

4/28/23

Request for Proposal TAC 915C

Addendum #1

Please note the following changes which have been made for clarification to this Invitation for Sealed Bid. **This addendum must be listed as Addendum #1 on the ACKNOWLEDGMENT OF RECEIPT OF ADDENDA/AMENDMENTS FORM** of the bid package as verification that you have received and are aware of the information contained herein.

QUESTIONS/CLARIFICATION/CHANGES:

QUESTIONS:

1. Why are these services out to bid (e.g., routine process every few years, concerns with current service provider's level of service or pricing, due diligence, etc.)? **Routine process.**
2. To assist in gaining a clearer understanding of the scope of work, please provide the annual fixed fee (or hourly charges if not a fixed fee) for the OPEB actuarial services for the past 5 years, including the fee for the last experience study. **FYE 2022 \$10,800, FYE 2021 \$3,000 , FYE 2020 \$10,000, FYE 2019 \$3,000, FYE 2018 \$10,000. Last experience study March 30, 2017 \$3,000.**
3. Please provide the total hours and hourly rates for the past five years for services that have fallen outside of the fixed fee scope of services. **None.**
4. If the firm submitting a proposal is currently providing services to the City of Tulsa for non-OPEB related activities, does the firm need to register with Buyer as outlined in Section VII.C. of RFP TAC-915C? **No, It would not be necessary to register with the Buyer.**

1) RFP Section VI. PERFORMANCE METRICS AND CONTRACT MANAGEMENT, Item Performance Metrics, please confirm that the vendor 's responsibility will be to request the data items and information required for the completion of the Actuarial valuation report of post-employment benefits other than pension, Information for Notes to Financial Statements and Required Supplementary Information reporting, and the Experience Study with the City of Tulsa Human Resources Dept. for providing the required data to the vendor. **The vendor will request the data from the City of Tulsa Human Resources department.**

2.) Will the City of Tulsa Human Resources Dept. provide a point of contact for our firm to work with for this engagement? **Yes**

3.) Does the city currently fund its OPEB Plan on a 'pay-as-you-go' basis or has a trust been established? **See Appendix B, Note 10, #7**

- 4.) RFP Section IX. INFORMATION SPECIFIC TO THIS REQUEST FOR PROPOSAL, Item C. please clarify the meaning of the statement ‘on a “no gain / no loss” basis.’ **See Actuarial Methods and Assumptions on page 24 of the pdf.**
- 5.) Does the City require that Appendix A – F be included in our firm’s proposal response? **Yes**
- 6.) When are the final OPEB valuation reports and Financial Statements (for inclusion in the City’s ACFR) due each contracted reporting year? **A formal due date has not been established. The RFP (VII- J)requests the respondent to estimate the length of time needed to complete the report once data is received. Receiving valuation reports after September 15th can cause disruptions in our annual audit timeline and earlier receipt of the report is helpful.**
- 7.) Please confirm whether the City is requesting annual FULL OPEB valuations and reports or biennial FULL OPEB valuations and reports with updated (roll forward) valuation reports for the interim years? **See RFP IX B. Biennial full valuations within interim years roll forwards have been completed in the past.**
- 8.) What are the fiscal years (start and end dates) that are included in this RFP? **The City’s fiscal year runs July 1 to June 30. This RFP requests for periods starting for fiscal year ending 2023 and continuing through fiscal year ending 2027.**
- 9.) How long has the current firm been performing actuarial valuations and reporting services for the City? **Since fiscal year 2012.**
- 10.) Was the OPEB valuation and report (completed by NYHART, dated 04/17/2023) and provided as part of the RFP package a FULL OPEB valuations/report or an updated (roll-forward) OPEB valuation/report? **The date of 04/17/2023 seen in the header relates to the RFP issuance date, not the date of the last full report was dated. The last full report was issued (dated) September 19, 2022.**
- 11.) If the report provided with the RFP package is not a full OPEB valuation, when was the last full GASB compliant actuarial valuations completed for the City OPEB Plan? **Included in RFP package.**
- 12.) Can we receive a copy of the last full GASB compliant full actuarial valuation and report for OPEB? **See Appendix D.**
- 13.) What is the name of the firm that completed the last full actuarial valuation and reports for the City OPEB Plan? **Nyhart**
- 14.) What were the fees charged by that firm for the previous full valuation of the City OPEB Plan? **\$10,800**
- 15.) When was the most recent interim (updated or roll-forward) valuation and report performed for the City’s plans under the previous contract? **Fiscal year 2021.**
- 16.) What is the name of the firm that completed the most recent interim actuarial valuation and reports (if any) for the City OPEB Plan? **Nyhart**
- 17.) What were the fees charged for interim (roll-forward) reports (if any) for the City’s OPEB plan? **\$3,000**
- 18.) Was the previous contract awarded based on a weighted criteria tabulation or a Final And Best Offer (FABO) basis? **Weighted criteria tabulation**
- 19.) If the previous contract was awarded based on a weighted criterion, please provide a copy of the previous bid award tabulations. **See Evaluation following these questions.**
- 20.) What are the anticipated requirements for onsite consulting, meetings, and/or presentations? **Virtual meetings/presentations permitted.**

- 21.) Can all meetings be performed using voice conference and/or web meeting services?
Virtual meetings/presentations permitted.
- 22.) What is the anticipated budget for this contract? **TBD**

Tabulation requested on Question 19.

TAC815B Proposal Evaluations

Mandatory elements:

Non-collusion affidavit
 Affidavit of claimant
 Independent of CoT
 Data request format
 General contract terms

Pension Live Dallas, TX	Nyhart - Indianapolis , IN	Dean Actuaries LLC Dallas, TX	Gallagher Princeton, NJ	Lewis & Ellis Allen, TX	Jefferson Solutions Clifton Park NY
Y	Y	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y

Adequacy of reported

Adequacy of disclosures

No example report	Yes	Yes	No example report	Yes	Yes
Unclear	Yes	Yes	Unclear	Yes	Yes

Evaluation:

References
 Understanding
 Schedule and timing
 Organization / Staffing
 Experience

27%	0.7	20.0	19.0	11.3	16.7	12.7
33%	10.7	23.3	23.7	18.3	21.3	19.7
13%	10.0	10.0	6.7	10.0	10.0	9.3
13%	5.0	9.7	9.3	7.7	9.0	9.0
13%	2.7	10.0	9.7	7.7	9.7	7.7
subtotal	29.0	73.0	68.3	55.0	66.7	58.3

Request for Proposal

TAC 915C

Professional Services for an Actuarial Valuation Report
and Experience Study of Post-Employment Benefits
Other Than Pensions

DEPARTMENT: FINANCE

NIGP Commodity Code(s):

946-12 Actuarial Services and Retirement Planning

946-77 Statistical Services

918-40 Employee Benefits Consulting

RFP Schedule

EVENT	DATE
RFP Issue Date	04/17/2023
Deadline for Questions <i>Submit to assigned buyer via email.</i>	05/01/2023 <i>10 Days prior to RFP due date</i>
Proposal Due Date <i>Mail or deliver to City Clerk address. Proposals are open the day after the due date.</i>	05/10/2023

If You have any questions or need additional information, contact the Assigned Buyer:

Donny Tiemann, Senior Buyer | dtiemann@cityoftulsa.org
All questions should be emailed with the RFP TAC 915C in the subject line.

Submit proposals (sealed) to:

Office of the City Clerk
City of Tulsa
175 E. 2ND St.
Suite 260
Tulsa, OK 74103



I. OVERVIEW AND GOALS:

With this Request for Proposal (RFP), we are searching to secure professional services to provide:

- Actuarial valuation report of post-employment benefits other than pension, Notes to the Financial Statements, and Required Supplementary Information for the City of Tulsa consistent with GASB Statement No. 75- Accounting and Financial Reporting for Post-employment Benefits Other Than Pensions.
- Experience Study

We enthusiastically look forward to receiving your proposal.

II. BACKGROUND:

The City of Tulsa prepares the Annual Comprehensive Financial Report and Authority Financial Reports which include the accounting and reporting of the post-employment benefits other than pensions. We are requesting proposals for actuarial services which provide a report summarizing the GASB Statement No. 75 actuarial valuation for the City of Tulsa for each year and an experience study for future valuations.

III. TIMELINE:

The schedule below provides estimated dates for the RFP and contracting process. The City of Tulsa may adjust this schedule as needed.

Proposal Due Date	05/10/2023
Evaluation of Respondent's Proposals	05/11/2023 through 05/19/2023
Announcement of selected Actuary service provider	05/23/2023

IV. SCOPE OF WORK:

1. The Respondent shall provide an actuarial valuation of the City of Tulsa's post-employment benefits other than pension as of June 30 each year.
2. The valuation must comply with GASB 74 (Financial Reporting for Post-employment Benefit Plans Other Than Pension Plans) and GASB 75 (Accounting and Financial Reporting for Post-employment Benefits Other Than Pensions).
3. The Respondent shall provide Notes to Financial Statements and Required Supplementary Information, relating to the City of Tulsa's post-retirement benefits, to be used in the City of Tulsa's Annual Comprehensive Financial Report (ACFR).
4. The Respondent shall provide an experience study derived from historical demographic information for the following assumptions:
 - Healthcare coverage election rates- used to project active employees who will continue health coverage with the City of Tulsa after their retirement.
 - Spousal coverage election rate- used to project the number of subscribers who will elect to have his/her spouse covered under the health plan with the City of Tulsa after the employee's retirement.

V. DELIVERABLES:

The products and reports to be delivered to the City will include:

- 1) An Actuarial Valuation of the City of Tulsa's post-retirement benefits other than pension.
- 2) Notes to Financial Statements and Required Supplementary Information, relating to the City of Tulsa's post-retirement benefits other than pension, to be used in the City of Tulsa's Annual Comprehensive Financial Report (ACFR).
- 3) A report on the results of the experience study.

VI. PERFORMANCE METRICS AND CONTRACT MANAGEMENT:

Performance Metrics

The following performance metrics highlight key priorities that will be analyzed with the awarded Respondent collaboratively during the life of the contract. This is not an exhaustive list, but rather an indication of significant performance metrics of interest to City of Tulsa. The City looks forward to working with awarded Respondents to define additional important performance metrics during contract negotiations. The final set of performance metrics and frequency of collection will be negotiated by the successful Respondent and the City prior to the finalization of an agreement between parties and may be adjusted over time as needed.

Performance Metric	Data Source	Data Collection Frequency	Data Collection Responsibility
Actuarial valuation report of post-employment benefits other than pension, Information for Notes to Financial Statements and Required Supplementary Information reporting	Information requested from City of Tulsa Human Resources Department	Annually	Actuarial Service Provider
Experience Study	Information requested from City of Tulsa Human Resources Department	Once during the contract period	Actuarial Service Provider

Contract Performance Monitoring

As part of the City of Tulsa's commitment to becoming more outcomes-oriented, we seek to actively and regularly collaborate with awarded Respondents to enhance contract management, improve results, and adjust service delivery based on learning what works. Reliable and relevant data is necessary to drive service improvements, ensure compliance, inform trends to be monitored, and evaluate results and performance. During the regular meetings that occur throughout the term of the contract, it is anticipated that the following topics will be regularly discussed:

- Current status of performance metrics
- Topics of interest or concern to the Respondent
- Discussion and troubleshooting of challenges
- Review of activities on the horizon
- Review of budget and spending this year-to-date

VII. INSTRUCTIONS FOR SUBMITTING A PROPOSAL:

- A.** Proposals must be received by **5:00 p.m. on Wednesday, May 10, 2023 Central Daylight Time.** Please place proposals in a sealed envelope or box clearly labeled **“RFP TAC 915C, Professional Services for an Actuarial Valuation Report and Experience Study of Post-Employment Benefits Other Than Pensions”**.

Proposals received late will be returned unopened.

- B.** Proposals shall be delivered and sealed to:

Deputy City Clerk
City of Tulsa
175 E. 2nd St.
Suite 260
Tulsa, OK 74103

- C.** All interested Respondents (Sellers) are required to register with the Buyer in order to receive updates, addenda or any additional information required. You can learn more about the registration process on the following website:
<https://www.cityoftulsa.org/government/departments/finance/selling-to-the-city/register-as-a-vendor/>.

The City is not responsible for any failure to register.

- D.** Inquiries or questions to the Buyer requesting clarification regarding the Request for Proposal must be made via e-mail and must be received prior to the end of the business day on **May 1, 2023**.

Donald Tiemann Senior Buyer
dtiemann@cityoftulsa.org

Any questions regarding this RFP will be handled as promptly and as directly as possible. If a question requires only minor clarification of instructions or specifications, it will be handled via e-mail. If any question results in a substantive change or addition to the RFP, the change or addition will be forwarded to all registered Respondents as quickly as possible by addendum.

- E.** Proposals will be opened on the morning after the due date, at 8:30am, at the:

Standards, Specifications, and Awards Committee Meeting
175 East 2nd Street, 2nd Floor
City Council Chamber

VIII. RESPONSE QUESTIONS AND PROPOSAL REQUIREMENTS

To be considered, interested Respondents should submit or address the following questions or information requests:

- A.** One (1) unbound original and five (5) bound copies of the proposal plus one (1) electronic copy.
- B.** A description of the Respondent's qualifications and experience and that of key personnel assigned to this project (and that of each Respondent's staff proposed as part of the team). It is noted that equipment, material and staff shall be provided by the Respondent.
- C.** A description of previous projects that Respondent (and any others proposed as part of Respondent's team) has conducted for organizations of similar size and complexity. Provide contact names and telephone numbers of references from these organizations.
- D.** A project schedule, identifying beginning and ending dates of work, as well as project target dates.
- E.** To ensure that this project is completed in a timely manner, the City of Tulsa requires that the selected Respondent perform steps concurrently to expedite results and recommendations, as feasible.
- F.** At the discretion of the City of Tulsa, one or more Respondents may be invited to be interviewed for purposes of clarification or discussion of the proposal.
- G.** Letter of Transmittal - Your proposal must clearly indicate the name of the responding organization, including the Respondent's e-mail address and web site information, if applicable, as well as the name, address, telephone number and e-mail address of the organization's primary contact for this proposal. Your proposal must include the name, address, telephone number and e-mail address of Respondent and/or team of Respondents assigned to the City of Tulsa account.
- H.** Detail the specific data your firm would require to complete the actuarial study and in what format the data needs to be transmitted.
- I.** Clearly and concisely present your proposed fees for this engagement. The fees must be all inclusive for each of the five (5) years set out in Exhibit A "Price Sheet Summary". Please also include your hourly rate for additional services not included in the scope of this request.
- J.** Estimate the length of time needed to complete the study and submit a report once your firm has received all the required data from the City of Tulsa.

- K. Do you include all required disclosures in your valuation report? What additional information do you include?
- L. Will you be available to meet in person or virtually with the City of Tulsa to review the valuation results? If so, is this included in your fee proposal?
- M. Describe anticipated valuation dates to be used for each of the measurement dates June 30, 2023, 2024, 2025, 2026 and 2027 and which valuations will be projected based on prior valuations.
- N. Describe any experience studies needed to complete the valuations and the valuation dates the experience studies will be included. Additionally describe the expected use of the Tulsa Municipal Employees' Retirement Plan experience study as it relates to the OPEB liability.

IX. INFORMATION SPECIFIC TO THIS REQUEST FOR PROPOSAL:

- A. The City of Tulsa desires actuarial services to determine the OPEB liability as of the June 30 (the measurement date) consistent with GASB 75, beginning with June 30, 2023.
- B. Consistent with past practice, the City anticipates minimizing costs by utilizing the use of update procedures to roll forward to the measurement date from an actuarial valuation date no more than 30 months and 1 day earlier than the measurement date when possible.
- C. The City of Tulsa's last valuation was June 30, 2022 with no adjustments to get to the June 30, 2022 measurement date. Liabilities as of July 1, 2021 are based on an actuarial valuation date of July 1, 2020 actuarially projected to July 1, 2021 on a "no gain / no loss" basis. The prior report was as of July 1, 2020 with results actuarially projected on a "no gain / no loss" basis to get to June 30, 2021 measurement date. Liabilities as of July 1, 2020 are based on an actuarial valuation date of July 1, 2020 with no adjustment.
- D. The City of Tulsa desires to move census data collection date to January 1, which is consistent with the health insurance plan year.
- E. Where appropriate, the actuary is expected to use assumptions as set by the Tulsa Municipal Employees' Retirement Plan as set forth in Appendix F.
- F. The experience study is expected to be complete and included once during the 5 year period.

PREVIOUSLY PRESENTED FOOTNOTE INFORMATION

Please see Appendix B

PREVIOUSLY PRESENTED REQUIRED SUPPLEMENTARY INFORMATION

Please see Appendix C

PREVIOUSLY PROVIDED ACTUARIAL VALUATION OF POSTRETIREMENT HEALTH BENEFITS

Please see Appendix D

MOST RECENT EXPERIENCE STUDY OF HEALTH CARE COVERAGE ELECTION RATES AND SPOUSAL COVERAGE ELECTION RATES

Please see Appendix E

THE DECEMBER 31, 2020 ACTUARIAL ASSUMPTIONS OF TULSA'S MUNICIPAL EMPLOYEES' RETIREMENT PLAN

Please see Appendix F

X. EVALUATION OF PROPOSALS:

The approval of the selected Respondent will be subject to the final determination of the City and will be contingent on the successful completion of a contract between the City and the selected Respondent(s).

All bids will be evaluated using the following criteria:

1. The ability, capacity and experience of the Respondent to perform the contract or provide the service required,
2. Whether the Respondent can perform the contract or provide the service promptly or within the time specified, without delay or interference,
3. The character, integrity, reputation, judgment, experience and efficiency of the Respondent,
4. The quality of performance by Respondent of previous contracts or services,
5. The previous and existing compliance by the Respondent with laws and ordinances relating to the contract or service,
6. The sufficiency of the financial resources and ability of the Respondent to perform the contract or provide the service,
7. The quality, availability and adaptability of the Supplies, Services, and Information Technology Systems offered by Respondent to the particular use required,
8. The degree to which the Proposal submitted is complete, clear, and addresses the requirements in the Proposal specifications,
9. If a point system has been utilized in the Proposal specifications, the number of points earned by the Respondent.

10. If an evaluation committee performs the evaluation, the recommendation of such committee.

The City of Tulsa also reserves the right to evaluate based on the full list of eligible criteria listed in [Title 6, Chapter 4](#) of the Tulsa Revised Ordinances (TRO): https://library.municode.com/ok/tulsa/codes/code_of_ordinances.

XI. MISCELLANEOUS

- A. All data included in this RFP, as well as any attachments, are proprietary to the City of Tulsa.
- B. The City of Tulsa notifies all possible Respondents that no person shall be excluded from participation in, denied any benefits of, or otherwise discriminated against in connection with the award and performance of any contract on the basis of race, religious creed, color, national origin, ancestry, physical disability, sex, age, ethnicity, or on any other basis prohibited by law.
- C. All Respondents shall comply with all applicable laws regarding equal employment opportunity and nondiscrimination. They shall also comply with the Americans with Disabilities Act (ADA).
- D. The use of the City of Tulsa's name in any way as a potential customer is strictly prohibited except as authorized in writing by the City of Tulsa.
- E. The City assumes no responsibility or liability for any costs you may incur in responding to this RFP, including attending meetings or contract negotiations.
- F. The City is bound to comply with Oklahoma's Open Records Act, and information submitted with your proposal, with few exceptions, is a matter of public record. For specifics on the Oklahoma Open Records Act, see the link here: <https://libraries.ok.gov/law-legislative-reference/library-laws/statutes-open-records/>.

The City shall not be under any obligation to return any materials submitted in response to this RFP request.

- G. The City shall not infringe upon any intellectual property right of any Respondent but reserves the right to use any concept or methods contained in the proposal. Any desired restrictions on the use of information contained in the proposal should be clearly stated. Responses containing your proprietary data shall be safeguarded with the same degree of protection as the City's own proprietary data. All such proprietary data contained in your proposal must be clearly identified.
- H. The City of Tulsa also notifies all Respondents that the City has the right to modify the RFP and the requirements herein, to request modified proposals

from Respondents, and to negotiate with the selected Respondent on price and other contract terms, as necessary to meet the City's Objectives.

RESPONDENT INFORMATION SHEET

Respondent's Legal Name: _____

(Must be Respondent's company name as reflected on its organizational documents, filed with the state in which Respondent is organized)

State of Organization: _____

Respondent's Type of Legal Entity: (check one)

- | | |
|--|--|
| <input type="checkbox"/> Sole Proprietorship | <input type="checkbox"/> Limited Partnership |
| <input type="checkbox"/> Partnership | <input type="checkbox"/> Limited Liability Partnership |
| <input type="checkbox"/> Corporation | <input type="checkbox"/> Limited Liability Limited Partnership |
| <input type="checkbox"/> Limited Liability Company | <input type="checkbox"/> Other: _____ |

Respondent's Address: _____

Street City State Zip Code

Respondent's Website Address: _____

Sales Contact:

Name: _____

Title/Position: _____

Street: _____

City: _____

State: _____

Phone: _____

Email: _____

Contact for Legal Notice:

Name: _____

Title/Position: _____

Street: _____

City: _____

State: _____

Phone: _____

Email: _____

How did you learn about this business opportunity with the City of Tulsa?

- ☐ Email from Assigned Buyer
- ☐ City of Tulsa Website
- ☐ Tulsa World posting
- ☐ Purchasing search engine
- ☐ Industry colleague
- ☐ Other: [Click or tap here to enter text.](#)

EXHIBIT A

Price Sheet Summary

Please present a Fee Schedule for each year's services:

Year 1:	\$ _____	Valuation Report (measurement date of 6/30/2023)
Year X:	\$ _____	Experience Study - To Be Completed Once During the 5 Year Period
Year 2:	\$ _____	Valuation Report (measurement date of 6/30/2024)
Year 3:	\$ _____	Valuation Report (measurement date of 6/30/2025)
Year 4:	\$ _____	Valuation Report- GASB 75 (measurement date of 6/30/2026)
Year 5:	\$ _____	Valuation Report- GASB 75 (measurement date of 6/30/2027)

5 YEAR TOTAL	\$ _____
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HOURLY RATE FOR ADDITIONAL SERVICES NOT INCLUDED IN THE SCOPE OF THIS REQUEST	\$ _____ / HR
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By signing here, I affirm that these prices are my formal offer and agree to the inclusion of City of Tulsa's general contract terms and conditions as listed in Appendix A in any contract with the City of Tulsa.

Company Name: _____ Date: _____

Signature: _____

Name Printed: _____

Title: _____

AFFIDAVIT
NON-COLLUSION AND INTEREST

STATE OF _____)
)ss.
COUNTY OF _____)

I, _____, of lawful age, being first duly sworn, state that:

(Seller's Authorized Agent)

1. I am the Authorized Agent of Seller herein for the purposes of certifying facts pertaining to the existence of collusion between and among Bidders and municipal officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to the proposal to which this statement is attached.
2. I am fully aware of the facts and circumstances surrounding the making of Seller's Bid to which this statement is attached, and I have been personally and directly involved in the proceedings leading to the submission of such Bid; and
3. Neither the Seller nor anyone subject to the Seller's direction or control has been a party:
 - a. to any collusion among Bidders in restraint of freedom of competition by agreement to respond at a fixed price or to refrain from responding,
 - b. to any collusion with any municipal official or employee as to quantity, quality, or price in the prospective contract, or as to any other terms of such prospective contract, nor
 - c. in any discussions between Bidders and any municipal official concerning exchange of money or other thing of value for special consideration in the letting of a contract.
4. No officer or employee of the City of Tulsa either directly or indirectly owns a five percent (5%) interest or more in the Bidders business or such a percentage that constitutes a controlling interest. Affiant further states that the following officers and/or employees of the City of Tulsa own an interest in the Bidders business which is less than a controlling interest, either direct or indirect.

By: _____

Signature

Title: _____

Subscribed and sworn to before me this _____ day of _____, 20____.

Notary Public

My Commission Expires: _____

Notary Commission Number: _____

The Affidavit must be signed by an authorized agent and notarized

ACKNOWLEDGMENT OF RECEIPT OF ADDENDA/AMENDMENTS

I hereby acknowledge receipt of the following addenda or amendments and understand that such addenda or amendments are incorporated into the Proposal Packet and will become a part of any resulting contract.

List Date and Title/Number of all addenda or amendments: (Write “None” if applicable).

Sign Here ►

Printed Name:

Title:

Date:

APPENDIX A – City of Tulsa General Contract Terms

It is anticipated that the City of Tulsa will enter into an Agreement with the selected Respondent (“Seller”) for an initial term ending one (1) year from the date of its execution by the City’s Mayor, with four (4) one-year renewals available at the option of the City. Contracts entered into by the City of Tulsa generally include, but are not limited to, the following terms:

1. **Renewals.** Seller understands and acknowledges that any future contracts or renewals are neither automatic nor implied by this Agreement. The continuing purchase by City of the Services set forth in this Agreement is subject to City’s needs and to City’s annual appropriation of sufficient funds in City’s fiscal year (July 1st to June 30th) in which such Services are purchased. In the event City does not appropriate or budget sufficient funds to perform this Agreement, this Agreement shall be null and void without further action by City.
2. **No Indemnification or Arbitration by City.** Seller understands and acknowledges that City is a municipal corporation that is funded by its taxpayers to operate for the benefit of its citizens. Accordingly, and pursuant to Oklahoma law, City shall not indemnify nor hold Seller harmless for loss, damage, expense or liability arising from or related to this Agreement, including any attorneys’ fees and costs. In addition, Seller shall not limit its liability to City for actual loss or direct damages for any claim based on a breach of this Agreement and the documents incorporated herein. City reserves the right to pursue all legal and equitable remedies to which it may be entitled. City will not agree to binding arbitration of any disputes.
3. **Intellectual Property Indemnification by Seller.** Seller agrees to indemnify, defend, and save harmless City and its officers, employees and agents from all suits and actions of every nature brought against them due to the use of patented, trademarked or copyright-protected appliances, products, materials or processes provided by Seller hereunder. Seller shall pay all royalties and charges incident to such patents, trademarks or copyrights.
4. **General Liability and Indemnification.** Seller shall hold City harmless from any loss, damage or claims arising from or related to the performance of the Agreement herein. Seller must exercise all reasonable and customary precaution to prevent any harm or loss to all persons and property related to this Agreement. Seller agrees to indemnify and hold the City harmless from all claims, demands, causes of action or suits of whatever nature arising out of the services, labor, and material furnished by Seller or Seller’s subcontractors under the scope of this Agreement.
5. **Liens.** Pursuant to City’s Charter (Art. XII, §5), no lien of any kind shall exist against any property of City.
6. **No Confidentiality.** Seller understands and acknowledges that City is subject to the Oklahoma Open Records Act (51 O.S. §24A.1 *et seq.*) and therefore cannot assure the confidentiality of contract terms or other information provided by Seller pursuant to this Agreement that would be inconsistent with City’s compliance with its statutory requirements there under.
7. **Compliance with Laws.** Seller shall be responsible for complying with all applicable federal, state and local laws. Seller is responsible for any costs of such compliance. Seller shall take the necessary actions to ensure its operations in performance of this contract and employment practices are in compliance with the requirements of the Americans with Disabilities Act. Seller certifies that it and all of its subcontractors to be used in the performance of this agreement are in compliance with 25 O.S. Sec. 1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. Sec. 1313 and includes, but is not limited to, the free Employee Verification Program (E-Verify)

available at www.dhs.gov/E-Verify.

8. **Right to Audit.** The parties agree that books, records, documents, accounting procedures, practices, price lists or any other items related to the Services provided hereunder are subject to inspection, examination, and copying by City or its designees. Seller shall retain all records related to this Agreement for the duration of the contract term and a period of three years following completion and/or termination of the contract. If an audit, litigation or other action involving such records begins before the end of the three year period, the records shall be maintained for three years from the date that all issues arising out of the action are resolved or until the end of the three year retention period, whichever is later.
9. **Governing Law and Venue.** This Agreement is executed in and shall be governed by and construed in accordance with the laws of the State of Oklahoma without regard to its choice of law principles, which shall be the forum for any lawsuits arising under this Agreement or incident thereto. The parties stipulate that venue is proper in a court of competent jurisdiction in Tulsa County, Oklahoma and each party waives any objection to such venue.
10. **No Waiver.** A waiver of any breach of any provision of this Agreement shall not constitute or operate as a waiver of any other provision, nor shall any failure to enforce any provision hereof operate as a waiver of the enforcement of such provision or any other provision.
11. **Entire Agreement/No Assignment.** This Agreement and any documents incorporated herein constitute the entire agreement of the parties and supersede any and all prior agreements, oral or otherwise, relating to the subject matter of this Agreement. This Agreement may only be modified or amended in writing and signed by both parties. Notwithstanding anything to the contrary herein, the City does not agree to the terms of any future agreements, revisions or modifications that may be required under this Agreement unless such terms, revisions or modifications have been reduced to writing and signed by both parties. Seller may not assign this Agreement or use subcontractors to provide the Goods and/or Services without City's prior written consent. Seller shall not be entitled to any claim for extras of any kind or nature.
12. **Equal Employment Opportunity.** Seller shall comply with all applicable laws regarding equal employment opportunity and nondiscrimination.

APPENDIX B

CITY OF TULSA
 NOTES TO BASIC FINANCIAL STATEMENTS
 June 30, 2022
 (dollar amounts expressed in thousands)

Note 10. Other Post-Employment Benefits

A. OPEB

1. Plan Description - The City provides post-employment healthcare benefits (OPEB) for retired employees and their dependents through the City of Tulsa Postretirement Medical Plan (the Plan), a cost-sharing multi-employer defined benefit healthcare plan. The governmental activities, business type activities and component units account for 95.5% of the OPEB liability. Other organizations, not in the reporting entity account for the remaining 4.5%. The benefits, coverage levels, employee contributions and employer contributions are governed by the City and can be amended by the City through its personnel manual and union contracts. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75. The Plan does not issue a stand-alone financial report.

2. Benefits Provided - The Plan covers all current retirees who elected postretirement medical coverage through the City of Tulsa and future retired general employees. All current active police officers and firefighters are covered by a separate trust established specifically to provide medical benefits to the City of Tulsa police officers and firefighters and are not considered for this disclosure.

All healthcare benefits are provided through the City's fully insured health plan. The benefit levels are the same as those afforded to active employees. Benefits include general inpatient and outpatient medical services and prescriptions. General employees are eligible for membership in the Plan if they retire from the City on or after age 55 with 5 years of service or with age and service totaling 80 points. Coverage ceases upon eligibility of the member (retiree or dependent) for Medicare. Coverage for dependents can continue upon the death of the retiree. Spouses of employees eligible for benefits and who die in active service can receive coverage.

3. Membership - As of the most recent actuarial valuation date, membership consisted of the following:

Retired participants	66
Active employees	1,993
	<u>2,059</u>

4. Contributions - Contribution rates are set by the City. Retiree plan participants pay the entire amount of the premium charged by the insurer for coverage thus the employer does not directly contribute to the Plan. Retiree and active participants are included in the same cost pool used to determine the rates set by the insurer. An implicit subsidy results from this method of rate setting.

5. Total OPEB Liability - The total OPEB liability of \$5,714 was measured as of June 30, 2022 and was determined by an actuarial valuation as of the same date.

Proportionate share and OPEB liability reported in:

Governmental activities	47.55%	\$	2,718
Business type activities	8.63%		493
Component units	39.37%		2,250
Organizations not in reporting entity	4.45%		253
		\$	<u>5,714</u>

CITY OF TULSA
 NOTES TO BASIC FINANCIAL STATEMENTS
 June 30, 2022
 (dollar amounts expressed in thousands)

Note 10. Other Post-Employment Benefits, continued

6. Actuarial Methods and Assumptions - Projections of benefits for financial reporting purposes are based on the substantive Plan (the Plan as understood by the employer and Plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and the healthcare cost trend.

Actuarial Methods and Assumptions

Valuation date	June 30, 2022
Inflation rate	3.0%
Current year healthcare cost trend rate	7.5%
Annual reduction of healthcare cost trend	0.5%
Ultimate annual healthcare cost trend rate	4.5%

Thirty-five percent of future retirees with coverage are assumed to elect healthcare coverage.

Mortality rates for retirees were based on SOA Pub-2010 General Headcount Weighted Mortality Table fully generational using Scale MP-2021. Surviving spouses mortality were based on SOA Pub-2010 Contingent Survivor Headcount Weighted Mortality Table fully generational using Scale MP-2019

The actuarial assumptions used were based on an actuarial experience study for the five-year period ending December 31, 2015, with the exception of the healthcare election rate which was based on an experience study from June 30, 2010 through June 30, 2016.

7. Discount Rate - The OPEB plan is financed on a pay-as-you-go basis, thus a long-term rate of return was not used. The discount rate used to measure the total OPEB liability was 4.09 percent as of June 30, 2022, based on a yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher. The source of the discount rate used is the S&P Municipal Bond 20-Year High Grade Rate Index.

8. Discount Rate Sensitivity - The following presents the total OPEB liability as a whole and for the primary government, calculated using the 4.09% discount rate and if the discount rate was decreased 1% to 3.09% and if the discount rate was increased 1% to 5.09%:

	1% Decrease 3.09%	Discount Rate 4.09%	1% Increase 5.09%
Plan	\$ 6,193	\$ 5,714	\$ 5,279
Primary Government	\$ 3,479	\$ 3,211	\$ 2,966

9. Healthcare Rate Sensitivity - The following presents the total OPEB liability as a whole and for the primary government, calculated using the current healthcare cost rate trend of 7.5% decreasing .5% to an ultimate trend of 4.5%. It also presents the total OPEB liability if the healthcare cost rate trend was decreased to 6.5% decreasing .5% to an ultimate trend rate of 3.5% as well as if the trend rate was increased to 8.5% decreasing .5% to an ultimate trend rate of 5.5%:

	1% Decrease	Healthcare Cost Trend Rates Assumption	1% Increase
Plan	\$ 5,152	\$ 5,714	\$ 6,369
Primary Government	\$ 2,895	\$ 3,211	\$ 3,578

CITY OF TULSA
 NOTES TO BASIC FINANCIAL STATEMENTS
 June 30, 2022
 (dollar amounts expressed in thousands)

Note 10. Other Post-Employment Benefits, continued

10. OPEB Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB - The primary government's OPEB expense for the year was \$558. At June 30, 2022, the primary government's deferred outflows of resources and deferred inflows of resources related to OPEB were as follows:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual plan experience	\$ 504	\$ 343
Assumption Change	237	359
Changes in proportion and differences between employer contributions and proportionate share of contributions	74	44
	<u>\$ 815</u>	<u>\$ 746</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources will be recognized as OPEB expense over the average remaining service lives of plan participants (actives and retirees) as follows:

Year ended June 30 th	
2023	\$ 106
2024	66
2025	89
2026	(108)
2027	(84)
	<u>\$ 69</u>

B. DEFINED CONTRIBUTION OPEB PLANS

1. Tulsa Firefighters Health and Welfare Trust – The Tulsa Firefighters Health and Welfare Trust is a single employer defined contribution OPEB Plan that provides health, dental, and vision insurance for full time, sworn Tulsa firefighters and retirees. Assets accumulated in the trust meet the criteria in paragraph 4 of GASB Statement No. 75. Rates are established by the Trust. The City contributed \$7,718 to the Trust during the year as required by the annual collective bargaining contract and recognized the same amount as expense. No additional amounts were due to the Trust by the City at year-end.

2. Tulsa FOP #93 Health and Welfare Trust – The Tulsa FOP #93 Health and Welfare Trust is a single employer defined contribution OPEB Plan that provides health, dental and vision insurance for full time, sworn Tulsa police officers and retirees. Assets accumulated in the trust meet the criteria in paragraph 4 of GASB Statement No. 75. Rates are established by the Trust. The City contributed \$8,437 to the Trust during the year as required by the annual collective bargaining contract and recognized the same amount as expense. No additional amounts were due to the Trust by the City at year-end.

APPENDIX C

CITY OF TULSA
 REQUIRED SUPPLEMENTARY INFORMATION
 June 30, 2022
 (dollar amounts expressed in thousands)

City of Tulsa Postretirement Benefit Plan -- Schedule of Changes in the Total OPEB Liability
For the current and prior six years

	2022	2021	2020	2019	2018	2017	2016
Total OPEB liability:							
Service cost	\$ 477	\$ 442	\$ 274	\$ 262	\$ 271	\$ 297	\$ 241
Interest	187	226	219	245	207	167	210
Changes of benefit terms	(1,914)	-	(18)	-	-	-	-
Differences between expected and actual experience	(155)	(530)	1,653	(378)	427	637	459
Changes of assumptions	(762)	293	351	154	(23)	(250)	409
Benefit payments, including refunds of member contributions	(336)	(493)	(333)	(464)	(202)	(1,234)	(796)
Net change in total OPEB liability	(2,503)	(62)	2,146	(181)	680	(383)	523
Total OPEB liability—beginning	8,217	8,279	6,133	6,314	5,634	6,017	5,494
Total OPEB liability—ending	<u>\$ 5,714</u>	<u>\$ 8,217</u>	<u>\$ 8,279</u>	<u>\$ 6,133</u>	<u>\$ 6,314</u>	<u>\$ 5,634</u>	<u>\$ 6,017</u>
Covered payroll	\$112,058	\$106,457	\$110,600	\$106,985	\$103,869	\$104,090	\$101,059
Total OPEB liability as a percent of covered payroll	5.1%	7.7%	7.5%	5.7%	6.1%	5.4%	6.0%

Change in assumptions: Changes of assumptions and other inputs reflect the effects of changes in the discount rate each period. The following are the discount rates used in each period.

2022	4.09%
2021	2.19%
2020	2.66%
2019	3.51%
2018	3.87%
2017	3.56%
2016	4.00%

CITY OF TULSA
 REQUIRED SUPPLEMENTARY INFORMATION
 June 30, 2022
 (dollar amounts expressed in thousands)

*City of Tulsa Postretirement Benefit Plan -- Schedule of City's Total OPEB
 Liability and Related Ratios
 For the current and prior six years*

Year	Primary Government Proportion of Total OPEB Liability	Primary Government Proportionate Share of Total OPEB Liability	Primary Government Covered Payroll	Primary Government Proportionate Share of Total OPEB Liability as a Percentage of its Covered Payroll	Plan Fiduciary net Position as a Percentage of Total OPEB Liability
2022	56.1837%	\$ 3,211	\$ 62,958	5.1%	0.0%
2021	55.9882%	4,600	59,603	7.7%	0.0%
2020	56.1429%	4,648	62,094	7.5%	0.0%
2019	55.1724%	3,384	59,026	5.7%	0.0%
2018	55.4002%	3,497	57,544	6.1%	0.0%
2017	55.1098%	3,104	57,364	5.4%	0.0%
2016	54.9639%	3,307	55,546	6.0%	0.0%

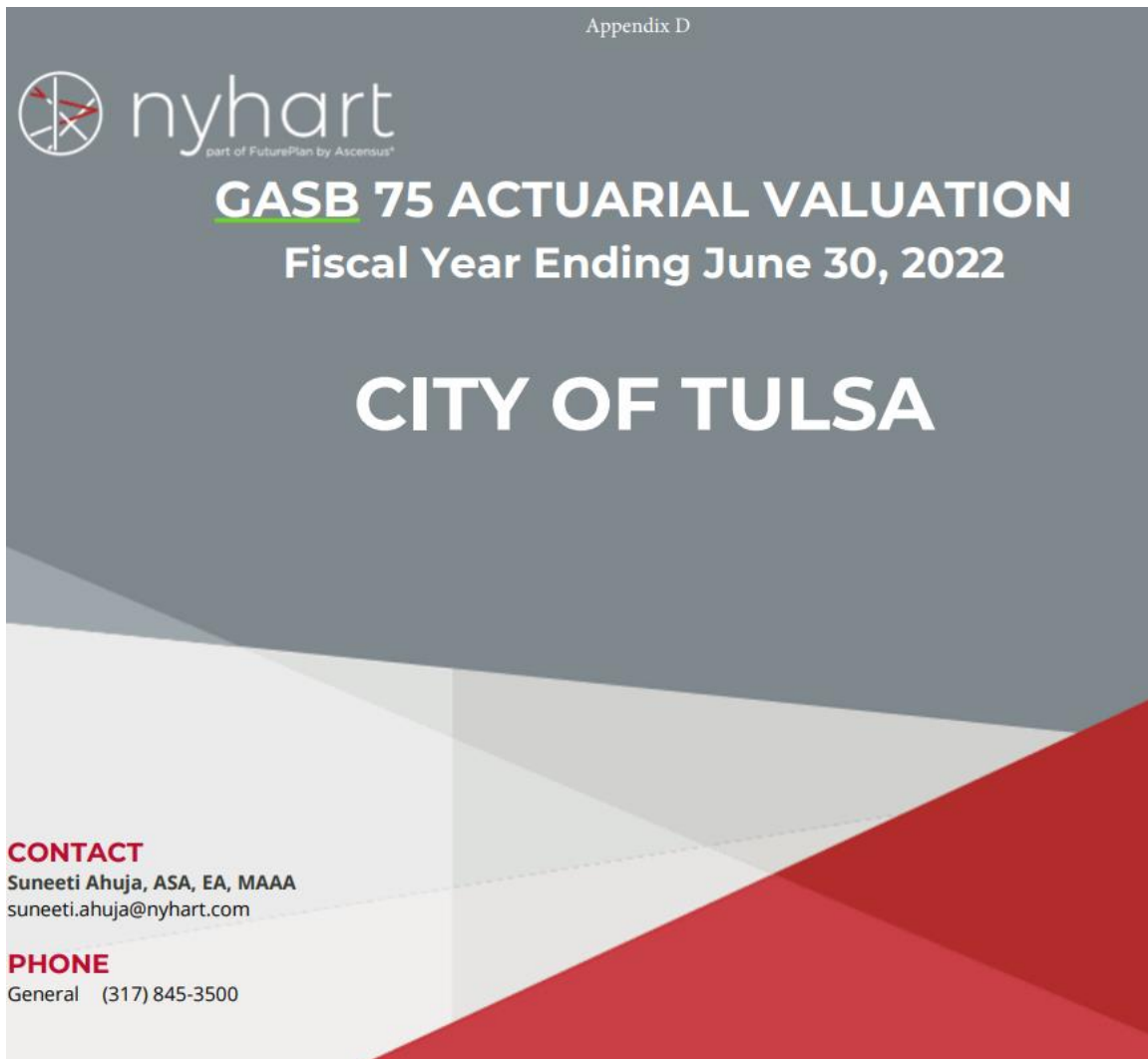


Table of Contents

	Page
Certification	1
Executive Summary	3
GASB Disclosures	
Schedule of Changes in Net OPEB Liability and Related Ratios	5
OPEB Expense	7
Deferred Outflows / (Inflows) of Resources	8
Sensitivity Results	11
Projection of GASB Disclosures	12
Cash Flow Projections	13
Discussion of Discount Rates	14
Summary of Plan Participants	15
Substantive Plan Provisions	17
Actuarial Methods and Assumptions	18
Appendix	24
Comparison of Participant Demographic Information	25
Detailed Actuary's Notes	26
Glossary	27
Decrements Exhibit	28
Retirement Rates Exhibit	29
Definitions	30



September 19, 2022

Norman Kildow
City of Tulsa
175 East Second Street
Suite 05-36B
Tulsa, OK 74103

This report summarizes the GASB actuarial valuation for the City of Tulsa 2021/22 fiscal year. To the best of our knowledge, the report presents a fair position of the funded status of the plan in accordance with GASB Statement No. 75 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions). This report may not be appropriate for other purposes. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than that explained above. Failure to do so may result in misrepresentation or misinterpretation of this report.

The information presented herein is based on the actuarial assumptions and substantive plan provisions summarized in this report and participant information furnished to us by the Plan Sponsor. We have reviewed the employee census provided by the Plan Sponsor for reasonableness when compared to the prior information provided but have not audited the information at the source, and therefore do not accept responsibility for the accuracy or the completeness of the data on which the information is based. When relevant data may be missing, we may have made assumptions we feel are neutral or conservative to the purpose of the measurement. We are not aware of any significant issues with and have relied on the data provided.

The discount rate, other economic assumptions, and demographic assumptions have been selected by the Plan Sponsor with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Plan. All calculations have been made in accordance with generally accepted actuarial principles and practice.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic assumptions;
- increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- changes in plan provisions or applicable law.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement.

To our knowledge, there have been no significant events prior to the current year's measurement date or as of the date of this report that could materially affect the results contained herein.



Neither Nyhart nor any of its employees has any relationship with the plan or its sponsor that could impair or appear to impair the objectivity of this report. Our professional work is in full compliance with the American Academy of Actuaries "Code of Professional Conduct" Precept 7 regarding conflict of interest. The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States.

Should you have any questions please do not hesitate to contact us.

Suneeti Ahuja, ASA, EA, MAAA
Actuary

Cody Kocher, ASA, MAAA
Actuary

Executive Summary

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Summary of Results

Presented below is the summary of GASB 75 results for the fiscal year ending June 30, 2022 compared to the prior fiscal year as shown in the City's Notes to Financial Statement.

	As of June 30, 2021	As of June 30, 2022
Total OPEB Liability	\$ 8,216,730	\$ 5,714,045
Actuarial Value of Assets	\$ 0	\$ 0
Net OPEB Liability	\$ 8,216,730	\$ 5,714,045
Funded Ratio	0.0%	0.0%

	FY 2020/21	FY 2021/22
OPEB Expense	\$ 1,201,486	\$ (1,013,471)
Annual Employer Contributions	\$ 493,246	\$ 336,019

	As of June 30, 2021	As of June 30, 2022
Discount Rate	2.19%	4.09%
Expected Return on Assets	N/A	N/A

	As of June 30, 2022
Total Active Participants	1,993
Total Retiree Participants	66

The active participants' number above includes active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

Executive Summary

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Summary of Results

Below is a breakdown of total GASB 75 liabilities allocated to past and current service compared to the prior year. The table below also provides a breakdown of the Total OPEB Liability allocated to pre- and post-Medicare eligibility. The liability shown below includes explicit (if any) and implicit subsidies. Refer to the Substantive Plan Provisions section for complete information on the Plan Sponsor's GASB subsidies.

Present Value of Future Benefits	As of June 30, 2021	As of June 30, 2022
Active Employees	\$ 12,155,359	\$ 7,202,788
Retired Employees	1,206,827	1,000,961
Total Present Value of Future Benefits	\$ 13,362,186	\$ 8,203,749

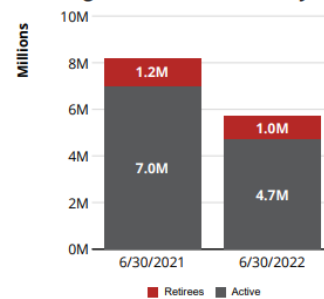
Total OPEB Liability	As of June 30, 2021	As of June 30, 2022
Active Pre-Medicare	\$ 7,009,903	\$ 4,713,084
Active Post-Medicare	0	0
Active Liability	\$ 7,009,903	\$ 4,713,084

Retiree Pre-Medicare	\$ 1,206,827	\$ 1,000,961
Retiree Post-Medicare	0	0
Retiree Liability	\$ 1,206,827	\$ 1,000,961

Total OPEB Liability	\$ 8,216,730	\$ 5,714,045
-----------------------------	---------------------	---------------------

	As of June 30, 2021	As of June 30, 2022
Discount Rate	2.19%	4.09%

Changes In Total OPEB Liability



Present Value of Future Benefits (PVFB) is the amount needed as of June 30, 2022 and June 30, 2021, to fully fund the City's retiree health care subsidies for existing and future retirees and their dependents assuming all actuarial assumptions are met.

Total OPEB Liability is the portion of PVFB considered to be accrued or earned as of June 30, 2022 and June 30, 2021. This amount is a required disclosure in the Required Supplementary Information section.

GASB Disclosures

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Schedule of Changes in Net OPEB Liability and Related Ratios

OPEB Liability	FY 2021/22	FY 2020/21	FY 2019/20	FY 2018/19	FY 2017/18
Total OPEB Liability					
Total OPEB Liability - beginning of year	\$ 8,216,730	\$ 8,279,446	\$ 6,132,944	\$ 6,314,241	\$ 5,634,157
Service cost	477,652	442,266	273,725	261,938	271,450
Interest	186,748	225,480	219,074	245,602	206,673
Change of benefit terms	(1,914,118)	0	(17,686)	0	0
Changes in assumptions	(761,803)	293,418	351,395	153,533	(22,800)
Differences between expected and actual experience	(155,145)	(530,634)	1,653,333	(378,196)	426,917
Benefit payments	(336,019)	(493,246)	(333,339)	(464,174)	(202,156)
Net change in total OPEB liability	\$ (2,502,685)	\$ (62,716)	\$ 2,146,502	\$ (181,297)	\$ 680,084
Total OPEB Liability - end of year	\$ 5,714,045	\$ 8,216,730	\$ 8,279,446	\$ 6,132,944	\$ 6,314,241
Plan Fiduciary Net Position					
Plan fiduciary net position - beginning of year	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Contributions - employer	336,019	493,246	333,339	464,174	202,156
Contributions - active employees	0	0	0	0	0
Net investment income	0	0	0	0	0
Benefit payments	(336,019)	(493,246)	(333,339)	(464,174)	(202,156)
Trust administrative expenses	0	0	0	0	0
Net change in plan fiduciary net position	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Plan fiduciary net position - end of year	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Net OPEB Liability - end of year	\$ 5,714,045	\$ 8,216,730	\$ 8,279,446	\$ 6,132,944	\$ 6,314,241
Plan fiduciary net position as % of total OPEB liability	0.0%	0.0%	0.0%	0.0%	0.0%
Covered employee payroll	\$ 112,057,701	\$ 106,456,728	\$ 110,600,373	\$ 106,985,250	\$ 103,869,175
Net OPEB liability as % of covered payroll	5.1%	7.7%	7.5%	5.7%	6.1%

* FY 2021/22 benefit payments are the difference between: (a) \$771,193 retiree claims paid by the City and (b) \$435,174 retiree contributions.

GASB Disclosures

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Schedule of Changes in Net OPEB Liability and Related Ratios (Continued)

OPEB Liability	FY 2016/17		FY 2015/16	
Total OPEB Liability				
Total OPEB Liability - beginning of year	\$	6,017,422	\$	5,494,428
Service cost		297,009		241,047
Interest		166,491		210,438
Change of benefit terms		0		0
Changes in assumptions		(249,942)		409,495
Differences between expected and actual experience		637,399		458,504
Benefit payments		(1,234,222)		(796,490)
Net change in total OPEB liability	\$	(383,265)	\$	522,994
Total OPEB Liability - end of year	\$	5,634,157	\$	6,017,422
Plan Fiduciary Net Position				
Plan fiduciary net position - beginning of year	\$	0	\$	0
Contributions - employer		1,234,222		796,490
Contributions - retired members		0		0
Net investment income		0		0
Benefit payments		(1,234,222)		(796,490)
Trust administrative expenses		0		0
Net change in plan fiduciary net position	\$	0	\$	0
Plan fiduciary net position - end of year	\$	0	\$	0
Net OPEB Liability - end of year	\$	5,634,157	\$	6,017,422
Plan fiduciary net position as % of total OPEB liability		0.0%		0.0%
Covered employee payroll	\$	104,090,258	\$	101,058,503
Net OPEB liability as % of covered payroll		5.4%		6.00%

GASB Disclosures

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

OPEB Expense

OPEB Expense	FY 2021/22	FY 2020/21
Discount Rate		
Beginning of year	2.19%	2.66%
End of year	4.09%	2.19%
Service cost	\$ 477,652	\$ 442,266
Interest	186,748	225,480
Change of benefit terms	(1,914,118)	0
Projected earnings on OPEB plan investments	0	0
Reduction for contributions from active employees	0	0
OPEB plan administrative expenses	0	0
Current period recognition of deferred outflows / (inflows) of resources		
Differences between expected and actual experience	\$ 275,613	\$ 377,889
Changes in assumptions	(39,366)	155,851
Net difference between projected and actual earnings on OPEB plan investments	0	0
Total current period recognition	\$ 236,247	\$ 533,740
Total OPEB expense	\$ (1,013,471)	\$ 1,201,486

GASB Disclosures

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Deferred Outflows / (Inflows) of Resources

Deferred Outflows / (Inflows) of Resources represents the following items that have not been recognized in the OPEB Expense:

1. Differences between expected and actual experience of the OPEB plan
2. Changes of assumptions
3. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)

The initial amortization period for the first two items noted above is based on expected future service lives while the difference between the projected and actual earnings in OPEB plan investment is amortized over five years. All balances are amortized linearly on a principal only basis and new bases will be created annually for each of the items above.

Differences between expected and actual experience for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2022
June 30, 2016	\$ 458,504	6	\$ 0	\$ 0
June 30, 2017	\$ 637,399	6	\$ 106,234	\$ 0
June 30, 2018	\$ 426,917	6	\$ 71,153	\$ 71,152
June 30, 2019	\$ (378,196)	6	\$ (63,033)	\$ (126,064)
June 30, 2020	\$ 1,653,333	6	\$ 275,556	\$ 826,665
June 30, 2021	\$ (530,634)	6	\$ (88,439)	\$ (353,756)
June 30, 2022	\$ (155,145)	6	\$ (25,858)	\$ (129,287)

Changes in assumptions for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2022
June 30, 2016	\$ 409,495	6	\$ 0	\$ 0
June 30, 2017	\$ (249,942)	6	\$ (41,657)	\$ 0
June 30, 2018	\$ (22,800)	6	\$ (3,800)	\$ (3,800)
June 30, 2019	\$ 153,533	6	\$ 25,589	\$ 51,177
June 30, 2020	\$ 351,395	6	\$ 58,566	\$ 175,697
June 30, 2021	\$ 293,418	6	\$ 48,903	\$ 195,612
June 30, 2022	\$ (761,803)	6	\$ (126,967)	\$ (634,836)

GASB Disclosures

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Deferred Outflows / (Inflows) of Resources (Continued)

Net Difference between projected and actual earnings in OPEB plan investments for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2022
June 30, 2018	\$ 0	N/A	\$ 0	\$ 0
June 30, 2019	\$ 0	N/A	\$ 0	\$ 0
June 30, 2020	\$ 0	N/A	\$ 0	\$ 0
June 30, 2021	\$ 0	N/A	\$ 0	\$ 0
June 30, 2022	\$ 0	N/A	\$ 0	\$ 0

As of fiscal year ending June 30, 2022	Deferred Outflows	Deferred Inflows
Differences between expected and actual experience	\$ 897,817	\$ (609,107)
Changes in assumptions	422,486	(638,636)
Net difference between projected and actual earnings in OPEB plan investments	N/A	N/A
Total	\$ 1,320,303	\$ (1,247,743)

Annual Amortization of Deferred Outflows / (Inflows)

The balances as of June 30, 2022 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below.

FYE	Balance
2023	\$ 171,669
2024	\$ 104,318
2025	\$ 141,757
2026	\$ (192,361)
2027	\$ (152,823)
Thereafter	\$ 0

GASB Disclosures

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Sensitivity Results

The following presents the Net OPEB Liability as of June 30, 2022, calculated using the discount rate assumed and what it would be using a 1% higher and 1% lower discount rate.

- The current discount rate is 4.09%.
- The 1% decrease in discount rate would be 3.09%.
- The 1% increase in discount rate would be 5.09%.

As of June 30, 2022	Net OPEB Liability
1% Decrease	\$ 6,193,062
Current Discount Rate	\$ 5,714,045
1% Increase	\$ 5,278,968

The following presents the Net OPEB Liability as of June 30, 2022, using the health care trend rates assumed and what it would be using 1% higher and 1% lower health care trend rates.

- The current health care trend rate starts at an initial rate of 7.50%, decreasing to an ultimate rate of 4.50%.
- The 1% decrease in health care trend rates would assume an initial rate of 6.50%, decreasing to an ultimate rate of 3.50%.
- The 1% increase in health care trend rates would assume an initial rate of 8.50%, decreasing to an ultimate rate of 5.50%.

As of June 30, 2022	Net OPEB Liability
1% Decrease	\$ 5,151,517
Current Trend Rates	\$ 5,714,045
1% Increase	\$ 6,368,704

Projection of GASB Disclosures

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

The Total OPEB Liability (TOL) is expected to change on an annual basis as a result of expected and unexpected events. Under normal circumstances, it is generally expected to have a net increase each year. Below is a list of the most common events affecting the total OPEB liability and whether they increase or decrease the liability.

Expected Events

- Increases in TOL due to additional benefit accruals as employees continue to earn service each year
- Increases in TOL due to interest as the employees and retirees age
- Decreases in TOL due to benefit payments

Unexpected Events

- Increases in TOL when actual health care costs increase more than expected. A liability decrease occurs when the reverse happens.
- Increases in TOL when more new retirements occur than expected or fewer terminations occur than anticipated. Liability decreases occur when the opposite outcomes happen.
- Increases or decreases in TOL depending on whether benefits are improved or reduced.

Projection of Total OPEB Liability (TOL)	FY 2021/22	FY 2022/23
TOL as of beginning of year	\$ 8,216,730	\$ 5,714,045
Normal cost as of beginning of year	477,652	277,390
Exp. benefit payments during the year	(336,019)	(305,897)
Interest adjustment to end of year	186,748	238,857
Exp. TOL as of end of year	\$ 8,545,111	\$ 5,924,395
Actuarial Loss / (Gain)	(2,831,066)	TBD
Actual TOL as of end of year	\$ 5,714,045	\$ TBD

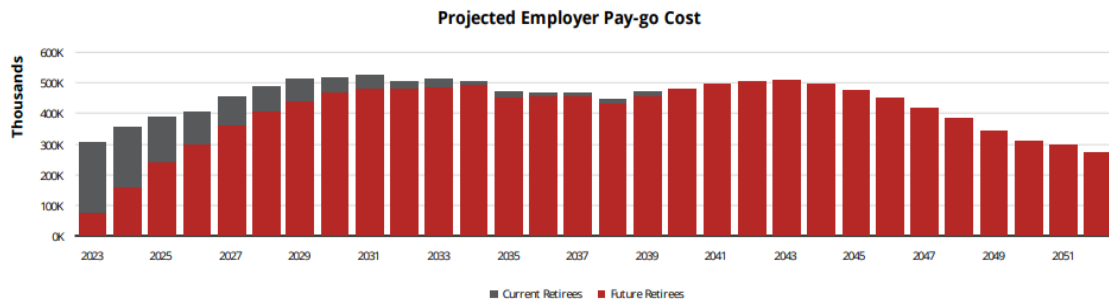
Discount rate as of beginning of year	2.19%	4.09%
Discount rate as of end of year	4.09%	TBD

Cash Flow Projections

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next thirty years. Results are shown separately for a closed group of current/future retirees. These projections include explicit and implicit subsidies.

FYE	Current Retirees	Future Retirees*	Total	FYE	Current Retirees	Future Retirees*	Total	FYE	Current Retirees	Future Retirees*	Total
2023	\$ 230,288	\$ 75,609	\$ 305,897	2033	\$ 26,990	\$ 485,534	\$ 512,524	2043	\$ 0	\$ 509,957	\$ 509,957
2024	\$ 198,655	\$ 157,175	\$ 355,830	2034	\$ 15,179	\$ 491,562	\$ 506,741	2044	\$ 0	\$ 496,381	\$ 496,381
2025	\$ 147,525	\$ 240,227	\$ 387,752	2035	\$ 21,745	\$ 449,059	\$ 470,804	2045	\$ 0	\$ 474,621	\$ 474,621
2026	\$ 106,205	\$ 299,413	\$ 405,618	2036	\$ 13,957	\$ 455,620	\$ 469,577	2046	\$ 0	\$ 452,087	\$ 452,087
2027	\$ 97,458	\$ 358,873	\$ 456,331	2037	\$ 14,481	\$ 454,724	\$ 469,205	2047	\$ 0	\$ 416,783	\$ 416,783
2028	\$ 79,313	\$ 407,472	\$ 486,785	2038	\$ 15,020	\$ 432,280	\$ 447,300	2048	\$ 0	\$ 383,534	\$ 383,534
2029	\$ 75,535	\$ 436,925	\$ 512,460	2039	\$ 15,572	\$ 456,099	\$ 471,671	2049	\$ 0	\$ 343,909	\$ 343,909
2030	\$ 50,888	\$ 466,962	\$ 517,850	2040	\$ 0	\$ 482,058	\$ 482,058	2050	\$ 0	\$ 312,241	\$ 312,241
2031	\$ 43,557	\$ 480,139	\$ 523,696	2041	\$ 0	\$ 496,799	\$ 496,799	2051	\$ 0	\$ 296,823	\$ 296,823
2032	\$ 26,007	\$ 478,519	\$ 504,526	2042	\$ 0	\$ 503,670	\$ 503,670	2052	\$ 0	\$ 273,165	\$ 273,165



* Projections for future retirees do not take into account future new hires.

Discussion of Discount Rates

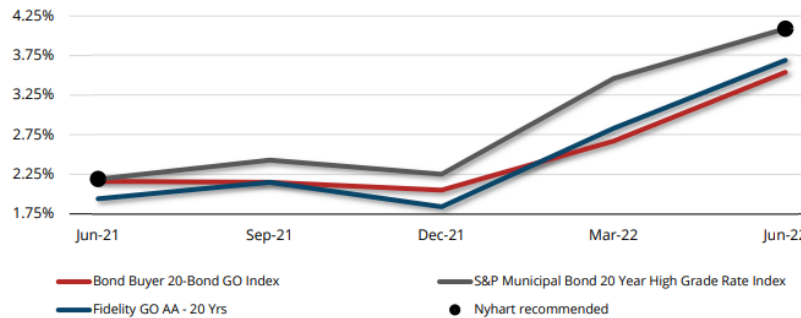
City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Under GASB 75, the discount rate used in valuing OPEB liabilities for unfunded plans as of the Measurement Date must be based on a yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale).

For the current valuation, the discount rate was selected from the range of indices as shown in the table below, where the range is given as the spread between the lowest and highest rate shown.

	Bond Buyer Go 20-Bond Municipal Bond Index	S&P Municipal Bond 20-Year High Grade Rate Index	Fidelity 20-Year Go Municipal Bond Index	Bond Index Range	Actual Discount Rate Used
Yield as of July 1, 2021	2.16%	2.19%	1.94%	1.94% - 2.19%	2.19%
Yield as of June 30, 2022	3.54%	4.09%	3.69%	3.54% - 4.09%	4.09%

20-Year Municipal Bond Indices



Summary of Plan Participants

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Active Employees

Actives with coverage	Single	Non-Single	Total	Avg. Age	Avg. Svc	Salary
Community Care 2500 with Care ATC Access	520	481	1,001	45.6	11.9	\$ 52,931,161
Community Care 2800 with HSA	210	241	451	48.3	12.0	\$ 29,764,553
Community Care Multi-Choice with Care ATC Access	156	135	291	48.4	11.5	\$ 15,991,999
Total actives with coverage	886	857	1,743	46.8	11.9	\$ 98,687,713
Actives without coverage			Total	Avg. Age	Avg. Svc	Salary
Total actives without coverage			250	45.3	9.3	\$ 13,369,988

Active employees without coverage are assumed not to elect coverage at retirement. They have been excluded from this GASB valuation.

Active Age-Service Distribution

Age	Years of Service										Total
	< 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	18	46									64
25 to 29	19	115	40								174
30 to 34	13	100	67	19							199
35 to 39	12	70	84	45	24	2					237
40 to 44	9	67	62	44	48	22	1				253
45 to 49	12	57	47	30	24	36	9				215
50 to 54	5	54	46	34	34	31	34	10			248
55 to 59	6	35	31	25	41	40	26	33	11	2	250
60 to 64	3	33	40	29	39	14	20	18	23	11	230
65 to 69	1	11	19	16	9	12	4	4	7	12	95
70 & up		3	3	10	3	1	1	3		4	28
Total	98	591	439	252	222	158	95	68	41	29	1,993

Summary of Plan Participants

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Retirees

Retirees with coverage	Single	Non-Single	Total	Avg. Age
Community Care 2500 with Care ATC Access ¹	59	7	66	62.8
Total retirees with coverage	59	7	66	62.8

Retiree Age Distribution

Age	Retirees
< 45	
45 to 49	
50 to 54	2
55 to 59	9
60 to 64	40
65 to 69	14
70 to 74	1
75 to 79	
80 to 84	
85 to 89	
90 & up	
Total	66

¹ Currently, this is the only health plan eligible retirees can enroll in

Substantive Plan Provisions

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Eligibility

Employees are eligible for retiree health care benefits until Medicare eligibility at the earlier of:

1. Age 55 with 5 years of service (Early Retirement)
2. Age 65 with 5 years of service (Normal Retirement)
3. 80 points: years of service plus age must be greater than or equal to 80
4. 90 points: (those hired after 7/1/2018) years of service plus age must be greater than or equal to 90

Active police officers and firefighters are covered by a separate Trust established specifically to provide medical benefits to the City of Tulsa police officers and firefighters. They are excluded from this GASB 75 disclosure.

Spouse Benefit

Surviving spouse can continue coverage until age 65 after the death of the retiree or active employee eligible to retire.

Medical Benefits

Retirees can enroll in the Community Care 2500 with Care ATC health plan exclusively. While current Actives have the liberty to enroll in additional health plans offered by the City, as disclosed above, those premium rates were not considered for the purposes of this valuation. The monthly premiums for the Community Care 2500 with Care ATC health plan effective on January 1, 2022 are as shown below.

	EE	EE + Spouse
Community Care 2500 with Care ATC	\$ 465.63	\$ 931.83

Retiree Cost Sharing

Retirees pay the full cost of coverage.

Sworn Firefighters and Police Officers

Active police officers and firefighters are covered by a separate trust established specifically to provide medical benefits to the City of Tulsa sworn firefighters and police officers. These sworn employees have their own group health plan, separate from the City. They have been excluded from this GASB valuation.

Civilian employees of these two departments are covered under the City's group health plan and are included in this GASB valuation.

Actuarial Methods and Assumptions

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

The actuarial assumptions used in this report represent a reasonable long-term expectation of future OPEB outcomes. As national economic and City experience change over time, the assumptions will be tested for ongoing reasonableness and, if necessary, updated.

The discount rate, other economic assumptions, and demographic assumptions have been selected by the Plan Sponsor with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Plan. All calculations have been made in accordance with generally accepted actuarial principles and practice.

There are changes to the actuarial methods and assumptions since the last GASB valuation, which was for the fiscal year ending June 30, 2020. Refer to Actuary's Notes section for complete information on these changes. For the current year GASB valuation, we have also updated the per capita costs. We expect to update discount rate, mortality assumption, health care trend rates, and per capita costs again in the next full GASB valuation, which will be for the fiscal year ending June 30, 2024.

Measurement Date	For fiscal year ending June 30, 2022, June 30, 2022 measurement date was used.
Actuarial Valuation Date	June 30, 2022 with no adjustments to get to the June 30, 2022 measurement date. Liabilities as of July 1, 2021 are based on an actuarial valuation date of July 1, 2020 actuarially projected to July 1, 2021 on a "no gain / no loss" basis.
Discount Rate	2.19% as of July 1, 2021 and 4.09% as of June 30, 2022 for accounting disclosure purposes. Refer to the Discussion of Discount Rates section for more information on selection of the discount rate.
Payroll Growth	Sample merit and longevity increases excluding 3.00% inflation and 1.00% productivity are shown below. These assumptions are based on the City's 2016 experience study that includes data from June 30, 2010 through June 30, 2016.

Years of Service	Rate
0	7.75%
5	1.75%
10	0.75%
15	0.25%
20	0.00%

Actuarial Methods and Assumptions

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Inflation Rate	3.00% per year The inflation rate is based on the current economic environment and future expectations.
Cost Method	Allocation of Actuarial Present Value of Future Benefits for services prior and after the Measurement Date was determined using Entry Age Normal Level % of Salary method where: <ul style="list-style-type: none"> Service Cost for each individual participant, payable from date of employment to date of retirement, is sufficient to pay for the participant's benefit at retirement; and Annual Service Cost is a constant percentage of the participant's salary that is assumed to increase according to the Payroll Growth.
Employer Funding Policy	Pay-as-you-go cash basis
Census Data	Census information was provided by the City in July 2022 and is reflective of the City's employment mix as of January 1, 2022. We have reviewed it for reasonableness and no material modifications were made to the census data. However, we have made the following data assumptions when information was missing or inconsistent with the prior census: <ul style="list-style-type: none"> When an employee's data of hire did not match the prior census, we used the older of the two dates or used prior information if not provided this year. This affected 25 participants.
Health Care Coverage Election Rate	Active employees with current coverage: 35% Active employees with no coverage: 0% Inactive employees with current coverage: 100% Inactive employees with no coverage: 0% This assumption is based on the observed participation rates from the City's 2016 experience study that includes data from June 30, 2010 through June 30, 2016.

Actuarial Methods and Assumptions

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Spousal Coverage

Actual coverage and age are used for current retirees.

For future retirees, 40% of male employees and 20% of female employees are assumed to be married at retirement. Husbands are assumed to be three years older than wives.

This assumption is based on the observed participation rates from the University's 2016 experience study that includes data from June 30, 2010 through June 30, 2016. The spousal age difference is based on the difference among the general population of married individuals who are of retirement age.

Mortality

Retirees: SOA Pub-2010 General Headcount Weighted Mortality Table fully generational using Scale MP-2021

Surviving Spouses: SOA Pub-2010 Contingent Survivor Headcount Weighted Mortality Table fully generational using Scale MP-2021

The plan does not have sufficient data to have credible experience. Therefore, mortality assumptions are set to reflect general population trends based upon Pub-2010 Mortality tables and the most recent generational projection scale MP-2021 released by the Society of Actuaries (SOA) for future mortality improvements.

Disability

None

Turnover Rate

Assumption used to project terminations (voluntary and involuntary) prior to meeting minimum retirement eligibility for retiree health coverage. The rates represent the probability of termination in the next 12 months. Rates are based on the City's 2016 experience study that includes data from June 30, 2010 through June 30, 2016. Sample annual turnover rates are shown below:

Service	All Ages		Years from Normal Retirement	Over 5 Years of Service	
	Male	Female		Male	Female
0	28.50%	24.00%	1	0.79%	0.94%
1	21.50%	17.50%	5	1.33%	1.57%
2	16.50%	15.50%	10	2.94%	3.47%
3	12.50%	14.00%	15	5.82%	6.88%
4	10.50%	13.00%	20	9.16%	10.84%
			25	10.03%	11.86%

Actuarial Methods and Assumptions

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Retirement Rate

Annual retirement rates are as shown below. Load 50% at age first eligible for normal retirement prior to age 63. Rates are based on the City's experience study from 2016 that includes data from June 30, 2010 through June 30, 2016.

Age	Normal Retirement	Early Retirement
49	5.0%	N/A
50 – 54	15.0%	N/A
55	12.0%	4.0%
56 – 59	12.0%	6.0%
60	20.0%	4.0%
61	11.0%	4.0%
62	30.0%	15.0%
63	20.0%	10.0%
64	20.0%	10.0%
65 – 69	25.0%	N/A
70 – 74	20.0%	N/A
75+	100.0%	N/A

Retiree Contributions

Retiree contributions are assumed to increase according to health care trend rates.

Health Care Trend Rates

FYE	Medical/Rx	FYE	Medical/Rx
2023	7.5%	2027	5.5%
2024	7.0%	2028	5.0%
2025	6.5%	2029+	4.5%
2026	6.0%		

The initial trend rate was based on a combination of employer history, national trend surveys, and professional judgment.

The ultimate trend rate was selected based on historical medical CPI information.

Actuarial Methods and Assumptions

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Per Capita Costs

Annual per capita costs were calculated based on the City's premium rates for the Community Care 2500 with Care ATC plan as of January 1, 2022 and actuarially increased using health index factors and current enrollment. The costs are assumed to increase with health care trend rates. Annual per capita costs are as shown below:

Age	Male	Female
<50	\$ 5,600	\$ 5,800
50 – 54	\$ 5,900	\$ 6,800
55 – 59	\$ 8,000	\$ 7,700
60 – 64	\$ 10,400	\$ 9,400

The per capita costs represent the cost of coverage for a retiree-only population.

Actuarial standards require the recognition of higher inherent costs for a retired population versus an active population.

Explicit Subsidy

The difference between (a) the premium rate and (b) the retiree contribution. Below is an example of the monthly explicit subsidies for a male retiree age 60 with spouse of the same age enrolled in the Community Care 2500 with Care ATC plan.

	Premium Rate	Retiree Contribution	Explicit Subsidy
	A	B	C = A – B
Retiree	\$ 465.63	\$ 465.63	\$ 0.00
Spouse	\$ 466.20	\$ 466.20	\$ 0.00

All employers that utilize premium rates based on blended active/retiree claims experience will have an implicit subsidy. There is an exception for Medicare plans using a true community-rated premium rate.

Implicit Subsidy

The difference between (a) the per capita cost and (b) the premium rate. Below is an example of the monthly implicit subsidies for a male retiree age 60 with spouse of the same age enrolled in the Community Care 2500 with Care ATC plan.

	Per Capita Cost	Premium Rate	Implicit Subsidy
	A	B	C = A – B
Retiree	\$ 866.67	\$ 465.63	\$ 401.04
Spouse	\$ 783.33	\$ 466.20	\$ 317.13

Actuarial Methods and Assumptions

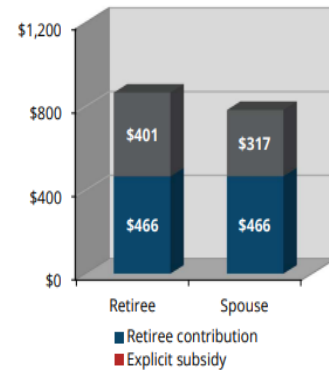
City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

GASB Subsidy Breakdown

Below is a breakdown of the GASB 75 monthly total cost for a male retiree age 60 with spouse of the same age enrolled in the Community Care 2500 with Care ATC plan.

	Retiree	Spouse
Retiree contribution	\$ 465.63	\$ 466.20
Explicit subsidy	\$ 0.00	\$ 0.00
Implicit subsidy	\$ 401.04	\$ 317.13
Total monthly cost	\$ 866.67	\$ 783.33

GASB Subsidy Breakdown



Experience Study

Best actuarial practices call for a periodic assumption review and Nyhart recommends the City to complete an actuarial assumption review (also referred to as an experience study) before the next full valuation, which will be for the fiscal year ending June 30, 2024. The actuarial assumptions have not been updated since at least the 2018 valuation.

Models

ProVal

Valuation software developed by Winklevoss Technologies, LLC. This software is widely used for the purpose of performing postretirement medical valuations. We coded the plan provisions, assumptions, methods and participant data summarized in this report, and reviewed the liability and cost outputs for reasonableness. We are not aware of any weakness or limitations in the software and have determined it is appropriate for performing this valuation.

HealthMAPS Manual

Rating manual developed by WTW. Aging factors are used to develop per capita costs by age for plans with limited credible exposure to develop plan-specific factors. We are not aware of any weakness or limitations in the factors and have determined they are appropriate for performing this valuation.

APPENDIX

Appendix

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Comparison of Participant Demographic Information

The active participants' number below includes active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

	As of June 30, 2020	As of June 30, 2022
Active Participants	2,070	1,993
Retired Participants	83	66
Averages for Active		
Age	45.4	46.6
Service	10.7	11.6
Averages for Inactive		
Age	61.7	62.8

Appendix

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Detailed Actuary's Notes

There have been two substantive plan provision changes since the last full valuation, which was for the fiscal year ending June 30, 2020:

1. The introduction of the Community Care 2500 with Care ATC health plan, and that being the sole enrollment option for retirees. This change caused a significant decrease in liabilities.
2. The introduction of the 90-point rule to the City's eligibility requirements for those hired after July 1, 2018. This resulted in a slight decrease in liabilities for this valuation.

The following assumptions have been updated since the prior valuation:

1. The discount rate has been updated based on the yield for 20-year tax-exempt general obligation municipal bonds as of June 30, 2022 (measurement date). The discount rate is 2.19% as of June 30, 2021 and 4.09% as of June 30, 2022. Refer to the Discussion of Discount Rates section for more information on the selection of the discount rate. The impact of this change is a significant decrease in liabilities.
2. The mortality improvement scale for all mortality tables was updated from MP-2019 to MP-2021. This resulted in a slight increase in liabilities.
3. Health care trend rates have been reset to an initial rate of 7.5% decreasing by 0.5% to an ultimate rate of 4.5%. This change caused an increase in liabilities for the City.

The updated census data resulted in a slight decrease in liabilities.

GLOSSARY

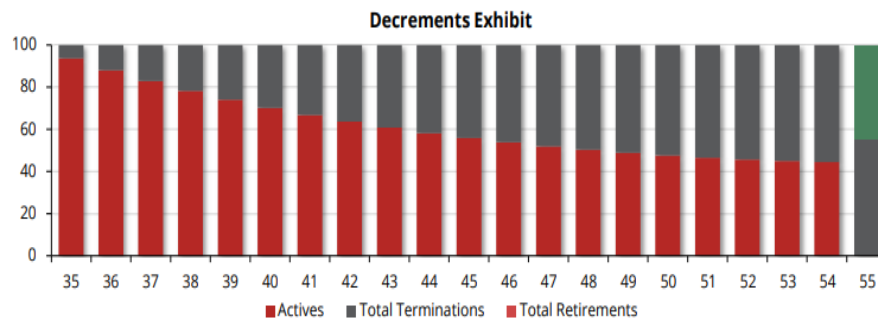
Glossary – Decrements Exhibit

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. Starting with 100 employees at age 35, the illustrated actuarial assumptions show that 44.43 employees out of the original 100 are expected to retire and could elect retiree health benefits at age 55.

Age	# Remaining Employees	# of Terminations per Year ²	# of Retirements per Year	Total Decrements
35	100.000	6.276	0.000	6.276
36	93.724	5.677	0.000	5.677
37	88.047	5.136	0.000	5.136
38	82.911	4.648	0.000	4.648
39	78.262	4.209	0.000	4.209
40	74.053	3.814	0.000	3.814
41	70.239	3.456	0.000	3.456
42	66.783	3.131	0.000	3.131
43	63.652	2.835	0.000	2.835
44	60.817	2.564	0.000	2.564
45	58.253	2.316	0.000	2.316

Age	# Remaining Employees	# of Terminations per Year	# of Retirements per Year	Total Decrements
46	55.938	2.085	0.000	2.085
47	53.853	1.866	0.000	1.866
48	51.987	1.656	0.000	1.656
49	50.331	1.452	0.000	1.452
50	48.880	1.253	0.000	1.253
51	47.627	1.060	0.000	1.060
52	46.567	0.877	0.000	0.877
53	45.690	0.707	0.000	0.707
54	44.983	0.553	0.000	0.553
55	44.430	0.000	44.430	44.430



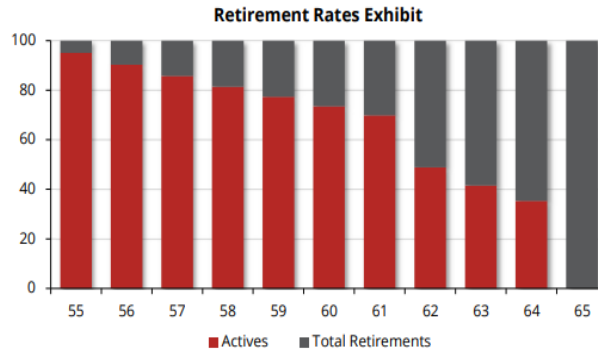
² The above rates are illustrative rates and are not used in our GASB calculations.

Glossary – Retirement Rates Exhibit

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. The illustrated retirement rates show the number of employees who are assumed to retire annually based on 100 employees age 55 who are eligible for retiree health care coverage. The average age at retirement is 62.0.

Age	Active Employees BOY	Annual Retirement Rates*	# Retirements per Year	Active Employees EOY
55	100.000	5.0%	5.000	95.000
56	95.000	5.0%	4.750	90.250
57	90.250	5.0%	4.513	85.738
58	85.738	5.0%	4.287	81.451
59	81.451	5.0%	4.073	77.378
60	77.378	5.0%	3.869	73.509
61	73.509	5.0%	3.675	69.834
62	69.834	30.0%	20.950	48.884
63	48.884	15.0%	7.333	41.551
64	41.551	15.0%	6.233	35.318
65	35.318	100.0%	35.318	0.000



* The above rates are illustrative rates and are not used in our GASB calculations.

Glossary – Definitions

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

GASB 75 defines several unique terms not commonly employed in the funding of pension and retiree health plans. The definitions of the terms used in the GASB actuarial valuations are noted below.

- Actuarial Assumptions** – Assumptions as to the occurrence of future events affecting health care costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided health care benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.
- Actuarial Cost Method** – A procedure for determining the Actuarial Present Value of Future Benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Service Cost and a Total OPEB Liability.
- Actuarially Determined Contribution** - A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in accordance with the parameters and in conformity with Actuarial Standards of Practice.
- Actuarial Present Value** – The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:
 - Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.);
 - multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned; and
 - Discounted according to an assumed rate (or rates) of return to reflect the time value of money.
- Deferred Outflow / (Inflow) of Resources** – represents the following items that have not been recognized in the OPEB Expense:
 - Differences between expected and actual experience of the OPEB plan
 - Changes in assumptions
 - Differences between projected and actual earnings in OPEB plan investments (for funded plans only)
- Explicit Subsidy** – The difference between (a) the amounts required to be contributed by the retirees based on the premium rates and (b) actual cash contribution made by the employer.
- Funded Ratio** – The actuarial value of assets expressed as a percentage of the Total OPEB Liability.

Glossary – Definitions

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

8. **Healthcare Cost Trend Rate** – The rate of change in the per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.
9. **Implicit Subsidy** – In an experience-rated healthcare plan that includes both active employees and retirees with blended premium rates for all plan members, the difference between (a) the age-adjusted premiums approximating claim costs for retirees in the group (which, because of the effect of age on claim costs, generally will be higher than the blended premium rates for all group members) and (b) the amounts required to be contributed by the retirees.
10. **OPEB** – Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.
11. **OPEB Expense** – Changes in the Net OPEB Liability in the current reporting period, which includes Service Cost, interest cost, changes of benefit terms, expected earnings on OPEB Plan investments, reduction of active employees' contributions, OPEB plan administrative expenses, and current period recognition of Deferred Outflows / (Inflows) of Resources.
12. **Pay-as-you-go** – A method of financing a benefit plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.
13. **Per Capita Costs** – The current cost of providing postretirement health care benefits for one year at each age from the youngest age to the oldest age at which plan participants are expected to receive benefits under the plan.
14. **Present Value of Future Benefits** – Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay total projected benefits when due.
15. **Real Rate of Return** – the rate of return on an investment after adjustment to eliminate inflation.

Glossary – Definitions

City of Tulsa GASB 75 Valuation for Fiscal Year Ending June 30, 2022

16. **Select and Ultimate Rates** – Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the investment return assumption, the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed investment return of 8% for year 20W0, then 7.5% for 20W1, and 7% for 20W2 and thereafter, then 8% and 7.5% select rates, and 7% is the ultimate rate.
17. **Service Cost** – The portion of the Actuarial Present Value of projected benefit payments that are attributed to a valuation year by the Actuarial Cost Method.
18. **Substantive Plan** – The terms of an OPEB plan as understood by the employer(s) and plan members.
19. **Total OPEB Liability** – That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Benefits which is attributed to past periods of employee service (or not provided for by the future Service Costs).

APPENDIX E

nyhart

EXPERIENCE STUDY

December 2016

Tiemann, Donald (dtiemann@cityoftulsa.org) is signed in

City of Tulsa

Nyhart Actuary & Employee Benefits

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(317) 845-3500 – www.nyhart.com

Table of Contents

	Page
Certification	1
Background	2
Executive Summary	3
Healthcare Coverage Election Rate Analysis	4
Spousal Coverage Election Rate Analysis	5
Impact on Actuarial Accrued Liabilities (AAL)	6

City of Tulsa

December 2016 Experience Study

Certification

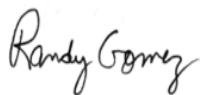
This report is prepared for the purpose of reviewing the actual experience compared to the current actuarial assumptions used in the GASB Statement No. 45 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions). Recommendation of any changes proposed for health care coverage election rates and spousal coverage election rates are included in this report.

The information presented in this report is based on the information furnished to us by the Plan Administrator. All calculations have been made in accordance with generally accepted actuarial principles and practice.

To our knowledge there have been no significant events prior to the date of this report which could materially affect the results contained herein.

Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report. Our professional work is in full compliance with the American Academy of Actuaries "Code of Professional Conduct" Precept 7 regarding conflict of interest. The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Nyhart



Randy Gomez, FSA, MAAA

March 30, 2017

Background

An experience study is a summary of actual experience defined over a specified period of time. This study can analyze past economic experience (such as past inflation, real rates of return on assets, real salary growth in relative to inflation, and active employees' payroll growth) and/or past demographic experience (analysis of recent patterns of withdrawal, death, disability, retirement, election rate, and spousal coverage).

Employees are subject to decrements prior to meeting retirement eligibility requirements. The term **decrements** describe any circumstances that cause an active employee to leave the population under study. For example, an active employee may decrement due to termination (voluntary or involuntary), death (work related or not), disability (work related or not), or service retirement.

The term **exposure** defines the number of employees who are subject to a particular decrement. For example:

1. A new hire is exposed to withdrawal, death, and disability decrements, but not retirement since he has most likely not met the retirement eligibility requirements.
2. An employee who is eligible to retire is no longer exposed to termination or disability as upon his withdrawal from active employment, he will be considered a retiree instead of a terminated or disabled active employee. He will however be subject to death decrement.

So in a population of ten employees, out of which two have met the retirement eligibility requirements, the two retirement eligible employees will be subject to the retirement and death decrements while the other eight will be subject to the withdrawal, death, and disability decrements.

Process:

1. We first compute the raw rates of decrements based on historical experience. These rates are calculated by taking the total number of employees who left the population divided by the total number of employees exposed to a particular decrement.
2. The actuaries will analyze whether the raw rates of decrements are significantly different between gender or employee groups (which may be subject to different eligibility requirements).
3. Final recommended rates are usually smoothed based on historical experience presented and professional judgment on future behavior.

Data for this experience study was provided by the Plan Sponsor and it consists of a series of snapshots of retirement coverage election data taken as of June 30 of 2010 through 2016.

Executive Summary

This report presents the results of the experience study for the City of Tulsa, which is derived from historical demographic information as of June 30, 2010 through 2016. This is the first experience study completed for the City for measuring its retiree health obligations. Assumptions reviewed in this study are as follows:

1. Healthcare coverage election rate – the assumption used to project active employees who will continue health coverage with the City after their retirement.
2. Spousal coverage election rate – the assumption used to project the number of subscribers who will elect to have his/her spouse covered under the plan.

Note: for purposes of measuring OPEB liabilities, disability, termination, and retirement rates have been assumed to follow the appropriate pension fund's assumptions without adjustment. These will be updated for the fiscal year ending 2018 valuation per the experience study that will be performed for the pension fund in 2016.

Recommendations

We are recommending changes to all assumptions analyzed as described below:

1. Healthcare coverage election rate – fewer employees with coverage prior to retirement elect retiree health coverage than currently assumed. Therefore, we are proposing a reduction from 60% to 35% for this assumption. The City's liabilities are expected to decrease by 34% due to this change.
2. Spousal coverage election rate – fewer employees elect spousal coverage at retirement than currently assumed. We are proposing that this assumption is reduced from 70% for all employees to 40% for male employees and 20% for female employees. The City's liabilities are expected to decrease by 4% due to this change.

Healthcare Coverage Election Rate Analysis

In analyzing the healthcare coverage election rate assumption, we have reviewed the number of new retirements and those electing coverage in the past six fiscal years as shown below.

FY	# of New Retirements	All actives ¹	
		# Elected Health Coverage	Health Care Election %
2010/11	96	46	48%
2011/12	76	39	51%
2012/13	71	32	45%
2013/14	98	50	51%
2014/15	89	24	27%
2015/16	72	18	25%
Average			41%
Average since 7/1/2014			26%

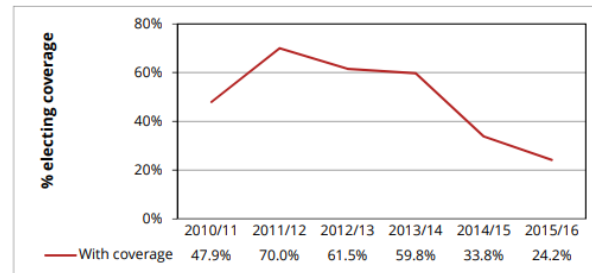
FY	# of New Retirements	All actives with coverage prior to retirement ¹	
		# Elected Health Coverage	Health Care Election %
2010/11	96	46	48%
2011/12	50	35	70%
2012/13	52	32	62%
2013/14	82	49	60%
2014/15	71	24	34%
2015/16	62	15	24%
Average			50%
Average since 7/1/2014			29%

The current assumption is as follows:

- 60% of active employees with current coverage are assumed to continue coverage at retirement
- 0% of active employees without current coverage are assumed to elect coverage at retirement

As of July 1, 2014, retirees must pay the full cost of coverage, which has reduced the health care coverage election significantly. Based on this knowledge, and heavier weight on the results from 2014/15 and 2015/16, we are recommending that the current health care coverage election assumption be changed to the following:

- 35% of active employees with current coverage are assumed to continue coverage at retirement
- 0% of active employees without current coverage are assumed to elect coverage at retirement

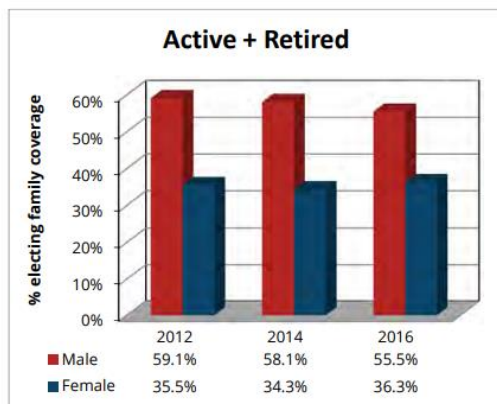


¹ Includes only those retiring prior to age 65.

Spousal Coverage Election Rate Analysis

For the spousal coverage election rate analysis, we have reviewed the percentage of participants (employees and retirees) electing spousal coverage by member's gender in the past three full valuations. Experience suggests that, on average, 58% of male participants and 35% of female participants elected spousal coverage. However, only 28% of male retirees and 8% of female retirees have elected spousal coverage. Based on the entire group, with more weight given to retired participants, we are recommending that the current spousal coverage election rate of 70% for all employees be reduced to 40% for male employees and 20% for female employees.

FYE	% Participants with Spousal Coverage					
	Active		Retired		Total	
	Male	Female	Male	Female	Male	Female
2012	63%	39%	29%	14%	59%	36%
2014	61%	38%	31%	10%	58%	34%
2016	57%	40%	24%	0%	56%	36%
Average	60%	39%	28%	8%	58%	35%



Impact on Actuarial Accrued Liabilities (AAL)

Below is the impact on the City's AAL as of July 1, 2015 after all of the assumption changes recommended in this report.

As of July 1, 2015	Current	Proposed Election Rates	Proposed Election and Spousal Rates
Future Retirees	\$ 7,966,392	\$ 4,647,062	\$ 4,413,198
Current Retirees	\$ 1,746,941	\$ 1,746,941	\$ 1,746,941
Total	\$ 9,713,333	\$ 6,394,003	\$ 6,160,139
Incremental AAL Change			
Future Retirees		\$ (3,319,330)	\$ (233,864)
Current Retirees		\$ 0	\$ 0
Total		\$ (3,319,330)	\$ (233,864)
Cumulative AAL Change			
		\$ (3,319,330)	\$ (3,553,194)
Discount Rate ²		4.0%	4.0%

² For the next full valuation, which will be disclosed under GASB 74/75, the discount rate will be based on a yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

Appendix F

STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS

(Effective as of January 1, 2021)

1. Investment Return Rate 6.75% per year, net of investment expenses. The 6.75% is composed of a 2.50% inflation component and an assumed 4.25% real rate of return.

2. Mortality Rates

- a. Post Retirement Non-Disabled Healthy retirees and beneficiaries – The Pub-2010 General Employee Mortality Tables. Generational mortality improvements in accordance with the ultimate rates of Scale MP-2020 from the table's base year of 2010.
- b. Disabled Lives Disabled annuitants – The Pub-2010 General Employee Disabled Mortality Tables. Generational mortality improvements in accordance with the ultimate rates of Scale MP-2020 from the table's base year of 2010.
- c. Active Mortality Active employees – The Pub-2010 General Employee Mortality Tables. Generational mortality improvements in accordance with the ultimate rates of Scale MP-2020 from the table's base year of 2010.

3. Incidence of Disability Rates

<u>Age</u>	<u>Rate (%)</u>
	<u>Male & Female Participants</u>
20	0.0004
25	0.0025
30	0.0099
35	0.0259
40	0.0494
45	0.0804
50	0.1188
55	0.1647
60	0.2180

4. Retirement Rates

Age	Rate (%)		
	Normal Retirement	Early Retirement	
		Hired before July 1, 2018	Hired on or after July 1, 2018
49	5.0		
50-54	14.0		
55	10.0	3.5	
56	10.0	5.5	
57	10.0	5.0	
58	10.0	5.0	
59	10.0	4.0	
60	20.0	3.5	5.0
61	11.0	3.0	5.0
62	25.0	12.0	8.0
63	20.0	9.0	5.0
64	20.0	9.0	5.0
65	30.0		
66-67	27.0		
68-69	25.0		
70-74	20.0		
75	100.0		

Employees hired before July 1, 2018:

Load 75% at age first eligible for normal retirement less than age 63.

Employees hired on or after July 1, 2018:

Load 80% at age first eligible for normal retirement less than age 65.

5. Termination Rates

<u>Credited Service</u>	<u>During the first 5 years of Service Withdrawal Rate (%)</u>	
	<u>Male</u>	<u>Female</u>
1	28.50	24.00
2	19.00	17.00
3	15.50	12.00
4	11.50	10.50
5	9.00	9.50

<u>Years From Normal Retirement</u>	<u>After 5 years of Service Withdrawal Rate (%)</u>	
	<u>Male</u>	<u>Female</u>
1	0.76	0.94
2	0.87	1.07
3	0.99	1.22
4	1.12	1.39
5	1.27	1.57
6	1.47	1.82
7	1.70	2.10
8	2.04	2.52
9	2.41	2.98
10	2.81	3.47
11	3.29	4.07
12	3.81	4.70
13	4.36	5.39
14	4.94	6.11
15	5.57	6.88
16	6.23	7.70
17	6.84	8.46
18	7.41	9.16
19	7.97	9.25
20+	8.50	9.25

Tiemann, Donald (dtiemann@cityoftulsa.org) is signed in

6. Salary Increase Rates

Rates are composed of a 2.50% inflation rate, a 1.00% productivity rate that applies to all, and a variable promotional/longevity component that is a function of the member's service.

Years of Service	Annual Promotional/ Longevity Component	Annual Total Salary Increase
1	6.00%	9.50%
2	4.50%	8.00%
3	3.00%	6.50%
4	2.00%	5.50%
5	1.75%	5.25%
6	1.50%	5.00%
7	1.50%	5.00%
8	1.25%	4.75%
9	1.25%	4.75%
10-12	1.00%	4.50%
13-15	0.75%	4.25%
16-18	0.50%	4.00%
19	0.25%	3.75%
20	0.25%	3.75%
21 or more	0.00%	3.50%

7. Total Payroll Growth Rate

2.75% per year, compounded annually. Assumes no membership growth.

8. Other Assumptions

- a) Percent married: 100% of employees are assumed to be married.
- b) Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.
- c) Cost of living escalators (COLA): None. Ad Hoc Colas are studied and granted based on the discretion of the Board.
- d) Percent electing annuity on death (when eligible): All of the spouses of vested, married participants are assumed to elect an annuity.
- e) Percent electing deferred termination benefit: Vested terminating members are assumed to elect a refund or a deferred benefit, whichever is more valuable at the time of termination.
- f) There will be no recoveries once disabled.
- g) No surviving spouse will remarry and there will be no children's benefit.
- h) Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt at the first age at which unreduced benefits are available.
- i) Administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment expenses. A 0.40% load is added to the employer normal cost to account for administrative expenses.
- j) Pay increase timing: Beginning of (fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
- k) Decrement timing: Decrements of all types are assumed to occur mid-year.
- l) Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
- m) Decrement relativity: Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
- n) Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this Report, and the actual payroll payable at the time contributions are made.
- o) Benefit Service: All members are assumed to accrue one (1) year of service each year. Exact fractional service is used to determine the amount of benefit payable.

9. Asset Valuation Method

The actuarial value of assets recognizes 20% of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return, further adjusted, if necessary, to be within 20% of the market value.

RESPONDENT CHECKLIST

Use this checklist to ensure You have properly read and completed all documents listed below. This document (the RFP) contains all the following materials, which must be completed and returned to the City of Tulsa Clerk's Office. We recommend You include this checklist with your proposal.

Proposer's Name: _____

RESPONDENT CHECKLIST	
RESPONDENT DOCUMENTS	INCLUDED?
Cover Letter	
Proposal Narrative	
Respondent Information Sheet (required form)	
Exhibit A - Price Sheet Summary (required form)	
Affidavit (Non-Collusion and Interest) (required form)	
Acknowledgement of Receipt of Addenda / Addendum	
Appendix A General Contract Terms	
Appendix B Notes to Basic Financial Statements	
Appendix C Required Supplemental Information	
Appendix D Actuarial Valuation	
Appendix E Experience Study	
Appendix F Statement of Actuarial Methods & Assumptions	
Additional Information (Optional)	

PACKING LABEL

TOP LEFT CORNER OF LABEL

FROM: [Name]

[Respondent's legal name]

[Street Address]

[City, State, Zip Code]

FROM:

City of Tulsa - City Clerk's Office

175 East 2nd Street, Suite 260

Tulsa, OK, 74103

Respondent Submission For:

RFP# TAC 915C

RFP DESCRIPTION: ACTUARIAL SERVICES

This label ensures that Your proposal will be sent to the correct office (City Clerk's) and that it is associated with the correct Solicitation (indicated by the RFP number).
Proposals must be sealed and either mailed or delivered to the City Clerk's Office.
Proposals must also be received no later than 5:00 PM (CST) on date listed on the first page of the RFP.