TOPEKA METROPOLITAN TRANSPORTATION AUTHORITY

TECHNICAL PROPOSAL FOR ACTUARIAL VALUATION SERVICES UNDER GASB 75

IN RESPONSE TO RFP #TO-22-10

LEWIS & ELLIS
Actuaries and Consultants

Patrick Glen, ASA, ACAS, MAAA
11225 Authority Boulevard, Suite 320
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(913) 491-3388 (T)
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April 2022

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LEWIS & ELLIS
Actuaries and Consultants

11225 College Blvd.
Suite 320
Overland Park, KS 66210

913.491.3388
LewisEllis.com

April 20, 2022

Topeka Metropolitan Transportation Authority
201 North Kansas Avenue
Topeka, Kansas 66603

Re: Request for Actuarial Valuation Services RFP #TO-22-10

We appreciate the opportunity to submit a proposal for actuarial consulting services concerning the valuation of the postemployment insurance program of the Topeka Metropolitan Transportation Authority (Metro or Authority) under GASB 75 reporting and compliance.

Lewis & Ellis, Inc. (L&E) provides valuation services for post-employment insurance benefits to clients across the country. Our Overland Park office has extensive expertise working with local clients that utilize KPERS valuation assumptions. We believe our valuation knowledge, commitment to customer satisfaction and substantial OPEB experience, equip us to meet your needs in an effective and efficient manner. Lewis & Ellis understands the Scope of Work to be completed and agrees to perform the proposed work within the Authority's desired timeframe.

A.M. Best ranks Lewis & Ellis as one of the top Actuarial Services firms in the country. We have a dedicated team who will work with you from year to year. L&E operates as an independent actuarial consulting firm with strict adherence to ethical and professional standards.

We have enjoyed working with the Metro in the past, and look forward to the opportunity to work with you if we are selected for this contract. Please contact us with any questions you may have regarding our proposal.

Sincerely,

LEWIS & ELLIS, INC.

Patrick Glenn

Patrick Glenn, ASA, ACAS, MAAA, CPA (inactive)
Vice President & Principal
(913) 766-9179
PGlenn@LewisEllis.com

SECTION II
EXECUTIVE SUMMARY

Lewis & Ellis, Inc. (L&E) proposes actuarial services for the Topeka Metropolitan Transportation Authority. The scope of the proposed services involves valuing the Authority's postemployment insurance program for GASB 75 reporting and cost recognition. We have significant expertise and experience in valuing postemployment insurance benefits.

We understand GASB 75 reporting is needed for fiscal years ending June 30, 2022, through 2027. We will communicate with the Authority as necessary to plan the project, make necessary decisions and report progress regarding the analysis. We will analyze the data for inconsistencies and make recommendations for enhancing the data quality.

Full update valuations are required at least every two years under GASB 75 standards unless material changes have occurred in the interim year. A "full" valuation requires an updated census and a revised analysis of per capita costs / assumptions / actuarial methods. We assume full valuations will be required at least every other year starting with FY 2022. It is noted that even in the interim years (without material changes) the OPEB Expense and Net OPEB Liability will need to be re-measured using an appropriate discount rate, benefit terms as of the measurement date, and reasonable assumptions. The value of assets will be recognized as of the measurement date for each annual valuation.

The Overland Park office of L&E currently serves over 100 clients with postemployment insurance benefit valuation services. We have successfully worked with clients throughout the Country. Our experience includes the valuation of various benefit types and arrangements. We have worked with numerous auditors for OPEB reporting and maintain an excellent reputation for the timeliness and quality of our reports. We ask the questions in order to dig into the detail when appropriate. Deadlines are very important to us because we know they are important to you. We strive to provide not only top-notch actuarial analysis but also clear, concise communication that is vital to OPEB studies and valuations.

As well as all compliant information, our reports provide census statistics, detail of assumptions and actuarial methods and an explanation of the results. We pride ourselves on making our reports auditor friendly and are certainly available to answer any and all questions from you and your auditor. We believe our communication style, accessibility, experience and attention to detail give us a competitive advantage for meeting your needs.

SECTION III
FIRM QUALIFICATIONS

We are qualified to issue a Public Statement of Actuarial (PSAO) in accordance with the Qualification Standards of the American Academy of Actuaries (AAA) and to undertake this project according to Precept 2 of the Code to Professional Conduct of the AAA.

Lewis & Ellis, Inc. (L&E) was formed in 1968 in Dallas as Buchanan & Lewis, Inc. The firm opened an office in Overland Park in 1970, and one in Los Angeles in 1973. The corporate name was changed to Lewis & Ellis, Inc. (L&E) in 1976. The Los Angeles office was relocated to Dallas in 1996 due to retirement of the managing partner there.

L&E is an independent, full-service actuarial consulting firm. In addition to the valuation of retiree health insurance programs, we offer management consulting and actuarial services in the areas of: life insurance, group health insurance, employee benefits and property/casualty insurance to non-insurance companies that bear risk, as well as to insurance companies, brokers, the federal government and state insurance departments.

The firm has about 100 total employees with major offices in Overland Park, Kansas and Dallas, Texas. Except for some administrative functions, the offices operate autonomously.

All services stipulated in the request for proposal will be provided exclusively by the Overland Park office. The Overland Park office offers 38 employees with 20 credentialed actuaries including valuation, pricing and reserving actuaries.

The address of our office is presented below:

Lewis & Ellis, Inc.
11225 College Boulevard, Suite 320
Overland Park, KS 66210
(913) 766-9179 (phone) (913) 642-9777 (fax)
www.LewisEllis.com

Some additional ad hoc services we can provide in the health insurance area include: unpaid claim liability evaluation (i.e. reserves), self-insured plan premium rates, plan design change evaluation, and Medicare Part D attestations. We are one of a few firms that provide services to Medicare. This is evidence of our expertise and reputation in the marketplace.

SECTION III
FIRM QUALIFICATIONS

Our consultants and actuaries come from national consulting firms and/or private industry, and bring a high level of expertise to their respective areas of practice. L&E employs both healthcare costing and valuation actuaries to provide the highest level of service for GASB OPEB valuations. This is very important as OPEB valuation services require a comprehensive knowledge of the healthcare industry as well as experience and expertise in pension costing principles. The managing consultant for our proposed services has also earned the CPA designation enabling an additional financial perspective that can add value. Our senior consultants are intimately involved in each assignment. We have successfully provided actuarial and consulting services from our Overland Park, Kansas office for nearly 50 years.

Our actuaries follow the codes of conduct and professional standards promulgated by the Society of Actuaries and the American Academy of Actuaries. Each actuary takes personal responsibility for adhering to these standards and our internal training and professional development activities reinforce this commitment. L&E actuaries select assumptions that are reasonable in accordance with standards published by actuarial organizations such as the American Academy of Actuaries.

The valuation actuary has the responsibility for attesting to the reasonableness of all the actuarial assumptions used in the valuation of post-employment benefits under GASB. However, the actuary is aware the sponsor of benefits is ultimately responsible for attesting to the GASB assumptions. Thus, our actuaries ensure the plan sponsor fully understands the derivation of each assumption.

Lewis & Ellis, Inc. is an independent actuarial consulting firm that operates as a Schedule S corporation whose owners are all active employees.

We are independent from the Authority in all respects and not aware of any potential real or perceived conflicts of interest.

SECTION IV
PROPOSED SCOPE OF SERVICES

VALUATION METHODOLOGY

We propose to perform valuation analyses to determine the financial information for compliance with GASB 75 standards. The present value cost of the difference between the age –based cost and any retiree contributions premiums is allocated to different time periods and recognized in accordance with the entry age normal – level % of pay actuarial cost method as required under GASB standards. The present value costs will be projected using actuarial techniques from the valuation date to the measurement date based on the applicable benefit terms and appropriate assumptions for each fiscal year.

In performing the valuations, we will apply aggregate assumptions to specific employees and retirees. Therefore, the census, as of the valuation date, will need to comprise appropriate detail and the assumptions should be reasonable and appropriate to your plan.

ACTUARIAL ASSUMPTIONS

Our assumption analysis will be based on a combination of various industry data and Authority data. The amount of weight given to Authority data will be determined by the amount of credibility associated with it and the nature of the assumption. Credibility is a function of the variability of experience, nature of the risk(s) and the number of exposures. We will certainly utilize the latest available data from statistical sources such as valuation reports from pension plans covering employees as appropriate.

The assumptions used in a retiree health valuation can be divided into two broad categories: pension-type assumptions and healthcare assumptions. The pension-type assumptions (such as retirement, turnover and disability) impact the discounting of future healthcare benefits back to the valuation date. The healthcare assumptions impact the estimation of the amount of future benefits.

We will evaluate "decrement" assumptions such as retirement, death, turnover and disability considering actuarial standards and available pertinent data from the State of New Jersey pension and OPEB valuations. We may also utilize Authority data and input from management on certain decrement assumptions.

ACTUARIAL ASSUMPTIONS *(continued)*

Per capita costs will be determined by an analysis of Authority experience with potential weight also given to other data sources. This data should be adjusted to the expected average exposure date to reflect both current cost levels and plan parameters. We are interested in estimating the expected costs that apply during the ages of retirement coverage. For example, the age-adjusted cost for a 60 year-old retiree represents the expected average cost if a credible number of 60 year-old retirees were covered by a plan with coverage features similar to those of the Authority. The difference between the age-adjusted cost and the retiree contribution is the "benefit" that must be valued under GASB standards. Ultimately, our goal is to use the most reasonable and appropriate balance of plan and industry experience that is both credible (has predictive value) and based on a plan design structure similar to that offered by the Authority.

Healthcare cost trends are typically based on industry data sources and plan experience. Greater weight may be given to industry surveys and industry experience for the trend assumptions in the longer term, while greater weight may be given to plan experience for the trend assumptions in the shorter term. In evaluating projected trend for the short term, we may use linear and/or exponential regression applied to the plan experience based on least squares. The resulting equation will produce an estimated trend that mathematically "best fits" the plan experience.

The substantive plan is the plan that operates in practice as understood by the Authority and the plan participants. Any ambiguity in plan provisions, data or plan parameters will be described and communicated with Authority personnel. If written documentation is not available for all material plan parameters, confirmation and explanation by Authority personnel is necessary to confirm the substantive plan. We will ask questions until our understanding reaches an appropriate comfort level for performing a high-quality valuation.

SECTION V
STAFF QUALIFICATIONS AND EXPERIENCE

Our service team is listed below. (See Attachment #2 for Resumes.) In addition to the team members listed below, actuarial students and administrative support may be utilized when it is efficient to do so.

Patrick Glenn (ASA 2003, ACAS 2010) – Responsible for the overall valuation analysis, client relationship, delivery of actuarial information and billings. Patrick has deep experience in OPEB valuations and has provided actuarial consulting services for about 20 years and has earned the CPA designation. He is a member of the American Academy of Actuaries.

Kim Shores (FSA 2008) – May provide peer review and valuation analysis. Kim has over 15 years of health experience. She has worked in the areas of product development, rate filings and claims analysis for employer and retiree groups. She is a member of the American Academy of Actuaries.

Jason R. Dunavin (FSA (2014) – May provide peer review and valuation analysis. Jason has 13 years of health insurance experience, including reserving, forecasting, product development and rate filings. He is a member of the American Academy of Actuaries.

Carolyn McAlarney – Provides assistance with data analysis, report preparation and valuation testing. Carolyn has worked in the insurance industry for more than 15 years. She has completed two actuarial examinations.

Heather Robinson – May provide assistance with projections of claims costs and trend/assumption analysis. Heather has worked on claim cost projections and trending for more than 20 years.

SECTION VI
DATA REQUIREMENTS

We ask that all information be submitted electronically. In order to make the data gathering process as easy as possible, we will provide Excel spreadsheets to complete for census data and paid claims experience.

Some of the data we <u>may</u> request are listed below. (Some of these items may not apply to your program and will not be requested in the actual data request.)

- Census Data – **Sample Fields**
    - Employee ID
    - Date of Birth
    - Date of Hire
    - Date of Retirement
    - Gender
    - Plan Election
    - Coverage Tier
    - Covered Dependent Information
    - Pension Plan Category
- Benefit Summaries / Schedule of Benefits / Summary of Benefits & Coverage
- Plan renewal detail or Premium Equivalent Rate Derivation Detail
- Monthly Paid Claims – Experience & Enrollment
- Stop-loss Premium Rates and Plan Administration Rates (if self-funded)
- Large Claim Reports
- Plan Premium Rates by Coverage Tier
- Retiree Contribution Premium Rates by Coverage Tier
- Investment Policy and typical mix of assets for assets in the Trust
- Union Contracts
- Pension Plan Reports
- Funding / Contribution Policy
- Trust Balance Sheet and Income Statement

SECTION VIII
TIMELINE

L&E is well equipped to provide actuarial valuation services in a timely manner. Deadlines are extremely important to us as we know they are important to our clients. Before starting the project we will confirm specific timing needs from the Authority. As we do the work, we will communicate project progress as appropriate to keep the Authority well informed.

We offer the following as a general guide of the valuation process:

- After project award notification, conduct a planning conference call to discuss key personnel, data flow, plan provisions and deadline expectations (within 1 week after project award notification).
- To transition from the prior actuary, we will request data and actuarial assumptions used to perform the prior valuation.
- Submit initial data request for the current valuation, in conjunction with information above.
- After receiving the census and experience data, process / analyze data and complete valuation using the most reasonable assumptions.
- Questions and communication concerning assumptions, data received and plan provisions.
- Submit draft report.
- Conduct a conference call to discuss results.
- Submit final report by the Authority's deadline. A sample report is included as Attachment #3.

We understand final reports are due on August 15th each year. We are flexible and will work with the Authority to meet its deadlines. Consistent communication is key.

SECTION VIII
REFERENCES

References have been provided as Attachment #1.

We enjoy working with our clients and are confident they will attest that our L&E team provides top-notch service and customer satisfaction.

We are fortunate to have worked with Topeka Metro in the past and look forward to the opportunity to work with you in the future, if we are selected for this contract.

We have a qualified team dedicated to providing GASB services. We strive to be easy to work with and give our clients exceptional communication, quality and value. Because of these attributes our client retention is very high. We have worked with most of our clients since GASB OPEB implementation. For these reasons L&E is best suited to perform the GASB OPEB services for the Authority.

SECTION IX
COST PROPOSAL

We have completed the required Price Quote form.

At Lewis and Ellis, it is important to understand that we spend the time up front to gain an in-depth understanding of the data and actual operation of your plan. We don't rely on a cookie-cutter approach. Also, we stand behind our reports and pride ourselves in having our clients and their auditor understand the results.

D. PATRICK GLENN, ASA, ACAS, MAAA

Vice President & Principal

Consulting Actuary, Kansas City office

Prior Positions

1999-2006: Wachovia Insurance Services, Overland Park, Kansas; Consulting Actuary

1996-1999: Universal Underwriters Group, Overland Park, Kansas; Actuarial Associate

1990-1996: Patrick Glenn, CPA, Ponca City, Oklahoma; Business Owner

1986-1990: Conoco Inc., Ponca City, Oklahoma; Tax Accountant

Responsibilities and Experience

- Valuation of post-employment insurance programs for GASB 74/75 reporting
- Valuation of post-employment insurance programs for ASC 715 and ASC 965 reporting
- Per capita cost modeling and analysis
- Self-insured plans and benefits – premium equivalents and reserves
- Examinations and audit support – insurance companies
- Statutory and GAAP reserves - insurance companies
- Demographic and economic assumptions for valuations
- Projections of plan assets and liabilities for funding of benefit plans
- Experience studies
- Tax and accounting analysis of employee benefit plan issues

Education

East Central University

B.S., Accounting (School of Business Distinguished Graduate Award) (1986)

Professional

Associate, Society of Actuaries (2003)

Associate, Casualty Actuarial Society (2010)

Member, American Academy of Actuaries (2006)

Certified Public Accountant (inactive) (1987)

KIMBERLY SHORES, FSA, MAAA

Vice President & Principal

Consulting Actuary, Kansas City Office

Prior Positions

2005-2013: Coventry Health Care, Director of Actuarial Services

2001-2005: Lewis & Ellis, Sr. Actuarial Consultant

2000-2000: Business Men's Assurance, Actuarial Student

1997-2000: Americo Life, Actuarial Student

Responsibilities and Experience

- Reserving / IBNR
- Actuarial assistance to state insurance departments, including rate review of other A&H products (Short-Term, Med Supp, Specified Disease) and special projects
- Healthcare Liability Audits
- Pricing/rate adequacy for commercial group and individual products, including ACA
- Rate Filing preparation, including ACA and the required rate templates
- ACA Risk Adjustment analysis
- Retiree Drug Subsidy attestations and Credible Coverage determinations
- Additional pricing analysis: Area factors, age/gender studies, SIC studies, benefit slope
- Benefit pricing
- Medicaid capitation rate analysis and reserving
- Provider contracting analysis
- Trend analysis
- Financial forecasting (Group, Individual, Medicare)
- Budget support
- Medical expense / Medical economics research
- Experience studies
- Competitive rate studies

Education

William Jewell College – Liberty, Missouri

B.A., Mathematics and Chemistry (1997)

Professional

Fellow, Society of Actuaries (2008)

Member, American Academy of Actuaries (2004)

JASON R. DUNAVIN, FSA, MAAA

Vice President

Consulting Actuary, Kansas City office

Prior Position

2008-2021: Blue Cross and Blue Shield of Kansas, Manager of Actuarial Research

Responsibilities and Experience

- Prepare and submit rate filings for commercial ACA and pre-ACA group and individual business
- Reserving and IBNR calculations
- Benefit pricing
- Product development
- Rating factor studies
- Trend analysis
- Financial forecasting
- Provider contracting analysis
- Review rate filings of other health products (Medicare Supplemental, hospital indemnity, specified disease)
- Analysis of value-based reimbursement programs
- Year-end valuations for health insurance

Education

Kansas State University

M.S., Mathematics (2003

Professional

Fellow, Society of Actuaries (2014)

Member, American Academy of Actuaries (2012)

CAROLYN McALARNEY

Actuarial Associate, Kansas City office

Prior Positions

1997-2007: Transamerica Life Insurance Co, Kansas City, Missouri; Actuarial Technician

1995-1996: Centennial Life Insurance Co, Merriam, Kansas; Actuarial Analyst

1994-1995: American Fiduciary Corporation, Kansas City, Missouri; Actuarial Student

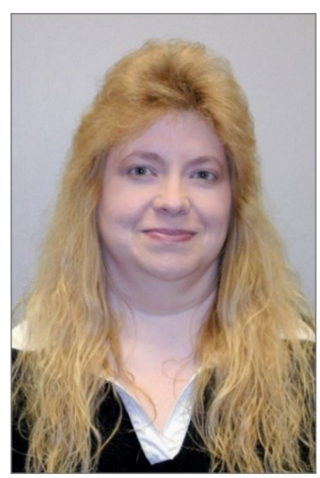
Responsibilities and Experience

- Data collection and analysis for pricing and costing of new and existing products
- Census analysis and processing for OPEB Valuations
- Plan coding for gain-loss analysis
- OPEB report preparation
- Development, pricing and filing of new insurance products
- Policy form development
- Financial reporting: statutory and management information
- Individual and group A & H experience analysis
- Medicare Supplement and major medical rate increase development and state filings
- Financial projections and forecasting
- Rate filings with state insurance departments
- Annual statement development and preparation
- State insurance department compliant response and resolution

Education

University of Central Missouri

B.S., Actuarial Science & Mathematics; Cum Laude (1994)



Professional

Society of Actuaries; Course 1 Passed

HEATHER L. H. ROBINSON

Senior Actuarial Associate, Kansas City office

Prior Positions

2003-2006: The Ceres Group, Mission, Kansas; Actuarial Analyst

2000-2003: DeFrain Mayer, Overland Park, Kansas; Consulting Actuary

1998-2000: American Chambers Life Insurance Co, Lenexa, Kansas; Senior Actuarial Analyst

1994-1998: Centennial Life Insurance Co, Merriam, Kansas; Senior Actuarial Analyst

1993-1994: Providian Corporation, Louisville, Kentucky; Actuarial Student

Responsibilities and Experience

- Individual and group A & H experience analysis and rate repricing
- Medicare Supplement experience analysis and rate repricing
- Dental experience analysis and repricing
- Development and pricing of Medicaid risk products
- State-specific certification of individual and small employer A & H requirements
- Financial projections and forecasting
- In-depth utilization analysis of health plan costs
- Rate filings with state insurance departments
- Benchmarking of utilization and costs for employers
- A & H claim and contract reserves
- Annual statement preparation
- State insurance department complaint response and resolution

Education

Auburn University

B.S., Business Administration, Finance; Cum Laude (1991)

Georgia State University

Post-Baccalaureate – Actuarial Science

Professional

Society of Actuaries; Courses 1 & 2 passed

SAMPLE REPORT

CLIENT

POSTRETIREMENT HEALTH INSURANCE
FINANCIAL INFORMATION

UNDER GASB 75

FISCAL YEAR ENDING
DECEMBER 31, 2020

11225 College Boulevard, Suite 320
Overland Park, KS 66210

April 2021

LEWIS & ELLIS
Actuaries and Consultants

11225 College Blvd.
Suite 320
Overland Park, KS 66210

913.491.3388
LewisEllis.com

April 12, 2021

Client
Jane Doe
Chief Financial Officer
Client Hall
12345 Main Street
Anytown, USA 67890

Dear Sarah:

This report presents actuarial information in accordance with Governmental Accounting Standards Board Statement No. 75 ("GASB 75" or "GASB") regarding the health insurance benefits available to retirees of the Client ("Client"). The purpose of this report is to:

- Present information that provides a basis for financial statement disclosure and liability recognition as of December 31, 2020; and

- Determine the OPEB Expense for fiscal year 2020.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices. Employee data, historical claim data, and plan descriptions were furnished by the Client and its vendors. The data provided has been reviewed for reasonableness, but no attempt has been made to audit such information. The valuation is based on the benefit terms as of the measurement date of December 31st. Each actuarial assumption used in this valuation represents reasonable expectations of future experience under the postretirement insurance program.

The undersigned is a member of the Society of Actuaries and the American Academy of Actuaries and meets the qualification standards to render the actuarial information contained herein.

Respectfully submitted,

LEWIS & ELLIS, INC.

Patrick Glenn

Patrick Glenn, ASA, ACAS, MAAA, CPA (inactive)

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SUMMARY

The valuation procedures noted below and information presented in this report are based on provisions underlying GASB 75. GASB stipulates that retiree benefits should be measured using age-adjusted costs. The excess of expected costs by age less retiree contribution premiums equals the employer provided benefit that forms the basis for the valuation.

The Client adopted GASB 75 in fiscal year ("FY") 2018. The present value of benefits allocated to past service represents the actuarial accrued liability ("AAL"). The amount of AAL less any OPEB trust assets is recognized as the booked liability known as the Net OPEB Liability. The amount of OPEB Expense is measured as the change in the Net OPEB Liability with deferral and amortization of specified items. When an OPEB trust does not apply, GASB 75 requires the discount rate be determined based on a yield or index rate for 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

VALUATION PROCEDURES

The measurement date as selected by the Client under GASB 75 Standards is December 31st.

The valuation dates for FY 2020 beginning and end of year measurement are January 1, 2018 and January 1, 2020, respectively. The Total OPEB liability was projected using actuarial techniques from the valuation date to the corresponding measurement date. The valuation procedures performed took into account benefit terms as of the respective measurement date and utilized appropriate assumptions.

SUBSTANTIVE PLAN

The Client allows qualifying retirees to continue insurance coverage under the Client's group insurance program until Medicare eligibility (i.e., age 65). Two Medical plan options along with Dental and Vision coverage are available. Medical and Dental coverage are provided through self-insurance with stop-loss coverage for Medical. Retirees must contribute stipulated premiums to maintain coverage. Retiree contribution premium levels differ depending on date of hire and date of retirement.

FUNDING OF BENEFITS

Benefits are paid from an internal service fund. This arrangement does not qualify as an "OPEB Plan" under GASB requirements and thus these assets may not be reported as an offset to GASB liabilities.

The average of the S&P Municipal Bond 20 Year High Grade and Fidelity GO AA-20 Year published yields was evaluated to determine the discount rate. The selected rates are 3.00% (beginning-of-year measurement) and 1.96% (end-of-year measurement).

RESULTS

The present value costs may differ from expected due to experience gains / losses and changes in plan provisions, assumptions and/or actuarial methods. Example sources of experience gains may include lower retirements than assumed and lower medical inflation than assumed. Example sources of experience losses may include lower turnover than assumed and less increase in retiree contribution premiums than assumed.

Changes and items of impact relative to the prior valuation are noted below:

- The assumed proportion of future retiring employees with a covered spouse was changed from 20% to 25%.
- The assumed proportion of future retiring employees (with a date of hire after December 31, 2003) electing coverage upon retirement was changed from 70% to 65%.
- Update retirement, turnover and disability assumptions based on the latest available data from the KPERS valuation report.
- The mortality assumption was changed from Society of Actuaries Pub-2010 Public Retirement Plans Headcount-Weighted General and Public Safety Mortality Tables using Scale MP-2019 Full Generational Improvement to Society of Actuaries Pub-2010 Public Retirement Plans Headcount-Weighted General and Public Safety Mortality Tables using Scale MP-2020 Full Generational Improvement
- Per capita costs, retiree contribution premiums and trend rates were updated as part of the evaluation.
- The discount rate was changed from 3.00% to 1.96% for the end of year measurement. Prior to the change in the discount rate, the Total OPEB Liability would have been $26.5 million.

Changes from the beginning to the end of year measurement for FY 2020 are also noted in Items 3 and 6 of Subsection K of the "Financial & Disclosure Information" section.

FUTURE REPORTING

GASB 75 requires full updated valuations every 2 years unless a material change occurs. Thus, assuming no material changes, the next full valuation should be for FY 2022. In this context a "full" valuation is meant to entail an updated census and a revised analysis of per capita costs / assumptions / actuarial methods.

Though a full valuation is not required for interim year fiscal year 2021 (assuming no material changes) the OPEB Expense and Net OPEB Liability will need to be re-measured using a discount rate (based on the published bond rates) and the benefit terms as of the measurement date of December 31, 2021.

VALUATION RESULTS

December 31, 2019 Measurement Date

Actuarial Present Value of Benefits	40,526,519
Actuarial Accrued Liability	27,399,493
Service Cost	1,175,257
Discount Rate	3.00%

December 31, 2020 Measurement Date

Actuarial Present Value of Benefits	45,998,965
Actuarial Accrued Liability	28,618,736
Discount Rate	1.96%

Employer Contributions – Benefit Payments for 2020 Measurement Period

(January 1, 2020 to December 31, 2020)

A. Expected Retiree Claims and Admin Costs	2,167,000
B. Expected Retiree Premium Contributions	533,000
C. Employer Contribution (A – B)	1,634,000

FINANCIAL & DISCLOSURE INFORMATION

A. Valuation Parameters

	Fiscal Year 2020	
	Beginning of Year	**End of Year**
Valuation Date	January 1, 2018	January 1, 2020
Measurement Date	December 31, 2019	December 31, 2020
Reporting Date	December 31, 2019	December 31, 2020
Discount Rate	3.00%	1.96%

B. Net OPEB Liability – FY 2020

I. Total OPEB Liability	28,618,736
II. Plan Fiduciary Net Position (Trust Assets)	0
III. Net OPEB Liability (I minus II)	28,618,736

C. OPEB Liability Changes during FY 2020

OPEB Liability – Beginning of Year	27,399,493
1. Service Cost	1,175,257
2. Interest Cost	832,733
3. Changes in Benefit Terms	0
4. Differences between expected and actual experience	(834,359)
5. Changes in assumptions and inputs	1,679,612
6. Benefit Payments (Employer Contributions)	1,634,000
Net Changes (1 + 2 + 3 + 4 + 5 – 6)	1,219,243
OPEB Liability – End of Year	28,618,736

D. OPEB Expense – Fiscal Year 2020

1. Service Cost	1,175,257
2. Interest Cost	832,733
3. Changes in Benefit Terms	0
4. Differences between expected and actual experience	(134,903)
5. Changes of assumptions and inputs	258,698
6. Projected earnings on OPEB plan investments	0
7. Differences between projected & actual earnings on OPEB investments	0
OPEB Expense / (Income) (1 + 2 + 3 + 4 + 5 – 6 + 7)	2,131,785

E. Net OPEB Liability as a Percentage of Payroll

Net OPEB Liability	28,618,736
Payroll *	56,238,165
Percent of Payroll	50.89%

**Annualized pay as of January 1, 2020 of active employees*

F. Sensitivity of Net OPEB Liability to changes in the Discount Rate

	1% Decrease 0.96%	Current Single Discount Rate Assumption 1.96%	1% Increase 2.96%
Net OPEB Liability	30,823,287	28,618,736	26,563,879
Increase / (Decrease) from Baseline	2,204,551		(2,054,857)

G. Sensitivity of Net OPEB Liability to changes in Healthcare Cost Trend Rate

	1% Decrease	Current Trend Assumption	1% Increase
Net OPEB Liability	25,810,145	28,618,736	31,910,339
Increase / (Decrease) from Baseline	(2,808,591)		3,291,603

H. Deferred Outflows and Inflows of Resources

The accumulated amount of Deferred Outflows and Inflows of Resources as of December 31, 2020 are shown below.

Category	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	-	1,134,565
Changes in Assumptions	2,952,855	625,902
Contributions Subsequent to Measurement Date (1)	-	-

(1) Employer Contributions between Measurement date and Reporting date – Does Not Apply

Amounts reported as deferred outflows / inflows of resources related to OPEB will be recognized as an expense / (income) item in OPEB expense as follows:

Fiscal Year Ending	Amount
2021	123,795
2022	123,795
2023	123,795
2024	123,795
2025	123,795
2026 & Thereafter	573,413

I. Changes in Benefit Terms

None

J. History of Schedule of Changes in Total OPEB Liability

Fiscal Year Ending	2018	2019	2020
Discount Rate	3.68%	3.00%	1.96%
Valuation Date	Jan 1, 2018	Jan 1, 2018	Jan 1, 2020
Measurement Date	Dec 31, 2018	Dec 31, 2019	Dec 31, 2020
Reporting Date	Dec 31, 2018	Dec 31, 2019	Dec 31, 2020
Total OPEB Liability:			
Beginning of Year	27,631,277	26,265,984	27,399,493
1. Service Cost	1,102,462	1,014,753	1,175,257
2. Interest Cost	903,255	972,026	832,733
3. Changes in Benefit Terms	(484,927)	(687,045)	0
4. Differences between actual and expected experience	(280,939)	(233,731)	(834,359)
5. Changes in assumptions or other inputs	(894,144)	1,801,506	1,679,612
6. Employer Contributions (Benefit Payments)	1,711000	1,734,000	1,634,000
Net Changes (1 + 2 + 3 + 4 + 5 - 6)	(1,365,293)	1,133,509	1,219,243
End of Year	**26,265,984**	**27,399,493**	**28,618,736**
Covered-employee payroll at Valuation Date	53,013,812	53,013,812	56,238,165
Total OPEB Liability - % of Covered-employee payroll	49.55%	51.68%	50.89%

K. Amortization of Deferred (Inflows) / Outflows

Item	Initial Year Ending	Amortization Period	Initial Balance	Beginning of Year Unamortized Balance	Amortization Amount FY 2020	End of Year Unamortized Balance
1-Assumption	2018	10.0	(894,144)	(715,316)	(89,414)	(625,902)
2-Assumption	2019	10.0	1,801,506	1,621,355	180,151	1,441,204
3-Assumption	2020	10.0	1,679,612	1,679,612	167,961	1,511,651
Total Assumptions			2,586,974	2,585,651	258,698	2,326,953
4-Exp to Actual	2018	10.0	(280,939)	(224,751)	(28,094)	(196,657)
5-Exp to Actual	2019	10.0	(233,731)	(210,358)	(23,373)	(186,985)
6-Exp to Actual	2020	10.0	(834,359)	(834,359)	(83,436)	(750,923)
Total Exp to Actual			(1,349,029)	(1,269,468)	(134,903)	(1,134,565)
Totals			**1,237,945**	**1,316,183**	**123,795**	**1,192,388**

1. Revise discount rate and mortality improvement scale.
2. Revise discount rate and mortality (RPH-2014 Adjusted to 2006 Total Dataset Headcount-weighted Mortality with MP-2018 Full Generational Improvement to Pub-2010 Public Retirement Plan Headcount-weighted Mortality with MP-2019 Full Generational Improvement).
3. Revise / Update discount rate, retirement / turnover / disability / mortality rates, covered spouse rate (20% to 25%), per capita costs and trend rates. Change assumed enrollment for those with DOH > December 31, 2003 from 70% to 65%.
4. Update retiree premium contributions, premium costs and fixed costs per January 1, 2019 renewal.
5. Update retiree premium contributions, premium costs and fixed costs per January 1, 2020 renewal.
6. Value updated census using actuarial assumption and method parameters consistent with the prior valuation. Value contribution premiums / costs per January 1, 2021 renewal.

Accounting Fund	Number of Employees	Number of Retirees	Net OPEB Liability/(Asset) at 12-31-2019 (A)	OPEB Expense /(Income) (B)	Benefit Payments (C)	Change in Unamortized Deferred Inflows/Outflows (D)	Net OPEB Liability/(Asset) at 12-31-2020 (E)=(A)+(B)-(C)+(D)
100	574	117	22,579,849	1,803,350	1,336,000	1,140,694	24,187,893
210	31	0	503,956	37,842	8,000	(65,132)	468,666
215	5	0	61,014	6,293	1,000	(12,298)	54,009
220	2	0	8,159	1,570	0	1,294	11,023
226	18	2	494,801	13,429	27,000	(122,703)	358,527
230	2	1	10,260	3,575	14,000	19,768	19,603
235	2	0	196	185	0	741	1,122
310	62	6	1,027,442	62,157	69,000	(92,669)	927,930
320	134	11	2,105,688	164,997	148,000	(3,385)	2,119,300
330	10	0	33,021	4,159	0	(24,988)	12,192
331	11	0	20,725	6,794	0	3,282	30,801
411	22	2	458,496	23,454	29,000	(79,568)	373,382
422	1	0	3,305	911	0	663	4,879
423	1	0	33,931	(1,315)	0	(32,616)	0
450	6	0	58,639	4,373	2,000	(11,603)	49,409
710	1	0	11	11	0	(22)	0
Total	**882**	**139**	**27,399,493**	**2,131,785**	**1,634,000**	**721,458**	**28,618,736**

Summary of Participant Data

Data on employees and retirees electing insurance coverage was provided by the Client. A summary of participants utilized for valuation is presented here. (Active employees waiving both Medical and Dental coverage were not valued and are not included in the counts below.)

Participant Summary	Census as of January 1, 2018	Census as of January 1, 2020
Active Employees		
KPERS 1	295	251
KPERS 2	120	104
KPERS 3	157	225
Police & Fire	282	302
Total Count	854	882
Average Age	42.5 years	41.6 years
Average Service	10.4 years	9.4 years
Current Benefit Recipients		
Retirees / Disableds / COBRA Spouses	140	139
Spouses of Covered Retirees / Disableds	64	67
Total Count	204	206
Average Attained Age – Subscribers	59.1 years	58.6 years

Medical Elections at January 1, 2020

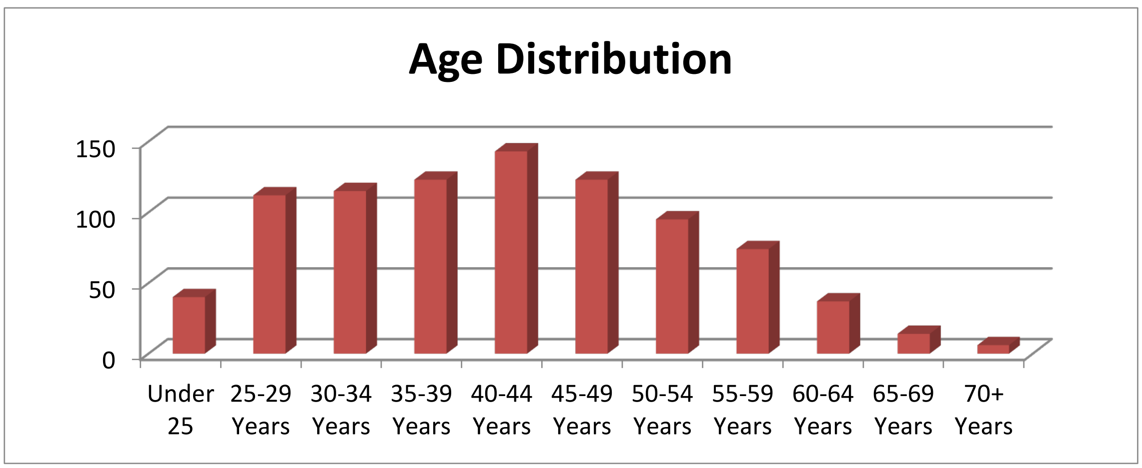
Status	OAP	CIP	Waived Medical	Total
Active	169	701	12	882
Retired	41	94	4	139
Total	210	795	16	1,021

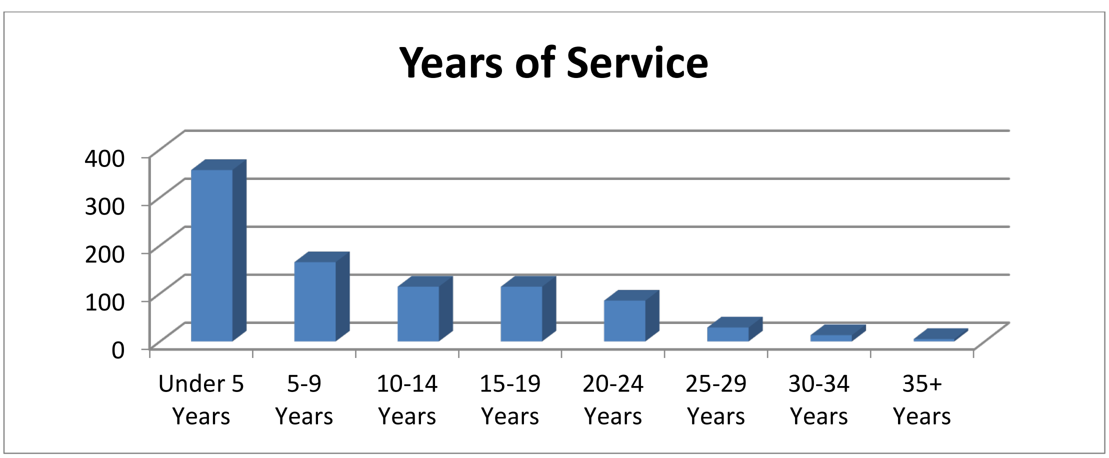
Dental Elections at January 1, 2020

Status	Dental	Waived Dental	Total
Active	858	24	882
Retired	139	0	139
Total	997	24	1,021

Distribution of Active Participants

Age	Years of Service as of January 1, 2020								
	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
Under 25	39	1							40
25-29	97	15							112
30-34	66	39	9	1					115
35-39	49	28	31	14	1				123
40-44	29	35	33	38	7	1			143
45-49	28	15	14	23	36	6	1		123
50-54	20	10	16	13	18	11	7		95
55-59	18	16	4	12	13	5	4	2	74
60-64	7	4	5	9	5	3	1	3	37
65-69	4	1	2	2	4	1			14
70+		1		2	1	2			6
Total	**357**	**165**	**114**	**114**	**85**	**29**	**13**	**5**	**882**





Distribution of Inactive Participants (Medical and / or Dental Coverage) at January 1, 2020

Age	Subscribers	Spouses
≤50	6	3
51	2	1
52	3	5
53	6	3
54	7	2
55	11	2
56	11	8
57	6	7
58	11	3
59	14	6
60	10	4
61	11	5
62	6	2
63	18	8
64	11	6
65+	6	2
Totals	**139**	**67**
Average Age	**58.6**	**58.1**

Category	Count
Retired Prior to 12/31/2009	21
Retired After 12/31/2009 and Hired < 1/1/2004	112
Retired After 12/31/2009 and Hired > 1/1/2004	6
Total Subscribers	139

Summary Of Plan Provisions

The Client provides for continuing health insurance coverage to its retirees and their dependents. Retiree health coverage is provided for under Kansas Statute 12-5040. Below is a summary of the provisions of the healthcare program utilized in completing this valuation study.

OPEB Eligibility

Employees must attain at least 10 years of consecutive enrollment in the Client's insurance program as an active full-time employee immediately prior to retirement and be less than 65 years of age. Also, benefits due to disability retirement may occur for qualifying individuals who meet the requirements.

Pension eligibility is shown below for reference.

Category	Pension Eligibility	
	Unreduced Retirement	Reduced Retirement
KPERS 1	62 & 10 Rule of 85 65 & 1	55 & 10
KPERS 2 & 3	60 & 30 65 & 5	55 & 10
KP&F – Tier II	50 & 25 55 & 20 60 & 15	50 & 20

For Disability retirement, members at any level of service who qualify for disability under KPERS / KP&F are also eligible to continue insurance benefits as a retiree.

Benefits

Medical and Dental benefits are self-funded with stop-loss coverage for Medical. Vision is fully insured and coverage is automatically included with Medical. Retiree benefits are provided through the Client's group insurance program and renew on a calendar year basis. Retiree coverage ends when the retiree reaches Medicare eligibility age which is age 65. Spouses may elect to continue coverage upon retiree death or retiree attainment of age 65 under COBRA but in no event does spousal coverage extend beyond the spouse's own age 65. Any retiree who waives continuing participation during open enrollment is not eligible to participate at a later date.

The Client offers a traditional OAP plan and a Consumer Involved Plan (CIP). The CIP is a high deductible plan under which the Client makes H.R.A. contributions each month to retiree participant accounts to provide for out-of-pocket costs. Any unused funds after leaving the Client's plan are used for future healthcare expenses and do not revert back to the Client.

A summary of the 2021 plan design for Medical / Rx is shown below:

	OAP In-Network	OAP Out of Network
Deductible Individual / Family	$800 / $1,600	$1,600 / $3,200
Coinsurance – Plan Pays	85%	65%
Out of Pocket Individual / Family	$2,300 / $4,600	$5,000 / $10,000
Office Visit Copays Primary Care Specialist	 $30 $40	 Deductible + Coinsurance Deductible + Coinsurance
Wellness Benefit	100% Covered	65% Coinsurance
Emergency Room	$200 Copay + 100% Coinsurance	
Prescription Drugs Generic Brand Formulary Non-formulary Mail Order Copays (90 days)	Retail Copays (30 days) $10 $25 $50 2x Copay	Retail Copays (30 days) 70% 70% 70% No Benefit
Lifetime Limit	Unlimited	

	CIP In-Network	CIP Out of Network
Deductible Individual / Family	$1,500 / $3,000	$3,000 / $6,000
Coinsurance – Plan Pays	80%	60%
Out of Pocket Individual / Family	$3,000 / $5,600	$6,000 / $11,200
Office Visit Copays Primary Care Specialist	 Deductible + Coinsurance Deductible + Coinsurance	 Deductible + Coinsurance Deductible + Coinsurance
Wellness Benefit	100% Covered	60% Coinsurance
Emergency Room	Deductible + 80% Coinsurance	
Prescription Drugs Generic Brand Formulary Non-formulary Mail Order Copays (90 days)	Retail Copays (30 days) $10 $25 $50 2x Copay	Retail Copays (30 days) 60% 60% 60% No Benefit
Lifetime Limit	Unlimited	

There were no plan changes from 2020 to 2021.

A summary of the 2021 plan design for Dental is shown below:

Deductible	$25 x 3
Diagnostic	100% - Not Subject to Deductible
Preventive	100% - Not Subject to Deductible
Basic	80%
Major - Delta Dental PPO	80%
Major – Non Participating	50%
Orthodontics	80% up to $1,500 per lifetime
Coverage Maximum	$1,500 per enrollee per contract year (Ortho not included)

Retirees and their dependents must pay the premiums noted below to maintain coverage.

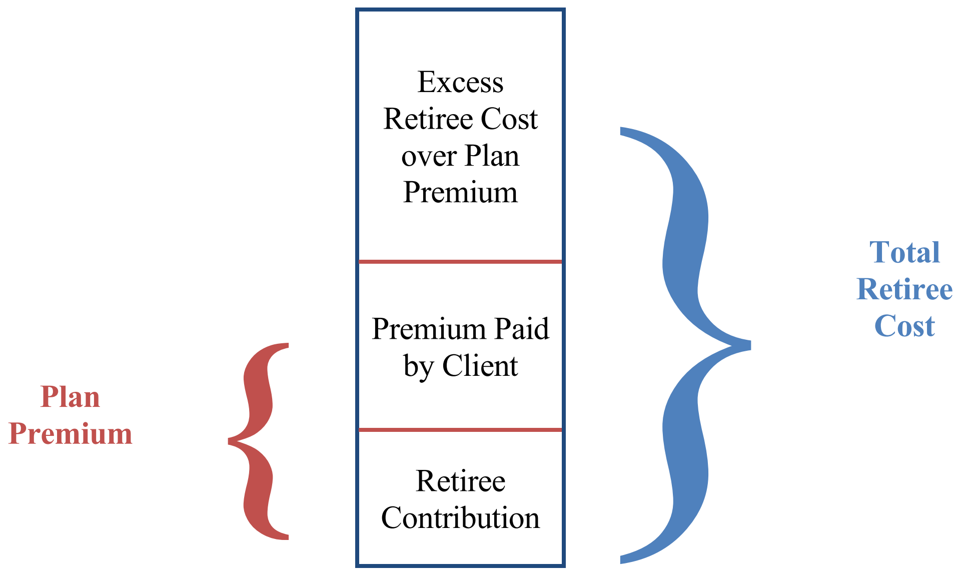
	2020 / 2021 Monthly Retiree Contributions			
	Retired < 1/1/2010	**Retired > 12/31/09 & Hired < 1/1/04**	**Retired > 12/31/09 & Hired > 12/31/03**	**COBRA**
CIP Plan & Vision				
Single	58 / 59	58 / 59	395 / 393	746 / 741
Single+Spouse	287 / 293	875 / 957	1,211 / 1,291	1,579 / 1,658
Single+Children	251 / 256	682 / 756	1,018 / 1,090	1,382 / 1,452
Family	392 / 400	1,526 / 1,627	1,863 / 1,961	2,244 / 2,341
OAP Plan & Vision				
Single	115 / 117	115 / 117	470 / 450	842 / 798
Single+Spouse	392 / 400	1,026 / 1,073	1,381 / 1,405	1,771 / 1,773
Single+Children	345 / 352	814 / 866	1,169 / 1,199	1,555 / 1,563
Family	535 / 546	1,748 / 1,772	2,104 / 2,104	2,508 / 2,487
Dental Plan				
Single	11 / 11	11 / 11	21 / 21	32 / 32
Single+Spouse	28 / 28	43 / 43	53 / 53	65 / 65
Single+Children	32 / 32	64 / 64	75 / 75	87 / 87
Family	40 / 40	103 / 103	114 / 114	126 / 126

Categories	Retiree Contribution Policy
Retired < 1/1/2010	The retiree contribution is the same as for Active employees.
Retired > 12/31/09 & Hired < 1/1/04	The retiree contribution is the same as for Active employees with Single coverage. When Single coverage is not elected, the retiree contribution is the plan premium less what the Client contributes at the Single level.
Retired > 12/31/09 & Hired > 12/31/03	The retiree contribution equals the plan premium less 50% of the amount the Client contributes at the Single level.

COST ANALYSIS BY AGE

The cost to the Client for retiree health insurance benefits that is valued under GASB 75 equals the age-adjusted cost (sample ages shown below) less the retiree contribution premium. Age-adjusted costs are the estimated costs that would result if a credible-size group of like-age participants was measured.

The GASB 75 benefit may consist of direct and indirect components. The direct component is equal to the portion of the plan premium paid by the Client. The indirect component is equal to the retiree cost less the plan premium. This is the age subsidy that exists because the plan premium is based on the pool of actives and retirees. The pool is largely composed of younger actives that drive the overall blended average below the cost at retiree ages. The indirect benefit is paid for through higher plan premiums than would exist over time if retirees were not part of the covered group.



We evaluated Client active and retiree monthly claim experience separately by plan option. We studied claim patterns and trends including the impact of any large claims.

Historical average per member costs were adjusted to the current plan design basis and trended to the appropriate average expected exposure point. Age-based cost relativities were applied to projected average per member costs to derive expected costs by age. Cost relativities were calculated by fitting industry cost factors to the age distribution of the covered group of the Client. A combination of age-adjusted Client group plan experience and Client retiree experience were utilized in assessing per capita claims. Expected administrative costs were determined by an analysis of vendor contract rates.

Age-adjusted expected costs <u>during the next 12 months from the valuation date</u> on a per member per month (PMPM) basis are shown below at sample ages. The costs reflect Medical, Rx, Dental and Vision coverage.

Expected Cost Levels (PMPM)

Age	CIP Plan		OAP Plan	
	Male	Female	Male	Female
55	757	816	870	940
58	859	876	991	1,011
62	1,013	994	1,174	1,151
64	1,104	1,069	1,281	1,240

In addition, the Client makes monthly HRA contributions to those electing the CIP plan.

Coverage Tier	Enrolled in CIP Before January 1, 2018	Enrolled in CIP After December 31, 2017
Single	100	66.67
Single+Spouse	175	116.67
Single+Children	150	100.00
Family	200	133.00

ACTUARIAL ASSUMPTIONS

A. Discount Rate

1.96% per annum	End of Year
3.00% per annum	Beginning of Year

B. Measurement Date

December 31, 2020	End of Year
December 31, 2019	Beginning of Year

C. Valuation Date

January 1, 2020	End of Year
January 1, 2018	Beginning of Year

D. Medical / Rx Claim Cost Trend

Year(s) Applied To	Trend
2020	6.00%
2021	5.50%
2022	5.25%
2023	5.00%
2024	4.75%
2025 (to Ultimate)	4.50%

E1. Admin Fees – No Stop-Loss 2.50% per annum *

E2. Stop-Loss Premiums 2.5 percentage points above claim cost trend. *

E3. Dental Cost Trend Rate 3.25% per annum *

E4. Vision Cost Trend Rate 2.50% per annum *

* Actual was used when known as of the measurement date

F. Trend on Retiree Contribution Premiums Actual was used actual when available as of the measurement date. Otherwise, same as above for D - Medical and E3 - Dental.

G. Trend on HRA Contributions None (Flat)

H. Healthy Life Mortality

Society of Actuaries Pub-2010 Public Retirement Plans Headcount-weighted General and Public Safety Mortality Tables using Scale MP-2020 Full Generational Improvement

I. Disabled Life Mortality

Society of Actuaries Pub-2010 Public Retirement Plans Headcount-weighted General and Public Safety Disability Mortality Tables using Scale MP-2020 Full Generational Improvement

J. Spouse Age Difference

Males are assumed to be 3 years older than females for future retirees. Actual spousal age, if known, was valued for current retirees.

K. Participation in Coverage for Future Retirees

Category	Assumed Enrollment Upon Retirement
Hired prior to 1/1/2004	95%
Hired after 12/31/2003	65%

This considers experience from 2007 to November 30, 2020.

L. Age-Adjusted Costs

The estimated age-adjusted cost for retiree insurance coverage during the next 12 months from the valuation date is shown at sample ages in the “Cost Analysis by Age” section.

M. Covered Spouses

Twenty-five percent (25%) of future eligible retirees are assumed to have a covered spouse. This considers multiple years of retiree experience. Actual spousal elections were valued for current retirees.

N. Non-Spouse Dependents

Valued HRA contributions made by the Client on behalf of children. Otherwise, deemed to be immaterial and not valued.

O. Benefit Elections & Coverage Duration

Current retirees are assumed to continue the same elections until age 65. Future retirees are assumed to elect Medical (with the same plan option as today, or CIP if currently waiving) and Dental from retirement until age 65. Upon retiree death or attainment of age 65, spouses are assumed to continue COBRA coverage for up to 36 months not to exceed spouse age 65.

P. Timing of Claim Payments

Mid-Year

Q. Medicare Eligibility Age

Age 65

R. Salary Scale Per Employee

3.50% per year

S. Inflation Rate

2.50% per year

T. Retirement Due to Disability

Assumed disability rates are based on those utilized for the KPERS-Local and KP&F pension valuations. Illustrations of assumed annual rates of disablement are shown below for selected ages.

Age	Kansas Public Employees Retirement System (KPERS)	Kansas Police & Firemen's Retirement System (KP&F)
30	.03%	.12%
40	.07%	.48%
50	.18%	.88%
60	.27%	1.00%

U. Turnover Incidence (Other than Retirement)

Assumed turnover rates are based on those used for the KPERS-Local and KP&F pension valuations. Turnover rates are not applied when retirement eligibility is achieved. Annual rates of turnover are shown below at sample levels of service.

Employees Covered by Kansas Public Employees Retirement System (KPERS)

Years of Service	Probability Per Year	
	Males	Females
0	23.00%	25.00%
1	19.00%	22.00%
2	16.50%	19.00%
3	13.50%	15.75%
4	11.75%	13.50%
5	10.00%	12.10%
7	8.00%	9.30%
10	5.60%	6.70%
12	4.90%	5.75%
15	3.80%	4.50%
17	3.40%	4.00%
20	2.80%	3.40%
23	2.20%	2.70%
25	1.80%	2.00%
29	1.00%	1.00%

U. Turnover Incidence (Other than Retirement) (continued)

Assumed turnover rates are based on those used for the KPERS-Local and KP&F pension valuations. Turnover rates are not applied when retirement eligibility is achieved. Annual rates of turnover are shown below at sample levels of service.

Employees Covered by Kansas Police & Firemen's (KP&F) Retirement System

Service From Hire	Probability Per Year
0	11.00%
1	11.00%
2	9.75%
3	8.50%
4	7.25%
5	6.00%
7	4.72%
10	2.80%
15	1.80%
20	1.10%

V. Retirement Age

Assumed rates are based on those used for the KPERS-Local and KP&F pension valuations. Retirement rates project the probability of eligible employees who will retire during the next year at the applicable age.

Employees Covered by Kansas Public Employees Retirement System (KPERS)

Ages(s)	**KPERS Tier 1**			
	Early (Reduced) Retirement	***Normal (Unreduced) Retirement***	***First Year Eligible - Rule of 85***	***Rule of 85***
53	-	-	15%	-
54	-	-	15%	8%
55 to 58	3%	-	15%	8%
59 to 60	6%	-	15%	10%
61	10%	-	25%	20%
62 to 64	-	20%	-	20%
65 to 70	-	30%	-	30%
71 to 74	-	22%	-	22%
75	-	100%	-	100%

Ages(s)	**KPERS Tier 2**		**KPERS Tier 3**	
	Early (Reduced) Retirement	***Normal (Unreduced) Retirement***	***Early (Reduced) Retirement***	***Normal (Unreduced) Retirement***
55 to 58	3%	-	3%	-
59	6%	-	5%	-
60	6%	15%	5%	15%
61	10%	20%	5%	10%
62 to 64	20%	20%	5%	10%
65 to 66	-	30%	-	25%
67 to 70	-	30%	-	30%
71 to 74	-	22%	-	30%
75	-	100%	-	100%

V. Retirement Age (continued)

Assumed rates are based on those used for the KPERS-Local and KP&F pension valuations. Retirement rates project the annual probability of eligible employees who will retire.

Employees Covered by Kansas Police & Fire (KP&F) Retirement System

Unreduced Retirement

Age(s)	Probability Per Year
50	30%
51-57	25%
58	20%
59	30%
60-61	25%
62-64	30%
≥ 65	100%

Reduced Retirement

Age(s)	Probability Per Year
50 to 53	10%
54	20%

ACTUARIAL METHODS

A. POPULATION VALUED

The valuation is based on a closed group. Current employees and covered retirees as of the valuation date of January 1, 2020 are considered; no provision is made for future new hires. Active employees waiving both Medical and Dental were not valued.

B. ACTUARIAL COST METHOD – ENTRY AGE NORMAL – LEVEL PERCENT-OF-PAY

The actuarial calculations were performed in accordance with the Entry Age Normal – Level Percent-of-Pay Actuarial Cost Method as required under GASB 75.

- The Actuarial Present Value ("APV") of each member's projected benefits is allocated on a level basis over the member's assumed compensation between the entry age of the member and the assumed decrement ages.
- The portion of the APV allocated to the upcoming year from the valuation date is called the Normal Cost.
- The APV of benefits allocated to past service is called the Actuarial Accrued Liability ("AAL").
- The Unfunded AAL represents the difference between the AAL and the actuarial value of assets as of the measurement date.
- The APV = AAL for current retirees as all benefits have effectively been "earned."

C. VALUATION PROCEDURES AND DISCOUNT RATE

The Client implemented GASB 75 in fiscal year 2018. The selected measurement date is December 31st. The valuation dates for FY 2020 beginning and end of year measurement are January 1, 2018 and January 1, 2020, respectively. The Total OPEB liability was projected using actuarial techniques from the valuation date to the corresponding measurement date. The benefit terms as of the measurement date and appropriate assumptions were valued.

GASB 75 standards require a single discount rate be determined. To the extent Plan (i.e. Trust) assets are projected to be sufficient to make projected benefit payments, the discount rate will equal the expected return on such assets. To the extent a Plan is not projected to be sufficient to make future benefit payments the yield or index for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher should be factored in. Plan assets do not apply to the Client's program.

In order to determine the municipal bond rate we took the average of the published yields from the S&P Municipal Bond 20 year High Grade and the Fidelity GO AA-20 Years indexes. The selected average rates are 3.00% and 1.96% as of the beginning and end of year, respectively. These were used as the discount rates to determine present value costs.

D. ACTUARIAL VALUE OF ASSETS

It is our understanding there are no plan assets set aside in a qualifying, irrevocable trust as recognized under GASB rules. Rather, the cost of retiree benefits is paid as it comes due from internal service funds.

E. CALCULATION OF PRESENT VALUES

Using the actuarial assumptions, the number of retired participants and costs at each age is projected into the future considering the current population census. The projected costs less retiree contribution premiums are multiplied by the expected number of retirees to produce expected employer costs (i.e. retiree benefits) by year. These employer costs are discounted using the "discount rate" to determine the present value of the projected liabilities.

The actuarial calculations reflect a long-term perspective that involves estimates of reported amounts and assumptions about the probability of events into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. The actuarial calculations are based on the substantive plan (i.e. benefit terms) and pertinent law as they exist at the measurement date.

F. BENEFIT TERMS

Projections of benefit payments are required to be based on the benefit terms and legal agreements existing at the measurement date, including changes impacting future periods finalized and made public as of the measurement date. For purposes of evaluating the benefit terms, consideration is required to be given to the written plan document, as well as additional information, including other communications between the employer and plan members and an established pattern of practice with regard to the sharing of benefit-related costs with inactive plan members.

GLOSSARY

Actuarial Accrued Liability (AAL). That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of plan benefits which is allocated to past service.

Actuarial Cost Method. A procedure for allocating the Actuarial Present Value of plan benefits to time periods, usually in the form of a Service Cost and Actuarial Accrued Liability. GASB 75 requires the use of the entry age actuarial cost method with each period's Service Cost determined as a level percentage of pay.

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, and plan provisions. Actuarial Present Value takes into account the probability of payment as well as the time value of money.

Actuarial Valuation Date. The date as of which an actuarial valuation is performed generally coinciding with the "as of" census date. Actuarial valuations are required to be performed at least every two years. For GASB 75 reporting, the actuarial valuation must have been performed as of a date no more than 30 months and 1 day prior to the employer's most recent fiscal year-end date.

Age-Adjusted Cost. The projected cost that would result if a credible-size group of like-age participants was measured.

Age-Subsidy. The difference between the age-adjusted cost and the retiree premium. An age-subsidy may occur because the retiree premium, based on the combined pool of actives and retirees, is lower than the age-adjusted cost at retiree ages.

Consolidated Omnibus Budget Reconciliation Act (COBRA). Gives workers and their families who lose their health benefits the right to choose to continue group health benefits provided by their group health plan for limited periods of time under certain circumstances such as voluntary or involuntary job loss, reduction in the hours worked, transition between jobs, death, divorce, and other life events. Qualified individuals may be required to pay the entire premium for coverage up to 102 percent of the cost to the plan.

Deferred Inflows of Resources. Resources received not currently recognized as revenue.

Deferred Outflows of Resources. Resources expended not currently recognized as expense.

Defined Benefit OPEB Plan. An OPEB plan having terms that specify the amount of benefits to be provided at or after separation from employment. The amount specified usually is a function of one or more factors such as age and years of service.

Discount Rate. Expected rate of return on assets in an irrevocable trust to the extent that benefits may be paid from such assets; otherwise, the yield as of the measurement date on 20-year, tax-exempt, municipal bonds of quality rating AA or higher.

GLOSSARY

Employer Contribution. An employer may make contributions through an irrevocable transfer of assets to a qualifying trust, direct payment of benefits or a combination of these. Without a trust and self-funded, the contribution equals retiree claims plus admin costs, less any retiree contribution premiums. Without a trust and not self-funded, the contribution equals age-adjusted premium costs, less any retiree contribution premiums.

Healthcare Cost Trend Rate. The rate of change in per capita health claims cost over time as a result of factors such as medical inflation, utilization of healthcare services, plan design and technological developments.

Measurement Date. The date as of which the Net OPEB liability is calculated. For purposes of GASB 75, the measurement date may be selected from a range starting no earlier than one year prior to and ending no later than the employer's fiscal year-end date. When the actuarial valuation date does not equal the measurement date, actuarial techniques may be utilized to project results to the measurement date.

Net OPEB Liability. Total OPEB liability on the measurement date minus plan assets.

OPEB Expense. The amount of expense an employer must recognize under GASB 75 provisions. The change in the Net OPEB Liability during the measurement period, with deferral of recognition for (1) changes of economic and demographic assumptions (2) differences between actual and expected experience and (3) differences between actual and projected earnings on plan assets.

Other Postemployment Benefits (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 generally include termination benefits or termination payments for sick leave.

Postemployment Healthcare Benefits. Medical, dental, vision and other health-related benefits paid subsequent to the termination of employment.

Service Cost. The portion of the Actuarial Present Value of OPEB benefits attributed to the current year by the Actuarial Cost Method.

Substantive Plan. The terms of the OPEB plan as understood by the employer and plan members.

Total OPEB Liability. The portion of the Actuarial Present Value of OPEB benefits attributed to past service by the Actuarial Cost Method. This is equal to the AAL.

Unfunded Actuarial Accrued Liability. The excess, if any, of the Actuarial Accrued Liability over the assets of the plan.

COVER SHEET

Proposer Information

Company Name	Lewis & Ellis, Inc.
Address	11225 College Boulevard, Suite 320
City, State, Zip	Overland Park, KS 66210
Main Phone	(913) 491-3388

Contact Person Information

Name	Patrick Glenn
Job Title	Vice President & Principal
Phone	(913) 766-9179
Alt. Phone	
Email	PGlenn@lewisellis.com

Signature Patrick Glenn

Date: April 20, 2022

PRICE QUOTE

FY2022 – Full Valuation	3000
FY2023 – Interim Valuation	2000
FY2024 – Full Valuation	3250
FY2025 – Interim Valuation	2000
FY2026 – Full Valuation	3500
FY2027 – Interim Valuation	2000
Total Contract Cost	15750

Lewis & Ellis, Inc.
Proposer

Patrick Glenn
Signature of Proposer's Authorized Official

Patrick Glenn, Vice President & Principal
Name and Title of Proposer's Authorized Official

April 20, 2022
Date

Note: All reports are to be prepared in accordance with GASB 75 requirements and must be submitted to Metro in final format by August 15 of each year.

DISADVANTAGED BUSINESS ENTERPRISES (DBE) CERTIFICATION

This contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs*. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. Metro's overall 2022-2024 goal for DBE participation is 1.62%; the race neutral goal is 1.25%, and the race conscious goal is 0.37%. There is no contract goal for this procurement.

The contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as Metro deems appropriate. Each subcontract the contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).

The contractor is required to pay its subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the contractor's receipt of payment for that work from Metro.

The contractor may not hold retainage from its subcontractors.

The contractor must promptly notify Metro, whenever a DBE subcontractor performing work related to this contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of Metro.

Signature: Patrick Glenn

Name and Title: Patrick Glenn, Vice President & Principal

Company Name: Lewis & Ellis, Inc.

Date: April 20, 2022

NON-COLLUSION CERTIFICATION

This is my sworn statement to certify that this proposal was not made in the interest of or on behalf of any undisclosed entity. This proposal is not collusive.

This proposer has not been a party to any agreement or collusion in restraint of freedom of competition by agreement to bid a fixed price, to refrain from bidding, or otherwise. This proposer has not, directly or indirectly, by agreement, communication or conference with anyone, attempted to induce action prejudicial to the interest of Topeka Metropolitan Transit Authority, or of any proposer, or anyone else interested in the proposed contract.

Signature: Patrick Glenn

Name and Title: Patrick Glenn, Vice President & Principal

Company Name: Lewis & Ellis, Inc.

Date: April 20, 2022

SUSPENSION / DEBARMENT CERTIFICATION
In regard to 2 CFR Parts 180 and 1200

This order is a covered transaction for purposes of 2 CFR Parts 180 and 1200. As such, the bidder is required to verify that itself, its principals, or its affiliates are not excluded or disqualified from participating in Federally awarded contracts.

Bidder is required to comply with Suspension / Debarment requirements, and must include the requirement to comply in any lower-tier covered transaction that it enters into.

By signing and submitting its bid, the bidder certifies as follows:

> The certification in this clause is a material representation of fact relied upon by Topeka Metropolitan Transit Authority. If it is later determined that the bidder knowingly rendered an erroneous certification, in addition to remedies available to Topeka Metropolitan Transit Authority, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder agrees to comply with the requirements of 2 CFR Parts 180 and 1200 while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder further agrees to include a provision requiring such compliance in its lower-tier covered transactions.

Signature: Patrick Glenn

Name and Title: Patrick Glenn, Vice President & Principal

Company Name: Lewis & Ellis, Inc.

Date: April 20, 2022