,000	180,505,000
2030	130,981,000	55,581,000	186,562,000
2031	128,956,000	63,908,000	192,864,000
2032	126,756,000	72,778,000	199,534,000
2033	123,916,000	82,098,000	206,014,000
2034	120,871,000	92,062,000	212,933,000
2035	117,267,000	102,631,000	219,898,000
2036	113,675,000	113,498,000	227,173,000

\*Amounts shown are the cash flows for current members only, based on the current benefit structure and assuming that all actuarial assumptions are met in each future year. To the extent that actual experience deviates from that expected, results will vary. Amounts are shown in future nominal dollars and have not been discounted to the valuation date.



## RISK CONSIDERATIONS

Actuarial Standards of Practice are issued by the Actuarial Standards Board and are binding on credentialed actuaries practicing in the United States. These standards generally identify what the actuary should consider, document and disclose when performing an actuarial assignment. In September, 2017, Actuarial Standard of Practice Number 51, *Assessment and Disclosure of Risk in Measuring Pension Obligations*, (ASOP 51) was issued as final with application to measurement dates on or after November 1, 2018. This ASOP, which applies to funding valuations, actuarial projections, and actuarial cost studies of proposed plan changes, was first applicable for the January 1, 2019 actuarial valuation for the Omaha School Employees' Retirement System (System).

A typical retirement plan faces many different risks. The term "risk" is most commonly associated with an outcome with undesirable results. However, in the actuarial world, risk can be translated as uncertainty. The actuarial valuation process uses many actuarial assumptions to project how future contributions and investment returns will meet the cash flow needs for future benefit payments. Of course, we know that actual experience will not unfold exactly as anticipated by the assumptions and that uncertainty, whether favorable or unfavorable, creates risk. ASOP 51 defines risk as the potential of actual future measurements to deviate from expected results due to actual experience that is different than the actuarial assumptions.

The various risk factors for a given plan can have a significant impact – positive or negative – on the actuarial projection of liability and contribution rates.

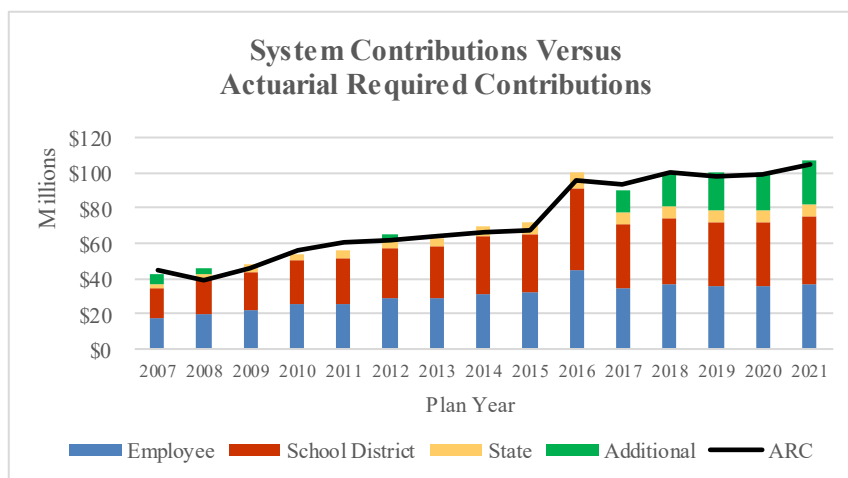
There are a number of risks inherent in the funding of any defined benefit plan. These include:

- economic risks, such as investment return and price inflation;
- demographic risks such as mortality, active membership size, payroll growth, aging population including impact of baby boomers, and retirement ages;
- contribution risk, i.e., the potential for contribution rates to be too high for the plan sponsor/employer to pay; and
- external risks such as the regulatory and political environment.

The last two risk are not required to be assessed by the actuary under ASOP 51.

In assessing the risks associated with funding a pension plan, it is important to realize that each retirement system is unique and may have different risks. This discussion is intended to identify and disclose the more significant risks to the funding of OSERS.

The biggest risk to any retirement system is the inability to pay benefits when they are due. That risk is minimized by the accumulation of assets in the System's trust. There is generally a direct correlation between healthy, well-funded retirement plans and consistent contributions equal to the full actuarial contribution each year. As the following graph illustrates, the School District has contributed at least the full actuarial required contribution in 10 of the past 15 years and has contributed an amount very close to the actuarial contribution in the other years.



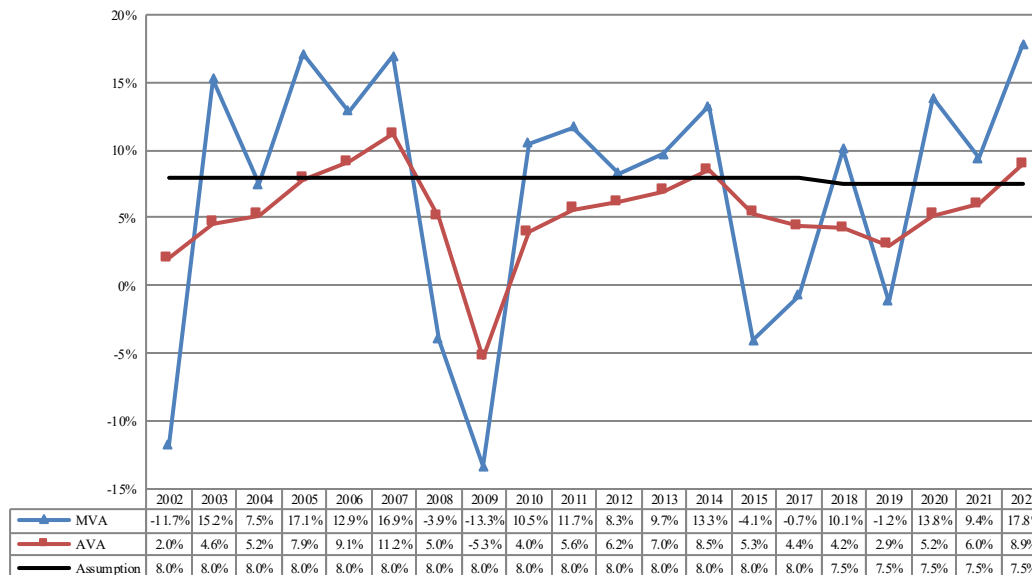
Current state statutes require the School District to contribute any shortfall between the actuarial required contribution rate and the statutory contributions by members, the State of Nebraska and the School District on or before August 31. As a result, the full actuarial contribution rate can be expected to be contributed in future years and the funded status of OSERS should improve over time, if actuarial assumptions are met.

The System’s funding policy, as modified in 2019, amortizes the legacy UAAL over a closed 30-year period, with payments calculated as a level-percent of pay. Effective with the January 1, 2022 actuarial valuation, new layers are amortized over a closed 25-year period. Both 30 and 25 years are relatively long amortization periods and thus will tend to improve the System’s funded status relatively slowly. The payment pattern which develops a payment schedule that is level as a percent of payroll is the most common method used by public plans, but it is less conservative than the level-dollar amortization method because the dollar amount of the unfunded actuarial accrued liability increases for many years before finally starting to decline, particularly over long periods like 30 years, even if all assumptions are met. In addition, amortization as a level percent of pay requires the use of an assumption regarding the growth of covered payroll in future years (currently 3.20% per year). This introduces another possible source of variation between actual and expected experience, thus increasing the funding risk for the System. If actual payroll does not increase as assumed, which could be due to a decline in the number of active members or actual salary increases that are less than expected, the UAAL contribution rate will increase. The dollar payment on the UAAL is the same, but the higher UAAL contribution rate ultimately pushes more of the UAAL funding to the District’s additional contribution.

Perhaps the most significant risk factor for most Systems, including OSERS, is investment return because of the volatility of returns associated with the asset allocations. Over the past 20 years, actual returns each year have varied significantly from the assumed rate of return (see following graph). This is to be expected, given the underlying capital market assumptions and the System’s asset allocation and standard deviation, but it does create a high degree of uncertainty or risk. The compound rate of return over this period was about 6.5%, but the range of returns varied from +18% to -13%. When actual investment returns are lower than the assumed rate of return, there is an increasing trend in the actuarial contribution rate absent offsetting gains on liabilities or changes in actuarial assumptions or methods. The investment experience of the last two decades has been significantly lower than the assumption, resulting in a higher actuarial contribution rate.



## RISK CONSIDERATIONS



The System is currently 63% funded using the actuarial value of assets and 66% funded on a market value basis. The low funded ratio has increased the actuarial required contribution rate and the School District now has an obligation to make an additional contribution of around 6% of covered payroll. As the District's obligation to make the additional contributions is statutory, some risk of unmanageable contribution levels exists. The risk associated with investment returns has the potential to create significant volatility in the amount of additional District contributions. Given the asset allocation of the portfolio and the associated volatility of returns in any one year, it would not be unexpected to have returns that are more than 10% lower than the assumed return of 7.40%. In that case, the District's additional contribution could increase significantly (around 0.70% of pay or \$2.7 million in the first year alone) because the full impact of the "miss" on investments impacts the District's additional contribution rate.

A key demographic risk for all retirement systems, including OSERS, is improvements in mortality (longevity) greater than anticipated. While the actuarial assumptions reflect small, continuous improvements in mortality experience over time and these assumptions are refined in every experience study, the risk arises because there is a possibility of some sudden shift, perhaps from a significant medical breakthrough that could quickly increase liabilities. Likewise, there is some possibility of a significant public health crisis that could result in a significant number of additional deaths in a short time period, as experienced with Covid-19. This kind of event is also significant, although the experience is more easily absorbed. While either of these events could happen, it represents a relatively small probability and thus represents much less risk than the volatility associated with investment returns.

The following exhibits in this section summarize certain historical information that helps indicate how certain key risk metrics may have changed over time. Many of the changes are due to the maturity of the Plan.



## EXHIBIT 14 – HISTORICAL ASSET VOLATILITY RATIOS

As a retirement plan matures, the size of the market value of assets usually increases relative to the covered payroll of active members, on which the Plan is funded. The size of the plan assets relative to covered payroll, sometimes referred to as the asset volatility ratio, is an important indicator of the contribution risk (variability) for the plan. The higher this ratio, the more sensitive a plan's contribution rate is to investment return volatility. In other words, it will be harder to recover from investment losses with increased contributions (contribution rates will be higher).

OSERS' historical trends are somewhat different than those observed in most public plans. This is due both to the length of time the System has been in existence (since 1909) and the slow growth of assets over this period compared to payroll. The result is a stable or decreasing asset volatility ratio rather than an increasing trend which is more typical. As the System's funding improves over the long term, the asset volatility ratio is expected to increase.

<b>Actuarial Valuation Date</b>	<b>Market Value of Assets</b>	<b>Actual Covered Payroll</b>	<b>Asset Volatility Ratio</b>	<b>Increase in ACR with a Return 10% Lower than Assumed*</b>
9/1/2007	\$1,117,628,000	\$272,844,149	4.10	2.63%
9/1/2008	1,050,281,000	272,720,007	3.85	2.47%
9/1/2009	884,438,000	287,770,291	3.07	1.97%
9/1/2010	951,214,000	302,229,282	3.15	2.02%
9/1/2011	1,033,128,000	310,228,916	3.33	2.14%
9/1/2012	1,095,565,000	307,258,065	3.57	2.29%
9/1/2013	1,170,347,000	313,946,237	3.73	2.40%
9/1/2014	1,294,722,000	323,077,710	4.01	2.58%
9/1/2015	1,211,107,000	333,166,135	3.64	2.34%
1/1/2017	1,148,582,000	351,940,122	3.26	2.09%
1/1/2018	1,234,040,000	359,359,507	3.43	2.20%
1/1/2019	1,193,800,000	375,598,301	3.18	2.04%
1/1/2020	1,323,663,000	364,799,331	3.63	2.33%
1/1/2021	1,405,393,000	364,310,430	3.86	2.48%
1/1/2022	1,626,049,000	381,926,844	4.26	2.74%

Note: Years prior to the 9/1/2010 valuation were provided by the prior actuary.

\* The impact of asset smoothing is not reflected in the increase in the Actuarial Contribution Rate (ACR). Current year assumptions and methods are used for all years shown. With asset smoothing, the first-year impact on contributions would be about 25% of the amount shown.

The assets at January 1, 2022 are 426% of payroll, so underperforming the investment return assumption by 10.00% (i.e., earning -2.60% for one year) is equivalent to a loss of about \$163 million or 43% of payroll. The impact on the actuarial contribution rate would be 2.74% once the full amount of actuarial loss worked through the asset smoothing method. While the impact in the first year is mitigated by the asset smoothing method, this illustrates the contribution risk associated with volatile investment returns.



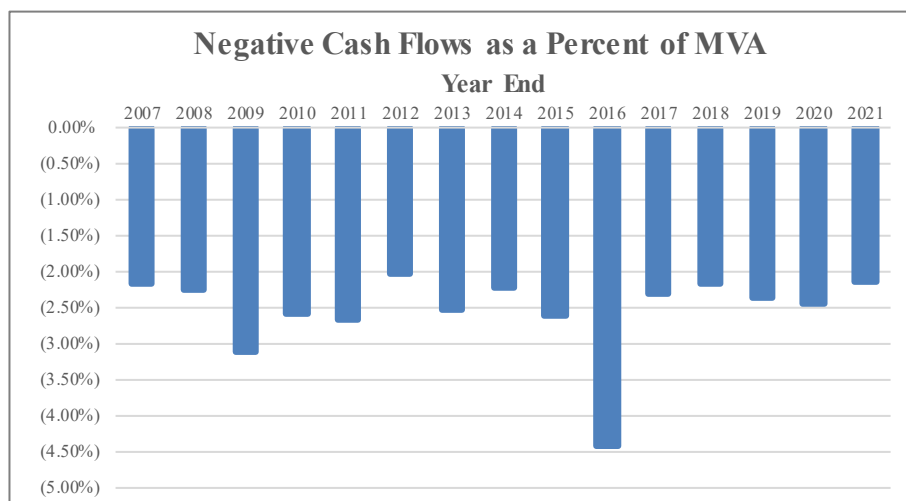
## EXHIBIT 15 – HISTORICAL CASH FLOWS

Plans with negative cash flows will experience increased sensitivity to investment return volatility. Cash flows, for this purpose, are measured as contributions less benefit payments. If the System has negative cash flows and experiences returns below the assumed rate, there are fewer assets to be reinvested to earn the higher returns that typically follow. While any negative cash flow will produce such a result, it is typically a negative cash flow of more than 4% to 5% of market value of assets that may cause significant concerns. In general, large negative cash flow is not a major risk for OSERS at this time.

Year End	Market Value of Assets (MVA)	Contributions*	Benefit Payments	Net Cash Flow	Net Cash Flow as a Percent of MVA
8/31/2007	\$1,117,628,000	\$44,037,000	\$68,286,000	(\$24,249,000)	(2.17%)
8/31/2008	1,050,281,000	49,099,000	72,912,000	(23,813,000)	(2.27%)
8/31/2009	884,438,000	49,943,000	77,503,000	(27,560,000)	(3.12%)
8/31/2010	951,214,000	56,616,000	81,260,000	(24,644,000)	(2.59%)
8/31/2011	1,033,128,000	58,242,000	86,015,000	(27,773,000)	(2.69%)
8/31/2012	1,095,565,000	68,139,000	90,621,000	(22,482,000)	(2.05%)
8/31/2013	1,170,347,000	65,248,000	95,107,000	(29,859,000)	(2.55%)
8/31/2014	1,294,722,000	72,072,000	100,810,000	(28,738,000)	(2.22%)
8/31/2015	1,211,107,000	75,065,000	106,735,000	(31,670,000)	(2.61%)
12/31/2016	1,148,582,000	101,826,000	152,808,000	(50,982,000)	(4.44%)
12/31/2017	1,234,040,000	92,397,000	121,005,000	(28,608,000)	(2.32%)
12/31/2018	1,193,800,000	101,704,000	127,578,000	(25,874,000)	(2.17%)
12/31/2019	1,323,663,000	102,468,000	133,824,000	(31,356,000)	(2.37%)
12/31/2020	1,405,393,000	103,010,000	137,486,000	(34,476,000)	(2.45%)
12/31/2021	1,626,049,000	108,428,000	143,199,000	(34,771,000)	(2.14%)

Note: Years prior to Year End 8/31/2010 were provided by the prior actuary.

\* Contributions include additional revenue coming into the System such as Purchases of Service and State Service Annuity receipts.



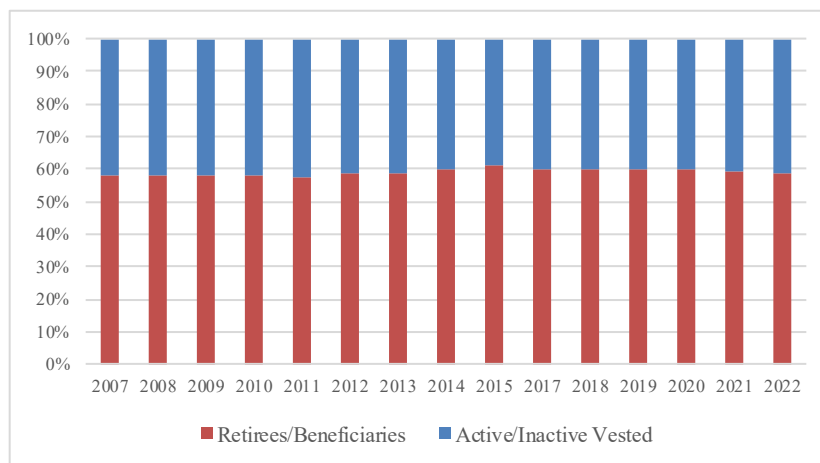


## EXHIBIT 16 – LIABILITY MATURITY MEASUREMENTS

Most public sector retirement systems were established after World War 2 and have been in operation for many years. As a result, they have aging plan populations, and in some cases declining active populations, resulting in an increasing ratio of retirees to active members and a growing percentage of retiree liability. With more of the total liability residing with retirees, investment volatility has a greater impact on the funding of the plan since it is more difficult to restore the system financially after losses occur when there is comparatively less payroll over which to spread costs. Because OSERS has been in existence for a very long time (prior systems dating back to 1909 were consolidated to create OSERS), there has been no significant change in the percent of liability attributable to retirees over the last 15 years. The ratio of retiree liability to covered payroll has increased over this time period, however, which indicates an increase in contribution risk.

Actuarial Valuation Date	Retiree Liability (a)	Total Actuarial Accrued Liability (b)	Retiree Percentage (a) / (b)	Covered Payroll (c)	Ratio (b) / (c)
9/1/2007	\$725,838,000	\$1,255,527,000	57.8%	\$272,844,149	4.60
9/1/2008	783,518,000	1,346,999,000	58.2%	272,720,007	4.94
9/1/2009	818,000,000	1,410,318,000	58.0%	287,770,291	4.90
9/1/2010	850,325,000	1,467,850,000	57.9%	302,229,282	4.86
9/1/2011	874,656,000	1,516,284,000	57.7%	310,228,916	4.89
9/1/2012	935,442,000	1,592,738,000	58.7%	307,258,065	5.18
9/1/2013	978,397,000	1,660,287,000	58.9%	313,946,237	5.29
9/1/2014	1,028,802,000	1,723,970,000	59.7%	323,077,710	5.34
9/1/2015	1,099,161,000	1,798,706,000	61.1%	333,166,135	5.40
1/1/2017	1,230,588,000	2,050,581,000	60.0%	351,940,122	5.83
1/1/2018	1,274,528,000	2,136,385,000	59.7%	359,359,507	5.94
1/1/2019	1,311,452,000	2,192,893,000	59.8%	375,598,301	5.84
1/1/2020	1,364,109,000	2,265,653,000	60.2%	364,799,331	6.21
1/1/2021	1,408,667,000	2,381,356,000	59.2%	364,310,430	6.54
1/1/2022	1,459,396,000	2,476,073,000	58.9%	381,926,844	6.48

Note: Years prior to the 9/1/2010 valuation were provided by the prior actuary.





**EXHIBIT 17 – COMPARISON OF VALUATION RESULTS UNDER ALTERNATE INVESTMENT RETURN ASSUMPTIONS**

This exhibit is a sensitivity analysis that compares the key January 1, 2022 valuation results under the current investment return assumption and four (4) alternate investment return assumptions, both higher and lower than the current assumption. This information is intended to illustrate the impact of the investment return assumption on the funding of the System. Note that only the investment return assumption is changed for this purpose, as identified in the heading below. This may not result in a set of economic actuarial assumptions that complies with Actuarial Standard of Practice Number 27. The alternate return assumptions are only for purposes of identifying the impact of different investment return assumptions on the funding results. All other actuarial assumptions are unchanged for purposes of this analysis

<b>Investment Return Assumption</b>	<b>6.90%</b>	<b>7.15%</b>	<b>7.40%</b>	<b>7.65%</b>	<b>7.90%</b>
<b>Contributions</b>					
Normal Cost Rate	14.22%	13.37%	12.59%	11.86%	11.18%
Administrative Expenses	0.24%	0.24%	0.24%	0.24%	0.24%
UAAL Contribution	15.98%	15.17%	14.36%	13.55%	12.74%
Total Actuarial Contribution Rate	30.44%	28.78%	27.19%	25.65%	24.16%
Statutory Contribution Rate	21.66%	21.66%	21.66%	21.66%	21.66%
<b>Contribution Shortfall/(Margin)</b>	8.78%	7.12%	5.53%	3.99%	2.50%
<b>Additional District Contribution</b>	\$34,588,083	\$28,059,572	\$21,801,926	\$15,736,601	\$9,863,838
<b>Actuarial Accrued Liability (\$ in millions)</b>	\$2,626.5	\$2,549.6	\$2,476.1	\$2,405.9	\$2,338.9
<b>Actuarial Value of Assets (\$ in millions)</b>	\$1,562.8	\$1,562.8	\$1,562.8	\$1,562.8	\$1,562.8
<b>Unfunded Actuarial Accrued Liability (\$ in millions)</b>	\$1,063.8	\$986.8	\$913.3	\$843.1	\$776.1
<b>Funded Ratio</b>	59.5%	61.3%	63.1%	65.0%	66.8%

Note: Dollar amounts may not add due to rounding.





**APPENDIX A**

**HISTORICAL BACKGROUND**



## **APPENDIX A – HISTORICAL BACKGROUND**

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### **Historical Background**

Since 1909, the Omaha School District has maintained a retirement system for its teachers. Since then, systems covering other employees were added. In 1951, the Nebraska Legislature consolidated the existing systems into one new System. Amendments of significance in the Nebraska statutes and federal Social Security Act have occurred from time to time. These changes in order of their occurrence are outlined briefly below:

#### **1951 - New System**

Prior to 1951, three separate retirement systems existed. In 1951 the Nebraska Legislature repealed these three separate systems and created the present single System covering all employees. This act provided, however, that a member of a pre-existing system might elect to retain his benefit and contribution rights under one of the former systems in lieu of the new System benefits and contributions. The members who so elected then became known by the following titles for retirement purposes:

- (1) Employees covered by the former Omaha Teachers Retirement System were known as "Teachers,"
- (2) Employees covered by the former Non-Teaching Employee Retirement System were known as "Non-Teachers,"
- (3) Employees covered by the former Cafeteria Employee Retirement System were known as "Cafeteria."

All other employees became members of the new System and received credit for membership service starting September 1, 1951. Benefits as well as contributions under the new System became directly related to a member's compensation by formula. The maximum covered annual compensation under the new System became \$5,000, but the maximum for Teachers, Non-Teachers and Cafeteria remained \$3,000.

#### **1955 Amendments**

On September 24, 1955, Omaha School employees voted to become participants in the federal Social Security program. All Social Security benefits are payable in addition to the System benefits. As a result of Social Security coverage, changes were made in the benefit and contribution formulas of the System effective August 31, 1955. In general, the changes reduced contributions and benefits to 60% of the rates formerly in effect. In addition, the maximum covered compensation was increased from \$5,000 to \$6,000 except for Teachers, Non-Teachers and Cafeteria which remained at \$3,000.

The amount contributed by the School District was also reduced to 60% of the rates in effect prior to the change and the School District's contributions, matching the refunds paid upon the withdrawal or death of employees, were retained in the retirement fund rather than being returned to the School District.

#### **1963 Amendments**

Effective September 1, 1963, several changes were made in the new System. The limit on covered compensation for contributions and benefits of members was removed.



## **APPENDIX A – HISTORICAL BACKGROUND**

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The service retirement annuity credit was increased in order to integrate with the modifications in federal Social Security between 1955 and 1963. The disability annuity for members was increased to 100% of the service retirement annuity accrued to date of disability and the restriction as to the number of years for which it was payable was removed. The offset in the benefit formula for the Nebraska State Service Annuity credit was placed on a year-to-year basis for all members, increasing the annuity credit for service after September 1, 1951 for active and retired alike.

The employees who were participating as Teachers, Non-Teachers and Cafeteria began to make contributions and receive benefit credits at the same rates as other members of the System. It should be noted that any employee who retained rights under a pre-existing system still receives credit in accordance with the provisions of the former system if this is more than the credit, after the State service annuity offset, would be under the 1963 amendments.

The contribution rate for employees was changed to integrate with the modifications in Social Security and was no longer subject to revision depending upon the degree of actuarial soundness of the System as had been provided in 1962. The School District became solely responsible for maintaining the solvency of the System on the basis of annual actuarial valuations. The School District again became entitled to refunds equal to the refunds paid upon withdrawal or death of employees.

The restriction prohibiting the crediting of interest on refunds to employees who withdraw from employment during the first ten years of service was removed. Thus, all employees who withdraw after one year or more of service receive interest on their contributions made since September 1, 1951.

### **1965 Amendments**

Effective September 1, 1965, a pre-retirement survivor's annuity was added to the System for long-service employees. This change gave an employee with 25 or more years of service protection at death approximately equivalent in value to the vesting which already existed at termination of employment for an employee with the same period of service.

Effective January 1, 1966, the Social Security tax base was increased from \$4,800 to \$6,600 per year. This change became effective in the System's contribution and benefit formulas as of September 1, 1966.

### **1967 Amendments**

The 77th Session of the Nebraska Legislature enacted LB 494 which amended the Nebraska School Retirement System, effective October 23, 1967. A major change was the increase in the State service annuity credit from \$1.50 to \$3.00 per month for each year of credited service after July 1, 1968 and the removal of the 35 year limitation on credited State service. For the purpose of determining the new State service annuity offset in calculating the net Omaha annuity, the additional \$1.50 per month for each year of service after July 1, 1968 is not applicable, but removal of the 35 year limitation does apply. This means that the State service annuity offset is still determined on the basis of \$1.50 per month for each year of service. The increase in the State service annuity offset by virtue of eliminating the 35 year limitation represents a lower cost to the Omaha System for those members having more than 35 years of State service by age 65.



## **APPENDIX A – HISTORICAL BACKGROUND**

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Another change with regard to the State service annuity was the manner in which the funds are transferred from the State to the Omaha System to pay these annuities. For retirements occurring after the effective date of the amendments (October 23, 1967), the State transfers the commuted value (equivalent single sum) of the individual State service annuity to the Omaha System and then the payment of the monthly annuity to the retired member is the School District's responsibility.

In 1967 the eligibility provisions for the pre-retirement survivors' annuity and the vested retirement rights were changed, reducing the service required from 25 years to 20 years and thereby granting these options to a larger number of employees.

Effective January 1, 1968, the federal Social Security taxable wage base was increased from \$6,600 to \$7,800 per year. This change became effective in the System's contribution and benefit formulas as of September 1, 1968.

### **1969 Amendments**

The 80th Session of the Nebraska Legislature enacted LB 530 which amended the System effective August 11, 1969. The provisions of this bill improved the benefit structure of the System in two ways. The membership annuity credits (credits after 9/1/51) were increased approximately 10% and the Social Security wage base was "frozen" at the \$7,800 level for purposes of calculating benefit credits and employee contributions.

By freezing the Social Security base, benefit credits and employee contributions for service after September 1, 1969 will not be reduced by virtue of future increases in the Social Security wage base. The System benefits will remain integrated with the Social Security program at the level provided by the \$7,800 base.

### **1972 Amendments**

During 1972, the Nebraska Legislature enacted LB 1116 which amended the System. These amendments were to become effective for retirements occurring on or after September 1, 1972. The provisions of this bill improved the benefit structure of the System and liberalized the eligibility condition for qualification upon termination for the deferred vested retirement benefit.

The benefits of the System were improved by increasing the membership annuity credits (credits after 9/1/51) by approximately 20% over those in existence on September 1, 1971.

In order to be eligible upon resignation to elect a deferred vested service annuity, the years of creditable service was reduced from 20 years to 15 years.

### **1973 Amendments**

The 1973 Session of the Nebraska Legislature enacted LB 445 which created increases in the State service annuity of the Nebraska School Retirement System. LB 445 provides for (a) a State service annuity credit of \$3.00 per month for each year of creditable service for all emeritus members and for all full time school employees who retire on or after July 1, 1973 and (b) for increases in the State service annuity for members who retired prior to July 1, 1973 based upon the difference between the Consumers Price Index on the date of retirement and July 1, 1973.



## **APPENDIX A – HISTORICAL BACKGROUND**

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### **1976 Amendments**

The 1976 Session of the Nebraska Legislature enacted LB 994 which increased the membership annuity credits (credits after 9/1/51) by 20%.

The members' contributions were increased to 2.90% of compensation up to \$7,800 per year plus 5.25% of salary in excess of that amount.

### **1979 Amendments**

The 1979 Session of the Nebraska Legislature changed the mandatory retirement date from age 65 to age 70. Late retirement benefits are actuarially increased from what would have been payable at the normal retirement date.

### **1982 Amendments**

The 1982 Session of the Nebraska Legislature enacted LB 131 which made considerable changes to the System. LB 131 was approved by the Governor on February 19, 1982.

The most major revision in the System was to change the previous primary benefit formula from the step rate formula based on each year of salary to a final average compensation formula. The primary benefit formula became 1.5% of final average compensation for each year of creditable service not in excess of 30. Final average compensation was then defined to be 1/36 of the total compensation received during the three fiscal years of highest compensation. Also, the creditable service not in excess of 30 years was allowed to continue to accrue after the fiscal year in which the employee attains age 65. In addition, the State service annuity offset of \$1.50 per year of creditable service was removed with respect to the final average compensation formula. The prior provisions of the System were retained as a minimum benefit, recognizing creditable service for those provisions through the earlier of the date of retirement or August 31, 1983.

Another major revision in the System was to change the step rate formula for employee contributions to a level 4.90% of compensation. In addition, the provision entitling the School District to receive refunds of its own contributions equal to the contributions refunded to employees was removed.

The early retirement date was liberalized. Previously an employee needed to have either 35 years of creditable service or to have attained age 60 with 25 years of creditable service. Now an employee can retire early if he has at least 10 years of creditable service and has attained age 55.

The actuarial equivalent of the annuity payable at the end of the fiscal year in which the employee attains age 65 was changed in the following two ways:

1. For employees retiring before age 62, the monthly formula retirement annuity is a reduced amount based on the actuarial equivalent of the annuity deferred to the employee's 62nd birthday. If retirement is at age 62 or later, there is no actuarial reduction. Previously there was an actuarial reduction, based on the benefit deferred to age 65, for any retirement before age 65.
2. For employees retiring on or after age 65, the monthly formula retirement annuity is to be based on total years of creditable service (not in excess of 30) and the employee's entire compensation history at date of retirement. Consequently, for retirements after the fiscal year in which the employee attains age 65 there is no longer an actuarial increase from the benefit available at the normal retirement date.



## **APPENDIX A – HISTORICAL BACKGROUND**

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The eligibility provision to elect a deferred vested service annuity upon resignation was changed from 15 years of creditable service to 10 years.

### **1983 Amendments**

The 1983 Session of the Nebraska Legislature enacted LB 488 which created benefit increases effective September 1, 1983 for members having retired before February 21, 1982. The amount of benefit increase was limited to the smaller of:

1. The percentage increase in the Consumer Price Index for all Urban consumers from the effective date of retirement to June 30, 1983 applied to benefits being paid and
2. The sum of \$1.50 per month for each year of creditable service and \$1.00 per month for each completed year of retirement from the effective date of retirement to June 30, 1983, actuarially adjusted for joint and survivor elections.

### **1985 Amendments**

The 1985 Session of the Nebraska Legislature enacted LB 215 which removed the 30 year limit on years of service used in the benefit formula, provided for vesting after five years of service rather than ten years, and reduced the eligibility period for disability from ten years of service to five years of service.

LP215 also provided for the employer “pick up” of employee contribution under IRC 414(h), thereby allowing employee contributions to be made on a pre-tax basis.

Unisex factors are now being used for determining early retirement reductions and actuarial equivalents for joint and survivor optional benefits.

### **1986 Amendments**

The 1985 Session of the Nebraska Legislature enacted LB 1048 which granted increases in benefits for most retirees to reflect cost-of-living increases over the last several years. The increases ranged up to a maximum of 10.5%.

### **1987 Amendments**

A "window of opportunity" was created for the buy-in or buy-back of service credits for participants qualifying for that right.

### **1989 Amendments**

LB 237 was enacted by the 1989 Session of the Nebraska Legislature and provided: annual benefit accruals of 1.65% of final average compensation (up from 1.50%), unreduced benefits if a member retires with 35 or more years of service, a five year certain and life thereafter annuity as the normal form of benefit (instead of just a life annuity), employee contributions of 5.8% of pay (up from 4.9%), and increased benefits to retirees (the increases ranged up to 9.0%). There were some other changes as a result of this bill, but none that had a direct actuarial cost impact.



## **APPENDIX A – HISTORICAL BACKGROUND**

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### **1992 Amendments**

The 1992 Session of the Nebraska Legislature enacted LB 1001 which increased annual benefit accruals from 1.65% of final average compensation to 1.70%, and increased benefits to retirees (3% increase per year of retirement, not exceeding 9% total increase), a change in the preretirement joint and survivor option to allow it to become effective automatically after 20 years of service, and allowed employees to “buy-in” their time with other public school systems by means of a tax-deferred rollover of their refund from that System.

### **1995 Amendments**

The 1995 Session of the Nebraska Legislature enacted LB 505 which increased annual benefit accruals from 1.70% to 1.80% of final average compensation. It also provided for unreduced retirement benefits when the sum of age and service equals or exceeds 85 (still maintaining the age 55 minimum), and reduced early retirement reductions to .25% per month prior to age 62. Early retirement at 84, 83, or 82 points is also allowed with a maximum reduction of 3%, 6% and 9% respectively. Employee contributions were increased to 6.3% of pay. The bill also provided for a one time increase to current retirees of 3% per year since retirement (not to exceed 9%), or if larger, 90% restoration of the purchasing power of their original pension.

There are other changes resulting from this bill, which are not included since they did not have a direct actuarial impact. One change with no actuarial impact but worth noting is the provision for employer “pick up” of employee contributions to the System used to buy in outside service, pursuant to Section 414(h) of the Internal Revenue Code.

### **1998 Amendments**

The 1998 Session of the Nebraska Legislature enacted LB 497 which increased annual benefit accruals from 1.80% to 1.85% of final average compensation. The bill also provided for a one time increase to current retirees of 3% per year since retirement (not to exceed 9%) and provides an annual automatic cost of living adjustment, not greater than 1.5%, beginning January 1, 2000.

### **2000 Amendments and Cost of Living Adjustment**

The 2000 session of the Nebraska Legislature enacted LB 155 which increased accruals from 1.85% to 2.00% of final average compensation.

Pursuant to LB 497, the OSERS Board and the Omaha School District Board authorized a 1.5% discretionary COLA beginning January 1, 2000 in addition to the automatic COLA.

### **2001 Amendments and Cost of Living Adjustment**

The 2001 session of the Nebraska Legislature enacted LB 711 which provided that certain members who previously left employment due to pregnancy could purchase their “lost” service. It also provided a post-retirement supplemental benefit to assist with medical costs. The supplement commences 10 years after retirement, beginning at \$10 per month for each year retired and increasing by \$10 each year to a maximum of \$250 per month. For retirees with less than twenty years of service, the benefit is reduced proportionately.

Additionally, the OSERS Board and the Omaha School Board authorized a discretionary COLA to restore full purchasing power, beginning January 1, 2001, in addition to the automatic COLA.



## **APPENDIX A – HISTORICAL BACKGROUND**

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### **2002 Cost of Living Adjustment**

The automatic 1.5% COLA was granted beginning January 1, 2002.

### **2003 Cost of Living Adjustment**

The automatic 1.5% COLA was granted beginning January 1, 2003.

### **2004 Cost of Living Adjustment**

The automatic 1.5% COLA was granted beginning January 1, 2004.

### **2005 Cost of Living Adjustment**

The automatic 1.5% COLA was granted beginning January 1, 2005.

### **2006 Cost of Living Adjustment**

The automatic 1.5% COLA was granted beginning January 1, 2006.

### **2007 Amendment and Cost of Living Adjustment**

The 2007 session of the Nebraska Legislature enacted Section 79-9, 113 which changed the employee contribution rate from 6.30% of compensation to 7.30% and provided for an employer contribution equal to 101% of the employee contribution rate.

The automatic 1.5% COLA was granted beginning January 1, 2007.

### **2008 Cost of Living Adjustment**

The automatic 1.5% COLA was granted beginning January 1, 2008.

### **2009 Amendment and Cost of Living Adjustment**

The 2009 session of the Nebraska Legislature enacted Legislative Bill 187 (LB 187), which increased the State's contribution from 0.7% to 1.0% of covered pay from July 1, 2009 to July 1, 2014. On July 1, 2014 the State's contribution returns to 0.7%. LB 187 also increased the employee contribution rate from 7.30% of compensation to 8.30%. The School District's contribution is equal to 101% of the employee contribution rate so the District's contribution rate increased from 7.373% of compensation to 8.383% as a result of the increase in the member contribution rate.

The automatic 1.5% COLA was granted beginning January 1, 2009.

### **2010 Amendment and Cost of Living Adjustment**

The automatic 1.5% COLA was granted beginning January 1, 2010.





## **APPENDIX A – HISTORICAL BACKGROUND**

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### **2011 Amendment and Cost of Living Adjustment**

The 2011 session of the Nebraska Legislature enacted Legislative Bill 382 (LB 382), which increased the Member's contribution from 8.30% of compensation to 9.30%. The School District's contribution is equal to 101% of the employee contribution rate so the District's contribution rate increased from 8.383% of compensation to 9.393% as a result of the increase in the member contribution rate. LB 382 also extended the 1% of payroll contribution by the State from July 1, 2014 to July 1, 2017.

The automatic 1.5% COLA was granted beginning January 1, 2011.

### **2012 Cost of Living Adjustment**

The automatic 1.5% COLA was granted beginning January 1, 2012.

### **2013 Amendments and Cost of Living Adjustment**

The 2013 session of the Nebraska Legislature enacted Legislative Bill 553 (LB 553), which increased the Member contribution rate from 9.30% of pay to 9.78% of pay. The School District's contribution is equal to 101% of the employee contribution rate so the District's contribution rate increased from 9.393% of pay to 9.878% of pay as a result of the increase in the member contribution rate. LB 553 also ended the scheduled decrease in the State contribution rate and instead increased the State contribution from 1.0% of pay to 2.0% of pay, effective July 1, 2014. LB 553 also created a new benefit structure for members hired on or after July 1, 2013. For these members, annual cost of living adjustments will be the lesser of 1.0% or CPI, and the final average compensation is defined as 1/60 of the total compensation received during the five fiscal years of highest compensation.

The automatic 1.5% COLA was granted beginning January 1, 2013.

### **2014 Cost of Living Adjustment**

The automatic 1.5% COLA was granted beginning January 1, 2014.

### **2015 Cost of Living Adjustment**

The automatic 1.5% COLA was granted beginning January 1, 2015.



## **APPENDIX A – HISTORICAL BACKGROUND**

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### **2016 Amendments and Cost of Living Adjustment**

The 2016 session of the Nebraska Legislature enacted Legislative Bill 447 (LB 447), which created a new benefit structure for members hired on or after July 1, 2016. The changes result in the same benefit structure for new OSERS members as for new members of the Nebraska School Retirement System. These members will not receive the supplemental medical COLA offered to employees hired before July 1, 2016. Other changes for these employees include a revised early retirement benefit reduction schedule and different retirement eligibility requirements.

The automatic 1.5% COLA was granted beginning January 1, 2016.

### **2017 Cost of Living Adjustment**

The automatic 1.5% COLA was granted beginning January 1, 2017.

### **2018 Amendments and Cost of Living Adjustment**

The 2017 session of the Nebraska Legislature enacted Legislative Bill 415 (LB 415), which created a new benefit structure for members hired on or after July 1, 2018. The changes result in the same benefit structure for new OSERS members as for new members of the Nebraska School Retirement System. The changes for these employees include a revised early retirement benefit reduction schedule and different retirement eligibility requirements.

The 2018 session of the Nebraska Legislature enacted Legislative Bill 1005 (LB 1005), which also affects the benefit provisions for members hired on or after July 1, 2018. As a result of LB 1005, the Board has the authority to set the actuarial assumptions used to determine the benefit amounts payable under optional forms of payment for members hired on or after July 1, 2018.

The automatic 1.5% COLA was granted beginning January 1, 2018.

### **2019 Cost of Living Adjustment**

The automatic 1.5% COLA for members hired before July 1, 2013 was granted beginning January 1, 2019.

### **2020 Cost of Living Adjustment**

The automatic 1.5% COLA for members hired before July 1, 2013 was granted beginning January 1, 2020.



## **APPENDIX A – HISTORICAL BACKGROUND**

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### **2021 Amendments and Cost of Living Adjustment**

The 2021 session of the Nebraska Legislature enacted Legislative Bill 147 (LB 147), which re-defines the term Regular Employee. The bill allows employees who are contracted to less than 30 hours per week to participate in the System, if they average more than 30 hours per week during any three calendar months of a fiscal year.

The automatic 1.5% COLA for members hired before July 1, 2013 was granted beginning January 1, 2021.

The automatic 1.0% COLA for members hired on or after July 1, 2013 was granted beginning January 1, 2021.



**APPENDIX B**

**SUMMARY OF PLAN PROVISIONS**



## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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### Contributions

**Employee Contributions:** Employees contribute 9.78% of compensation, effective September 1, 2013. Such contributions are payable each year while employed. Contributions accumulated with interest are refundable at resignation unless the vested retirement benefit has been elected and at death unless the pre-retirement survivor's benefit has been elected.

**State Contribution:** The State contributes annually an amount equal to 2.0% of the members' compensation, effective July 1, 2014.

**School District Contribution:** The School District contributes the greater of (a) one hundred and one percent of the contributions by the employees or (b) such amount as may be necessary to maintain the solvency of the system, as determined annually by the board upon recommendation of the actuary engaged by the trustees.

**Interest Credited on Refunds:** Contributions made prior to September 1, 1951 and refunded at withdrawal or death are not credited with interest. Contributions after September 1, 1951 are credited with interest beginning September 1, 2016 at the rate equal to the daily treasury yield curve for one-year treasury securities, as published by the secretary of the treasury of the United States, that applies on September 1 of each year.

### Benefits

**General:** The System provides annuities upon retirement from service or disability and upon death to designated survivors.

The service retirement formula is 2.0% per year of creditable service times the final average compensation.

Final average compensation is defined as 1/36 of the total compensation received during the three fiscal years of highest compensation for those who became members before July 1, 2013. For those who became members on or after July 1, 2013, final average compensation is defined as 1/60 of the total compensation received during the five fiscal years of highest compensation.

Annuities are paid for life, with 5 years guaranteed. Optional forms of payment are available.

The disability annuity, the pre-retirement survivor annuity and the vested retirement right are summarized in the following sections.

Benefits in pay status are subject to an annual cost of living adjustment equal to the lesser of 1.5% or CPI for those who became members before July 1, 2013. There is an additional COLA if surplus assets exist beginning January 1, 2000. Effective October 3, 2001, a medical cost of living adjustment is payable to retired members. Such amount will commence after the 10<sup>th</sup> year of retirement and shall be an amount equal to \$10 per month for each year retired (subject to a maximum of \$250 per month), prorated for years of service less than 20. For those who became members on or after July 1, 2013, the annual cost of living adjustment is capped at 1.0%.

Those who became members on or after July 1, 2016 are not eligible to receive the medical COLA benefit.



## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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**Retirement Annuities:** An employee who becomes a member before July 1, 2016 may begin receiving a retirement benefit once the employee has left the employment of the School district, selected a retirement date and

- (a) has completed 35 years of creditable service,
- or
- (b) has 10 years of creditable service (with at least five of those years being creditable Omaha service) and attained age 55,
- or
- (c) remained employed until his or her 65th birthday and completed at least five years of creditable Omaha service.

If an employee who was a member before July 1, 2016 begins receiving an annuity at or after age 62, or has achieved 85 points and is at least age 55, there is no adjustment for the retirement annuity. If, however, such employee begins receiving an annuity before age 62, the annuity shall be reduced by 0.25% for each month prior to age 62, but if 84 points have been achieved then the reduction is limited to 3%, if 83 points, 6%, and 82 points, 9%.

An employee who became a member on or after July 1, 2016 and before July 1, 2018 may begin receiving a retirement benefit once the employee has left the employment of the School district, selected a retirement date and

- (a) has attained age 55 and the sum of the member's attained age and creditable service totals 85,
- or
- (b) has 5 years of creditable service and attained age 60.

For employees who became members on or after July 1, 2016 and before July 1, 2018, if an employee begins receiving an annuity before age 65, such annuity shall be reduced by 0.25% for each month prior to age 65. If, however, the employee has achieved 85 points and is at least age 55, then there is no reduction to the annuity.

An employee hired on or after July 1, 2018 may begin receiving a retirement benefit once the employee has left the employment of the School district, selected a retirement date and

- (a) has attained age 60 and the sum of the member's attained age and creditable service totals 85,
- or
- (b) has 5 years of creditable service and attained age 60.

For employees who were hired on or after July 1, 2018, if an employee begins receiving an annuity before age 65, such annuity shall be reduced by 0.25% for each month prior to age 65. If, however, the employee has achieved 85 points and is at least age 60, then there is no reduction to the annuity.

**Disability Retirement Annuities:** Each employee who becomes totally disabled and who has completed five or more years of creditable Omaha service is entitled to a disability retirement annuity equal to the amount of service annuity earned to date of disability. Alternatively, the employee may defer the disability retirement and accrue service and compensation increases in the interim. The disability retirement annuity is payable each month until disability ceases, if before unreduced retirement, or death.



## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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**Pre-Retirement Survivor Annuities:** Upon the death of a member who has completed 20 or more years of creditable service and who has not retired, a pre-retirement survivor annuity shall be paid to the member's primary beneficiary. The survivor must be a spouse or one other person whose attained age in the calendar year of the member's death is no more than 10 years less than the attained age of the member in such calendar year. If there is no beneficiary form on file with OSERS, the member's spouse at the time of death is deemed to be the beneficiary and eligible for a pre-retirement survivor annuity. The survivor annuity is the actuarial equivalent of the member's annuity accrued to the date of death, determined on the basis of the member's and beneficiary's attained ages on said date. The survivor annuity is payable in lieu of a refund of the member's accumulated contributions. However, a member may elect out of the survivor annuity and specify that such a refund be paid in lieu of the annuity. An election out of the pre-retirement survivor annuity is entirely independent of the election of a joint and survivor option at retirement. Within 60 days after the member's death, the beneficiary may request a refund of the member's accumulated contributions instead of the annuity; provided, however, that the member may direct the System to pay only an annuity.

If the member (not retired) has less than 20 years of creditable service, or the beneficiary does not meet the requirements stated above, a refund of the member's accumulated contributions shall be paid.

**Vested Retirement Right:** Each employee who has completed five or more years of creditable Omaha service is eligible upon resignation to elect a deferred vested benefit, first payable as an unreduced amount at age 65, in lieu of a refund of his accumulated contributions. With ten or more years of total creditable service (including at least five years of creditable Omaha service), the deferred vested benefit could commence, unreduced, at age 62 for employees who became members before July 1, 2016. If benefits start before age 62 (but not earlier than attained age 55), the benefit shall then be reduced as described above.

For employees who became members on or after July 1, 2016 and before July 1, 2018, the deferred vested benefit could commence, unreduced, at age 65. If benefits start before age 65 (but not earlier than attained age 55), the benefit shall then be reduced as described above.

For employees who were hired on or after July 1, 2018, the deferred vested benefit could commence, unreduced, at age 65. If benefits start before age 65 (but not earlier than attained age 60), the benefit shall then be reduced as described above.



**APPENDIX C**

**ACTUARIAL ASSUMPTIONS AND METHODS**





## APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

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The valuation assumptions and methods used in conducting the current actuarial valuation are as follows:

### Actuarial Assumptions

Investment Return Assumption: 7.40% per annum, compounded annually, net of investment expenses.  
Note: This assumption will decrease each year until reaching the ultimate rate of 7.00% in the 2025 valuation.

Inflation (CPI): 2.70% compounded annually.  
Note: This assumption will decrease each year until reaching the ultimate rate of 2.35% in the 2025 valuation.

Assumed Interest Rate Credited on Employee Contributions: 2.70% compounded annually.  
Note: This assumption will decrease each year until reaching the ultimate rate of 2.35% in the 2025 valuation.

Total Payroll Growth: 3.20% compounded annually.  
Note: This assumption will decrease each year until reaching the ultimate rate of 2.85% in the 2025 valuation.

Mortality Rates: Active members use the Pub-2010 General Members (Median) Employee Mortality Table projected generationally using the NPERS projection scale.

Retirees use the Pub-2010 General Members (Median) Retiree Mortality Table projected generationally using the NPERS projection scale.

Beneficiaries use the Pub-2010 General Members (Median) Contingent Survivor Mortality Table projected generationally using the NPERS projection scale.

Disabled retirees use the Pub-2010 Non-Safety Disabled Retiree Mortality Table, without generational improvement.

Disability: None assumed.

Termination of Employment: Illustrative rates of termination are as follows:  
(prior to retirement eligibility)

#### **Certificated:**

<u>Percent Terminating</u>	
<u>Duration</u>	<u>Rate</u>
1	10.00%
5	8.00
10	4.50
15	2.50
20	1.25
25	1.00
30	0.75



**APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

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**Classified:**

<u>Duration</u>	<u>Percent Terminating</u>	
	<u>Male</u>	<u>Female</u>
1	10.00%	13.00%
5	6.00	8.00
10	2.65	4.00
15	1.60	1.75
20	1.00	0.80
25	0.50	0.50
30	0.50	0.50

**Retirement Rates:**

Early retirement rates are assumed to occur according to the schedule illustrated below:

Became members before July 1, 2016

<b>Certificated:</b>		<b>Classified:</b>	
<u>Age</u>	<u>Early</u>	<u>Age</u>	<u>Early</u>
55	6%	55	5%
56	6	56	3
57	6	57	3
58	6	58	3
59	8	59	3
60	12	60	3
61	12	61	7

Became members on or after July 1, 2016

<b>Certificated:</b>		<b>Classified:</b>	
<u>Age</u>	<u>Early</u>	<u>Age</u>	<u>Early</u>
60	12%	60	3%
61	12	61	7
62	12	62	7
63	12	63	7
64	12	64	7



## APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

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Unreduced retirement rates are assumed to occur according to the schedule illustrated below:

### Became members before July 1, 2018

#### **Certificated:**

<u>Age</u>	<u>1<sup>st</sup> Year Eligible</u>	<u>Ultimate</u>
55	40%	
56	40	40%
57	40	20
58	40	20
59	40	20
60	30	20
61	22	20
62	22	25
63	25	20
64	25	25
65	40	30
66	40	40
67	40	40
68	40	35
69	100	35
70	100	100

#### **Classified:**

<u>Age</u>	<u>1<sup>st</sup> Year Eligible</u>	<u>Ultimate</u>
55	35%	
56	13	10%
57	13	10
58	13	10
59	13	10
60	13	10
61	13	10
62	18	15
63	18	15
64	18	15
65	18	35
66	18	35
67	18	30
68	18	30
69	18	25
70	100	25
71	100	25
72	100	25
73	100	25
74	100	25
75	100	100



## APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

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### Members hired on or after July 1, 2018

#### **Certificated:**

<u>Age</u>	<u>1<sup>st</sup> Year Eligible</u>	<u>Ultimate</u>
60	40%	
61	22	20%
62	22	25
63	25	20
64	25	25
65	40	30
66	40	40
67	40	40
68	40	35
69	100	35
70	100	100

#### **Classified:**

<u>Age</u>	<u>1<sup>st</sup> Year Eligible</u>	<u>Ultimate</u>
60	30%	
61	13	10%
62	18	15
63	18	15
64	18	15
65	18	35
66	18	35
67	18	30
68	18	30
69	18	25
70	100	25
71	100	25
72	100	25
73	100	25
74	100	25
75	100	100

Deferred vested members are assumed to retire at first unreduced retirement age.



## APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

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Salary Scale: Salaries are assumed to increase according to the schedule illustrated below:

<u>Duration</u>	<u>Annual Salary Increase</u>	
	<u>Certificated</u>	<u>Classified</u>
0	5.30%	6.60%
1	5.30	5.45
2	5.30	5.20
3	5.30	4.95
4	5.30	4.70
5	5.30	4.60
6	5.30	4.50
7	5.30	4.40
8-9	5.30	4.20
10	5.30	5.30
11	5.30	4.20
12-14	5.30	3.70
15	5.95	5.70
16-19	5.15	3.70
20	5.45	5.20
21-23	4.25	3.70
24	4.70	3.70
25	6.20	5.20
26-29	3.45	3.45
30	4.20	5.20
31-34	3.45	3.20
35	4.20	3.70
36-39	3.20	3.20
40	3.95	4.20
41+	3.20	3.20

Note: The salary scale reflects a general wage growth assumption of 3.20% as of January 1, 2022. The general wage growth assumption, and therefore the salary scale, will decrease each year until reaching the ultimate rate of 2.85% in the 2025 valuation.

Pre-Retirement Survivor Annuity: It is assumed that females are three years younger than males, and that 85% of members are married.

Probability of Electing a Refund: The proportion of terminating vested members electing a refund of member contributions:

- 20% for Certificated members with less than 15 years of service
- 10% for Certificated members with 15 or more years of service
- 35% for Classified members with less than 11 years of service
- 25% for Classified members with 11 or more years of service

Cost of Living Adjustments: 1.5% if became member before 7/1/2013  
1.0% if became member on or after 7/1/2013



## APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

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Inactive Vested Load	A 5% load on deferred monthly benefits is included to reflect that some inactive vested members' account balances are greater than the present value of their deferred benefit.
Administrative Expense	0.24% of payroll
Decrement Timing:	Middle of year
Valuation Salary Methodology	<p>Valuation salaries are imputed using each member's contribution amount during the prior year. For members who did not work a full year, their salaries are annualized using current salary rates.</p> <p>Salaries are assumed to increase by 2.0% for members who have not yet finalized their contract negotiations as of the valuation date. This assumption did not impact any members in the January 1, 2022 valuation.</p>



## **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

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### **Actuarial Cost Method**

The actuarial cost method is a procedure for allocating the actuarial present value of pension plan benefits and expenses to time periods. The method used for the valuation is known as the individual entry-age actuarial cost method, and has the following characteristics.

- (i) The annual normal costs for individual active member are sufficient to accumulate the value of the member's pension at time of retirement.
- (ii) Each annual normal cost is a constant percentage of the member's year-by-year projected pensionable compensation.

The entry-age actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's pensionable compensation between the entry-age of the member and the assumed exit-ages.

The portion of the actuarial present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the actuarial accrued liability. Deducting accrued assets from the actuarial accrued liability determines the unfunded actuarial accrued liability (UAAL).

### **Asset Valuation Method**

Assets are valued at expected value at the valuation date plus 25% of the difference between the market value and expected value. As a starting point for implementation of this asset valuation method, the actuarial value of assets as of September 1, 1996 was set equal to the market value. As of September 1, 2007, the actuarial value was again reset to market value. The smoothing method was again implemented in the 2008 valuation. Effective September 1, 2008, the actuarial value must fall within a corridor of 80% to 120% of market value.

### **UAAL Amortization Method**

Effective with the January 1, 2019 valuation, OSERS amortizes the UAAL using a "layered" approach. Under this method, the UAAL is split into pieces; the first piece is amortized, as a level-percent of pay, over a closed 30-year period beginning with the January 1, 2019 valuation (27 years remain as of the January 1, 2022 valuation). Future UAAL bases that result from future actuarial experience will be amortized, as a level-percent of pay, over a new 25-year closed period commencing on the respective valuation date.



**APPENDIX D**  
**MEMBERSHIP DATA**





APPENDIX D– MEMBERSHIP DATA

SUMMARY OF MEMBERSHIP DATA

	<u>Active</u>	<u>Inactive Vesteds</u>	<u>Nonvested Terminations</u>	<u>Retirees*</u>	<u>Beneficiaries</u>	<u>Deferred Disableds</u>	<u>In-Pay Disableds</u>	<u>Total</u>
Members on 1/1/2021	7,182	1,213	917	4,814	260	10	15	14,411
Terminated – vested	(231)	231	0	0	0	0	0	0
Terminated – refund due	(338)	0	338	0	0	0	0	0
Terminated – refunded	(221)	(38)	(107)	0	0	0	0	(366)
Retired	(226)	(35)	0	261	0	0	0	0
Disability retirement	0	(1)	0	0	0	1	0	0
Death	(12)	(3)	(1)	(135)	(10)	0	(1)	(162)
Payments ended	0	0	0	(1)	(3)	0	0	(4)
New beneficiaries	0	0	0	0	37	0	0	37
New Alternate Payees	0	0	0	1	0	0	0	1
New members	838	0	81	0	0	0	0	919
Rehires	94	(18)	(76)	0	0	0	0	0
Corrections/adjustments	0	1	0	0	0	0	0	1
Members on 1/1/2022	7,086	1,350	1,152	4,940	284	11	14	14,837

\* Includes QDROs



**APPENDIX D– MEMBERSHIP DATA**

**HISTORICAL SUMMARY OF MEMBERS**

The following table displays selected historical data that was used in the actuarial valuation for the System.

Valuation		Active Members						Number			Act/Ret Ratio
Date January 1*	Total Count	Average				Annual Pay (\$)	Pay Increase	Inactive Vested	Inactive Nonvested	Retired	
		Number	Age	Entry Age	Service						
1998	8,204	5,680	44.2	33.7	10.5	28,912		330		2,194	2.59
1999	8,564	5,864	43.9	34.0	9.9	29,493	2.01%	386		2,314	2.53
2000	8,885	6,057	43.8	34.1	9.7	30,544	3.56%	380		2,448	2.47
2001	9,156	6,259	44.0	34.4	9.6	32,091	5.06%	368		2,529	2.47
2002	9,409	6,383	43.9	34.5	9.4	33,406	4.10%	384		2,642	2.42
2003	9,425	6,279	44.0	34.5	9.5	33,877	1.41%	385		2,761	2.27
2004	9,711	6,399	44.2	34.6	9.6	34,698	2.42%	473		2,839	2.25
2005	10,124	6,623	44.1	34.8	9.3	35,234	1.54%	485		3,016	2.20
2006	10,522	6,972	44.1	34.9	9.2	35,732	1.41%	442		3,108	2.24
2007	10,769	7,041	44.2	35.1	9.1	36,720	2.77%	483		3,245	2.17
2008	11,228	7,313	44.2	35.2	9.0	37,725	2.74%	515		3,400	2.15
2009	11,480	7,438	44.5	35.5	9.0	38,686	2.55%	553		3,489	2.13
2010	11,644	7,491	44.7	35.4	9.3	39,152	1.20%	566		3,587	2.09
2011	11,602	7,215	45.1	35.2	9.9	40,394	3.17%	680		3,707	1.95
2012	11,881	7,315	44.9	35.0	9.9	40,793	0.99%	723		3,843	1.90
2013	12,152	7,372	44.9	34.9	10.0	41,731	2.30%	813		3,967	1.86
2014	12,477	7,415	44.7	34.8	9.9	42,427	1.67%	937		4,125	1.80
2015	12,938	7,393	44.5	34.7	9.8	44,050	3.83%	984	210	4,351	1.70
2017	13,386	7,462	44.5	34.1	10.4	44,998	2.15%	1,035	347	4,542	1.64
2018	13,703	7,569	44.5	34.1	10.4	46,233	2.74%	1,043	413	4,678	1.62
2019	13,788	7,177	44.8	33.8	11.0	47,300	2.31%	1,114	671	4,826	1.49
2020	14,218	7,366	44.5	33.9	10.6	47,571	0.57%	1,163	709	4,980	1.48
2021**	14,411	7,182	44.2	33.4	10.8	52,027	9.37%	1,223	917	5,089	1.41
2022	14,837	7,086	44.1	33.4	10.7	54,980	5.68%	1,361	1,152	5,238	1.35

\* Years prior to 2017 have a valuation date of September 1.

\*\* Salary data refinement.

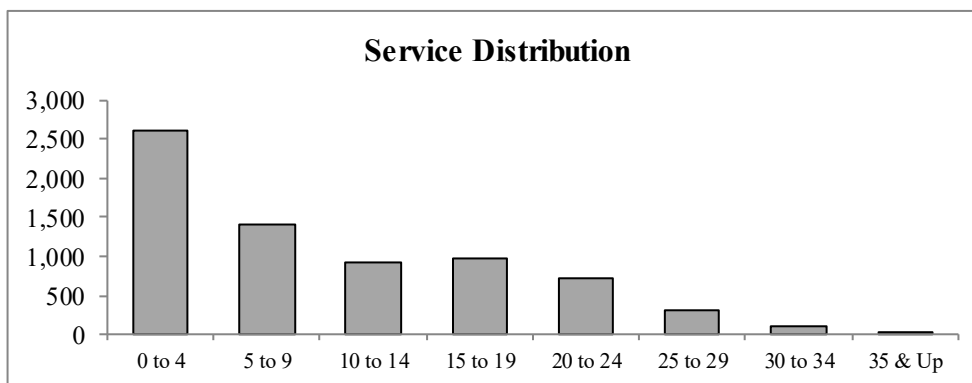
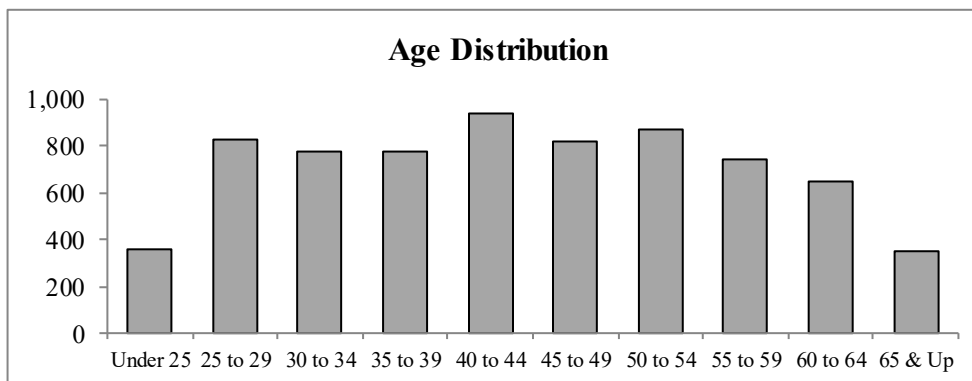


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of January 1, 2022

**Total**

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	355	0	0	0	0	0	0	0	355
25 to 29	717	109	0	0	0	0	0	0	826
30 to 34	351	366	56	0	0	0	0	0	773
35 to 39	238	229	239	67	0	0	0	0	773
40 to 44	248	153	166	314	54	0	0	0	935
45 to 49	169	120	118	155	238	18	0	0	818
50 to 54	158	124	114	153	157	142	22	0	870
55 to 59	167	109	89	124	109	84	52	9	743
60 to 64	118	129	94	101	117	43	27	16	645
65 & Up	93	80	39	49	43	22	13	9	348
<b>Total</b>	<b>2,614</b>	<b>1,419</b>	<b>915</b>	<b>963</b>	<b>718</b>	<b>309</b>	<b>114</b>	<b>34</b>	<b>7,086</b>





OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
PROJECTED SALARY DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2022

Total

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	12,911,066	0	0	0	0	0	0	0	12,911,066
25 to 29	31,768,535	5,736,994	0	0	0	0	0	0	37,505,529
30 to 34	15,371,406	20,214,175	3,470,581	0	0	0	0	0	39,056,162
35 to 39	11,167,068	12,308,429	15,234,480	4,762,105	0	0	0	0	43,472,082
40 to 44	11,733,455	8,655,189	10,249,003	22,885,246	4,046,169	0	0	0	57,569,062
45 to 49	7,825,978	6,487,756	7,066,461	10,853,366	18,387,971	1,582,054	0	0	52,203,586
50 to 54	7,784,938	6,448,659	6,546,166	9,812,864	11,810,165	12,255,904	1,970,407	0	56,629,103
55 to 59	7,191,407	4,934,701	4,678,464	7,253,015	6,977,589	6,249,821	4,272,558	800,011	42,357,566
60 to 64	4,610,821	5,909,290	4,211,432	5,496,619	6,603,768	2,338,062	2,039,216	1,225,620	32,434,828
65 & Up	3,082,772	3,534,730	1,707,406	2,409,835	2,048,272	1,099,751	757,770	805,594	15,446,130
Total	113,447,446	74,229,923	53,163,993	63,473,050	49,873,934	23,525,592	9,039,951	2,831,225	389,585,114

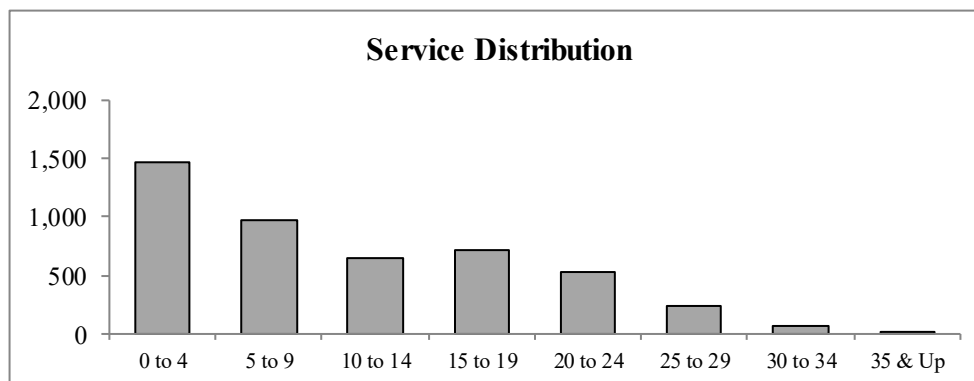
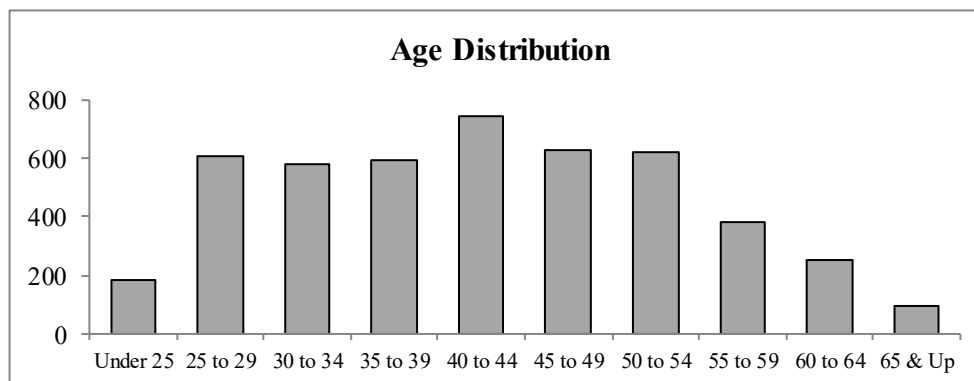


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of January 1, 2022

**Certificated - Total**

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	187	0	0	0	0	0	0	0	187
25 to 29	513	94	0	0	0	0	0	0	607
30 to 34	213	321	48	0	0	0	0	0	582
35 to 39	138	181	215	60	0	0	0	0	594
40 to 44	144	115	144	294	45	0	0	0	742
45 to 49	87	81	93	136	215	14	0	0	626
50 to 54	85	74	77	103	130	132	18	0	619
55 to 59	51	37	40	70	71	65	41	7	382
60 to 64	34	45	27	46	53	20	16	9	250
65 & Up	18	21	12	15	12	6	4	7	95
<b>Total</b>	<b>1,470</b>	<b>969</b>	<b>656</b>	<b>724</b>	<b>526</b>	<b>237</b>	<b>79</b>	<b>23</b>	<b>4,684</b>





OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
PROJECTED SALARY DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2022

Certificated - Total

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	8,807,764	0	0	0	0	0	0	0	8,807,764
25 to 29	26,324,402	5,218,661	0	0	0	0	0	0	31,543,063
30 to 34	11,530,918	18,698,301	3,126,893	0	0	0	0	0	33,356,112
35 to 39	8,168,625	10,812,998	14,274,625	4,467,445	0	0	0	0	37,723,693
40 to 44	8,783,560	7,333,048	9,557,497	22,204,568	3,605,465	0	0	0	51,484,138
45 to 49	5,513,732	5,225,823	6,165,441	10,113,359	17,371,027	1,352,239	0	0	45,741,621
50 to 54	5,497,635	4,869,003	5,301,755	7,564,010	10,575,724	11,792,790	1,704,523	0	47,305,440
55 to 59	3,659,790	2,322,362	2,781,293	5,041,061	5,380,744	5,372,458	3,608,722	639,308	28,805,738
60 to 64	2,074,091	3,075,117	1,802,784	3,249,919	4,125,056	1,515,643	1,428,279	808,671	18,079,560
65 & Up	1,169,275	1,516,910	874,746	1,161,598	937,835	529,245	377,384	727,830	7,294,823
Total	81,529,792	59,072,223	43,885,034	53,801,960	41,995,851	20,562,375	7,118,908	2,175,809	310,141,952

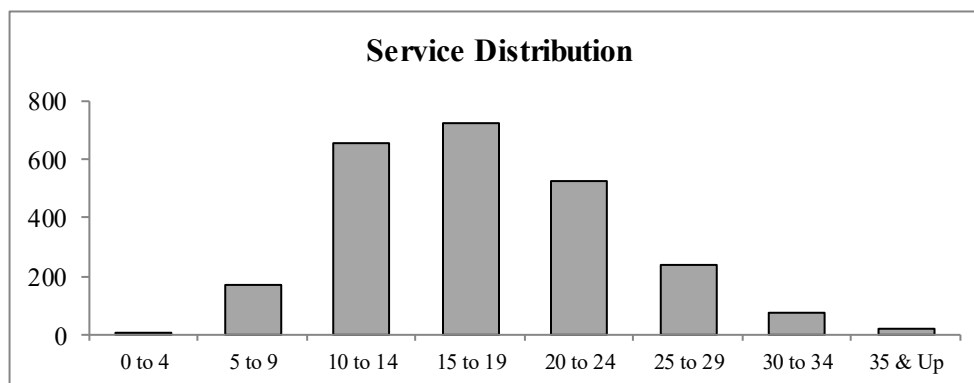
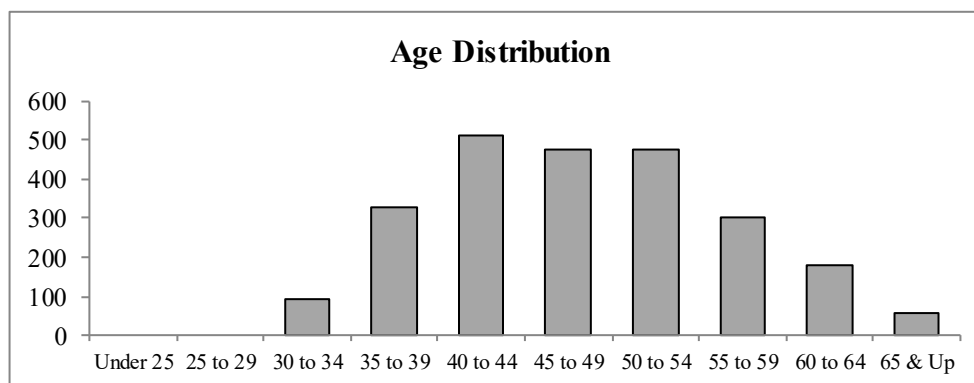


## OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2022

**Certificated - Tier 1**

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0
30 to 34	1	43	48	0	0	0	0	0	92
35 to 39	3	49	215	60	0	0	0	0	327
40 to 44	1	26	144	294	45	0	0	0	510
45 to 49	0	17	93	136	215	14	0	0	475
50 to 54	0	16	77	103	130	132	18	0	476
55 to 59	1	9	40	70	71	65	41	7	304
60 to 64	0	10	27	46	53	20	16	9	181
65 & Up	0	1	12	15	12	6	4	7	57
<b>Total</b>	<b>6</b>	<b>171</b>	<b>656</b>	<b>724</b>	<b>526</b>	<b>237</b>	<b>79</b>	<b>23</b>	<b>2,422</b>



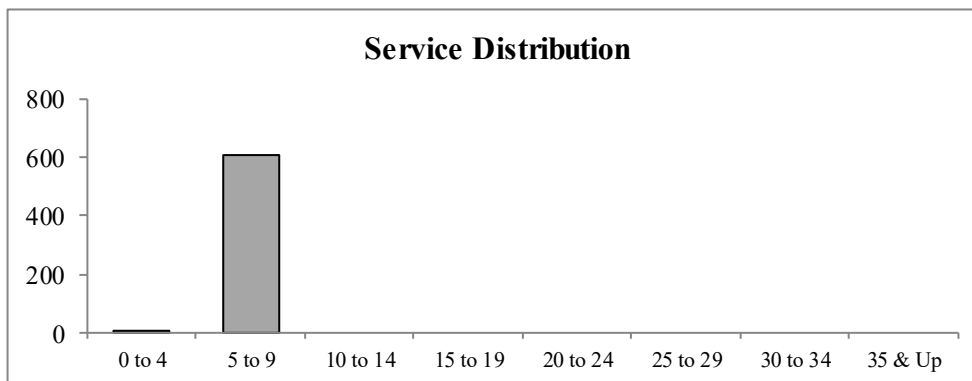
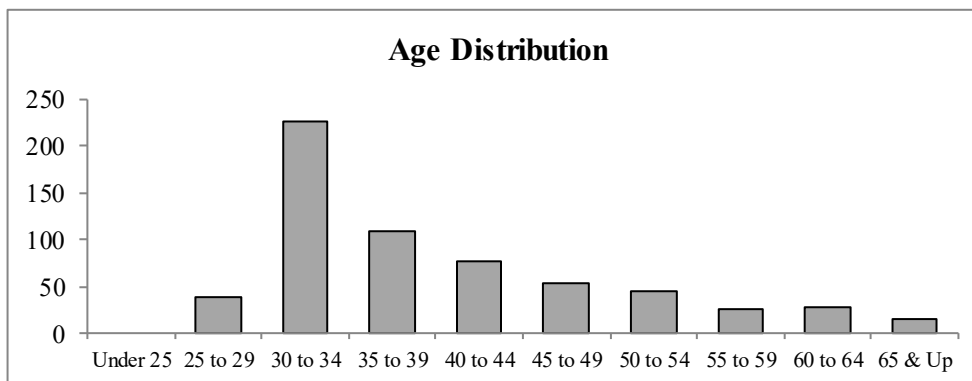


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of January 1, 2022

**Certificated - Tier 2**

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	0	0	0	0	0	0	0	0	0
25 to 29	0	39	0	0	0	0	0	0	39
30 to 34	5	220	0	0	0	0	0	0	225
35 to 39	0	109	0	0	0	0	0	0	109
40 to 44	1	76	0	0	0	0	0	0	77
45 to 49	0	54	0	0	0	0	0	0	54
50 to 54	2	44	0	0	0	0	0	0	46
55 to 59	1	24	0	0	0	0	0	0	25
60 to 64	0	28	0	0	0	0	0	0	28
65 & Up	0	16	0	0	0	0	0	0	16
<b>Total</b>	<b>9</b>	<b>610</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>619</b>





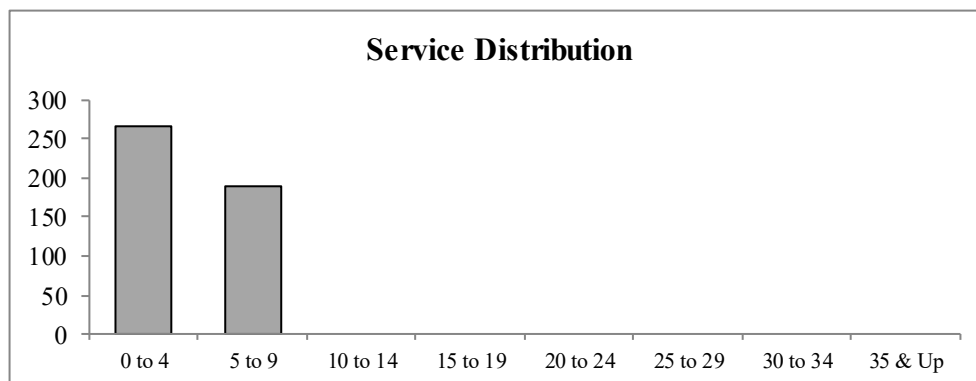
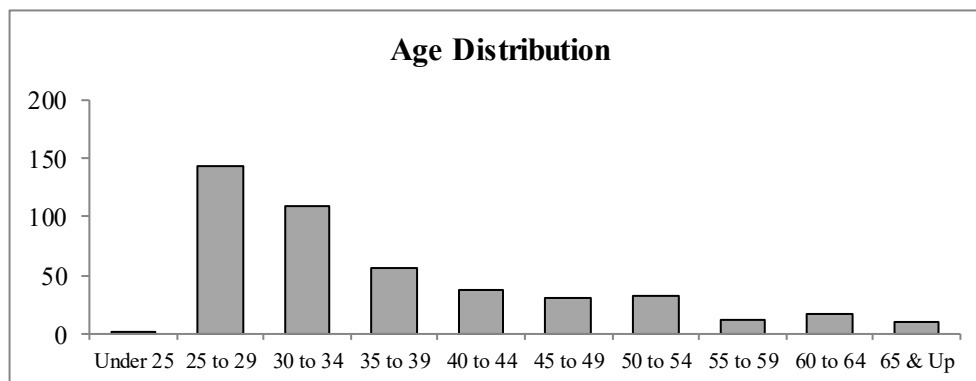


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of January 1, 2022

**Certificated - Tier 3**

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	2	0	0	0	0	0	0	0	2
25 to 29	88	55	0	0	0	0	0	0	143
30 to 34	51	58	0	0	0	0	0	0	109
35 to 39	33	23	0	0	0	0	0	0	56
40 to 44	25	13	0	0	0	0	0	0	38
45 to 49	21	10	0	0	0	0	0	0	31
50 to 54	19	14	0	0	0	0	0	0	33
55 to 59	9	4	0	0	0	0	0	0	13
60 to 64	10	7	0	0	0	0	0	0	17
65 & Up	7	4	0	0	0	0	0	0	11
<b>Total</b>	<b>265</b>	<b>188</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>453</b>



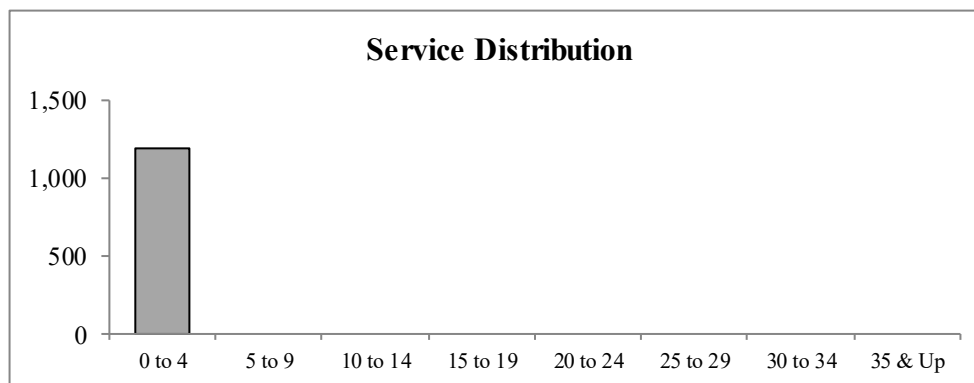
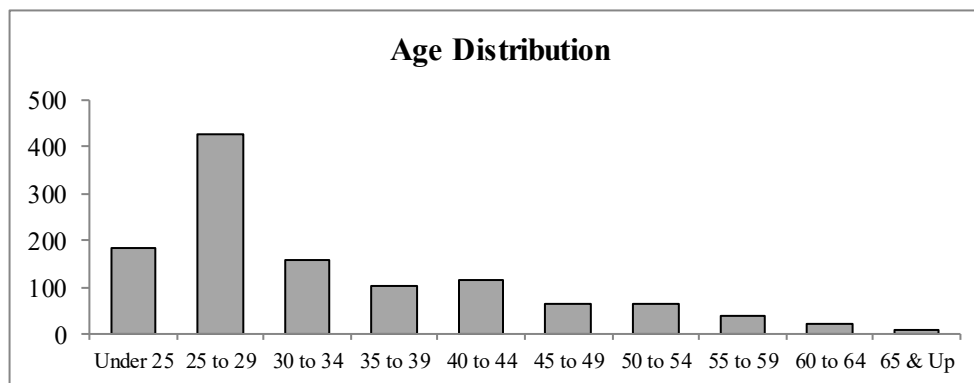


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of January 1, 2022

**Certificated - Tier 4**

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	185	0	0	0	0	0	0	0	185
25 to 29	425	0	0	0	0	0	0	0	425
30 to 34	156	0	0	0	0	0	0	0	156
35 to 39	102	0	0	0	0	0	0	0	102
40 to 44	117	0	0	0	0	0	0	0	117
45 to 49	66	0	0	0	0	0	0	0	66
50 to 54	64	0	0	0	0	0	0	0	64
55 to 59	40	0	0	0	0	0	0	0	40
60 to 64	24	0	0	0	0	0	0	0	24
65 & Up	11	0	0	0	0	0	0	0	11
<b>Total</b>	<b>1,190</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,190</b>



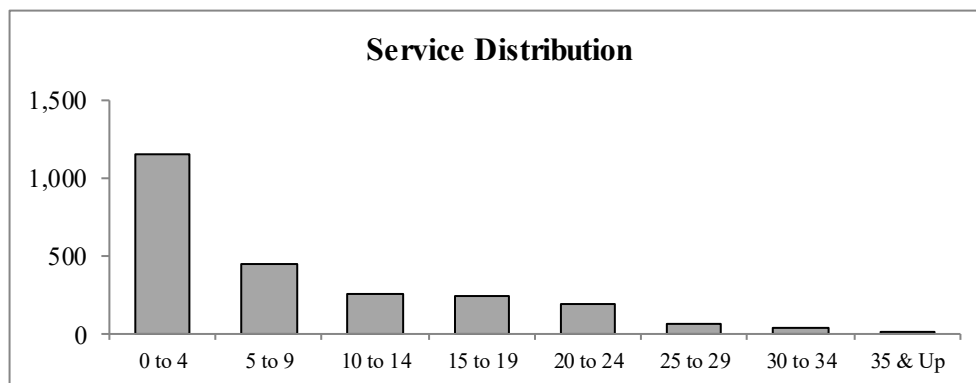
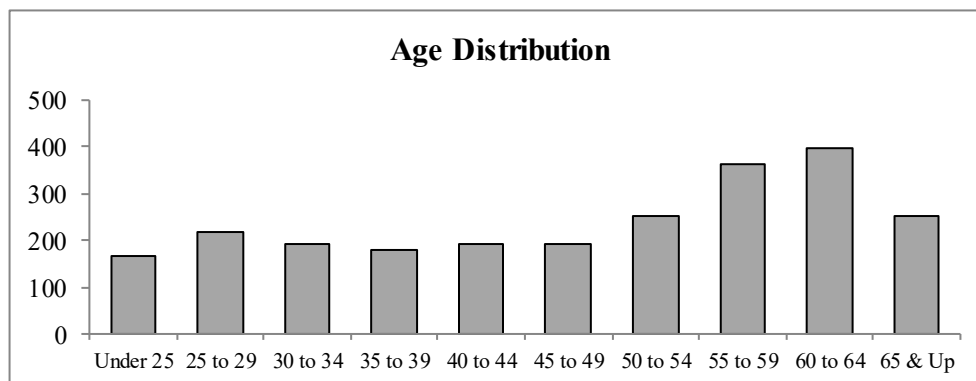


## OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2022

### Classified - Total

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	168	0	0	0	0	0	0	0	168
25 to 29	204	15	0	0	0	0	0	0	219
30 to 34	138	45	8	0	0	0	0	0	191
35 to 39	100	48	24	7	0	0	0	0	179
40 to 44	104	38	22	20	9	0	0	0	193
45 to 49	82	39	25	19	23	4	0	0	192
50 to 54	73	50	37	50	27	10	4	0	251
55 to 59	116	72	49	54	38	19	11	2	361
60 to 64	84	84	67	55	64	23	11	7	395
65 & Up	75	59	27	34	31	16	9	2	253
<b>Total</b>	<b>1,144</b>	<b>450</b>	<b>259</b>	<b>239</b>	<b>192</b>	<b>72</b>	<b>35</b>	<b>11</b>	<b>2,402</b>





OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
PROJECTED SALARY DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2022

Classified - Total

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	4,103,302	0	0	0	0	0	0	0	4,103,302
25 to 29	5,444,134	518,332	0	0	0	0	0	0	5,962,466
30 to 34	3,840,488	1,515,874	343,688	0	0	0	0	0	5,700,050
35 to 39	2,998,443	1,495,431	959,855	294,660	0	0	0	0	5,748,389
40 to 44	2,949,894	1,322,141	691,506	680,679	440,704	0	0	0	6,084,924
45 to 49	2,312,247	1,261,933	901,019	740,007	1,016,944	229,815	0	0	6,461,965
50 to 54	2,287,304	1,579,655	1,244,411	2,248,853	1,234,441	463,115	265,884	0	9,323,663
55 to 59	3,531,618	2,612,339	1,897,171	2,211,953	1,596,845	877,363	663,836	160,703	13,551,828
60 to 64	2,536,730	2,834,172	2,408,648	2,246,701	2,478,713	822,419	610,936	416,949	14,355,268
65 & Up	1,913,497	2,017,820	832,660	1,248,237	1,110,437	570,506	380,386	77,764	8,151,307
Total	31,917,657	15,157,697	9,278,958	9,671,090	7,878,084	2,963,218	1,921,042	655,416	79,443,162

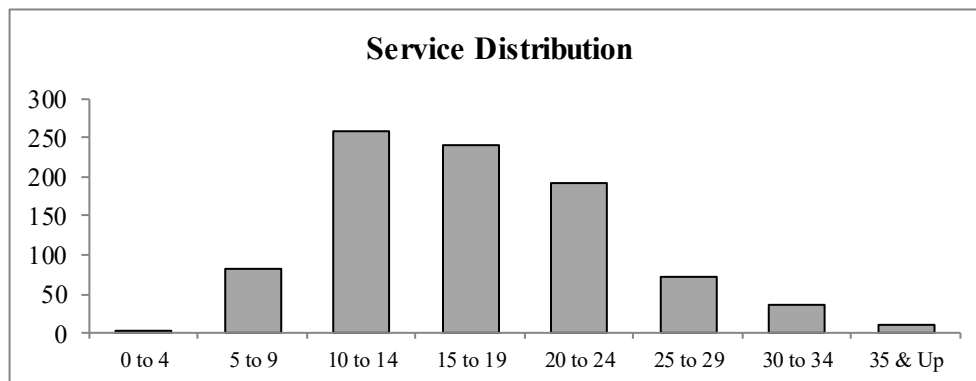
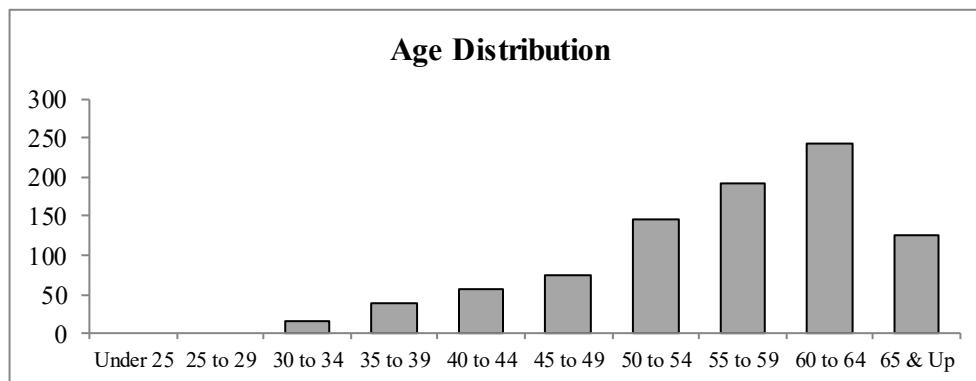


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of January 1, 2022

**Classified - Tier 1**

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0
30 to 34	0	8	8	0	0	0	0	0	16
35 to 39	1	7	24	7	0	0	0	0	39
40 to 44	1	4	22	20	9	0	0	0	56
45 to 49	0	4	25	19	23	4	0	0	75
50 to 54	0	18	37	50	27	10	4	0	146
55 to 59	1	17	49	54	38	19	11	2	191
60 to 64	0	16	67	55	64	23	11	7	243
65 & Up	0	7	27	34	31	16	9	2	126
<b>Total</b>	<b>3</b>	<b>81</b>	<b>259</b>	<b>239</b>	<b>192</b>	<b>72</b>	<b>35</b>	<b>11</b>	<b>892</b>



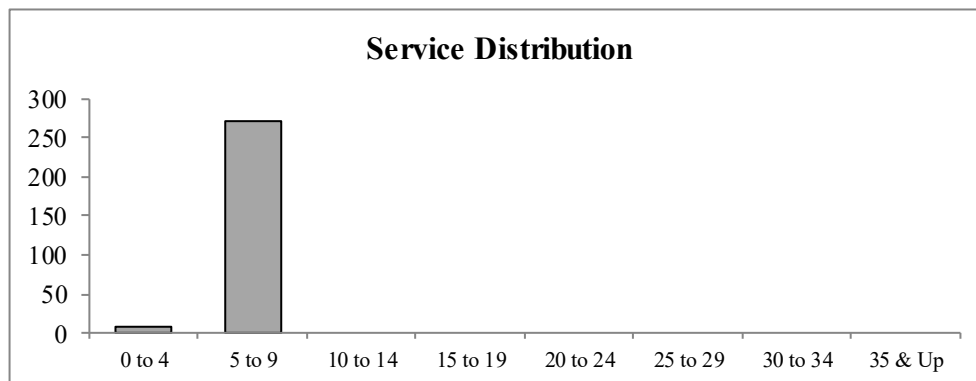
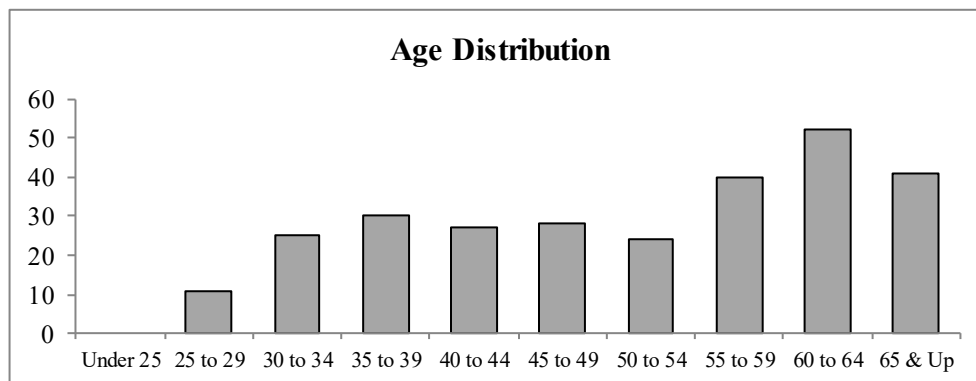


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of January 1, 2022

**Classified - Tier 2**

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	0	0	0	0	0	0	0	0	0
25 to 29	2	9	0	0	0	0	0	0	11
30 to 34	2	23	0	0	0	0	0	0	25
35 to 39	2	28	0	0	0	0	0	0	30
40 to 44	0	27	0	0	0	0	0	0	27
45 to 49	0	28	0	0	0	0	0	0	28
50 to 54	0	24	0	0	0	0	0	0	24
55 to 59	0	40	0	0	0	0	0	0	40
60 to 64	0	52	0	0	0	0	0	0	52
65 & Up	1	40	0	0	0	0	0	0	41
<b>Total</b>	<b>7</b>	<b>271</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>278</b>



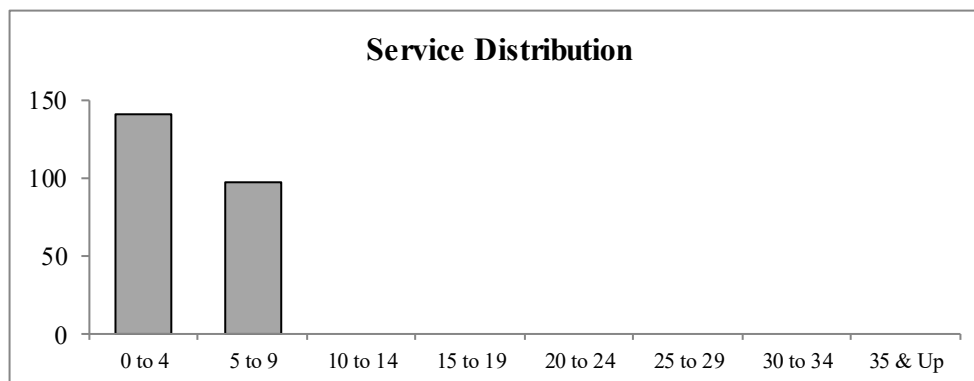
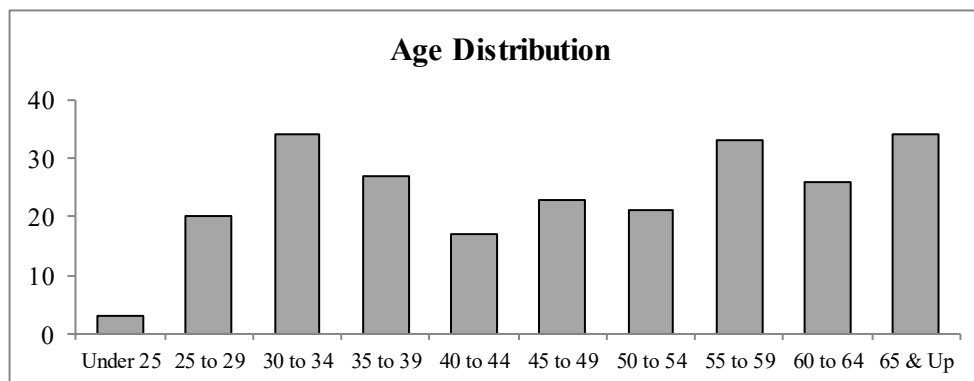


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of January 1, 2022

**Classified - Tier 3**

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	3	0	0	0	0	0	0	0	3
25 to 29	14	6	0	0	0	0	0	0	20
30 to 34	20	14	0	0	0	0	0	0	34
35 to 39	14	13	0	0	0	0	0	0	27
40 to 44	10	7	0	0	0	0	0	0	17
45 to 49	16	7	0	0	0	0	0	0	23
50 to 54	13	8	0	0	0	0	0	0	21
55 to 59	18	15	0	0	0	0	0	0	33
60 to 64	11	15	0	0	0	0	0	0	26
65 & Up	22	12	0	0	0	0	0	0	34
<b>Total</b>	<b>141</b>	<b>97</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>238</b>



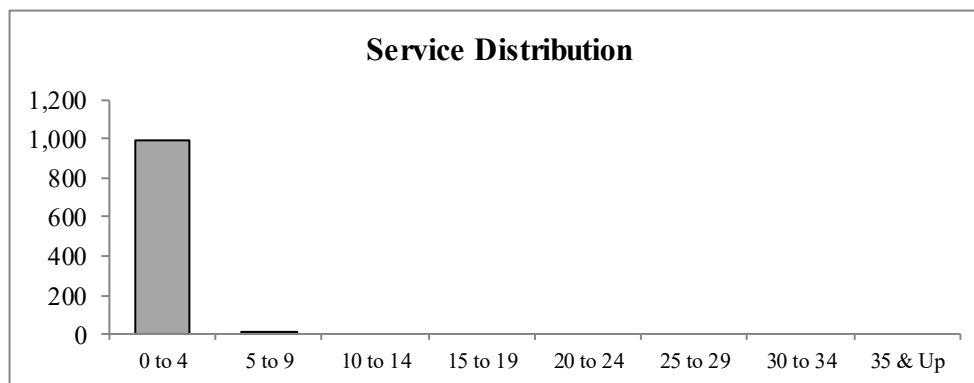
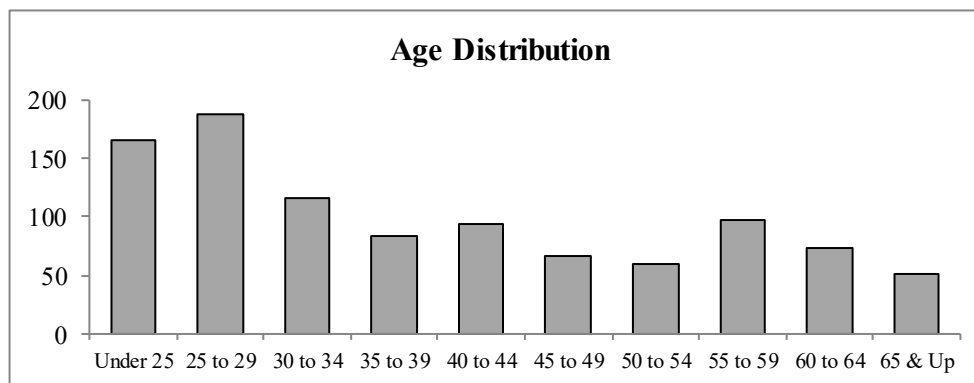


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
DISTRIBUTION OF ACTIVE MEMBERS**

as of January 1, 2022

**Classified - Tier 4**

Age	Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	165	0	0	0	0	0	0	0	165
25 to 29	188	0	0	0	0	0	0	0	188
30 to 34	116	0	0	0	0	0	0	0	116
35 to 39	83	0	0	0	0	0	0	0	83
40 to 44	93	0	0	0	0	0	0	0	93
45 to 49	66	0	0	0	0	0	0	0	66
50 to 54	60	0	0	0	0	0	0	0	60
55 to 59	97	0	0	0	0	0	0	0	97
60 to 64	73	1	0	0	0	0	0	0	74
65 & Up	52	0	0	0	0	0	0	0	52
<b>Total</b>	<b>993</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>994</b>





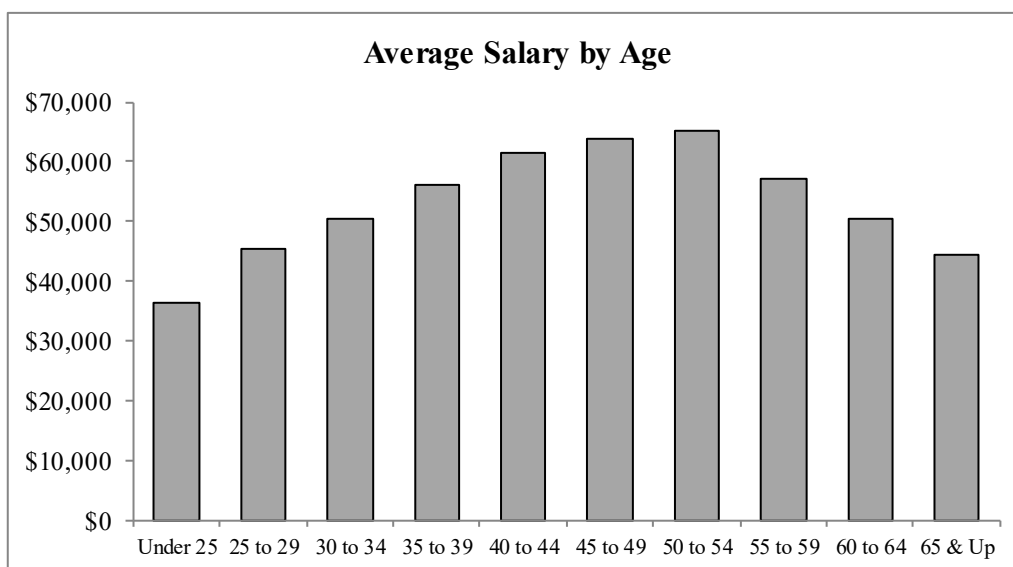


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
SUMMARY OF ACTIVE MEMBERS**

as of January 1, 2022

**Total**

Age	Number			Projected Salaries		
	Males	Females	Total	Males	Females	Total
Under 25	75	280	355	\$2,731,931	\$10,179,135	\$12,911,066
25 to 29	197	629	826	9,082,901	28,422,628	37,505,529
30 to 34	183	590	773	9,781,440	29,274,722	39,056,162
35 to 39	209	564	773	12,354,736	31,117,346	43,472,082
40 to 44	238	697	935	15,573,561	41,995,501	57,569,062
45 to 49	226	592	818	15,361,229	36,842,357	52,203,586
50 to 54	208	662	870	15,190,243	41,438,860	56,629,103
55 to 59	209	534	743	13,096,676	29,260,890	42,357,566
60 to 64	188	457	645	10,683,577	21,751,251	32,434,828
65 & Up	128	220	348	6,189,056	9,257,074	15,446,130
<b>Total</b>	<b>1,861</b>	<b>5,225</b>	<b>7,086</b>	<b>\$110,045,350</b>	<b>\$279,539,764</b>	<b>\$389,585,114</b>



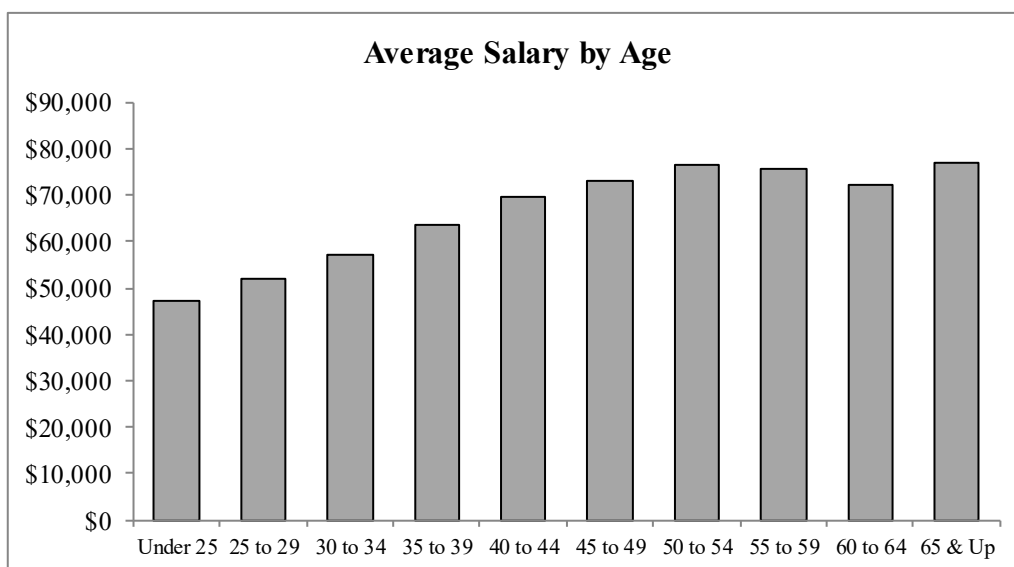


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
SUMMARY OF ACTIVE MEMBERS**

as of January 1, 2022

**Certificated**

Age	Number			Projected Salaries		
	Males	Females	Total	Males	Females	Total
Under 25	26	161	187	\$ 1,193,106	\$ 7,614,658	\$ 8,807,764
25 to 29	124	483	607	6,605,350	24,937,713	31,543,063
30 to 34	124	458	582	7,501,376	25,854,736	33,356,112
35 to 39	140	454	594	9,451,555	28,272,138	37,723,693
40 to 44	182	560	742	13,233,122	38,251,016	51,484,138
45 to 49	162	464	626	12,403,757	33,337,864	45,741,621
50 to 54	136	483	619	11,214,316	36,091,124	47,305,440
55 to 59	83	299	382	6,458,184	22,347,554	28,805,738
60 to 64	62	188	250	4,491,593	13,587,967	18,079,560
65 & Up	30	65	95	2,311,980	4,982,843	7,294,823
<b>Total</b>	<b>1,069</b>	<b>3,615</b>	<b>4,684</b>	<b>\$ 74,864,339</b>	<b>\$ 235,277,613</b>	<b>\$ 310,141,952</b>



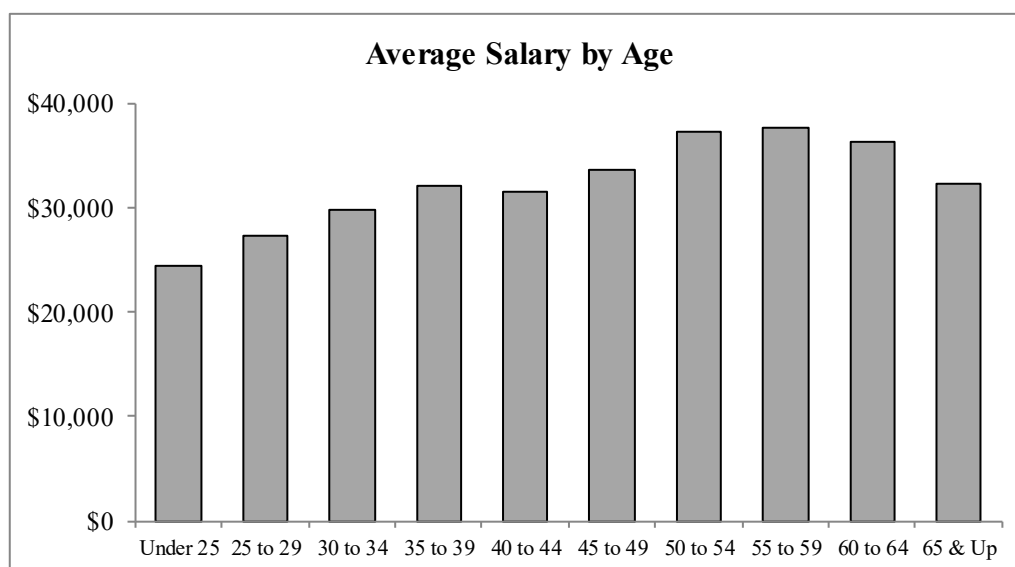


## OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF ACTIVE MEMBERS

as of January 1, 2022

### Classified

Age	Number			Projected Salaries		
	Males	Females	Total	Males	Females	Total
Under 25	49	119	168	\$ 1,538,825	\$ 2,564,477	\$ 4,103,302
25 to 29	73	146	219	2,477,551	3,484,915	5,962,466
30 to 34	59	132	191	2,280,064	3,419,986	5,700,050
35 to 39	69	110	179	2,903,181	2,845,208	5,748,389
40 to 44	56	137	193	2,340,439	3,744,485	6,084,924
45 to 49	64	128	192	2,957,472	3,504,493	6,461,965
50 to 54	72	179	251	3,975,927	5,347,736	9,323,663
55 to 59	126	235	361	6,638,492	6,913,336	13,551,828
60 to 64	126	269	395	6,191,984	8,163,284	14,355,268
65 & Up	98	155	253	3,877,076	4,274,231	8,151,307
<b>Total</b>	<b>792</b>	<b>1,610</b>	<b>2,402</b>	<b>\$ 35,181,011</b>	<b>\$ 44,262,151</b>	<b>\$ 79,443,162</b>





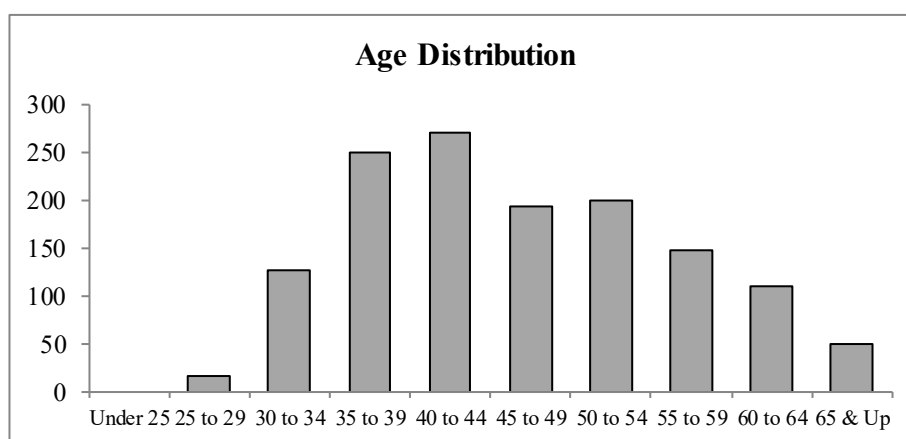
**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
SUMMARY OF INACTIVE VESTED MEMBERS**

as of January 1, 2022

**Total**

Age	Number			Monthly Benefit at Unreduced Retirement		
	Males	Females	Total	Males	Females	Total
Under 25	0	0	0	\$ 0	\$ 0	\$ 0
25 to 29	1	16	17	488	5,581	6,069
30 to 34	19	108	127	9,014	55,029	64,043
35 to 39	59	190	249	44,212	129,342	173,554
40 to 44	74	195	269	68,551	149,886	218,437
45 to 49	45	148	193	63,888	128,974	192,862
50 to 54	46	154	200	61,578	124,007	185,585
55 to 59	30	118	148	24,125	77,555	101,680
60 to 64	15	94	109	10,601	47,113	57,714
65 & Up	7	42	49	6,323	17,558	23,881
<b>Total</b>	<b>296</b>	<b>1,065</b>	<b>1,361</b>	<b>\$288,780</b>	<b>\$735,045</b>	<b>\$1,023,825</b>

Note: Includes 11 deferred disabled members.





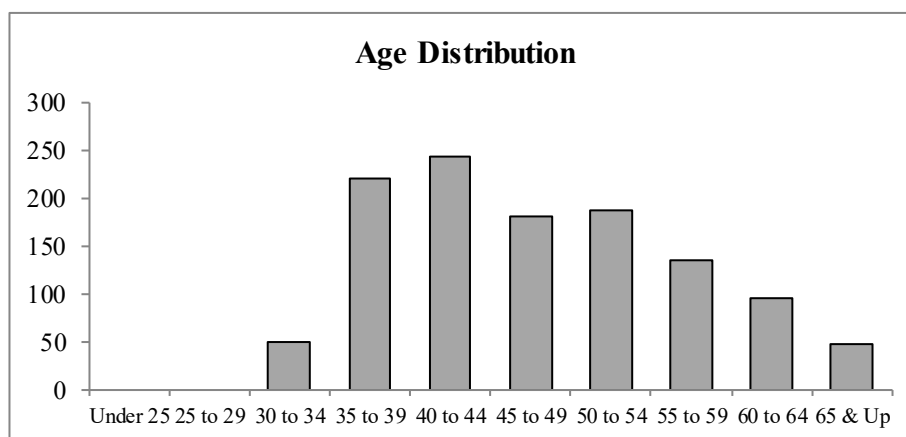
**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
SUMMARY OF INACTIVE VESTED MEMBERS**

as of January 1, 2022

**Tier 1**

Age	Number			Monthly Benefit at Unreduced Retirement		
	Males	Females	Total	Males	Females	Total
Under 25	0	0	0	\$ 0	\$ 0	\$ 0
25 to 29	0	0	0	0	0	0
30 to 34	8	42	50	4,447	23,835	28,282
35 to 39	53	167	220	41,214	118,275	159,489
40 to 44	64	178	242	62,727	142,865	205,592
45 to 49	42	139	181	60,667	125,389	186,056
50 to 54	43	143	186	59,549	119,593	179,142
55 to 59	26	108	134	22,773	74,429	97,202
60 to 64	12	83	95	7,337	43,241	50,578
65 & Up	7	41	48	6,323	17,354	23,677
<b>Total</b>	<b>255</b>	<b>901</b>	<b>1,156</b>	<b>\$ 265,037</b>	<b>\$ 664,981</b>	<b>\$ 930,018</b>

Note: Includes 11 deferred disabled members.



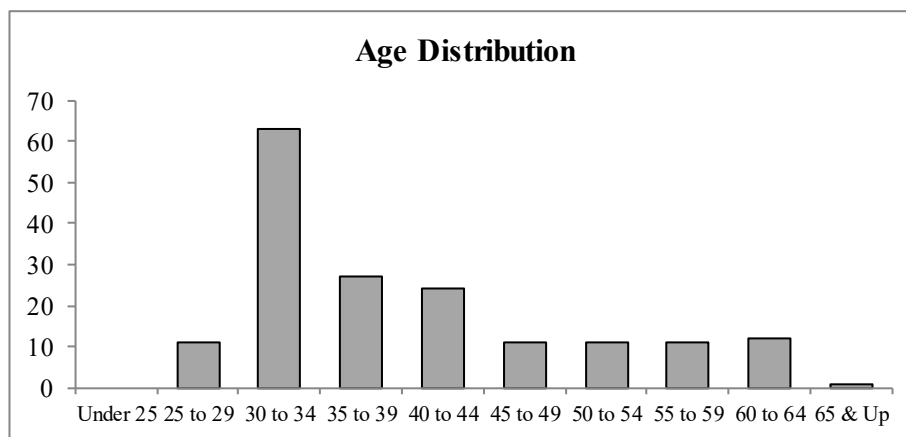


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
SUMMARY OF INACTIVE VESTED MEMBERS**

as of January 1, 2022

**Tier 2**

Age	Number			Monthly Benefit at Unreduced Retirement		
	Males	Females	Total	Males	Females	Total
Under 25	0	0	0	\$ 0	\$ 0	\$ 0
25 to 29	1	10	11	488	3,404	3,892
30 to 34	7	56	63	3,197	27,293	30,490
35 to 39	6	21	27	2,998	10,212	13,210
40 to 44	9	15	24	5,618	6,350	11,968
45 to 49	3	8	11	3,221	3,215	6,436
50 to 54	3	8	11	2,029	3,136	5,165
55 to 59	3	8	11	983	2,544	3,527
60 to 64	3	9	12	3,264	3,250	6,514
65 & Up	0	1	1	0	204	204
<b>Total</b>	<b>35</b>	<b>136</b>	<b>171</b>	<b>\$ 21,798</b>	<b>\$ 59,608</b>	<b>\$ 81,406</b>



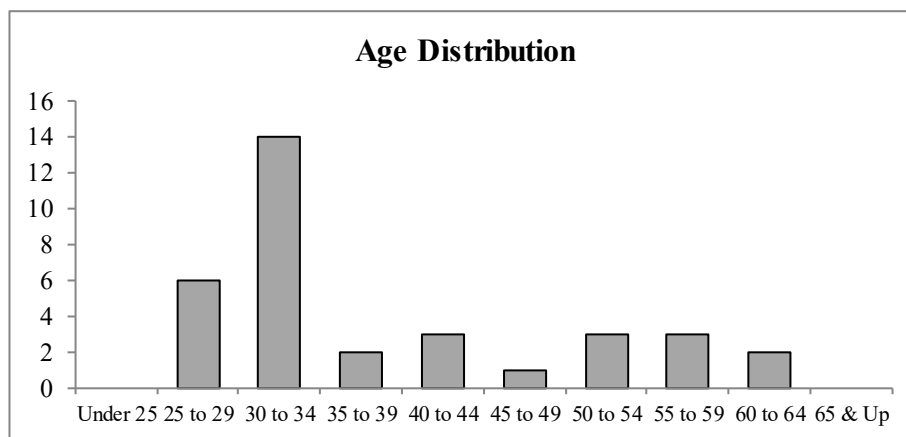


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
SUMMARY OF INACTIVE VESTED MEMBERS**

as of January 1, 2022

**Tier 3**

Age	Number			Monthly Benefit at Unreduced Retirement		
	Males	Females	Total	Males	Females	Total
Under 25	0	0	0	\$ 0	\$ 0	\$ 0
25 to 29	0	6	6	0	2,177	2,177
30 to 34	4	10	14	1,370	3,901	5,271
35 to 39	0	2	2	0	855	855
40 to 44	1	2	3	206	671	877
45 to 49	0	1	1	0	370	370
50 to 54	0	3	3	0	1,278	1,278
55 to 59	1	2	3	369	582	951
60 to 64	0	2	2	0	622	622
65 & Up	0	0	0	0	0	0
<b>Total</b>	<b>6</b>	<b>28</b>	<b>34</b>	<b>\$ 1,945</b>	<b>\$ 10,456</b>	<b>\$ 12,401</b>



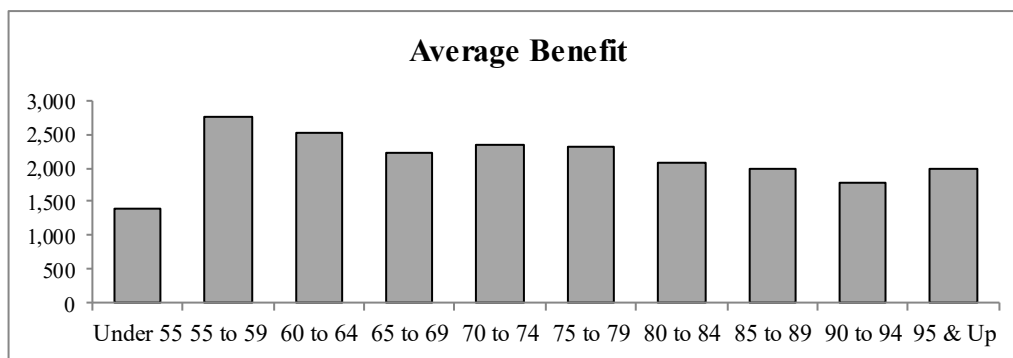
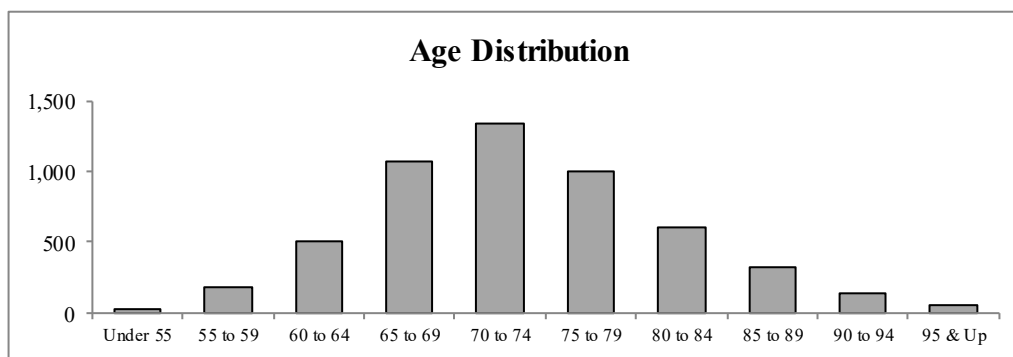


## OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF RETIREES, BENEFICIARIES AND DISABLED MEMBERS

as of January 1, 2022

### Total

Age	Number			Total Monthly Benefit		
	Males	Females	Total	Males	Females	Total
Under 55	8	13	21	\$ 7,399	\$ 21,902	\$ 29,301
55 to 59	53	129	182	144,932	339,260	484,192
60 to 64	117	395	512	275,073	969,559	1,244,632
65 to 69	280	788	1,068	655,856	1,660,176	2,316,032
70 to 74	355	988	1,343	906,097	2,187,688	3,093,785
75 to 79	322	680	1,002	824,336	1,475,527	2,299,863
80 to 84	173	426	599	421,434	809,458	1,230,892
85 to 89	87	239	326	207,747	441,046	648,793
90 to 94	24	110	134	54,445	182,913	237,358
95 & Up	12	39	51	30,934	70,537	101,471
<b>Total</b>	<b>1,431</b>	<b>3,807</b>	<b>5,238</b>	<b>\$3,528,253</b>	<b>\$8,158,066</b>	<b>\$11,686,319</b>





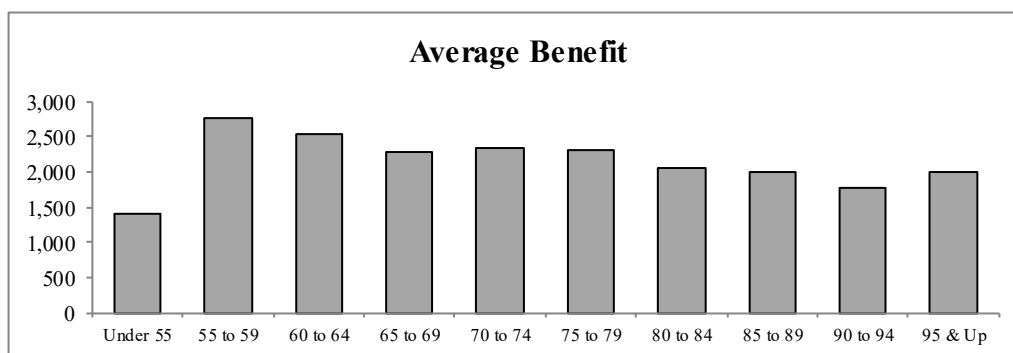
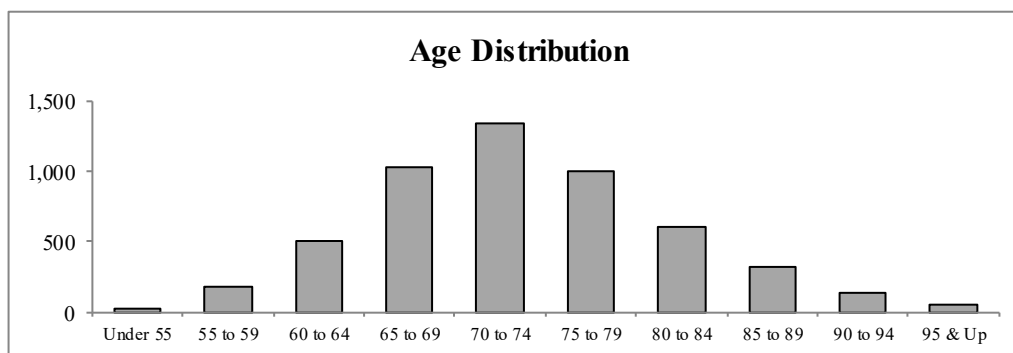


## OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM SUMMARY OF RETIREES, BENEFICIARIES AND DISABLED MEMBERS

as of January 1, 2022

### Tier 1

Age	Number			Total Monthly Benefit		
	Males	Females	Total	Males	Females	Total
Under 55	8	13	21	\$ 7,399	\$ 21,902	\$ 29,301
55 to 59	53	129	182	144,932	339,260	484,192
60 to 64	117	393	510	275,073	968,288	1,243,361
65 to 69	268	766	1,034	650,157	1,652,100	2,302,257
70 to 74	352	985	1,337	905,343	2,185,477	3,090,820
75 to 79	321	680	1,001	823,955	1,475,527	2,299,482
80 to 84	173	426	599	421,434	809,458	1,230,892
85 to 89	87	239	326	207,747	441,046	648,793
90 to 94	24	110	134	54,445	182,913	237,358
95 & Up	12	39	51	30,934	70,537	101,471
<b>Total</b>	<b>1,415</b>	<b>3,780</b>	<b>5,195</b>	<b>\$3,521,419</b>	<b>\$8,146,508</b>	<b>\$11,667,927</b>



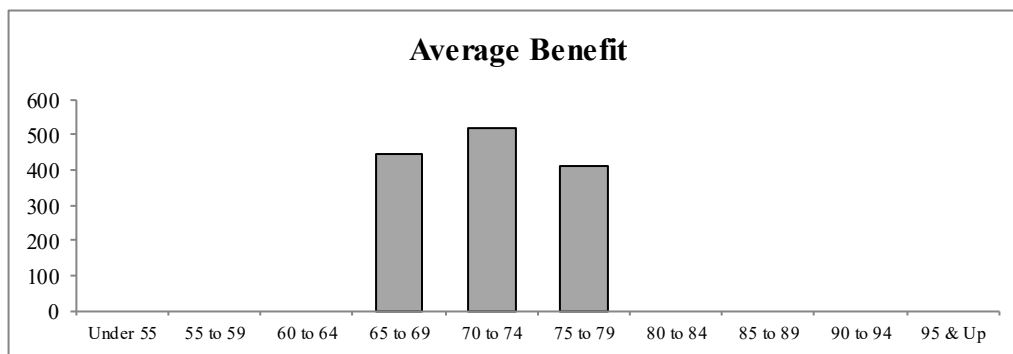
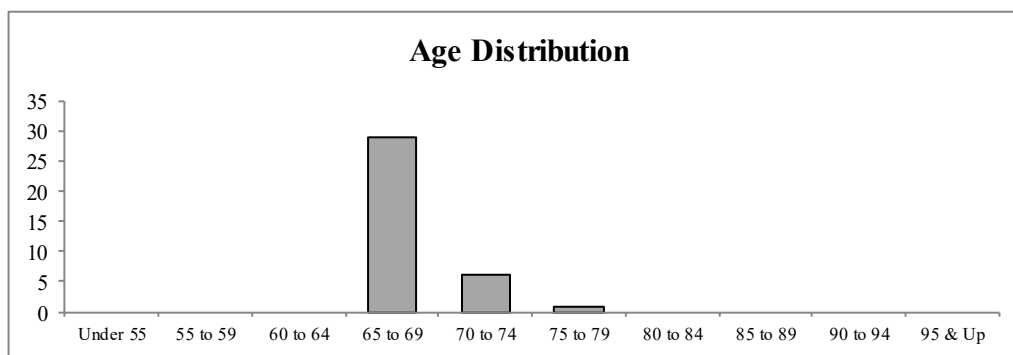


**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
SUMMARY OF RETIREES, BENEFICIARIES AND DISABLED  
MEMBERS**

as of January 1, 2022

**Tier 2**

Age	Number			Total Monthly Benefit		
	Males	Females	Total	Males	Females	Total
Under 55	0	0	0	\$ 0	\$ 0	\$ 0
55 to 59	0	0	0	0	0	0
60 to 64	0	0	0	0	0	0
65 to 69	12	17	29	5,699	6,165	11,864
70 to 74	3	3	6	754	2,211	2,965
75 to 79	1	0	1	381	0	381
80 to 84	0	0	0	0	0	0
85 to 89	0	0	0	0	0	0
90 to 94	0	0	0	0	0	0
95 & Up	0	0	0	0	0	0
<b>Total</b>	<b>16</b>	<b>20</b>	<b>36</b>	<b>\$6,834</b>	<b>\$8,376</b>	<b>\$15,210</b>





**OMAHA SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
SUMMARY OF RETIREES, BENEFICIARIES AND DISABLED  
MEMBERS**

as of January 1, 2022

**Tier 3**

Age	Number			Total Monthly Benefit		
	Males	Females	Total	Males	Females	Total
Under 55	0	0	0	\$ 0	\$ 0	\$ 0
55 to 59	0	0	0	0	0	0
60 to 64	0	2	2	0	1,271	1,271
65 to 69	0	5	5	0	1,911	1,911
70 to 74	0	0	0	0	0	0
75 to 79	0	0	0	0	0	0
80 to 84	0	0	0	0	0	0
85 to 89	0	0	0	0	0	0
90 to 94	0	0	0	0	0	0
95 & Up	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>7</b>	<b>7</b>	<b>\$ 0</b>	<b>\$3,182</b>	<b>\$3,182</b>

