

METROPOLITAN UTILITIES DISTRICT

Committee Meetings Agenda

1:00 p.m.

September 3, 2025

1. Safety Briefing
2. Roll Call
3. Open Meetings Act Notice
4. Outstanding Service Awards

Construction & Operations – Friend, Sidzyik, Cavanaugh

1. Capital Expenditures [Kendall Minor – SVP & Chief Operations Officer] – **Tab 5**
2. Acceptance of Contracts and Payment of Final Estimates
[Trevor Tonniges – Director, Plant Engineering] – **Tab 6**
3. Change Order No. 1 – WP2090 – Pat Thomas Construction, Inc
[Trevor Tonniges – Director, Plant Engineering] – **Tab 7**
4. JEO Consulting Services Agreement Extension
[Trevor Tonniges – Director, Plant Engineering] – **Tab 8**
5. Bids on Materials and Contracts [Jon Zellars – VP, Procurement & Enterprise Services] – **Tab 9**

Services & Extensions – Friend, Begley, Howard

1. Main Extensions [Masa Niiya – VP, Engineering] – **Tab 11**

Personnel – Begley, Sidzyik, Friend

1. Wage and/or Salary Increases and Ratification
[Bonnie Savine – VP, Human Resources] – **Tab 12**
2. Group Insurance Contract Renewals [Bonnie Savine – VP, Human Resources] – **Tab 13**
3. Advanced Leader Recognition [Bonnie Savine – VP, Human Resources] – **Tab 14**
(INFORMATION ONLY)

Judicial & Legislation – Cavanaugh, Cook, Howard

1. Condemnation Authority – Easy View Addition Lot 1 [Justin Cooper – Attorney] – **Tab 15**

Insurance & Pension – Howard, McGowan, Cook

1. Experience Study for Pension and OPEB Plans, Period Ending December 31, 2024
[Steve Dickas – SVP & Chief Financial Officer and Megan Skiles – CavMac Actuary] – **Tab 16**

(Turn over for regular Board Meeting agenda)

METROPOLITAN UTILITIES DISTRICT

Regular Monthly Board Meeting Agenda

1:45 p.m.

September 3, 2025

1. Roll Call
2. Open Meetings Act Notice
3. Pledge of Allegiance
4. Approval of Minutes – Committee Meetings and Regular Board Meeting for August 6, 2025

CONSTRUCTION & OPERATIONS

5. Capital Expenditures
6. Acceptance of Payments and Final Estimates
7. Change Order No. 1 – WP2090 – Pat Thomas Construction, Inc
8. JEO Consulting Services Agreement Extension
9. Bids on Materials and Contracts
10. Notice of Purchases Between \$25,000 & \$50,000

SERVICES & EXTENSIONS

11. Main Extensions

PERSONNEL

12. Wage and/or Salary Increases and Ratifications
13. Group Insurance Contract Renewals
14. Advanced Leader Recognition (INFORMATION ONLY)

JUDICIAL & LEGISLATIVE

15. Condemnation Authority – Easy View Addition Lot 1

INSURANCE & PENSION

16. Experience Study for the Pension and OPEB Plans, Period Ending December 31, 2024

BOARD

17. Other Matters of District Business for Discussion
18. Public Comment
19. CLOSED SESSION – Litigation, Personnel and Real Estate

Adjourn Regular Monthly Board Meeting

(Turn over for Committee Meetings agenda)

September 3, 2025

METROPOLITAN UTILITIES DISTRICT
Minutes of the Committee Meeting
August 6, 2025

Chairman Tim Cavanaugh called to order the Committee meetings of the Metropolitan Utilities District Board of Directors at 12:30 p.m. at its headquarters building located at 7350 World Communications Drive.

Advance notice of the meeting was published in the print version of *The Omaha World-Herald* on Sunday, July 27, 2025, with a revised notice published on Sunday, August 3, 2025. Notice was also provided on the MUD website at www.mudomaha.com and other social media platforms. Agendas and all pertinent Board materials to be presented at the meeting were emailed to Directors and posted on the MUD website on August 1, 2025.

Chairman Cavanaugh announced that the meeting was being livestreamed, and a recording of the meeting would be uploaded to the MUD website after the meeting's conclusion.

Safety Briefing

Vice President, Safety and Security Shane Hunter provided a safety briefing for all individuals attending the meeting in-person regarding protocol at the headquarters building in the event of an emergency.

Roll Call

On a roll call vote, the following Directors acknowledged their attendance: Dave Friend, Bob Sidzyik, Mike McGowan, Gwen Howard, Tim Cavanaugh, Jim Begley, and Tanya Cook.

Open Meetings Act Notice

Chairman Cavanaugh announced that a copy of the Open Meetings Act was located on the wall in the back of the Board Room.

Closed Session – Litigation and Security

At 12:33 p.m. Director Begley moved to go into Closed Session to discuss litigation and security. The motion was seconded by Director Cook and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook

Voting No: None

At 1:25 p.m. Director Cook motioned to return to Open Session. The motion was seconded by Director Howard and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook

Committee Meetings & Regular Board Meeting

August 6, 2025

Page 1 of 8

Voting No: None

Construction and Operations – Friend, Sidzyik, Cavanaugh

Senior Vice-President and Chief Operations Officer Kendall Minor presented the proposed capital expenditures as outlined in his letter to the Committee dated August 1, 2025. Discussion took place regarding the budget, funding sources, design and construction related to the Florence Capital Improvement Plan. Additional discussion was held regarding the bidding and selection process of external engineering firms. President Mark Doyle invited HDR Senior Vice President and Area Operations Manager Ann Williams to introduce herself.

Director of Plant Engineering Trevor Tonniges presented the acceptance of contracts and payment of final estimates as outlined in his letter to the Committee dated July 25, 2025.

Mr. Tonniges continued, presenting Change Order 1 – WP1992 – Roloff 2025 WIR as outlined in his letter to the Committee dated July 10, 2025. Discussion took place regarding the project plan revision and method of installation. Director Friend requested further information regarding the details of the design and installation plans.

Mr. Tonniges then presented the Three Year WIR Contract Partnership Recommendation as outlined in his letter to the Committee dated July 25, 2025.

Finally, Mr. Tonniges then presented the Gas Infrastructure Partner – Expanded Partnership with Q3 Contracting Through 2027 as outlined in his letter to the Committee dated July 31, 2025.

Vice-President of Procurement & Enterprise Services Jon Zellars presented the bids on materials and contracts as outlined in the letter to the Committee from Director of Procurement Sherri Lightfoot dated July 25, 2025.

Services and Extensions – Friend, Begley, Howard

Vice-President of Engineering Masa Niiya presented the proposed main extensions as outlined in his letter to the Committee dated July 30, 2025.

Personnel – Begley, Sidzyik, Friend

Vice-President of Human Resources Bonnie Savine reviewed the wage and/or salary increases and ratifications as outlined in her letter to the Committee dated July 24, 2025.

Ms. Savine continued, presenting the Selection of Vice President, Accounting as outlined in her letter to the Committee dated July 14, 2025.

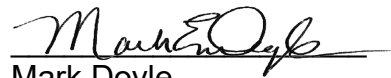
Judicial and Legislative – Cavanaugh, Cook, Howard

Senior Vice-President and General Counsel Mark Mendenhall presented the Blair High Pump Station Property Acquisition as outlined in his letter to the Committee dated July 30, 2025.

Public Comment

Chairman Cavanaugh asked if there were any further comments from the Board or if any member of the public would like to address the Board.

At 2:13 p.m., Chairman Cavanaugh announced the Committee Meetings had concluded, and the Board would reconvene in twelve minutes for the regular monthly Board Meeting.



Mark Doyle
President & Secretary to the Board

MD/sec

METROPOLITAN UTILITIES DISTRICT
Minutes of the Regular Monthly Board Meeting
August 6, 2025

Chairman Tim Cavanaugh called to order the Committee meetings of the Metropolitan Utilities District Board of Directors at 2:25 p.m. at its headquarters building located at 7350 World Communications Drive.

Advance notice of the meeting was published in the print version of *The Omaha World-Herald* on Sunday, July 27, 2025, with a revised notice published on Sunday, August 3, 2025. Notice was also provided on the MUD website at www.mudomaha.com and other social media platforms. Agendas and all pertinent Board materials to be presented at the meeting were emailed to Directors and posted on the MUD website on August 1, 2025.

Chairman Cavanaugh announced that the meeting was being livestreamed, and a recording of the meeting would be uploaded to the MUD website after the meeting's conclusion.

AGENDA NO. 1

ROLL CALL

On a roll call vote, the following Directors acknowledged their attendance: Dave Friend, Bob Sidzyik, Mike McGowan, Gwen Howard, Tim Cavanaugh, Jim Begley, and Tanya Cook.

AGENDA NO. 2

OPEN MEETINGS ACT NOTICE

Chairman Cavanaugh announced that a copy of the Open Meetings Act was located on the wall in the back of the Board Room.

AGENDA NO. 3

PLEDGE OF ALLEGIANCE

Chairman Cavanaugh invited all who wished to participate to recite the Pledge of Allegiance.

AGENDA NO. 4

APPROVAL OF MINUTES FOR THE COMMITTEE MEETINGS, REGULAR MONTHLY BOARD MEETING AND PUBLIC HEARING FOR JULY 2, 2025.

Director McGowan moved to approve the minutes for the Committee Meetings and Regular Monthly Board Meeting for July 2, 2025, which was seconded by Director Begley and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook

Voting No: None

Committee Meetings & Regular Board Meeting

August 6, 2025

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AGENDA NO. 5
CAPITAL EXPENDITURES

Director Friend moved to approve the proposed Capital Expenditures as presented in the Committee Meetings by Senior Vice-President and Chief Operations Officer, Kendall Minor as outlined in his letter to the Committee dated August 1, 2025. The motion was seconded by Director Howard and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook
Voting No: None

AGENDA NO. 6
ACCEPTANCE OF CONTRACTS AND PAYMENT OF FINAL ESTIMATES

Director Friend moved to approve the Acceptance of Contracts and Payment of Final Estimates as presented in the Committee Meetings by Director Plant Engineering Trevor Tonniges and as outlined in his letter to the Committee dated July 25, 2025. The motion was seconded by Director Begley and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook
Voting No: None

AGENDA NO. 7
CHANGE ORDER 1 – WP1992- ROLOFF 2025 WIR

Director Friend moved to approve Change Order 1 – WP1992 – Roloff 2025 WIR as presented in the Committee Meetings by Director Plant Engineering Trevor Tonniges and as outlined in his letter to the Committee dated July 10, 2025. The motion was seconded by Director Sidzyik and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook
Voting No: None

AGENDA NO. 8
THREE YEAR WIR CONTRACT PARTNERSHIP RECOMMENDATION

Director Friend moved to approve the Three Year WIR Contract Partnership Recommendation as presented in the Committee Meetings by Director Plant Engineering Trevor Tonniges and as outlined in his letter to the Committee dated July 25, 2025. The motion was seconded by Director Begley and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook
Voting No: None

AGENDA NO. 9
GAS INFRASTRUCTURE PARTNER – EXPANDED PARTNERSHIP WITH Q3 CONTRACTING THROUGH 2027

Director Friend moved to approve the Gas Infrastructure Partner – Expanded Partnership with Q3 Contracting through 2027 as presented in the Committee Meetings

by Director Plant Engineering Trevor Tonniges and as outlined in his letter to the Committee dated July 31, 2025. The motion was seconded by Director McGowan and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook
Voting No: None

AGENDA NO. 10
BIDS ON MATERIALS AND CONTRACTS

Director Friend moved to approve the Bids on Materials and Contracts as presented in the Committee Meetings by Vice-President of Procurement and Enterprise Services Jon Zellars and as outlined in the letter to the Committee dated July 25, 2025, from Director of Procurement Sherri Lightfoot. The motion was seconded by Director Sidzyik and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook
Voting No: None

AGENDA NO. 11
NOTICE OF PURCHASES BETWEEN \$25,000 AND \$50,000

Director Friend requested that the Notice of Purchases letter dated July 25, 2025, from Director of Procurement Sherri Lightfoot be placed on file.

AGENDA NO. 12
MAIN EXTENSIONS

Director Friend moved to approve the proposed Main Extensions as presented in the Committee Meetings by Vice-President of Engineering Masa Niiya and as outlined in his letter to the Committee dated July 30, 2025, which was seconded by Director Sidzyik and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook
Voting No: None

AGENDA NO. 13
WAGE AND/OR SALARY INCREASES AND RATIFICATIONS

Director Begley moved to approve the Wage and/or Salary Increases and Ratifications as presented in the Committee Meetings by Vice-President of Human Resources Bonnie Savine and as outlined in her letter dated July 24, 2025. The motion was seconded by Director Friend and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook
Voting No: None

AGENDA NO. 14**SELECTION OF VICE PRESIDENT, ACCOUNTING**

Director Begley moved to approve the Selection of Vice President, Accounting as presented in the Committee Meetings by Vice-President of Human Resources Bonnie Savine and as outlined in her letter dated July 14, 2025. The motion was seconded by Director Friend and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook

Voting No: None

AGENDA NO. 15**BLAIR HIGH PUMP STATION ACQUISITION**

Director Cavanaugh moved to approve the Blair High Pump Station Acquisition as presented in the Committee Meetings by Senior Vice-President and General Counsel Mark Mendenhall and as outlined in his letter dated July 30, 2025. The motion was seconded by Director Sidzyik and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook

Voting No: None

AGENDA NO. 16**OTHER MATTERS OF DISTRICT BUSINESS FOR DISCUSSION**

Chairman Cavanaugh asked whether any Board Members had any comments they wished to share. Senior Vice-President and General Counsel Mark Mendenhall informed the Board that District Management has recently met with the Accounts, Expenditures, Finance and Rates committee regarding the sewer and trash billing services with various municipalities. Each municipality is subject to different agreements. Discussions have begun with the municipalities to update all agreements to a generally uniform agreement which will include collection for the actual costs for the service provided, an inflationary adjustment of fees annually, and a study every 5 years to ensure the fees are in line with current actual costs. Director Cavanaugh also highlighted the unquantifiable costs of this service and importance of educating the public about the breakdown of each billing line item. A brief discussion took place regarding the municipality services billing.

AGENDA NO. 17**PUBLIC COMMENT**

Chairman Cavanaugh asked if there were any further comments from the Board or if any member of the public would like to address the Board. There was none.

AGENDA NO. 18**CLOSED SESSION – LITIGATION, PERSONNEL AND REAL ESTATE**

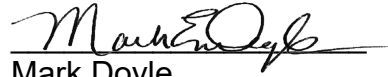
A Closed Session was not necessary.

Director Cook moved to adjourn the regular Board Meeting which was seconded by Director Sidzyik and carried on a roll call vote.

Voting Yes: Friend, Sidzyik, McGowan, Howard, Cavanaugh, Begley, Cook

Voting No: None

The regular Board Meeting was adjourned at 2:39 p.m.

A handwritten signature in black ink, appearing to read "Mark Doyle", with a horizontal line drawn underneath it.

Mark Doyle

President & Secretary to the Board

MD/sec

September 3, 2025**METROPOLITAN UTILITIES DISTRICT***Inter-Department Communication***August 29, 2025****Subject: CAPITAL EXPENDITURES**

To: Construction and Operations Committee
cc: all Board Members; President Doyle; Senior Vice Presidents Ausdemore, Dickas, Lobsiger, Mendenhall, and all Vice Presidents

From: Kendall Minor, SVP & Chief Operations Officer

The following items will be on the September 3, 2025, Committee Agenda for consideration and the Board Agenda for approval:

BUILDINGS, PLANTS & EQUIPMENT

1. JOB #: (100031000031 - \$375,000)

TOTAL COST: \$375,000

LOCATION: Florence Water Treatment Plant

PURPOSE: Construction Services for Filter and Engine Building Generator Replacement

DESCRIPTION: The generator that is located in the engine building is a back-up power source for both the Filter Building and Engine Building. This generator was installed in the early 1990's. Several parts of the generator have failed, and it has been difficult to find parts. Due to the age and limited parts availability, the generator needs to be replaced.

This C&A is for the construction services portion of the replacement. Plant engineering received competitive bids and approval of this C&A is contingent upon approval of the bid recommendation.

2. JOB #: (100031000033 - \$175,000)

TOTAL COST: \$175,000

LOCATION: Florence Water Treatment Plant

PURPOSE: Construction Services for Intake Catwalk Platform

DESCRIPTION: The intake structures at the Florence Water Treatment Plant extend into the Missouri river, which obstructs direct visibility of the area in front of the intakes. This visibility is especially important during the winter months when river conditions are low. To provide better visibility of the intakes, as well as creating easier access for the installation of ice eaters in the winter, a catwalk is recommended to be added to both intakes.

This C&A is for the construction services of the catwalk platform. Plant engineering received competitive bids and approval of this C&A is contingent upon approval of the bid recommendation.

3. JOB #: (100031000037 - \$650,000)

TOTAL COST: \$650,000

LOCATION: Florence Water Treatment Plant

PURPOSE: Presedimentation Basin Design

DESCRIPTION: This request is to contract an outside engineering firm for the Florence Water Treatment Plants Pre-Sedimentation renovations due to the project's complex and specialized expertise requirements. The firm will evaluate the necessary improvements, provide recommendations and/or additional alternatives, develop a project plan, design and prepare construction drawings and specifications, assist with permitting and regulatory compliance, and provide construction period services.

RFP and RFQ's were solicited with Burns & McDonnell Engineering, HDR Engineering & Olsson responding with proposals. A Selection Committee reviewed these submissions resulting in the recommendation to recommend Burns & McDonnell Engineering for this project.

Approval of this C&A will authorize the President to enter into a Professional Services Agreement with Burns & McDonnell Engineering for the professional engineering services required for the rehabilitation of the Florence Pre-Sedimentation Basins and related infrastructure.

SYSTEM IMPROVEMENTS

1. JOB #: GP2942 (100052001891- \$297,000)

PROJECT COST: \$297,000

LOCATION: State Street from Irvington Road to North 111th Street

PURPOSE: Install gas mains

DESCRIPTION: This main is needed to supply the CNG station at CC2. The existing gas mains in this area do not have the capacity to reliably serve the needed volume to the CNG station. This gas main will also interconnect two 60 psig systems currently separated by Blair High Road which will improve the reliability of the gas distribution system in this area. This project is anticipated to start October 2025.

2. JOB #: R2275 (100053001742 - \$27,900) & (100067001714 - \$76,600)

PROJECT COST: \$104,500

LOCATION: South 28th Street and "W" Street and South 30th Street and "V" Street

PURPOSE: Relocate water mains

DESCRIPTION: This work is required to eliminate conflicts with proposed grading, paving, storm sewers, and apartments being constructed as part of Southside Terrace Phases 1 and 2. This project is anticipated to begin fall of 2025 and will be constructed by District crews. This work is reimbursable as the project is private in nature.

3. JOB #: R2341 (100053001722 - \$89,100), (100067001694 - \$15,500), (100054001272 - \$167,700) & (100068001258 - \$47,200)

PROJECT COST: \$319,500

LOCATION: Harney Street to Farnam Street and South 41st Street to South 42nd Street

PURPOSE: Relocate water and gas mains

DESCRIPTION: This work is required to eliminate conflicts with proposed storm sewers being installed for the Nebraska Medicine Farnam Health Center on City of Omaha's Project OPW 54926. This project is anticipated to begin in September 2025 and will be constructed by a District crew. This work is reimbursable as the project is private in nature.

4. JOB #: R2328 – **STREETCAR PROJECT** (100054001173 - \$1,090,000) & (100068001156 - \$110,000) - **RATIFICATION**

PROJECT COST: \$1,200,000

LOCATION: Harney Street from South 24th Street to South 28th Street

PURPOSE: Relocate gas mains

DESCRIPTION: This project is part of utility relocations necessitated by the City of Omaha Streetcar Project. The District entered into a Term Sheet with the City of Omaha in February 2023 that limits District costs relative to the District's Streetcar-related work to \$7,600,000. Board approval of this project will allow them to move forward but will not commit District dollars in excess of the \$7.6 million already agreed to.

This work is required to eliminate conflicts on the City of Omaha's Streetcar Project OPW 54338. This phase is the seventh of eight (8) gas relocation projects along the currently proposed streetcar route. To reduce potential delays to the City of Omaha's streetcar project and take advantage of the City of Omaha street closures a District crew has begun work on this project in August of 2025. Taking advantage of the street closure benefits the District by providing the potential to increase speed/efficiency, productivity, and provide a safer work environment during this time.

In addition to the Project Costs above related to mains there is service work totaling an estimated cost of \$300,000.

DocuSigned by:

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Kendall Minor
SVP, Chief Operations Officer

Approved:

DocuSigned by:

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Mark E. Doyle
President

METROPOLITAN UTILITIES DISTRICT*Inter-Department Communication*September 3, 2025

August 22, 2025

Subject: ACCEPTANCE OF CONTRACTS AND PAYMENT OF FINAL ESTIMATES**To:** Construction and Operations Committee
cc: All Board Members; President Doyle; Senior Vice Presidents Ausdemore, Dickas, Lobsiger, Mendenhall, Minor, and all Vice Presidents**From:** Trevor Tonniges, Director, Plant Engineering

The following items will be on the September 3, 2025, Committee Meeting for consideration and the Board Meeting Agenda for approval. Work has been satisfactorily completed on the following contracts and final payment is recommended:

Contract	Contract Approval Date	Amounts	
		*Unit Price Bid	Actual
a. INSTALL WATER MAINS IN KENSINGTON PARK PHASE II LOTS 16-18, NW OF S. 205 TH ST. & W. "Q" RD.; PAT THOMAS CONSTRUCTION, INC.; WP2090 (100055001468)	9/4/2024	\$338,300.00	\$409,550.00

Comments: There was a net increase of \$71,250.00 (+21.1%) for this project due primarily to a change order required to bore the water main due to a utility conflict and to remove and replace a hydrant and vault. All work required by the contract has been completed by the Contractor and is acceptable and in compliance with the Contract and Specifications.

Contract	Contract Approval Date	Amounts	
		*Unit Price Bid	Actual
b. INSTALL WATER MAINS IN SHADOW VIEW VILLAGE LOTS 3-8 SHADOW VIEW VILLAGE REPLAT 1 LOT 1, NW OF S. HWS CLEVELAND BLVD. & W. CENTER RD.; CEDAR CONSTRUCTION COMPANY INC.; WP2120 (100055001478)	10/2/2024	\$467,237.00	\$480,280.10

Comments: There was a net increase of \$13,043.10 (+2.8%) for this project, due primarily to a previously approved change order in the amount of \$20,989.00 that was partially offset by an underrun in water mains, reducers and bends needed to complete the work. All work required by the contract has been completed by the Contractor and is acceptable and in compliance with the Contract and Specifications.

**Based upon Engineering's estimated unit quantities.*

Signed by:

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Trevor Tonniges
 Director, Plant Engineering

Approved:

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Masa Niya
 Vice President
 Engineering

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Kendall Minor
 Senior Vice President
 Chief Operations Officer

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Mark Doyle
 President

METROPOLITAN UTILITIES DISTRICT*Inter-Department Communication*September 3, 2025

August 8, 2025

Subject: CHANGE ORDER 1 – KENSINGTON PARK PHASE II LOTS 16-18, NW OF S. 205TH ST. & W. "Q" RD.; PAT THOMAS CONSTRUCTION, INC., WP2090 (100055001468)

To: Construction and Operations Committee
CC: All Board Members, President Doyle, Senior Vice Presidents Ausdemore, Dickas, Lobsiger, Mendenhall, Minor, and all Vice Presidents

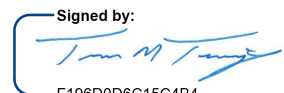
From: Trevor Tonniges, Director, Plant Engineering

On September 4, 2024, the District entered a contract with Pat Thomas Construction, Inc. to install water mains for the Kensington Park Phase II Lots 16-18 project. The original contract price was \$338,300.00. Change Order No. 1 represents an increase of \$71,810.00 to the contract for a total cost of \$410,110.00.

Change Order No. 1 represents an additional cost of \$71,810.00 for the additional efforts and materials needed to bore water main due to a utility conflict, and to remove and replace a hydrant and vault.

This work has already been completed to prevent project delays. The developer has approved these costs.

Your approval is requested.

Signed by:

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Trevor Tonniges
Director, Plant Engineering

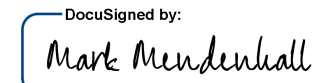
Approved:

DocuSigned by:

98B161DE431645F...
Masa Niiya
Vice President,
Engineering

DocuSigned by:

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Kendall Minor
Sr. Vice President,
Chief Operations Officer

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Mark Mendenhall
Sr. Vice President,
General Counsel

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Mark Doyle
President

September 3, 2025**METROPOLITAN UTILITIES DISTRICT***Inter-Department Communication*

August 29, 2025

Subject: RENEWAL OF CONSULTANT AGREEMENT CONSTRUCTION PHASE INSPECTION SERVICES FOR CONTRACTED WATER MAIN PROJECTS – THROUGH OCTOBER 2028.

To: Committee on Construction and Operations
cc: All Board Members; President Doyle; Senior Vice Presidents Ausdemore, Dickas, Lobsiger, Mendenhall, Minor, and all Vice Presidents

From: Trevor Tonniges, Director, Plant Engineering

Management is recommending that the District enter into a new three-year professional services agreement for water main construction inspection services with JEO Consulting Group Inc. (JEO).

JEO provides construction inspection services for new water development, distribution and transmission mains for new system growth and reliability. JEO has provided these inspection services for the District since 2014 under multiple, consecutive contracts. JEO continues to perform well and is an essential partner whose services are vital to meeting the critical needs of the District and the development community.

Contracted water development, distribution/transmission mains, infrastructure replacement (IR), among other contracted projects are administered and inspected by a team of (21) full-time District employees, Senior Engineering Technicians. Since 2014, JEO has provided consultant inspection services for water development and system growth projects to supplement District staff.

District staff are generally prioritized to challenging IR projects that have regular customer interactions, complex existing utility locates, or significant restoration demands. Remaining Sr. Engineering Technicians are assigned to water development projects as schedules permit. Water development and system growth projects, typically assigned to JEO, are usually installed in rural or suburban areas with little to no existing development and impact to existing District customers. These projects also require very limited utility locating services.

Water development and system growth projects have resulted in the addition of 44.5 miles of water main in 2022, 34.6 miles in 2023, and 35 miles in 2024. This represents a significant investment in the growth and reliability of the District's distribution system. These projects vary in timing, size, and have construction schedules outside of the District's control. The District utilizes these consultant inspection services only as required to meet schedules that extend beyond our internal staffing capabilities.

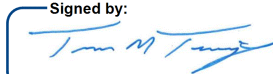
Two challenging programs going into 2026 and beyond are the contracted water relocations for the City of Omaha Streetcar and the increase in contracted lead water service projects. Three (3) Sr.Engineering Technicians will be dedicated to the Streetcar project and there are four (4) Sr. Engineering Technicians dedicated to the Lead Service Line Replacement Program.

In the case of the Streetcar project, the District does not have the direct ability to control the timing or project schedule. Continuing supplemental consultant inspection services on other projects will provide the District's inspection staff a greater presence. Consultant inspection (and District staff) costs are expensed to specific project construction and included in any developer paid or reimbursed costs to the District where applicable. Approximately 70% of the expenses related to the JEO contract are accounted for through development fees. Staff have negotiated with JEO to secure a 3% rate increase per year through the three-year term of the agreement.

Staff have worked with the Personnel Committee over the last year to evaluate various alternatives to how we could perform construction inspection work for these various projects over the next few years. Three alternatives were presented and staff recommended that we continue to contract new development and transmission main work with JEO. We expect that the water portion of the Streetcar project and the recent spike in the volume of fiber optic related locating should be wrapping up by the end of the proposed three-year agreement. We can then re-evaluate contracted inspection services at that time.

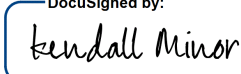
JEO has demonstrated consistent staffing of well-qualified inspectors and the ability to train new staff. By selecting to renew with JEO, the District is retaining the institutional knowledge gained in the relationship. JEO has demonstrated the ability to communicate and coordinate work with the numerous District departments involved in the water development program. This includes Water Distribution for pressure testing and chlorination and Graphic Information Systems (GIS) for as-building. JEO has also made significant investments in new technologies and equipment for GPS locating and project management and reporting software to support District projects and to provide high quality, accurate as-builts.

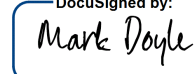
Approval of this item will allow the President to negotiate and enter into a new 3-year professional services agreement with JEO for water main construction inspection services, effective November 1, 2025.

Signed by:

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Trevor Tonniges
 Director, Plant Engineering

Approved:
 DocuSigned by:

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Masa Niya
 Vice President
 Engineering

DocuSigned by:

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Kendall Minor
 Senior Vice President
 Chief Operations Officer

DocuSigned by:

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Mark Doyle
 President

September 3, 2025

METROPOLITAN UTILITIES DISTRICT
Inter-Department Communication

August 25, 2025

Subject: BIDS ON MATERIALS AND CONTRACTS DURING THE MONTH OF AUGUST

To: Construction & Operations Committee
cc: All Board Members; President Doyle; Senior Vice Presidents Ausdemore, Dickas, Lobsiger, Mendenhall, Minor, and all Vice Presidents

From: Sherri A Lightfoot, Director, Procurement

The following items will be on the September 3, 2025 Committee Agenda for consideration and the September 3, 2025 Board Agenda for approval. The recommended bid is bolded and listed first. Nonlocal bidders have been indicated in italics.

WATER/GAS MAIN CONTRACTS

<u>Item</u>	<u>Bids Sent / Rec'd</u>	<u>Bidders</u>	<u>Bid Amount</u>
Install Water Mains in McGill Industrial Park Lots 1-20 and Outlots A & B NW of N. 108 th Street and Rainwood Road 100055001486 100057000556 100057000557 100057000558 WP2171 Engineering Estimate: \$4,502,820.00 (A C&A in the amount of \$5,926,634.00 will be presented to the Board on September 3, 2025 for approval.)	35/4	Cedar Constr. <i>Judds Bros Constr.</i> <i>Valley Corporation</i> L.G. Roloff Const. Co.	\$4,799,477.00 4,827,880.00 4,897,142.53 4,976,232.00
Install Water Mains in Burlington Trails Estates Phase 1, Harrison Street from S. 216 th Street to S. 230 th Street 100057000563 WP2216 Engineering Estimate: \$1,096,385.00 (A C&A in the amount of \$1,474,770.00 will be presented to the Board on September 3, 2025 for approval.)	35/7	Pat Thomas Constr. Cedar Constr. L.G. Roloff Company <i>Valley Corporation</i> <i>Judds Bros. Constr.</i> Kersten Constr. McCarthy Bldg. Co.	\$1,141,715.00 1,294,530.00 1,303,711.00 1,349,962.31 1,373,500.00 1,506,193.34 1,845,810.00

Install Water Mains in Levi Carter Park Activity and Sports Complex, S of N. 4 th Avenue and Browne Street 100055001498 100041000294 WP2200	35/4	Pat Thomas Constr. <i>SN Contracting LLC</i> <i>K2 Construction</i> Kersten Construction	\$213,135.20 215,710.00 264,280.00 350,074.50
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Engineering Estimate: \$223,520.00
(A C&A in the amount of \$285,400.00 will be presented to the Board on September 3, 2025 for approval.)

OTHER

<u>Item</u>	<u>Bids Sent / Rec'd</u>	<u>Bidders</u>	<u>Bid Amount</u>
Low Service Catwalk Platform Florence Water Treatment Plant 100031000033 WP2207	5/3	KE Flex Contracting <i>Judds Bros Constr.</i> <i>Midwest Mechanical</i>	\$157,793.00 178,925.00 275,532.00

(A C&A in the amount of \$175,000.00 will be presented to the Board on September 3, 2025 for approval.)

Detroit Generator Replacement Florence Water Treatment Plant 100031000031 WP2197	5/2	Electrical Service Group Commonwealth Electric	\$299,491.00 487,104.00
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(A C&A in the amount of \$375,000.00 will be presented to the Board on September 3, 2025 for approval.)

2700' of Coated Steel Gas Pipe (Various Sizes)	3/2	Edgen Murray <i>Consolidated Pipe</i>	\$39,735.00 50,284.00
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ANNUALS

<u>Item</u>	<u>Bids Sent / Rec'd</u>	<u>Bidders</u>	<u>Bid Amount</u>
Insulated Water Service Saddles (October 1, 2025 -September 30, 2026)	5/1	American Undergrd.	\$724,690.75

Magnesium Anodes (700 – 17lbs and 900 – 32lbs) (September 1, 2025 to August 31, 2026)	10/6	BK Corrosion	\$150,038.00
		Allied Corrosion	192,131.00
		Corrpro	197,000.00
		Farwest Corrosion	197,888.00
		A- Line Corrosion Svs	285,500.00
		American Undergrd.	305,266.00
Activated Carbon Florence Water Treatment Plant (20 tons) (September 1, 2025 to August 31, 2026) *3rd Low Bid Recommended	10/5	Arq Purification H	\$46,000.00*
		Donau Carbon	35,681.00
		Calgon Carbon	42,400.00
		Carbon Activated	50,800.00
		Jacobi	53,200.00

**Activated carbon is used to control impacts on taste, odor, and color of the water primarily during high runoff events. Activated carbon samples were evaluated. Arq Purficiation H's product performed 33% better than the other bidders.*

DocuSigned by:

Sherri A. Lightfoot

Sherri A. Lightfoot
Director, Procurement
(402) 504-7253

Approved:

DocuSigned by:

Jon Zellars

Jon Zellars
Vice President, Procurement and Enterprise Services

Signed by:

Steve Ausdemore

Steven E. Ausdemore
Senior Vice President, Safety, Security and Field Operations

DocuSigned by:

Mark Doyle

Mark E. Doyle
President

METROPOLITAN UTILITIES DISTRICT
Inter-Department Communication

September 3, 2025

August 22, 2025

Subject: NOTICE OF PURCHASES BETWEEN \$25,000 - \$50,000

To: Construction & Operations Committee
cc: All Board Members; President Doyle; Senior Vice Presidents Ausdemore, Dickas, Lobsiger, Mendenhall, Minor, and all Vice Presidents

From: Sherri A. Lightfoot, Director, Procurement

During the month of August, the following item was purchased or contracted for and is being submitted to the Board to be placed on file. The purchase or contract was initiated with the low bidder which is bolded and listed first.

<u>Item</u>	<u>Bids Sent / Rec'd</u>	<u>Bidder</u>	<u>Amount Bid</u>
Two (2) Hustler Zero Turn Mowers 100089001047 *Sourcewell Contract (C&A for Annual Construction Machines, Equipment, Vehicles and Upfitting approved January 8, 2025 in the amount of \$19,508,393.00.)	1/1	Hustler Turf Equip.	\$29,665.00*

DocuSigned by:

Sherri A. Lightfoot

Sherri A. Lightfoot
Director, Procurement
(402)504-7253

Approved:

DocuSigned by:

Jon Zellars

Jon Zellars
Vice President, Procurement and Enterprise Services

Signed by:

Steve Ausdemore

Steven E. Ausdemore
Senior Vice President, Safety, Security and Field Operations

DocuSigned by:

Mark Doyle

Mark E. Doyle
President

September 3, 2025**METROPOLITAN UTILITIES DISTRICT***Inter-Department Communication***August 28, 2025****Subject:** MAIN EXTENSIONS

To: Services and Extensions Committee
cc: All Board Members: President Doyle; Senior Vice Presidents
Ausdemore, Dickas, Lobsiger, Mendenhall, Minor, and all Vice
Presidents

From: Masa Niiya, Vice President, Engineering

The following main extensions will be on the September 3, 2025, Committee Agenda for consideration and the Board Agenda for approval:

1. JOB #: GP2853 (100060001498 - \$104,085)

PROJECT COST: \$104,085

DISTRICT COST: \$0

LOCATION: Northeast of South 204th Street to "Q" Street

DISTRICT SUBDIVISION: Cavanaugh

PURPOSE: Install gas mains for North Streams Subdivision Phase 2

DESCRIPTION: Work to be done will provide gas service to 113 single-family residential lots and 1 park lot in North Streams Subdivision.

2. JOB #: WP2216 (100057000563 - \$1,474,770)

PROJECT COST: \$1,474,770

DISTRICT COST: \$0

LOCATION: Harrison Street from South 216th Street to South 230th Street

DISTRICT SUBDIVISION: Cavanaugh

PURPOSE: Install water mains for Burlington Trails Estates Subdivision Phase 1

DESCRIPTION: Work to be done will provide domestic water service and fire protection to 41 single-family residential lots in Burlington Trails Estates Subdivision.

3. JOB #: WP2200 (100055001498 - \$280,364) & (100041000294 - \$5,036)

PROJECT COST: \$285,400

DISTRICT COST: \$0

LOCATION: North 4th Ave between Fort Street and Browne Street

DISTRICT SUBDIVISION: Cook

PURPOSE: Install water mains for the Levi Carter Park Activity and Sports Complex

DESCRIPTION: Work to be done will provide domestic water service and fire protection to the Levi Carter Park Activity and Sports Complex.

4. JOB #: WP2171 (100055001486 - \$2,283,136), (100057000556 - \$1,575,001),
(100057000557 - \$1,354,310) & (100057000558 - \$714,187)

PROJECT COST: \$5,926,634

DISTRICT COST: \$727,650

LOCATION: North 108th Street and Rainwood Road and Bennington Road from Blair High Road to North 111th street

DISTRICT SUBDIVISION: Friend

PURPOSE: Install water mains for McGill Industrial Park Subdivision

DESCRIPTION: Work to be done will provide domestic water service and fire protection to 20 industrial lots and 2 outlots in McGill Industrial Park Subdivision.

DocuSigned by:

Masa Niya

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Masa Niya

Vice President, Engineering

Approved:

DocuSigned by:

Kendall Minor

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Kendall Minor

Sr. Vice President, Chief Operations Officer

DocuSigned by:

Mark Doyle

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Mark E. Doyle

President

METROPOLITAN UTILITIES DISTRICT
Inter-Department Communication

September 3, 2025

August 25, 2025

Subject: Wage and/or Salary Increases and Ratifications, September 2025 Board Meeting

To: Personnel Committee

cc: All Board Members; President Doyle; Senior Vice Presidents Ausdemore, Dickas, Lobsiger, Mendenhall, Minor and all Vice Presidents

From: Bonnie Savine, Vice President, Human Resources

The Human Resources Department is recommending the Board of Directors approve the wage or salary increases outlined below. All positions involve District employees earning more than \$10,000 per year and therefore require your approval.

1. Operating and Clerical (OAC) Wage Increases Due To Promotion

The Human Resources Department is recommending the Board of Directors approve wage increases for the following Employees within the OAC classification. These wage increases are based on a job selection process, are in compliance with the Collective Bargaining Agreement, and are made following the posting and application process for a job opening in the District. The effective date for these increases will be the beginning of the next OAC pay period following Board approval.

Employee:	Marvin Cifuentes
Current position (department):	Meter Reader – Car Route (Meter Services)
New position (department):	Meter Mechanic (Meter Services)
Current rate; step/grade:	\$36.19; Step 3
Proposed rate; step/grade:	\$38.43; Step 3
Percent of increase:	6.19%
District hire date:	February 6, 2023

Employee:	Jason Penke
Current position (department):	Pipe Layer (Construction)
New position (department):	Machine Operator I (Construction)
Current rate; step/grade:	\$35.26; Step 2
Proposed rate; step/grade:	\$37.46; Step 2
Percent of increase:	6.24%
District hire date:	July 10, 2023

Employee:	Keegan Sheridan
Current position (department):	Meter Mechanic (Meter Services)
New position (department):	Industrial Gas Meter Technician (Meter Services)
Current rate; step/grade:	\$36.41; Step 2
Proposed rate; step/grade:	\$39.54; Step 1
Percent of increase:	8.60%
District hire date:	February 13, 2023

Wage and/or Salary Increases and Ratifications

September 2025

Page 2

2. Operating and Clerical (OAC) Wage Increases Due To Job Transfer

The Human Resources Department is recommending the Board of Directors approve wage increases for the following Employees within the OAC classification. A transferring employee who is at less than Standard Wage will be moved to an equal rate in the new job classification or, if there is not an identical wage rate, to the nearest higher wage rate in the new job classification. These wage increases are based on a formal selection process, are in compliance with the Collective Bargaining Agreement, and are made following the posting and application process for a job opening in the District. The effective date for these increases will be the beginning of the next OAC pay period following Board approval.

There are no recommendations for approval this month

3. Operating and Clerical (OAC) Wage Increases Due To Job Progression

The Human Resources Department is recommending the Board of Directors approve the following wage increases for the OAC employees who have successfully completed required training and who have been recommended by their supervisor for promotion as they progress within their job family. All increases are based on the bargaining unit wage structure. The effective date for these increases will be the beginning of the next OAC pay period following board approval.

Employee:	Magdalena Gammon
Current position (department):	Customer Service Clerk I (Customer Services)
New position (department):	Customer Service Clerk II (Customer Services)
Current rate; step/grade:	\$31.75; Step 3
Proposed rate; step/grade:	\$33.34; Step 3
Percent of increase:	5.01%
District hire date:	August 14, 2023

Employee:	Doris Lewis
Current position (department):	Customer Service Clerk I (Customer Services)
New position (department):	Customer Service Clerk II (Customer Services)
Current rate; step/grade:	\$31.75; Step 3
Proposed rate; step/grade:	\$33.34; Step 3
Percent of increase:	5.01%
District hire date:	August 14, 2023

Employee:	Christina Padilla
Current position (department):	Customer Service Clerk I (Customer Services)
New position (department):	Customer Service Clerk II (Customer Services)
Current rate; step/grade:	\$31.75; Step 3
Proposed rate; step/grade:	\$33.34; Step 3
Percent of increase:	5.01%
District hire date:	August 14, 2023

Wage and/or Salary Increases and Ratifications

September 2025

Page 3

Employee: **Candace Sallach**
Current position (department): Customer Service Clerk I (Customer Services)
New position (department): Customer Service Clerk II (Customer Services)
Current rate; step/grade: \$31.75; Step 3
Proposed rate; step/grade: \$33.34; Step 3
Percent of increase: 5.01%
District hire date: August 14, 2023

Employee: **Samantha Stanek**
Current position (department): Customer Service Clerk I (Customer Services)
New position (department): Customer Service Clerk II (Customer Services)
Current rate; step/grade: \$31.75; Step 3
Proposed rate; step/grade: \$33.34; Step 3
Percent of increase: 5.01%
District hire date: August 14, 2023

Employee: **Gabriel Villagomez**
Current position (department): Customer Service Clerk I (Customer Services)
New position (department): Customer Service Clerk II (Customer Services)
Current rate; step/grade: \$31.75; Step 3
Proposed rate; step/grade: \$33.34; Step 3
Percent of increase: 5.01%
District hire date: August 14, 2023

4. Supervisory, Professional and Administrative (SPA) Salary Increases Due To Job Promotion

The following employees are selected for promotion into SPA positions. It is recommended the President be authorized to increase the salary of these employees. These SPA jobs have been evaluated, graded, appropriate job descriptions completed, and posting guidelines fulfilled. The effective date for these salaries will be the beginning of the next SPA pay period following board approval.

Employee: **Stanley Bobbett**
Current position (department): Construction Planning Technician II (Construction)
New position (department): Sr. Construction Planning Technician (Construction)
Current rate; step/grade: \$97,892; SPA – 02
Proposed rate; step/grade: \$102,787; SPA – 03
Percent of increase: 5.00%
District hire date: September 24, 2007

Wage and/or Salary Increases and Ratifications

September 2025

Page 4

Employee: Mark Kriegler
Current position (department): Construction Planning Technician II (Construction)
New position (department): Sr. Construction Planning Technician (Construction)
Current rate; step/grade: \$97,892; SPA – 02
Proposed rate; step/grade: \$102,787; SPA – 03
Percent of increase: 5.00%
District hire date: April 26, 2010

Employee: Farhad Latifi
Current position (department): Engineer II (Engineering Design)
New position (department): Sr. Design Engineer – Supervisory (Engineering Design)
Current rate; step/grade: \$98,456; SPA – 04
Proposed rate; step/grade: \$118,399; SPA – 07S
Percent of increase: 20.26%
District hire date: August 7, 2023

5. Supervisory, Professional and Administrative (SPA) New Hire Ratification

Board of Director Ratification of salaries, for new SPA employees hired from outside the District, is required to confirm the salary within the grade established for the position. Authorization to ratify the annual salary of SPA employees hired from outside the District will be requested each month, if appropriate.

Employee: Tania Stevens
Current position (department): Payroll Analyst (Accounting)
Current rate; step/grade: \$87,000; SPA – 03
District hire date: August 25, 2025

Employee: Appalaswamy Yalamanchily
Current position (department): Software Engineer II (Information Technology)
Current rate; step/grade: \$124,639; SPA – 05
District hire date: August 11, 2025

DocuSigned by:

Bonnie Savine

Bonnie Savine

Vice President, Human Resources

APPROVED:

DocuSigned by:

Mark Mendenhall

Mark A. Mendenhall

Senior Vice President, General Counsel

DocuSigned by:

Mark Doyle

Mark E. Doyle

President

METROPOLITAN UTILITIES DISTRICT*Inter-Department Communication*September 3, 2025

August 25, 2025

Subject: GROUP INSURANCE CONTRACT RENEWALS**To:** Personnel Committee**cc:** All Board Members

President Doyle; Senior Vice Presidents Ausdemore, Dickas, Lobsiger, Mendenhall and Minor

From: Bonnie Savine, Vice President, Human Resources

The following group insurance contracts are being recommended for 2026: PPO health, HMO health, dental, vision, flexible spending accounts, basic life insurance, supplemental (voluntary) life insurance, accidental death & dismemberment (AD&D), long-term disability (LTD), COBRA administration, Allstate supplemental benefits and employee assistance program (EAP) benefits. The District worked with HUB International Great Plains (HUB), the District's third-party benefit consultant, to review the existing agreements and plan options for 2026.

The open enrollment period is slated for October 27, 2025, through November 26, 2025 and will be communicated through a variety of communication channels including in-person and virtual meetings, myMUDHub benefits app, along with the traditional written communications which are mailed to employee homes. We plan to hold our annual Benefits Fair in person on Thursday, October 30th at the Omaha Firefighters Union Hall. At this event, attendees have the opportunity to meet with the District's benefit administrators, obtain vaccinations, participate in an onsite mammogram, obtain a biometric screening and more. New this year, the District is offering free PSA (prostate-specific antigen) testing to males over the age of 40 in partnership with the Nebraska Prostate Cancer Alliance.

Blue Cross and Blue Shield of Nebraska – Medical and Rx

Per the terms of the existing three-year administrative services agreement with Blue Cross and Blue Shield of Nebraska (BCBS-NE) executed beginning in 2024, the base administration fee will increase by \$0.25 per employee per month (PEPM) to \$47.75 in 2026. The \$0.65 PEPM fee for the Magellan Spine Management program will remain unchanged from 2025, but the telehealth fee will increase to \$0.38 PEPM (from \$0.25) with the transition to Telescope as the new telehealth vendor.

The BCBS-NE partnership with Mutual of Omaha remains in place, providing for a \$0.75 PEPM reduction to the administration fee as long as at least three lines of coverage (\$0.25 reduction per line of coverage) remain in force with Mutual of Omaha. This credit brings the base administration fee down to \$47.00 for the 2026 plan year.

Group Insurance Contract Renewals

August 25, 2025

Page 2

BCBS-NE will be updating their standard contract provisions, mainly adding clarifying language to existing coverage provisions.

PPO Medical

On the PPO Medical plan, the Affordable Care Act (ACA) maximum allowable out-of-pocket for 2026 increases to \$10,150 for an individual and to \$20,300 for a family. As a result, the Prescription Drug out-of-pocket maximum will change to \$7,650 for an individual and to \$15,300 for a family. This equates to the ACA maximum, less the negotiated Medical out-of-pocket maximum for 2026. There were no bargained changes for the PPO health plan effective January 1, 2026.

HMO Medical

Plan changes were evaluated and considered for the 2026 renewal period. At this time there are no recommended changes to the HMO plan structure.

In addition to the provisions above, the following optional plan change is recommended for 2026:

Infertility Treatment

Adding coverage for infertility treatment and medications for eligible employees and spouses covered on the plan. The current District health plan provides coverage for the diagnosis of infertility but there is no existing plan coverage for infertility treatment or medications. Options for coverage of infertility treatment and medications were explored, both within the M.U.D health plan and through stand-alone vendors. At this time a lifetime benefit of \$25,000 is being recommended as an addition to the District's existing health plan with BCBS-NE for the active employee population and their spouses. The estimated claims projection for the first year is \$383,000 and the claims projection is expected to decrease to \$75,000 in subsequent years.

HUB is recommending a one-year commitment with Prime Therapeutics (Prime) for the 2026 pharmacy benefits. Per HUB the pharmacy benefit space is rapidly changing so it is advised to avoid locking into predetermined terms for an extended period in the event more favorable terms are warranted in the near term. The one-year commitment allows the District to reevaluate the pharmacy benefit terms in subsequent renewal periods. Currently, the pharmacy benefits are seamlessly built in with BCBS-NE. Renewal terms from Prime Therapeutics (Prime) for the pharmacy contract includes an improvement on the pricing discounts and minimum rebate guarantees. The pharmacy contract will continue to be a 'pass-through' arrangement where the District receives the better of the minimum guarantees or actual savings. The pharmacy reconciliation for each of the last five years shows that the savings credited to the District has been measurably greater than the minimum contractual guarantees.

Group Insurance Contract Renewals
August 25, 2025
Page 3

The pharmacy program reconciliation for the 2024 plan year shows that the District achieved an additional \$404,038 in savings above the minimum guarantees. Network performance (pricing) accounted for \$364,026 of this savings, with the remaining \$40,012 was attributed to rebates. This follows the prior four plan years where the pharmacy savings were \$994,041 (2021), \$910,303 (2022) and \$861,077 (2023) greater than the minimum guarantees. The value of rebates reported for the 12-month period ending June 2025 was \$3,231,114.

HM Life – Aggregate and Specific Stop Loss Coverage

Stop loss coverage is under contract with the current administrator, HM Life. An initial preliminary renewal offer has been received by HM Life with a 19.0% increase to the specific stop loss premium, no change to the aggregate stop loss premium and a 15.7% increase to the aggregate claim factor. Negotiations will continue and a firm offer will be provided after review of August claims. There is one specific deductible laser that will remain in place for the 2026 policy year. Based on the preliminary renewal offer from HM Life and the inability to obtain final offers from other carriers until review of August or even September claims, a market review was not conducted.

Ameritas - Dental Plan

Ameritas is requesting an increase to the fee to \$4.28 (from \$3.89) which will be guaranteed for two years until January 1, 2028.

Ameritas - Voluntary Vision Care

Ameritas underwrites the vision plan with employees having access to a dual choice plan through either EyeMed or Vision Service Plan (VSP) networks. Employee participants pay 100% of the premium associated with vision care. Ameritas is offering the renewal which will be guaranteed for two years until January 1, 2028.

The following optional plan considerations have been presented to the District and are recommended for 2026:

- Change frequency of benefits to be based on calendar year (no rate impact)
- Allow use of frame benefits annually compared to every other year and increase frames allowance from \$130 to \$200

Mutual of Omaha - Life Insurance, AD&D, and LTD Plans

Mutual of Omaha underwrites the Basic Life/AD&D, Voluntary Life, and Long-term Disability plans. Premium rates for all coverages are in a rate guarantee until January 1, 2027.

Based on a review of the historical performance of the Voluntary Life plan, Mutual of Omaha has agreed to reduce all voluntary life premium rates by 10.0% effective January 1, 2026. Employee participants pay 100% of the premium associated with voluntary life coverage.

Flexible Spending Account Administration

The contract with Inspira will renew with no change to the current \$4.25 per participant per month fee for another year through the end of 2026.

Group Insurance Contract Renewals
August 25, 2025
Page 4

WEX - COBRA Administration

Third party COBRA Administrative services are being provided by WEX. These services provide administration of the COBRA regulatory notices as required under the Act. A preliminary renewal has not yet been received but it is anticipated that the current administration fee of \$0.55 PEPM will not change for 2026.

Allstate Accident, Critical Illness and Universal Life with Long-Term Care (LTC)

The District continues to offer supplemental Allstate benefits including accident, critical illness, and universal life with long-term care insurance. As a reminder, employee participants pay 100% of the premium associated with the Allstate benefit plans.

BestCare Employee Assistance Program (EAP)

The employee assistance program renewal with BestCare EAP is recommended for 2026. The renewal pricing is increasing from \$25.50 per employee per year to \$28.00 per employee per year with a three-year rate lock. The 2026 EAP benefit continues to include one free 30-minute consultation with a legal or financial expert within the designated provider network annually for employees or their dependents.

Consulting Fees & Commissions

The HUB Great Plains consulting agreement is in effect until 2028. The \$9,000 per month fee remains unchanged for the duration of the agreement. The monthly consulting fee will continue to be billed by HUB Great Plains directly.

The voluntary vision plan commissions will not change for 2026 and the premiums for the Basic Life/AD&D, Voluntary Life and Long-term Disability benefits are net of commissions.

Recommendation

The District recommends the Board of Directors approve the negotiated rates for the Group Insurance products outlined above at the September 3, 2025, meeting. I will be at the meeting to answer any questions you may have.

DocuSigned by:

Bonnie Savine

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Bonnie Savine

Vice President, Human Resources

APPROVED:

DocuSigned by:

Mark Mendenhall

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Mark A. Mendenhall

Sr. Vice President, General Counsel

DocuSigned by:

Mark Doyle

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Mark E. Doyle

President



August 25, 2025

Ms. Bonnie Savine
Vice President, Human Resources
Metropolitan Utilities District (MUD)
3100 South 61st Avenue
Omaha, NE 68106

RE: Renewal Summary and Suggestions – 2026 Plan Year

Dear Bonnie:

On behalf of HUB International Great Plains (HUB), we thank you for the opportunity to work with MUD as your employee benefits consultant. The following will summarize our suggestions for the January 1, 2026, renewal of your employee benefit programs.

General Medical/Rx Overview

Per the terms of the three-year administrative services agreement executed with Blue Cross Blue Shield of Nebraska (BCBSNE) beginning in 2024, the base administration fee will increase by \$0.25 per employee per month (PEPM) to \$47.75 in 2026. While the \$0.65 PEPM fee for the Magellan Spine Management program will remain unchanged from 2025, the telehealth fee will increase to \$0.38 PEPM (from \$0.25) with the transition to Telescope as the new vendor.

The BCBSNE partnership with Mutual of Omaha remains in place, providing a \$0.75 PEPM reduction to the administration fee as long as at least three lines of coverage (\$0.25 reduction per line of coverage) remain with Mutual of Omaha. This credit brings the base administration fee down to \$47.00 for the 2026 plan year.

Renewal terms from Prime Therapeutics (Prime) for the pharmacy contract include a small improvement in the pricing but a more noticeable improvement in the guaranteed rebates. The contract will continue to be a “pass-through” arrangement where MUD will receive the “better of” the minimum guarantees or the actual discounts and rebates.

The pharmacy program reconciliation for the 2024 plan year shows that MUD achieved an additional \$404,038 in value above the minimum guarantees. Network performance (pricing) accounted for \$364,026 of this value, with the remaining \$40,012 attributed to rebates. This follows the prior four plan years where the pharmacy savings were \$994,041 (2021), \$910,303 (2022), and \$861,077 (2023) greater than the minimum guarantees. The value of rebates reported for the 12-month period ending June 2025 was \$3,231,114.

BCBSNE will be updating its standard contract provisions, mainly adding clarifying language to existing coverage provisions. The following optional plan considerations have been presented:

- Alternate drug formulary: not recommended
- Virtual second opinion program: not recommended
- Weight loss drug therapy program: not recommended
- Vitality total well-being program: not recommended
- Add \$25,000 lifetime coverage for infertility treatment and medications: recommended
- Increased calendar year visit limit for skilled nursing facility benefits: proposed
- Add narrow network option on the preferred provider organization (PPO) plan: not recommended

PPO Medical

On the PPO medical plan, the Affordable Care Act (ACA) maximum allowable out-of-pocket for 2026 increases to \$10,150 for an individual and to \$20,300 for a family. As a result, the prescription drug out-of-pocket maximum will change to \$7,650 for an individual and to \$15,300 for a family. This equates to the ACA maximum, less the negotiated medical out-of-pocket maximum for 2026.

The employee contribution amounts will remain at 15.0% for the 2026 plan year. This percentage will be incorporated into the MUD rate figuration review based on a three-year average of premium costs.

HMO Medical

No plan design changes are suggested on the HMO medical plan for 2026.

Pharmacy

The renewal offer includes an improvement in the pricing discounts and minimum rebate guarantees. The pharmacy contract will continue to be a “pass-through” arrangement where MUD receives the better of the minimum guarantees or actual savings. The pharmacy reconciliation for each of the last five years shows that the savings credited to MUD have been measurably greater than the minimum contractual guarantees.

The renewal offer is on a one-year contractual basis. It is suggested to evaluate the contractual terms on an annual basis. The pharmacy environment is frequently changing so it is advisable to avoid locking into predetermined terms for an extended period in the event more favorable terms are warranted in the near term.

Stop-Loss

HM Life has provided an initial preliminary renewal offer with a 19.0% increase to the specific stop-loss premium, no change to the aggregate stop-loss premium, and a 15.7% increase to the aggregate claim factor. Negotiations will continue and a firm offer will be provided after review of August claims.

There is one existing specific deductible laser that will remain in place for the 2025 policy year.

Dental

While the dental claims administration fee has not changed since Ameritas became the administrator in 2019, Ameritas is requesting an increase to the fee (from \$3.89 to \$4.28), which will be guaranteed for two years until January 1, 2028.

Premium Equivalencies for Medical/Rx and Dental

HUB will finalize the projected premium equivalencies for the 2026 plan year with the inclusion of claims through August 2025. These evaluations will be shared with MUD prior to the October annual enrollment. Initial budget projections indicate that the medical/Rx plan would be in an overall 5.5% deficit position for the 2026 plan year. Note the following broken down by group: 4.2% deficit for the Active PPO; 9.4% deficit for the Active HMO; 6.6% deficit for Active Total (PPO and HMO combined); and a 2.5% deficit for the Retirees.

The dental plan is also running in a slight deficit position and would not require a minimal (1.4%) increase for the 2026 plan year.

Infertility Treatment

The MUD health plan currently provides coverage for the diagnosis of infertility but there is no plan coverage for treatment or medications. Options for coverage of infertility treatment and medications were explored, both within the MUD health plan and through standalone vendors. A lifetime benefit of \$25,000 is being proposed for addition to the MUD health plan for the Active employee population, which would increase the required budget adjustment by 1.8% for the Active employees. The estimated first-year cost is \$383,000 and is expected to decrease to \$75,000 in subsequent years.

Vision

A voluntary vision plan has been offered since 2019. Ameritas underwrites the vision plan, with employees having the option to enroll in either the EyeMed or Vision Service Plan (VSP) network.

Ameritas is offering the renewal at no change, and premium rates will be guaranteed for two years until January 1, 2028.

The following options and plan considerations have been presented:

- Change frequency of benefits to be based on calendar year (no rate impact): recommended
- Reduce the frame frequency to 12 months and increase the materials allowance to \$200 (+39.2% to rates): recommended

Life and Disability

Mutual of Omaha underwrites the basic life/accidental death and dismemberment (AD&D), voluntary life, and long-term disability (LTD) plans. Premium rates for all coverages are in a rate guarantee until January 1, 2027.

Based on a review of the historical performance of the voluntary life plan, Mutual of Omaha has agreed to reduce all premium rates by 10.0% effective January 1, 2026.

Ms. Bonnie Savine
August 25, 2025
Page -4-

Flexible Spending Accounts (FSAs) Administration

The contract with Inspira will renew with no change to the current \$4.25 per participant per month fee for another year through the end of 2026.

COBRA Administration

Administrative services are provided by WEX. A renewal has not yet been received, but it is anticipated that the current administration fee of \$0.55 PEPM will not change for 2026.

Universal Life with Long-Term Care

Coverage was implemented in 2022 with an initial guarantee issue offering, followed by subsequent guarantee issue offerings with volume limitations during the annual open enrollment periods since implementation.

Current new hires enrolling when initially eligible go through a simplified underwriting process. Employees not electing coverage when initially eligible will be subject to full underwriting requirements if enrollment is requested at a later date.

Consulting Fees and Commissions

The HUB consulting fee of \$9,000 per month will remain unchanged for the duration of the current agreement through the end of 2027. The monthly consulting fee will continue to be billed by HUB directly to MUD.

The voluntary vision plan commissions will not change for 2026 and the premiums for the basic life/AD&D, voluntary life, and LTD benefits are net of commissions.

Again, we appreciate the opportunity to work with you as your benefits consultant. If you have any questions regarding any of these reviews or our suggestions, please do not hesitate to contact me.

Best regards,

A handwritten signature in blue ink that reads "Bill Fox". The signature is stylized with a large, looping "B" and a cursive "Fox".

Bill Fox, CEBS
Senior Vice President
Strategic Account Executive

BF/je

September 3, 2025

METROPOLITAN UTILITIES DISTRICT
Inter-Department Communication

August 25, 2025

Subject: Advanced Leaders Development Program Recognition

To: Personnel Committee

cc: All Board Members; President Doyle; Senior Vice Presidents Ausdemore, Dickas, Lobsiger, Mendenhall, Minor and all Vice Presidents

From: Bonnie Savine, Vice President, Human Resources

Human Resources would like to recognize the following individuals who completed an Advanced Leader development program offering through the District's Leadership Development Program. The Advanced Leader offerings use a nomination-based selection process, and the target audience is current and high-potential leaders at the District. Their commitment to their program was significant, and their completion is genuinely an accomplishment. In addition to personal recognition, Human Resources asks for this quarterly letter of recognition to be placed on file, providing additional recognition of their achievement and dedication to leading at the District.

Shalon Buffum was selected to represent M.U.D. in the Leadership Nebraska program. The goal of Leadership Nebraska is to discover, educate, connect, motivate, and involve both current and up-and-coming leaders in Nebraska, all for the betterment of our great state. The program was designed to emphasize leadership growth, enhancing participants' leadership attributes, and deepening their grasp of Nebraska's challenges and prospects.

Lisa Herren participated in ICAN Defining Leadership for Women. This program builds communication skills and leadership agility. After eight immersive, interactive sessions, graduates leave with greater self-awareness, heightened emotional intelligence, and more effective techniques for living, working, and leading with authenticity.

Ann Boesen participated in Revela - Effective Leadership Development. Revela guides you toward discovering an individual leadership style that you can feel confident in. By exploring the key attributes of a successful leader, you can build a more collaborative, engaging, and highly motivated environment.

Justin Corcoran, Steven Glup, and Steve LaMountain participated in the Emerging Leaders program with UNO. This program is a series of seven comprehensive professional development classes through UNO's College of Business. This program exposes employees to what it means to be a supervisor and grows their supervisor skills, or readies them for that path.

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Bonnie Savine

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Bonnie Savine

Vice President, Human Resources

APPROVED:

DocuSigned by:

Mark Mendenhall

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Mark A. Mendenhall

Senior Vice President, General Counsel

DocuSigned by:

Mark Doyle

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Mark E. Doyle

President

September 3, 2025**METROPOLITAN UTILITIES DISTRICT***Inter-Department Communication*

August 25, 2025

Subject: CONDEMNATION AUTHORITY:
18310 Hwy 370 Omaha, Nebraska 68136 Judiciary and

To: Legislative Committee
cc: all Board Members; President Doyle; Senior Vice Presidents
Ausdemore, Lobsiger, Mendenhall, Myers, and all Vice Presidents

From: Justin Cooper, Attorney

For several months, the Law Department has been attempting to negotiate a permanent water main easement with the owner of property at 18310 Hwy 370. The easement request of a permanent easement of 0.1738 acres and a Temporary Easement of 0.0218 acres is needed as an essential component in the District's ability to enter into a Wholesale Agreement with the City of Gretna, to provide water to their residents. A map showing the location of the easement on the owner's property is attached. The City of Gretna has reached its capacity to provide water by its well system and is building a pump station to be completed in the Fall of 2025. The District will provide a 16" main extension from 180th Street to 183rd Street to connect to the pump station which should take 30 to 60 days to complete.

Negotiations have consisted of letters, telephone conversations and a site visit with engineers on the project. Negotiations continue, but to avoid further delays in the project, the District is seeking condemnation authority to proceed in the event negotiations fail. Eminent Domain requires that the District make a good faith offers to compensate the property owners prior to seeking the Court's intervention. The District has made two compensation offers that have not been responded to.

A resolution authorizing condemnation has been prepared for consideration. This matter will appear on the September 3, 2025, Committee Agenda for discussion and on the Board Agenda for approval.

Signed by:



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Justin Cooper
Attorney

Approved:

DocuSigned by:



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Mark Mendenhall

Senior Vice President/General Counsel

DocuSigned by:



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Mark Doyle
President

EXHIBIT "A"

PERMANENT EASEMENT

TRACT 1

A PARCEL OF LAND BEING A PORTION OF LOT 1 IN EASY VIEW ADDITION, A PLATTED SUBDIVISION IN SARPY COUNTY, NEBRASKA, BEING MORE FULLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER (SE1/4SE1/4) OF SECTION 29, TOWNSHIP 14 NORTH, RANGE 11 EAST OF THE 6TH PRINCIPAL MERIDIAN, SARPY COUNTY, NEBRASKA;

THENCE ON THE WEST LINE OF SAID SOUTHEAST QUARTER OF SOUTHEAST QUARTER (SE1/4SE1/4), NORTH 00 DEGREES 13 MINUTES 33 SECONDS WEST (BASIS OF BEARING), 81.97 FEET;

THENCE NORTH 89 DEGREES 46 MINUTES 27 SECONDS EAST, 33.38 FEET TO A POINT ON THE EAST RIGHT-OF-WAY OF SOUTH 183RD STREET, SAID POINT ALSO BEING THE POINT OF BEGINNING;

THENCE ON SAID EAST RIGHT-OF-WAY LINE, NORTH 18 DEGREES 18 MINUTES 30 SECONDS WEST, 22.25 FEET;

THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS EAST, 314.89 FEET;

THENCE SOUTH 76 DEGREES 45 MINUTES 00 SECONDS EAST, 54.58 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY OF HIGHWAY 370;

THENCE ON SAID NORTH RIGHT-OF-WAY LINE THE FOLLOWING TWO (2) COURSES:

- 1) SOUTH 81 DEGREES 40 MINUTES 51 SECONDS WEST, 80.49 FEET;
- 2) NORTH 89 DEGREES 22 MINUTES 55 SECONDS WEST, 281.41 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS AN AREA OF 0.1738 ACRE, MORE OR LESS.

TEMPORARY EASEMENT

TRACT 2

A PARCEL OF LAND BEING A PORTION OF LOT 1 IN EASY VIEW ADDITION, A PLATTED SUBDIVISION IN SARPY COUNTY, NEBRASKA, BEING MORE FULLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER (SE1/4SE1/4) OF SECTION 29, TOWNSHIP 14 NORTH, RANGE 11 EAST OF THE 6TH PRINCIPAL MERIDIAN, SARPY COUNTY, NEBRASKA;

THENCE ON THE SOUTH LINE OF SAID SECTION 29, NORTH 89 DEGREES 57 MINUTES 08 SECONDS EAST (BASIS OF BEARING), 394.16 FEET;

THENCE NORTH 00 DEGREES 02 MINUTES 52 SECONDS WEST, 90.38 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY OF HIGHWAY 370, SAID POINT ALSO BEING THE POINT OF BEGINNING;

THENCE NORTH 76 DEGREES 45 MINUTES 00 SECONDS WEST, 54.58 FEET;

THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, 8.38 FEET;

THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, 10.00 FEET;

THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS EAST, 61.51 FEET;

THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, 22.51 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS AN AREA OF 0.0218 ACRE, MORE OR LESS.

RESOLUTION

WHEREAS, the Metropolitan Utilities District of Omaha has sought by negotiation and purchase of easement rights in a parcel of real property needed for the installation, maintenance, and operation of a water main to provide to the City of Gretna through a Wholesale Water Agreement.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Metropolitan Utilities District of Omaha, a municipal corporation and political subdivision of the State of Nebraska, that it finds it necessary to acquire private property for the purpose of constructing, maintaining, and to enhance the operation of service to the portion the City of Gretna, in Sarpy County, Nebraska as part of the District's water system; and further finds the acquisition of permanent easement rights in such properties is necessary for the stated public purpose.

BE IT FURTHER RESOLVED that the subject properties described in Exhibit "A".

BE IT FURTHER RESOLVED that a reasonable good faith offer has been made under the direction of the District's Senior Vice President, General Counsel to the owner of the described property in an effort to acquire easements by purchase, such offers have not been accepted by the owner, and therefore the Senior Vice President, General Counsel is hereby authorized to institute condemnation proceedings on behalf of the District for the easement rights as provided by Nebraska Revised Statute §14-2116 (Reissue 2012) as well as to continue negotiations up to the point of a condemnation hearing ruling.

Adopted:

A handwritten signature in blue ink, appearing to read "Timothy W. Davenport", is written over the word "Adopted:". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

September 3, 2025**METROPOLITAN UTILITIES DISTRICT***Inter-Department Communication*

August 28, 2025

Subject: Four Year "Experience Study" for the Retirement Plan - Period Ending December 2024

To: Insurance and Pensions Committee
CC: All Board Members; President Doyle; Senior Vice Presidents Ausdemore, Lobsiger, Mendenhall, Minor, and all Vice Presidents

From: Steve Dickas, Senior Vice President, Chief Financial Officer

The District is required by statute to perform a periodic "Experience Study" for the Retirement Plan of our employees. The purpose of the "Experience Study" is to determine whether the actuarial assumptions currently in use are consistent with actual emerging experience. To that end, CavMac Consulting recently completed an Experience Study of the retirement plan for the four-year period ending December 31, 2024, a copy of which is attached. The findings of this study were presented at the August 27, 2025, meeting of the Insurance and Pension Committee of the Board.

Pursuant to discussion at the August 27, 2025 Committee Meeting, the Insurance and Pension Committee and the Management Pension Committee recommend that the Board approve the following pension-related recommendations as determined by the Experience Study:

Actuarial Methods

All current actuarial methods are to be retained, including:

- "Entry Age Normal" actuarial cost method for allocating pension costs over a participant's working career and for determining pension contribution levels.
- "Asset Smoothing Method" for determining pension asset valuation.
- "Amortization Method" for addressing unfunded actuarial liabilities.

Economic Assumptions

- Investment Return: 6.75% (unchanged)
- Real Rate of Return: 4.25% (unchanged)
- Price Inflation: 2.50% (unchanged)
- Productivity: 1.00% (increase from 0.90%)
- Cost of Living Adjustment: 2.50% (unchanged)
- General Wage Growth: 3.50% (increase from 3.40%)
- Payroll Growth: 3.00% (unchanged)
- Salary Merit Scale: Increase at early durations

Demographic Assumptions

- Modify the current mortality assumption by updating to the most recently published table based solely on public plan data, the Pub-2016 General Employees Median Mortality Table, with future mortality improvements using the MP-2021 Projection Scale, the most recently published mortality improvement scale.
- Modify the early and normal retirement assumptions to partially reflect the observed experience in this study.
- Modify the termination of employment rates to align with observed actual experience.
- Lower the marriage assumption from 90% to 80% of employees.

Financial Recommendations/Implications

- The new set of assumptions will first be used in the January 1, 2026 actuarial valuation and, therefore, will first impact the District contribution for 2026. The potential impact of the revised assumptions recommended by the Experience Study is measured using the January 1, 2025 valuation. The new set of assumptions would have decreased the District's 2025 actuarially required pension contribution to approximately \$11.6 million, a decrease of \$0.4 million as compared with prior assumptions. Since 2012, the District has contributed at levels higher than the actuarially required levels to contribute towards the unfunded pension liability. The District's actual 2024 pension contribution was \$12.9 million. The District's expected 2025 contribution is also \$12.9 million.
- The impact of the recommended changes to our pension assumptions, as estimated in the January 1, 2025 actuarial valuation, was to decrease the Unfunded Actuarial Liability by \$7.0 million and thereby increases the actuarial funded ratio from 93.71% to 94.78% (had the revised assumptions been in place at that time).
- The new set of assumptions for the Other Post-Employment Benefits (OPEB) Plan will first be reflected in the January 1, 2025 valuation, which will be issued after the Board formally adopts the new assumptions. Adoption of the revised assumptions recommended by the Experience Study would decrease the District's 2025 actuarially required OPEB contribution to approximately \$6.8 million, a decrease of \$0.4 million as compared with prior assumptions. For the last several years, the District has contributed at levels higher than the actuarially required levels to contribute towards the unfunded OPEB liability. The District's actual 2024 OPEB contribution was \$12.0 million, including \$7.8 million of direct contributions and \$4.2 million for retiree medical claims and fees, which are currently funded on a pay as you go basis outside of the plan.
- The recommended changes to our OPEB assumptions decrease the Unfunded Actuarial Liability by \$3.1 million and thereby increases the actuarial funded ratio from 78.90% to 80.67% at January 1, 2025.

Megan Skiles will present a summary of the Experience Study at the September 3, 2025, Board Meeting and will be available to address any questions at that time.

Signed by:

Stephen Dickas

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Steve Dickas

Senior Vice President

Chief Financial Officer

Approved:

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Mark Doyle

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Mark Doyle

President

Attachment

Experience Study for The Retirement Plan and OPEB Plan for Employees of MUD

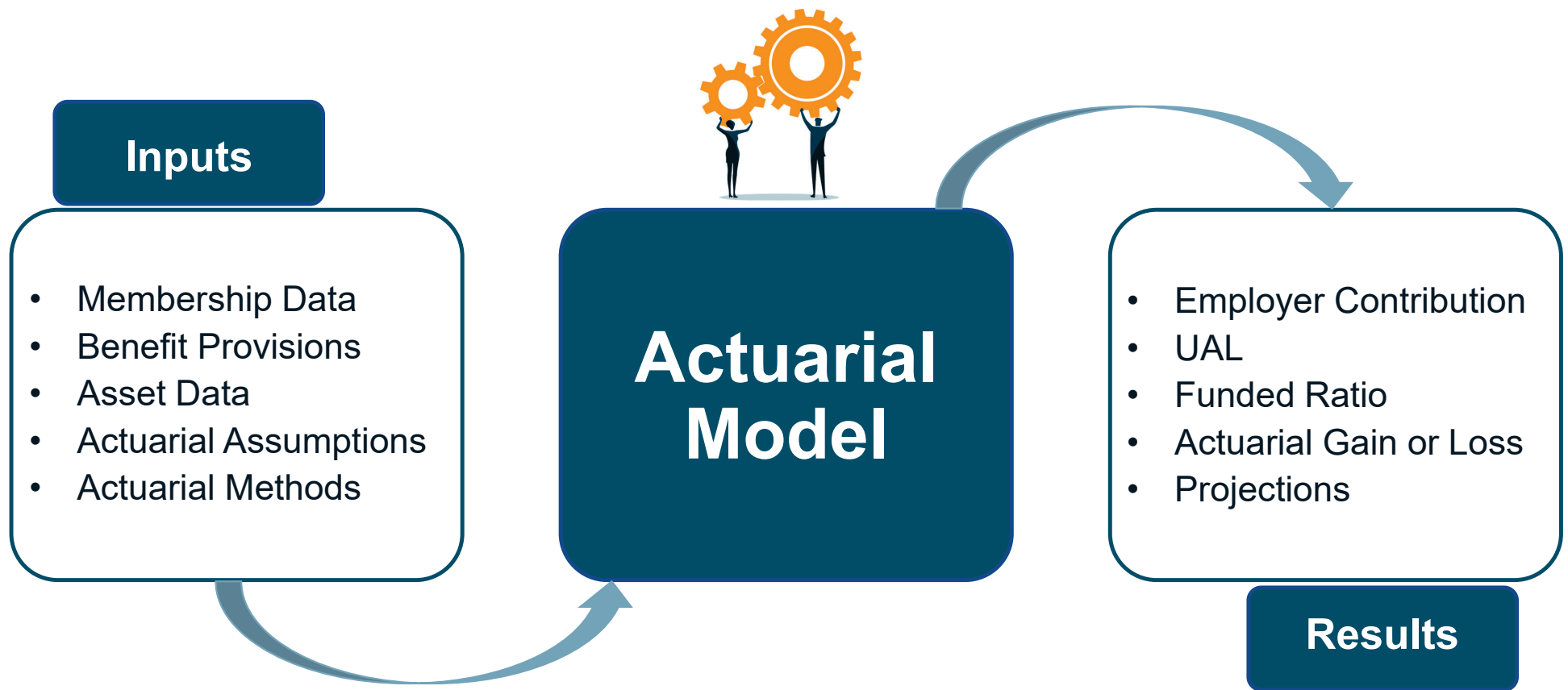
September 3, 2025



Patrice A. Beckham, FSA, EA, FCA, MAAA
Megan E. Skiles, ASA, FCA, MAAA



The Actuarial Model



- Liabilities of the System are the promise to pay benefits in the future.
 - Benefit payouts are dependent on a number of factors that are unknown at the valuation date.
 - Assumptions are used to anticipate the starting date, amount and duration of future benefit payments.
 - Those **projected** benefit payments then generate the system liabilities.
- Actuarial methods create the payment pattern of contributions to fund the benefits over time (funding policy).
- Given the importance of the assumptions/methods in the actuarial valuation process, it is critical to ensure the assumptions being used are the best estimates of future experience and the methods continue to meet the Plan's funding goals.

Purpose of Experience Study

- Evaluate whether to retain or change the current set of assumptions and actuarial methods
- Required every four years by statute (study period calendar years 2021-2024)
- Actuary's role is to make recommendations for each assumption.
 - As **fiduciaries**, the Board is responsible for the selection of actuarial assumptions
 - Board can adopt all, none, or some of actuary's recommendations
- Assumptions do not affect the true cost of the plan which is the actual benefit payments paid from the trust fund.

Our philosophy:

- Don't overreact: if experience is credible, we tend to move part of the way toward actual experience.
- Anticipate trends if expected to continue e.g., mortality improvements
- Simplify when possible: ignore factors that don't improve the accuracy of the liability measurement

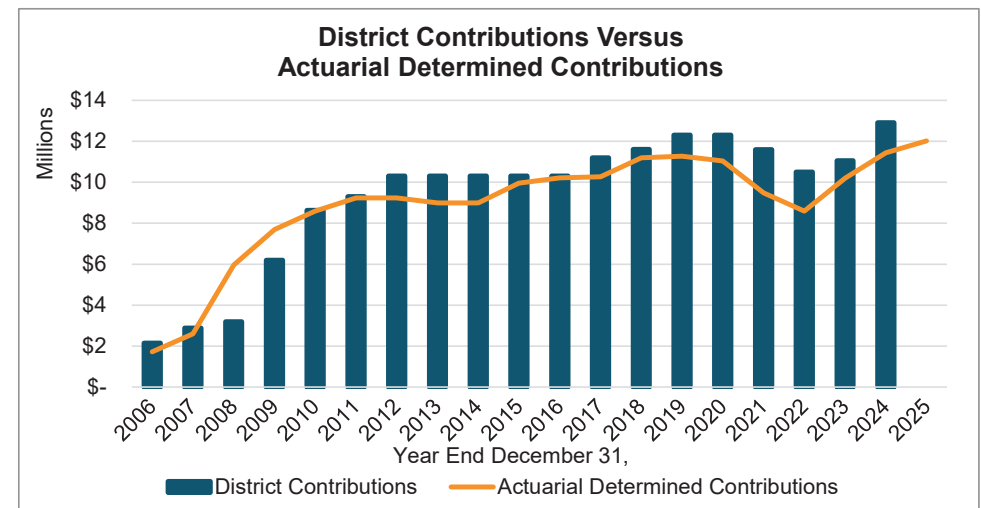
- Compare actual experience during study period with expected results based on current assumptions
 - Key measurement tool: Actual/Expected Ratio or A/E Ratio
- Past experience provides strong guidance for some assumptions (like mortality) and weak guidance for others (like investment return)
- Assumption setting involves both science and art
 - Objective (science): number crunching of actual and expected numbers of members and rates of occurrence
 - Subjective (art): interpreting the information, analyzing credibility and deciding on appropriate changes
- Given size of group, professional judgement heavily drives the recommendations.



No Change to Actuarial Methods

	Current	Recommended
Actuarial cost method	Entry Age	No change
Asset valuation method	75% of expected value plus 25% of the market value	No change
UAL Amortization Policy		
• Amortization bases	Layers with new experience base created each year	No change
• Amortization period	Current base: Closed 30-year period (19 years in 2025 valuation) New bases: Closed 20-year period	No change
• Payments	Level percent of pay	No change

- Since 2012, the District has contributed more than the actuarial required contribution.
- Two goals: stabilize contributions and move the Plan to fully funded status more rapidly.
- Generally, the greater of the actuarial contribution or the budgeted amount has been made.
- Policy worked very well, but modifications are possible, if deemed appropriate.



- Previous discussions have occurred about modifying the funding policy to avoid the perception that “excess” contributions are being made.
 - They are not “excess” payments but paying off the unfunded actuarial liability more rapidly than scheduled (a timing issue).
 - Goal would be for actuarially determined contribution to be equal to the actual contribution (usually the budgeted amount).
- Possible approach
 - Set the amortization payment equal to the budgeted amount less the normal cost for the year, but not less than the amortization payment calculated using the amortization policy (layered amortization).
- Bit more complicated but accomplishes the goal.

Selection of Assumptions

What Are They?

Economic

- Price Inflation
- Investment Return
- General Wage Increase
- Payroll Growth
- Individual Salary Increases
- Cost-of-Living Adjustment

Demographic

- Retirement
- Disability
- Termination
- Mortality
- Refund of EE contributions

Who Selects Them?

Economic

- Board
- Actuary
- Other Advisors

Demographic

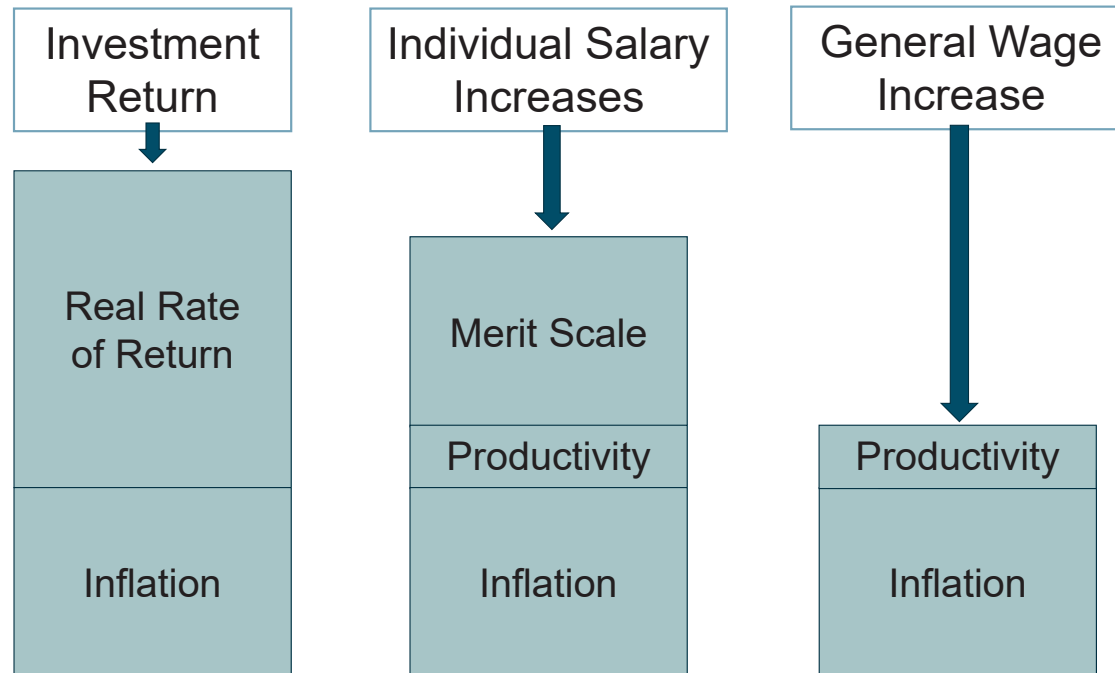
- Board Approves
- Mostly Actuary Since Data Driven

General cost impact of each assumption change alone

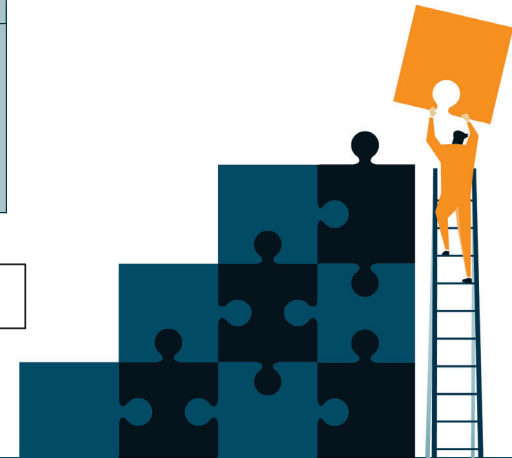
Assumption	Action	Usual Effect On Liabilities/Costs
Investment Return	Lower rate	Increase
Salary Scale	Lower scale	Decrease
Retirement	Retire younger	Increase
Mortality	Decrease (Live longer)	Increase
Termination	More terminations	Decrease

- Issued by the Actuarial Standards Board
 - Credentialed actuaries, like MUD's consulting actuaries, must follow ASOPs
 - Assumptions must be appropriate for their use
 - Must not give undue weight to recent experience
 - "Best estimate" – not overly aggressive or conservative although some conservatism for adverse deviation is acceptable
- ASOP 27, *Selection of Assumptions for Measuring Pension Obligations*, provides guidance to actuaries in the selection of assumptions used in valuing pension benefits.
- MUD is an on-going plan with a long-term horizon so assumptions must reflect this perspective.

Economic Assumptions Building Block Method



Note: inflation assumption and productivity must be consistent in all assumptions.



Selected Metrics of Expected Rates of Inflation

Source	Expected Inflation
PNC Investment Consultant (10 years)	2.25%
2025 Horizon Survey (20 years)	2.40%
Bond Market (30 years)	2.30%
2025 SSA Trustees Report (75 years)	2.40%
Survey of Professional Forecasters (10 years)	2.35%
Peer Retirement Systems	2.46%

Various forward-looking measures of inflation are considered in making a recommendation for this assumption. The current assumption of 2.50% is reasonable, and we recommend retaining it.



About

- Largest impact on liability calculation.
- Projected benefits extend many decades into future.
- Should be based on the asset allocation of the portfolio and expected returns of asset classes.
- **Reminder:** actual costs will be determined by actual experience, not assumptions.

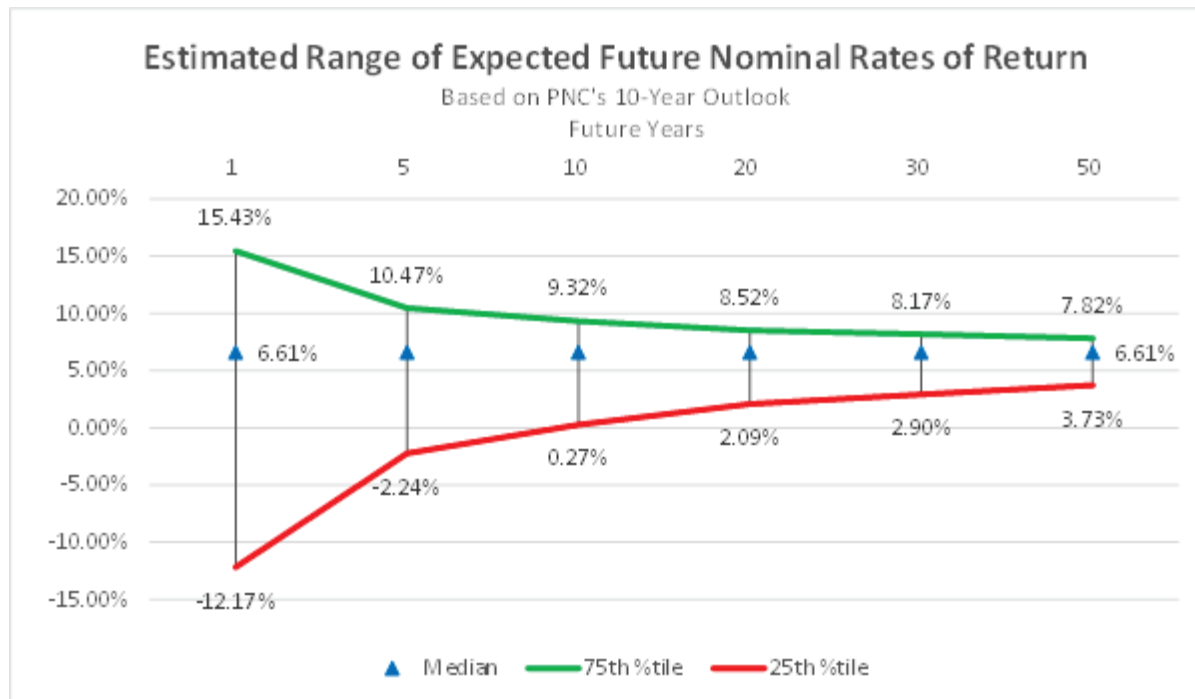
Challenges

- Difficult to predict as past performance is not indicator for future.
- Significant subjectivity – no “correct” assumption.
- Returns are expected to be volatile, resulting in gains/losses.
- Board decision affects frequency and magnitude of gains/losses.

Other Considerations

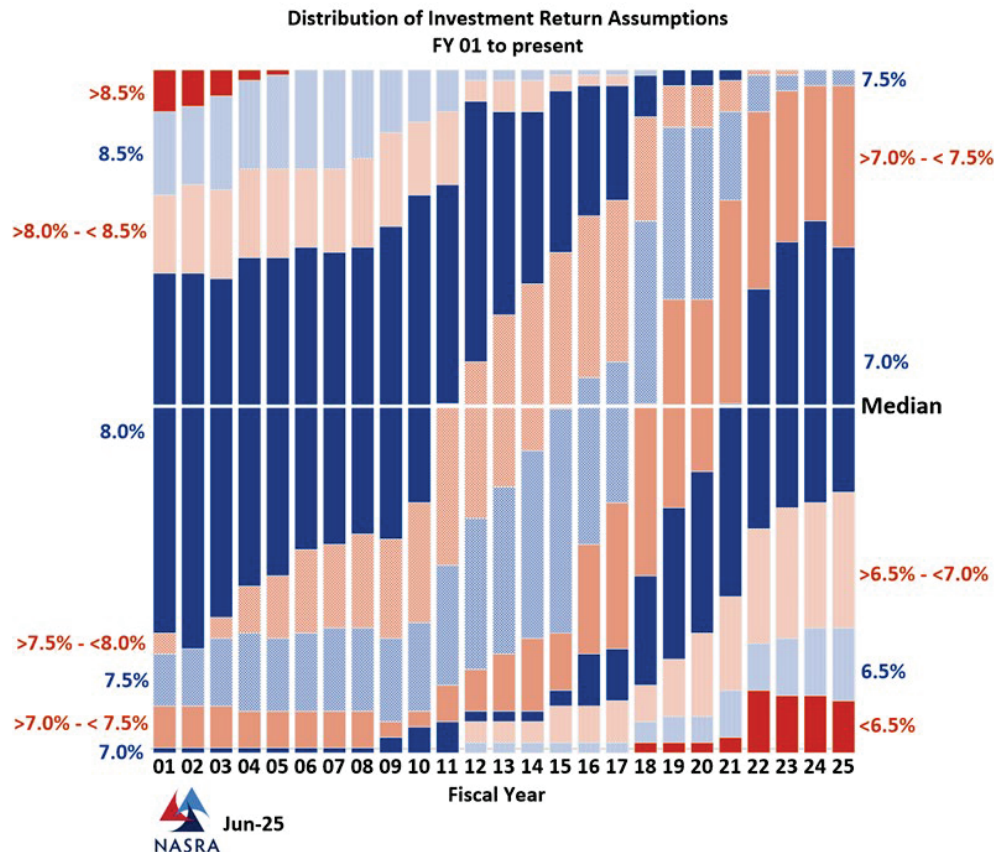
- Latest capital market assumptions should be considered.
- Incremental changes are usually preferred to large changes.
- Some degree of conservatism may be warranted. Gains are more easily absorbed than losses.

Expected Investment Returns



Based on PNC's capital market assumptions, the long term expected return (50th percentile) is 6.61%, using the 2.50% inflation assumption. However, due to volatility of returns, there is a 50% chance the long-term return will be between 3.73% and 7.82%.

Expected Investment Returns



While we do not recommend the selection of an investment return assumption be based on the assumptions used by other public retirement systems, this information does provide another set of relevant data to consider if we recognize that asset allocation varies from plan to plan, as does the risk profile of Boards.

This graph shows the change in the distribution of the investment return assumption from fiscal year 2001 through 2025 for the 130+ large public retirement systems included in the NASRA Public Fund Survey. The median assumption has dropped 100 basis points since 2011 and has stabilized at 7.0%.

General Wage Inflation Assumption

- Defined as “across the board salary increases”: price inflation + productivity or real wage growth
- Data considered:
 - National historical data is based on the national wage index from the Social Security Administration
 - Social security projections (75-year timeframe)
 - State and Local government data from Bureau of Labor and Statistics
 - Components of “total compensation” differ between corporate and governmental employees
 - Slower wage increases for governmental employers – more of compensation increases allocated to benefits
 - Actual system experience for long service employees
- Recommend small increase from 3.40% to 3.50%

Payroll Growth Assumption

- Has no impact on the liability measurement, unfunded actuarial liability, or funded ratio
- Used only to determine the amortization payment on each base composing the Unfunded Actuarial Liability (UAL)
 - UAL is amortized as a level percent of payroll (dollar amount of payment increases with assumed payroll increase)
 - An assumption for future payroll growth is needed to determine the payment schedule over time
- Impacted by size and demographic stability of active membership and general wage increase assumption
- Current assumption is 3.00%
 - Recommend no change.



Recommended Economic Assumptions



	Current Assumptions	Recommended Assumptions
Price Inflation	2.50%	2.50%
Real Rate of Return	4.25%	4.25%
Investment Return	6.75%	6.75%*
Productivity	0.90%	1.00%
General Wage Growth	3.40%	3.50%
Payroll Growth	3.00%	3.00%
Cost of Living Adjustment	2.50%	2.50%

We recommend retaining all of the current economic assumptions other than the productivity component of the general wage growth assumption. We recommend increasing it from 0.90% to 1.00% which results in an increase in the general wage growth assumption from 3.40% to 3.50%.

*Consider lowering the investment return assumption as the Plan reaches full funding.

Individual Salary Increase Assumption

- Typically consists of two pieces:
 - General wage inflation assumption (price inflation and productivity)
 - Component that varies by age or, more commonly, service that reflects individual performance (called merit scale)
- Pandemic, higher inflation and a tight labor market have created pressure on wage increases in recent years
 - Taken into account when analyzing the experience study findings
 - If a year occurs with a very large salary increase, the year may be excluded when evaluating the fit of the current assumption or prior study may be considered.



Current MUD Salary Increase Assumption

Service	Inflation	Productivity	Merit	Total	Beginning of Year	End of Year
0	2.50%	0.90%	8.00%	11.40%	\$50,000	\$55,700
1	2.50%	0.90%	7.00%	10.40%	55,700	61,493
2	2.50%	0.90%	6.00%	9.40%	61,493	67,273
3	2.50%	0.90%	5.00%	8.40%	67,272	72,924
4	2.50%	0.90%	4.00%	7.40%	72,924	78,320
5	2.50%	0.90%	3.00%	6.40%	78,320	83,333
10	2.50%	0.90%	1.00%	4.40%	102,110	106,603
15	2.50%	0.90%	0.70%	4.10%	125,552	130,699
20	2.50%	0.90%	0.70%	4.10%	147,443	153,489
25	2.50%	0.90%	0.50%	3.90%	186,204	193,466

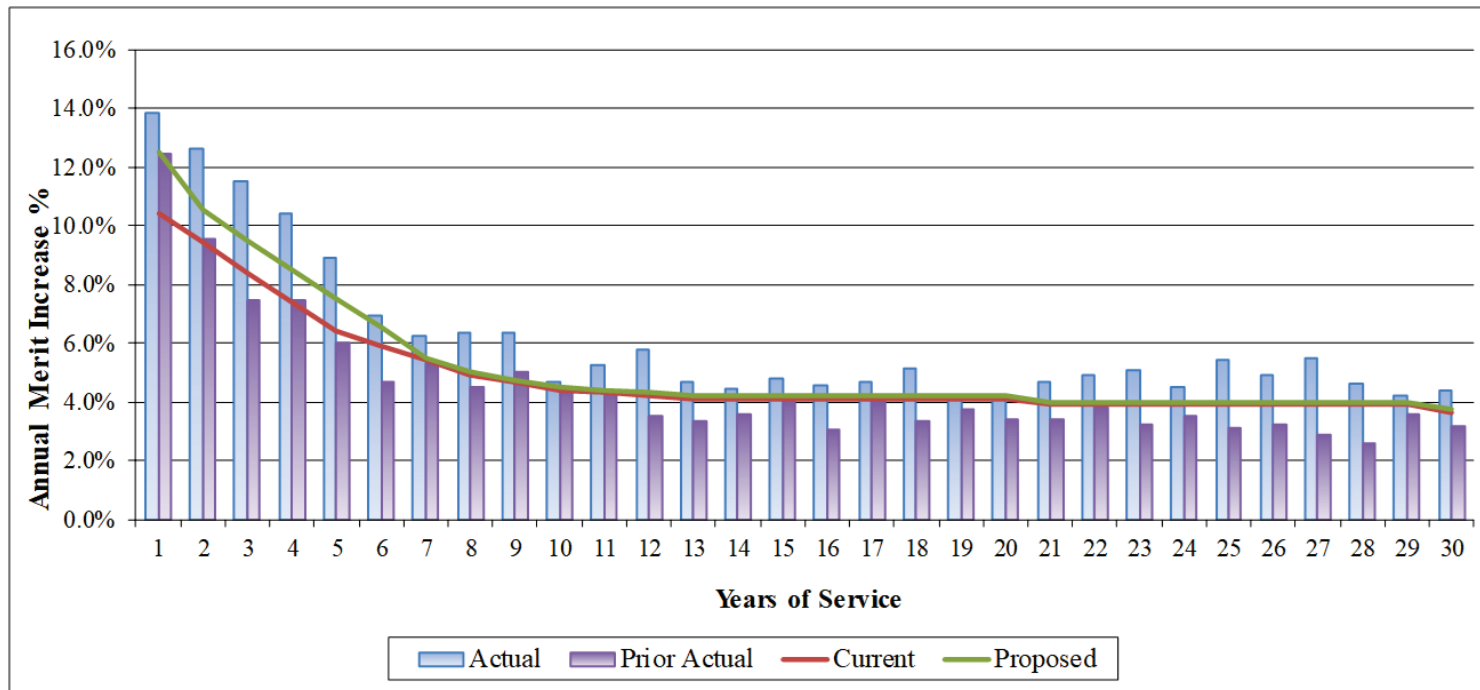
Note: Inflation and productivity assumptions do not depend on service since they are macroeconomic assumptions.

Actual Salary Increase Experience

Year	Actual	Expected	Difference
2021	5.52%	5.33%	0.19%
2022	5.94%	5.35%	0.59%
2023	7.93%	5.51%	2.42%
2024	7.92%	5.63%	2.29%
2021-2024	6.92%	5.47%	1.45%
2017-2024	5.92%	5.46%	0.46%

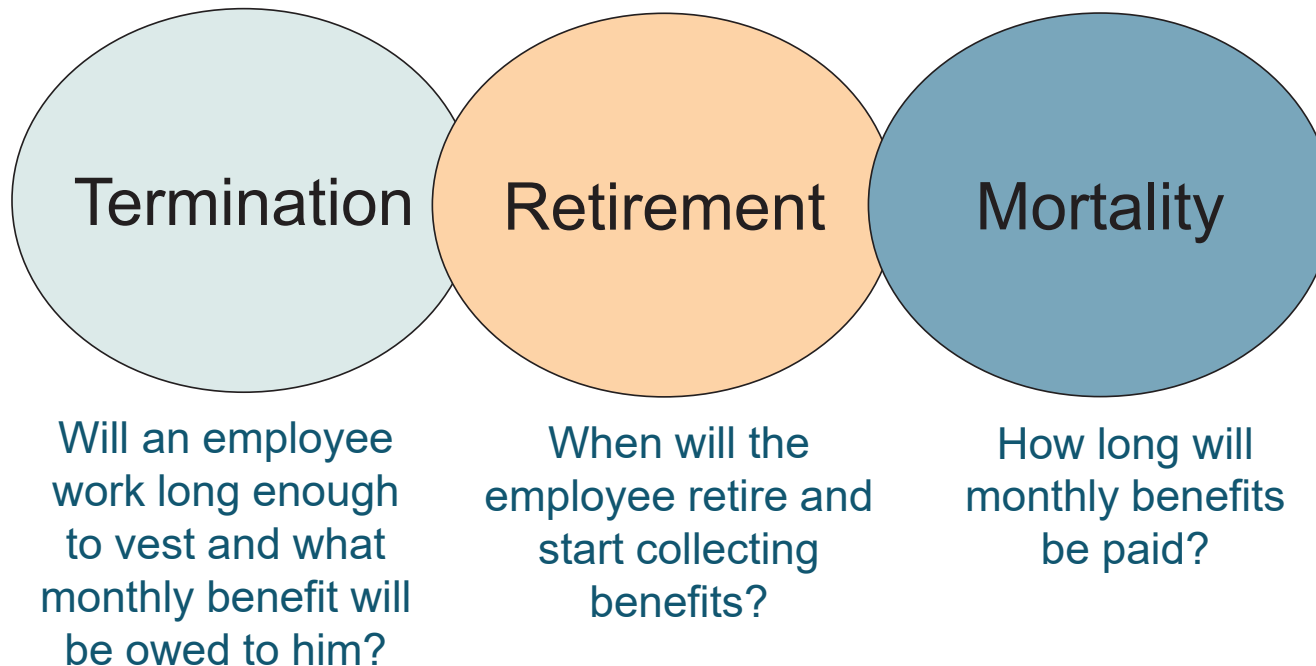
High salary increases in 2023 and 2024 resulted in actual experience being much higher than assumed. If experience over the last eight years is considered, the current assumption is closer to the actual experience. The current tight labor market and continued pressure on wages is expected to keep wage increases high in the short term but likely to moderate over the long term.

Recommended Individual Salary Increase



We are recommending some changes to the salary increase assumption in the early durations. As a result, the overall salary increase assumption moved from 5.47% to 5.92%.

Demographic Actuarial Assumptions

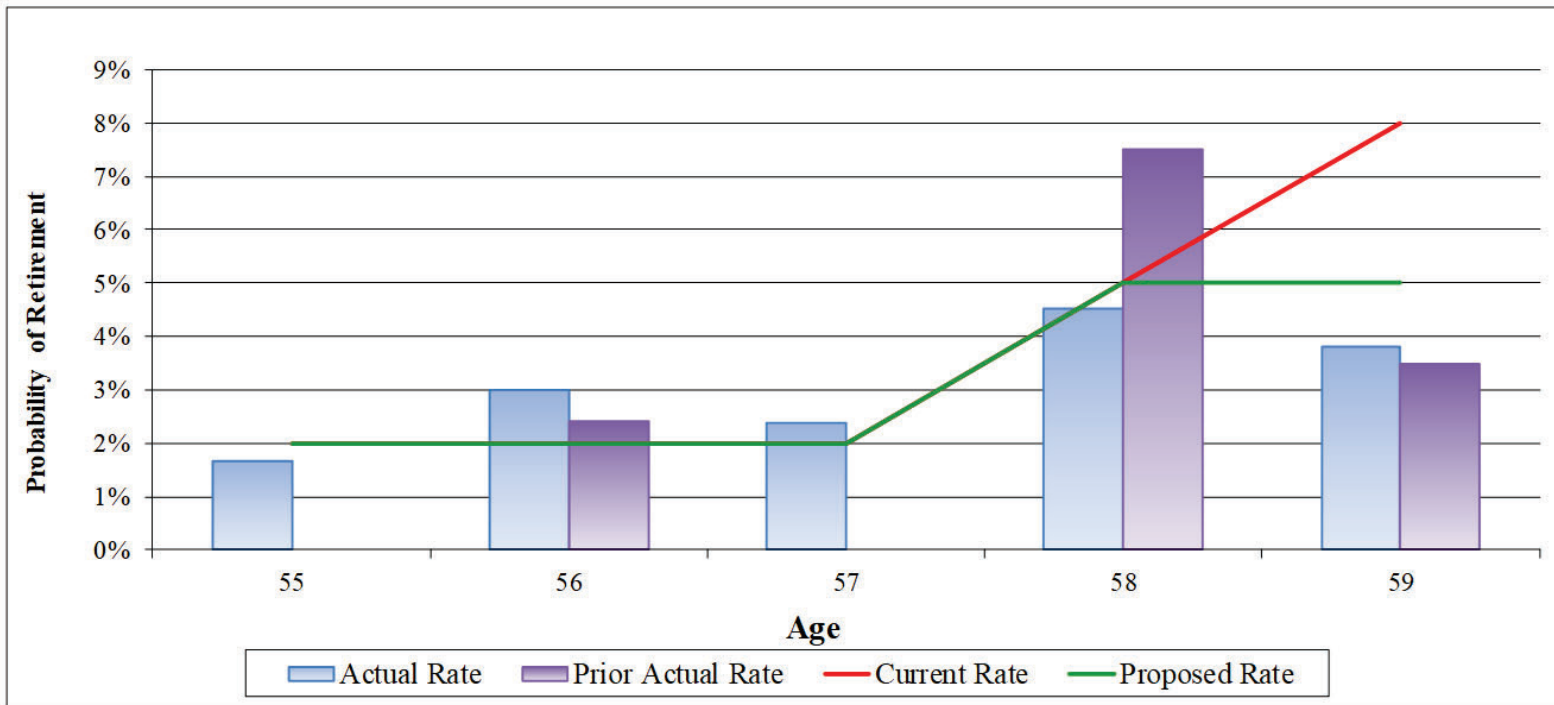


Recommended Changes/Demographic Assumptions



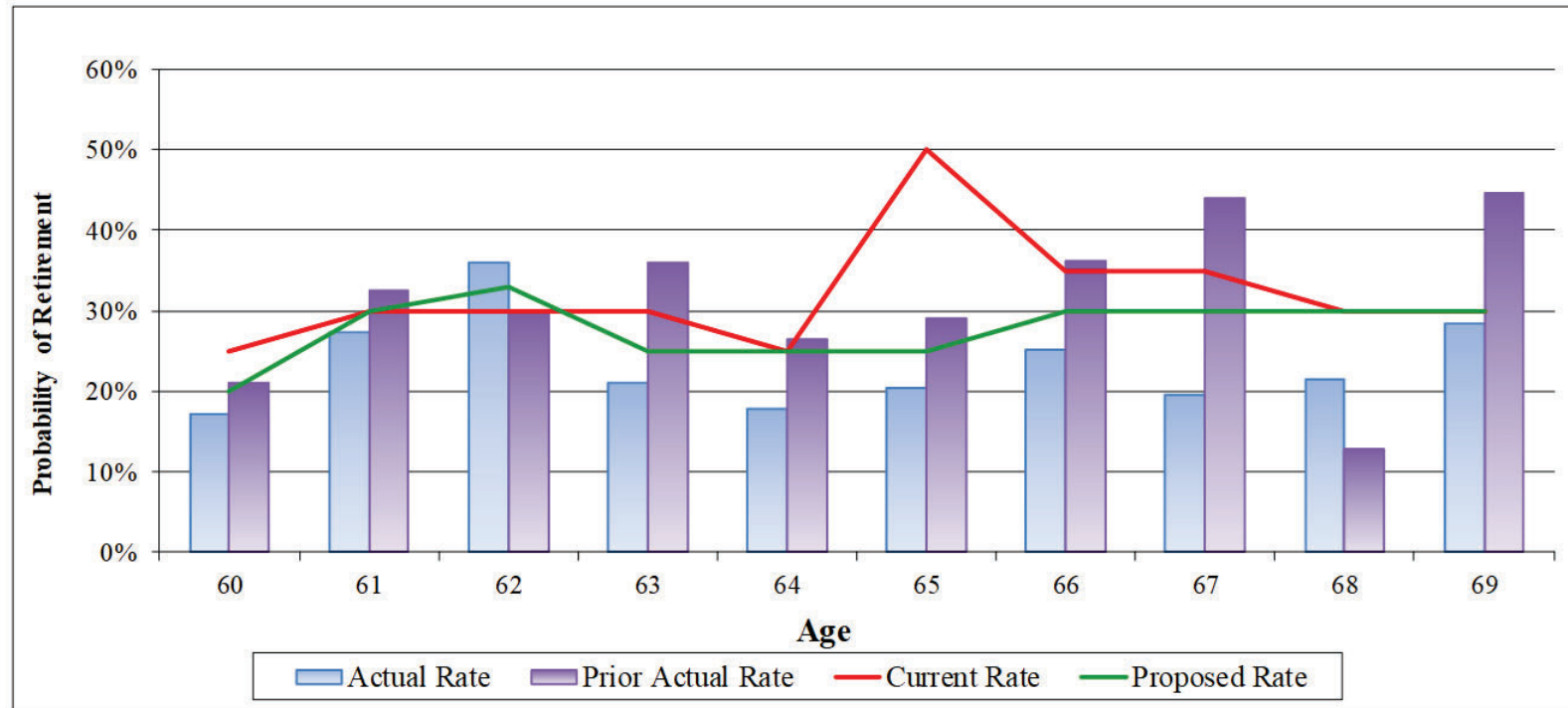
- Mortality: update assumption to the most recently published table for public plans (Pub-2016 Mortality Tables) with MP-2021 for future mortality improvements
 - MUD dataset is too small for credible analysis for mortality
- Retirement
 - Measures retirement directly from active status
 - Two assumptions: one for early retirement (reduced benefits) and the other for normal retirement (unreduced benefits)
 - Adjust rates to reflect consistent patterns from last two experience studies
- Termination
 - Small data set, especially for females
 - Adjust rates to better fit experience particularly for consistent patterns in last two studies
- Marriage
 - Lower from 90% to 80% based on US census data, recent SOA experience studies, and peer practice in public sector plans.

Retirement Assumption - Early



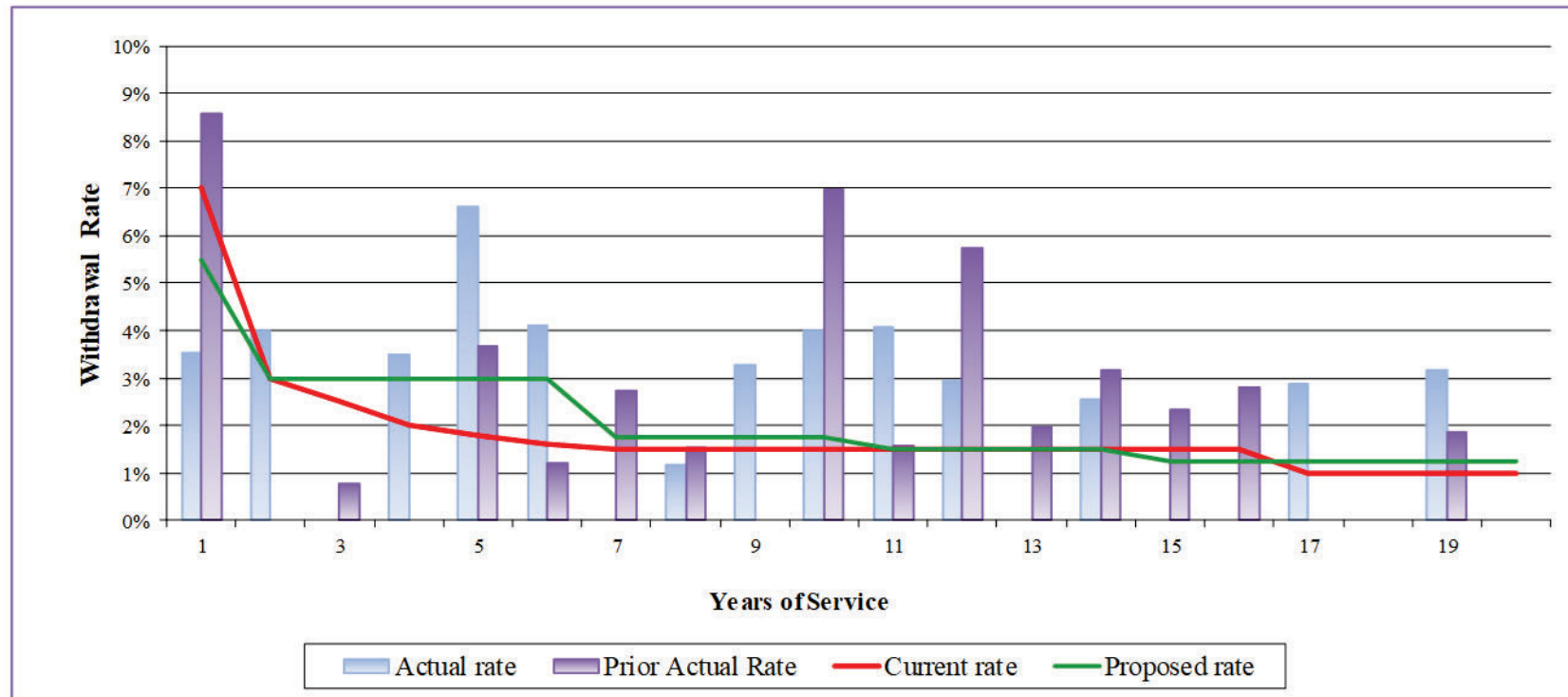
Only the retirement rate at age 59 is changed.

Retirement Assumption – Normal (Unreduced)



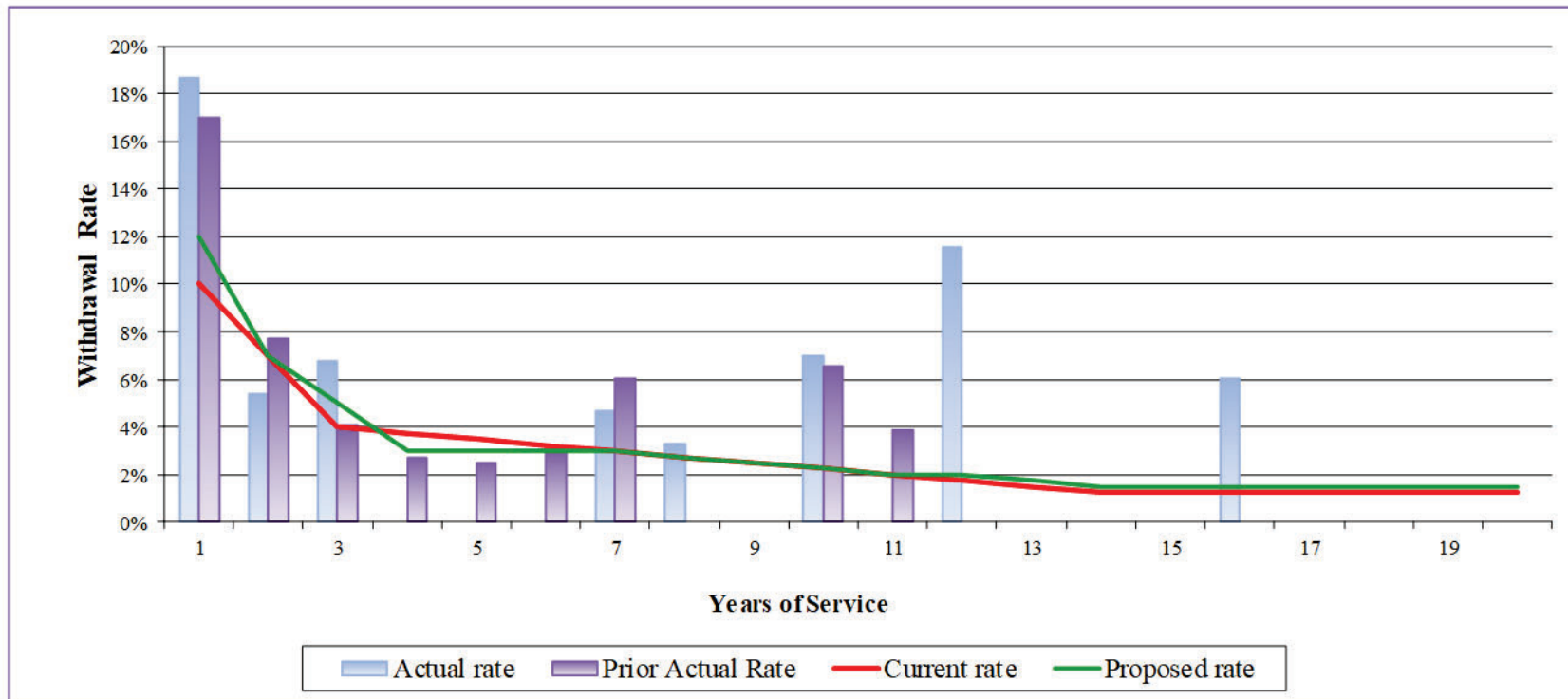
The recommended changes result in a better fit to the actual experience over the last two experience studies.

Termination Assumption - Males



Recommended changes are based on the actual experience in the last two studies.

Termination Assumption - Females



Due to the very small dataset, we expect to observe volatility in the actual termination rates over the range of service.

Recommended Assumption Changes



- Increase the productivity and general wage growth assumptions by 0.10%
- Increase the salary merit scale at early durations
- Update mortality assumption to the most recently published table for public plans (Pub-2016 Mortality Tables) with MP-2021 for future mortality improvements
- Modify early and normal retirement rates to partially reflect observed experience
- Modify male and female termination rates to partially reflect observed experience
- Lower marriage assumption from 90% to 80% of employees

Cost Impact – Retirement Plan

	Current Assumptions	Proposed Assumptions*	Change
Actuarial Liability	\$618,486,937	\$611,500,301	(\$6,986,636)
Actuarial Value of Assets	<u>579,581,100</u>	<u>579,581,100</u>	<u>0</u>
Unfunded Actuarial Liability	\$38,905,837	\$31,919,201	(\$6,986,636)
Funded Ratio	93.71%	94.78%	1.07%
Normal Cost Rate	19.53%	19.53%	0.00%
Administrative Expenses	0.11%	0.11%	0.00%
UAL Payment	<u>3.08%</u>	<u>2.50%</u>	<u>(0.58%)</u>
Actuarial Contribution Rate	22.72%	22.14%	(0.58%)
Employee Contribution Rate	<u>(9.00%)</u>	<u>(9.00%)</u>	<u>0.00%</u>
District Contribution Rate	13.72%	13.14%	(0.58%)
District Actuarial Contribution	\$12,021,557	\$11,578,650	(\$442,907)

Cost impact is shown based on the January 1, 2025 valuation. The new set of assumptions will first be used in the January 1, 2026 valuation, and the actual impact may vary from that shown here.

Of the proposed assumption changes, the adjustment to retirement rates had the largest cost impact.

Cost Impact – OPEB Plan

	Current Assumptions	Proposed Assumptions*	Change
Actuarial Liability	\$140,778,663	\$137,675,217	(\$3,103,446)
Market Value of Assets	<u>111,067,403</u>	<u>111,067,403</u>	<u>0</u>
Unfunded Actuarial Liability	\$29,711,260	\$26,607,814	(\$3,103,446)
Funded Ratio	78.90%	80.67%	1.77%
Normal Cost	\$3,008,980	\$2,874,706	(\$134,274)
UAL Payment	<u>4,214,092</u>	<u>3,936,047</u>	<u>(278,045)</u>
Actuarial Contribution	\$7,223,072	\$6,810,753	(\$412,319)

Cost impact is shown based on the January 1, 2025 valuation.

Of the proposed assumption changes, the adjustment to retirement rates had the largest cost impact.

Actuarial Certification



We, Patrice A. Beckham, FSA, and Megan E. Skiles, ASA, are consulting actuaries with Cavanaugh Macdonald Consulting, LLC (CavMac). We are members of the American Academy of Actuaries, Fellows/Associates of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. We are available to answer any questions or provide additional information as needed.

Sincerely,

A handwritten signature in purple ink that reads 'Patrice Beckham'.

Patrice A. Beckham, FSA, EA, FCA, MAAA
Senior Consulting Actuary

A handwritten signature in purple ink that reads 'Megan E. Skiles'.

Megan E. Skiles, ASA, FCA, MAAA
Actuary





THANK
YOU

THE RETIREMENT PLAN FOR EMPLOYEES OF METROPOLITAN UTILITIES DISTRICT



**FOUR YEAR EXPERIENCE
STUDY FOR PERIOD ENDING
DECEMBER 31, 2024**

SUBMITTED: AUGUST 25, 2025



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August 25, 2025

Insurance and Pensions Committee
Retirement Plan for Employees of
The Metropolitan Utilities District
7350 World Communications Dr.
Omaha, NE 68122-4041

Dear Committee Members:

It is a pleasure to submit this report of our investigation of the experience of the Retirement Plan for Employees of the Metropolitan Utilities District (MUD or District) for the study period of January 1, 2021 through December 31, 2024.

The purpose of this report is to communicate the results of our review of the actuarial methods and the economic and demographic assumptions. If adopted, the new assumptions and methods would be used in the January 1, 2026 actuarial valuation of the Retirement Plan and the January 1, 2025 actuarial valuation of the OPEB Plan. Our recommendations represent changes from the prior assumptions that are designed to better anticipate the emerging experience of the Plan. Actual future experience, however, may still differ from these assumptions.

In preparing this report, we relied without audit on information supplied by the Plan Administrator for the annual actuarial valuation. If any data or other information is inaccurate or incomplete, our analysis and recommendations may be impacted, and a revised report may need to be issued.

We hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

We further certify that, in our opinion, the assumptions developed in this report satisfy ASB Standards of Practice, in particular, No. 27, *Selection of Assumptions for Measuring Pension Obligations*.



In order to prepare the results in this study, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results. Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the assumptions, changes in the actuarial assumptions, increases or decreases such as the end of an amortization period or additional contribution requirements depending on the funded status, and changes in plan provision or applicable law.

We look forward to our discussions and the opportunity to respond to your questions and comments.

We, Patrice A. Beckham and Megan Skiles, are members of the American Academy of Actuaries, Fellow/Associate of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

A handwritten signature in blue ink that reads "Patrice Beckham".

Patrice A. Beckham, FSA, EA, FCA, MAAA
Senior Consulting Actuary

A handwritten signature in blue ink that reads "Megan E. Skiles".

Megan E. Skiles, ASA, FCA, MAAA
Actuary



SECTION I – INTRODUCTION

The purpose of an actuarial valuation is to provide a timely best estimate of the ultimate costs of a retirement system. Actuarial valuations for the Retirement Plan for Employees of the Metropolitan Utilities District (MUD) are prepared annually to measure the financial condition of the Plan and to determine the recommended contribution by the District. The valuation requires the use of certain assumptions with respect to the occurrence of future events, such as rates of death, disability, termination of employment, retirement, and salary changes to estimate the obligations of the System.

The basic purpose of an experience study is to determine whether the actuarial assumptions currently in use have accurately anticipated actual emerging experience. This information, along with the judgement of the Retirement Committee, its advisors, and the actuary, is used to evaluate the appropriateness of continued use of the current actuarial assumptions. When analyzing experience and assumptions, it is important to realize that actual experience is reported short term while assumptions are intended to be long term estimates of experience. Therefore, no single experience study period is given full credibility in setting actuarial assumptions. If significant differences exist between what is expected from our assumptions and actual experience and we believe it is a long-term trend, our strategy is usually to recommend a change in assumptions that would produce results somewhere between the actual and expected experience.

Our Philosophy

Similar to an actuarial valuation, the calculation of actual and expected experience is a fairly mechanical process, and differences between actuaries in this area are generally minor. However, the setting of assumptions differs, as it is more art than science. In this report, we have recommended changes to certain assumptions. To explain our thought process, we offer a brief summary of our philosophy:

- **Don't Overreact:** When we see significant changes in experience, we generally do not adjust our rates to reflect the entire difference. We will typically recommend rates somewhere between the old rates and the new experience. If the experience during the next study period shows the same result, we will probably recognize the trend at that point in time or at least move further in the direction of the observed experience. On the other hand, if experience returns closer to its prior level, we will not have overreacted, possibly causing volatility in the actuarial contribution rates.
- **Credibility:** Generally, there is insufficient data for any one single study period to be assigned full credibility in setting assumptions. Actual experience is analyzed to determine whether it is likely a long-term trend or an anomaly. If we determine the experience is credible, we move part way to the observed experience but not all the way.





SECTION I – INTRODUCTION

- **Anticipate Trends:** If there is an identified trend that is expected to continue, we believe that this should be recognized. An example is the retiree mortality assumption. It is an established trend that people are living longer. Therefore, we believe the best estimate of liabilities in the valuation should reflect some expected increase in life expectancy.
- **Simplify:** In general, we attempt to identify which factors are significant and eliminate or ignore the ones that do not materially improve the accuracy of the liability projections.

At the request of the Retirement Committee, Cavanaugh Macdonald Consulting, LLC performed a study of the experience of the Retirement Plan for Employees of the Metropolitan Utilities District for the period January 1, 2021 through December 31, 2024. This report presents the results and recommendations of our study which, if approved, will be implemented in the January 1, 2026 actuarial valuation of the Retirement Plan and the January 1, 2025 actuarial valuation of the OPEB Plan.

These assumptions have been developed in accordance with generally recognized and accepted actuarial principles and practices that are consistent with the applicable Standards of Practice adopted by the Actuarial Standards Board of the American Academy of Actuaries.

SCOPE OF THIS REPORT

The actuarial valuation utilizes various actuarial methods and two different types of assumptions: economic and demographic. Economic assumptions are related to the general economy and its impact on the System. Demographic assumptions are based on the emergence of the specific experience of the Systems’ members.

All of the major actuarial assumptions used in the actuarial valuations have been reviewed in this Study. The remainder of this report is divided as follows:

SECTION II	EXECUTIVE SUMMARY
SECTION III	ACTUARIAL METHODS
SECTION IV	ECONOMIC ASSUMPTIONS
SECTION V	DEMOGRAPHIC ASSUMPTIONS
SECTION VI	MORTALITY
SECTION VII	SERVICE RETIREMENT
SECTION VIII	TERMINATION OF EMPLOYMENT (WITHDRAWAL)
SECTION IX	OTHER ASSUMPTIONS





SECTION II – EXECUTIVE SUMMARY

A brief summary of the results of our findings and recommendations is shown below:

Actuarial Methods

We are recommending that all of the current actuarial methods be retained. This includes the actuarial cost method, the asset smoothing method, and the Unfunded Actuarial Liability amortization method.

Funding Policy

The District may want to consider adopting a formal Funding Policy that defines the Actuarially Determined Contribution as the greater of the budgeted amount for the year or the normal cost plus the amortization payment, as determined by the amortization policy. Such a change would result in the actual contribution being equal to the actuarial required contribution in most years. For Governmental Accounting Standards Board accounting disclosures, there would be no “excess” contributions.

This is entirely up to the District as CavMac finds both the current and alternate policy, as described above, acceptable under Actuarial Standards.

Economic Assumptions

The following table summarizes the current and recommended economic assumptions. Additionally, we are recommending minor adjustments to the salary merit scale at early durations.

	Current Assumptions	Recommended Assumptions
Price Inflation	2.50%	2.50%
Real Rate of Return	4.25%	4.25%
Investment Return	6.75%	6.75%*
Productivity	0.90%	1.00%
General Wage Growth	3.40%	3.50%
Payroll Growth	3.00%	3.00%
Cost of Living Adjustment	2.50%	2.50%

*Consider lowering the investment return assumption as the Plan reaches full funding.





SECTION II – EXECUTIVE SUMMARY

Demographic Assumptions

After thoughtful consideration, we are recommending the following changes to the current demographic assumptions:

- Modify the current mortality assumption by moving to the most recently published standard table for public pension plan valuations, the Pub-2016 General Employees Median Mortality Table, with future mortality improvements using the MP-2021 Projection Scale, the most recently published mortality improvement scale.
- Modify the early and normal retirement assumptions to partially reflect the observed experience in this study.
- Modify the termination of employment rates for both males and females to better reflect the observed patterns in the data.
- Lower the marriage assumption from 90% to 80% of employees.

Financial Impact

The estimated financial impact of the proposed changes, based on results of the January 1, 2025 actuarial valuations, is summarized on the following page. The actual impact, which will be reflected in the January 1, 2026 actuarial valuation of the Retirement Plan, may vary from the numbers shown on the exhibit on the following page. The assumption changes will be reflected in the January 1, 2025 actuarial valuation for the OPEB Plan, as shown in the following pages.





SECTION II – EXECUTIVE SUMMARY

Estimate of Financial Impact of Assumption Changes Retirement Plan Based on January 1, 2025 Retirement Plan Valuation

	Current Assumptions	Proposed Assumptions*	Change
1. Present Value of Future Benefits	\$793,700,389	\$792,569,806	(\$1,130,583)
2. Present Value Future Normal Costs	<u>175,213,452</u>	<u>181,069,505</u>	<u>5,856,053</u>
3. Actuarial Liability (1) – (2)	\$618,486,937	\$611,500,301	(\$6,986,636)
4. Actuarial Value of Assets	<u>579,581,100</u>	<u>579,581,100</u>	<u>0</u>
5. Unfunded Actuarial Liability (UAL) (3) – (4)	\$38,905,837	\$31,919,201	(\$6,986,636)
6. Funded Ratio (4) / (3)	93.71%	94.78%	1.07%
7. Normal Cost Rate	19.53%	19.53%	0.00%
8. Administrative Expenses	0.11%	0.11%	0.00%
9. UAL Payment	<u>3.08%</u>	<u>2.50%</u>	<u>(0.58%)</u>
10. Actuarial Contribution Rate (7) + (8) + (9)	22.72%	22.14%	(0.58%)
11. Employee Contribution Rate	<u>(9.00%)</u>	<u>(9.00%)</u>	<u>0.00%</u>
12. District Contribution Rate (10) + (11)	13.72%	13.14%	(0.58%)
13. District Contribution	\$12,021,557	\$11,578,650	(\$442,907)

* Reflects all proposed assumption changes.





SECTION II – EXECUTIVE SUMMARY

Estimate of Financial Impact of Assumption Changes OPEB Plan Based on January 1, 2025 Valuation

	Current Assumptions	Proposed Assumptions*	Change
1. Present Value of Future Benefits	\$166,162,533	\$162,284,643	(\$3,877,890)
2. Present Value Future Normal Costs	<u>25,383,870</u>	<u>24,609,426</u>	<u>(774,444)</u>
3. Actuarial Liability (1) – (2)	\$140,778,663	\$137,675,217	(\$3,103,446)
4. Market Value of Assets	<u>111,067,403</u>	<u>111,067,403</u>	<u>0</u>
5. Unfunded Actuarial Liability (UAL) (3) – (4)	\$29,711,260	\$26,607,814	(\$3,103,446)
6. Funded Ratio (4) / (3)	78.90%	80.67%	1.77%
7. Normal Cost	\$3,008,980	\$2,874,706	(\$134,274)
8. UAL Payment	<u>4,214,092</u>	<u>3,936,047</u>	<u>(278,045)</u>
9. Actuarial Determined Contribution (7) + (8)	\$7,223,072	\$6,810,753	(\$412,319)

* Reflects all proposed assumption changes.





SECTION III – ACTUARIAL METHODS

ACTUARIAL COST METHOD

The systematic financing of a pension plan requires that contributions be made in an orderly fashion while a member is actively employed, so that the accumulation of these contributions, together with investment earnings should be sufficient to provide promised benefits and cover administration expenses. The actuarial valuation is the process used to determine when money should be contributed; i.e., as part of the budgeting process.

The actuarial valuation will not impact the amount of benefits paid or the timing of those payments and, therefore, it does not impact the actual cost of the System. In the long run, actuaries cannot change the costs of a pension plan, regardless of the funding method used or the assumptions selected. However, the choice of actuarial methods and assumptions will influence the allocation of costs to different time periods and, therefore, the contribution pattern.

The valuation or determination of the present value of all future benefits to be paid by the System reflects the assumptions that best seem to describe anticipated future experience. The choice of a funding method does not impact the determination of the present value of future benefits. The funding method determines only the incidence or allocation of cost. In other words, the purpose of the funding method is to allocate the present value of future benefits determination into annual costs. In order to do this allocation, it is necessary for the funding method to “break down” the present value of future benefits into two components: (1) that which is attributable to the past (2) and that which is attributable to the future. The excess of that portion attributable to the past over the plan assets is then amortized over a period of years. Actuarial terminology calls the part attributable to the past the “past service liability” or the “actuarial liability”. The portion of the present value of future benefits allocated to the future is commonly known as the “present value of future normal costs”, with the specific piece of it allocated to the current year being called the “normal cost”. The difference between the plan assets and actuarial accrued liability is called the “unfunded actuarial liability”.

Two key points should be noted. First, there is no single “correct” funding method. Second, the allocation of the present value of future benefits, and hence cost, to the past for amortization and to the future for annual normal cost payments is not necessarily in a one-to-one relationship with service credits earned in the past and future service credits to be earned.

There are various actuarial cost methods, each of which has different characteristics, advantages and disadvantages. Currently, the Entry-Age Normal method is used in the annual actuarial valuation. The rationale of the Entry Age Normal (EAN) funding method is that the cost of each member’s benefit is determined to be a level percentage of salary from date of hire to the end of the member’s employment. This level percentage multiplied by the member’s annual salary is referred to as the normal cost and is that portion of the total cost of the employee’s benefit which is allocated to the current year. The portion of the present value of future benefits allocated to the future is determined by multiplying this percentage times the present value of the member’s assumed earnings for all future years including the current year. The entry age normal actuarial





SECTION III – ACTUARIAL METHODS

accrued liability is then developed by subtracting from the present value of future benefits that portion of costs allocated to the future. To determine the unfunded actuarial liability, the value of plan assets is subtracted from the entry age normal actuarial accrued liability. The current year's cost to amortize the unfunded actuarial liability is developed by applying an amortization factor.

It is to be expected that future events will not occur exactly as predicted by the actuarial assumptions in each year. Actuarial gains/losses from actual versus expected experience under this actuarial cost method can be directly calculated and are reflected as a decrease/increase in the unfunded actuarial liability. Consequently, the actuarial gain/loss results in a decrease/increase in the amortization payment and therefore, the contribution rate.

The Entry Age Normal cost method is the most common cost method used by public plans because it develops a normal cost rate that tends to be stable and less volatile. It also is the required cost method under calculations required by the Governmental Accounting Standards Board Statements 67 and 68, which are used for financial reporting. **We recommend the Entry Age Normal actuarial cost method be retained.**

ACTUARIAL VALUE OF ASSETS

In preparing an actuarial valuation, the actuary must assign a value to the assets of the trust fund. An adjusted market value, called the “actuarial value of assets”, is often used by applying an asset smoothing method (also called an asset valuation method). This reduces the effect of short-term volatility while still tracking the overall movement of the market value of assets. This practice is commonly used by governmental pension plans because most plan sponsors would rather have annual costs remain relatively level, as a percentage of payroll or actual dollars, than have a cost pattern that is extremely volatile.

The actuary does not have complete freedom in assigning this value. The basic principles regarding the calculation of a smoothed asset value, as prescribed by the Actuarial Standards Board, are found in Actuarial Standard of Practice No. 44 (ASOP 44), *Selection and Use of Asset Valuation Methods for Pension Valuations*.

ASOP 44 provides that the asset valuation method should bear a reasonable relationship to the market value. Furthermore, the asset valuation method should be likely to satisfy both of the following:

- Produce values within a reasonable range around market value, AND
- Recognize differences from market value in a reasonable amount of time.

In lieu of both of the above, the standard will be met if either of the following requirements is satisfied:

- There is a sufficiently narrow range around the market value, OR





SECTION III – ACTUARIAL METHODS

- The method recognizes differences from market value in a sufficiently short period.

These rules or principles prevent the asset valuation methodology from being used to manipulate annual funding patterns. No matter what asset valuation method is used, it is important to note that, like a cost method or actuarial assumptions, **the asset valuation method does not affect the true cost of the plan; it only impacts the incidence of contributions.**

MUD's Current Method

The MUD Retirement Plan values assets, for actuarial valuation purposes, based on the principle that the difference between actual and expected investment returns should be subject to partial recognition to smooth out fluctuations in the total return achieved by the fund from year to year. This philosophy is consistent with the long-term nature of a retirement system. Under this method, the actuarial value of the assets is the expected value of assets plus 25% of the difference between the actual market value and the expected value, where the expected value is last year's actuarial value of assets and subsequent cash flows into and out of the fund accumulated at the assumed rate of return. This is mathematically equivalent to using a weighted average of 75% of the expected asset value and 25% of actual market value.

The current asset valuation method also includes what is known as a “corridor”, which provides that once the initial calculation of the actuarial value of assets is made it is compared to a corridor around the market value (80% of market value to 120% of market value). If the initial actuarial value lies outside this corridor, the final actuarial value of assets is set equal to the corresponding corridor value. For example, if the initial calculation of the actuarial value of assets is 132% of market value, the actuarial value is set equal to 120% of market value. We believe the corridor is necessary to ensure actuarial standards are met.

An asset valuation method is used to “smooth out” the volatility that occurs in the market value of assets. We believe the current method is reasonable and provides adequate smoothing while the corridor ensures the asset valuation method meets actuarial standards. **We recommend the current asset valuation method be retained.**

AMORTIZATION OF UAL

As described earlier, actuarial liabilities are the portion of the actuarial present value of future benefits that are not included in future normal costs. Thus, it represents the liability that, in theory, should have been funded through normal costs for past years of service. Unfunded actuarial liabilities (UAL) exist when the actuarial liability exceeds the actuarial value of plan assets. These deficiencies can result from:

- (i) plan improvements that have not been completely paid for,
- (ii) experience that is less favorable than expected,
- (iii) assumption changes that increase liabilities, or
- (iv) contributions that are less than the actuarial contribution rate.





SECTION III – ACTUARIAL METHODS

There are a variety of different methods that can be used to amortize the UAL. Each method results in a different payment stream and, therefore, has cost implications. For each methodology, there are three characteristics:

- The period over which the UAL is amortized,
- The rate at which the amortization payment increases, and
- The number of components of UAL (separate amortization bases).

Amortization Period: The amortization period can be either “closed” or “open”. If it is a closed amortization period, the number of years remaining in the amortization period decreases by one each year. Alternatively, if the amortization period is an open or rolling period, the amortization period does not decline but remains the same number each year. This approach essentially “refinances” the System’s debt (UAL) every year, pushing off the payment of the UAL to future years.

While the funded ratio may increase over time under the open amortization period, the System is not expected to reach a funded ratio of 100%. The open amortization policy is especially of concern when the amortization period is very long (i.e. 25 or 30 years) due to the negative amortization that occurs with the level percent of payroll financing method (UAL payment is less than the interest on the UAL so the dollar amount of the UAL increases). Open amortization periods were once fairly common but are rarely used now in pension funding given most industry experts do not embrace the methodology.

Amortization Payment: The level dollar amortization method is similar to the method in which a homeowner pays off a mortgage. The liability, once calculated, is financed by a constant fixed dollar amount, based on the amortization period until the liability is extinguished. This results in the liability steadily decreasing while the payments, though remaining level in dollar terms, in all probability decrease as a percentage of payroll. (Even if a plan sponsor’s population is not growing, inflationary salary increases will usually be sufficient to increase the aggregate covered payroll).

The rationale behind the level percentage of payroll amortization method is that the Plan is funded with payroll-based contribution rates. Since normal costs are calculated to be a constant percentage of pay, it follows that the unfunded actuarial liability should be paid off in the same manner. When this method of amortizing the unfunded actuarial liability is adopted, the initial amortization payments are lower than they would be under a level dollar amortization payment method, but the dollar amount of the payment increases at a fixed rate each year so that ultimately the annual payment far exceeds the level dollar payment. The expectation is that total payroll will increase at the same rate so the amortization payments will remain constant, as a percentage of payroll. In the initial years, the level percentage of payroll amortization payment is often less than the interest accruing on the unfunded actuarial liability meaning that even if there are no experience losses, the dollar amount of the unfunded actuarial liability will grow (called negative





SECTION III – ACTUARIAL METHODS

amortization). The growth in the dollar amount of UAL is dependent on the investment return assumption, payroll growth assumption and the amortization period, but it is usually more of an issue if the plan is paying off the unfunded actuarial liability over a longer period, such as 25 or 30 years.

Amortization Bases: The UAL can either be amortized as one single amount or as components or “layers”, each with a separate amortization base, payment and period. If the UAL is amortized as one amount, the UAL is recalculated each year in the valuation and experience gains/losses or other changes in the UAL are folded into the single UAL amortization base. The amortization payment is then the total UAL divided by an amortization factor for the applicable amortization period.

If separate amortization bases are maintained, the UAL is composed of multiple amortization bases, each with its own payment schedule and remaining amortization period. In each valuation, the unexpected change in the UAL is established as a new amortization base over the appropriate amortization period beginning on that valuation date. The total system UAL is simply the sum of all of the outstanding amortization bases on the valuation date and the total UAL payment is the sum of all of the amortization payments on the existing amortization bases. This approach provides transparency in that the legacy UAL is paid off over a fixed period of time and the remaining components of the UAL are clearly identified in each subsequent valuation. Adjustments to the UAL in future years due to assumption changes, benefit changes and actuarial experience are also separately identified. One downside of this approach is that it can create some discontinuities in contribution rates when UAL layers/components are fully paid off. If this occurs, it likely would be far in the future, with adequate time to address any adjustments needed.

Current MUD Unfunded Actuarial Liability Amortization Method: The current amortization method used by MUD includes an initial amortization base (established in 2014) with payments over a closed 30-year period, determined as a level percentage of payroll. A new amortization base is created each year that includes the unanticipated change in the UAL for the year. The new bases are amortized over a closed 20-year period, also determined as a level percentage of payroll. A new amortization base will also be created when actuarial assumptions are changed, or the benefit structure is modified. An appropriate period can be determined, after discussion with the actuary, for these events. If the system has a total UAL of \$0 or less (i.e., there is an actuarial surplus), all of the amortization bases are eliminated, and the net surplus is amortized over 30 years. **We recommend the current amortization policy be retained.**

However, when the plan is at or above 100% funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payments each year. The purpose of MUD’s amortization method is to give a smooth progression of the costs from year to year and, at the same time, provide for an orderly funding of the unfunded actuarial liabilities.

District Funding Policy: Since 2012, the District has generally contributed the budgeted contribution amount for the year if it is greater than the actuarial contribution amount determined





SECTION III – ACTUARIAL METHODS

in the valuation. This approach strengthens the Plan's funding because the additional contributions above the actuarial contribution decrease the unfunded actuarial liability. It also results in a more stable contribution pattern. The current funding policy has been successful, and we suggest the District continue the practice of paying the higher of the actuarial contribution and the budgeted contribution.

However, if the District would prefer the actuarial required contribution in the valuation report show an amount equal to the budgeted amount, a modification could be made to the funding policy to use an output smoothing method that defines the actuarial determined contribution as the greater of the budgeted amount or the normal cost plus the amortization payment under the amortization policy. This would eliminate the perception of any "excess" contribution for both funding and financial reporting purposes.

Recommendation

The Government Finance Officers Association (GFOA) and the Conference of Consulting Actuaries (CCA) have published guidance on public pension plan funding, including the amortization period. Although these recommendations are not binding, they do point to an increased focus on developing amortization policies that are designed to pay down the UAAL in a meaningful way over a reasonable period. The Actuarial Standards Board has also recently updated its required disclosures regarding amortization. MUD's current methods and funding policy align with the objectives set forth by all three of these organizations. In addition, the proposed alternate funding policy also complies with the objectives of all three organizations. **Either funding policy is acceptable to CavMac.**





SECTION IV – ECONOMIC ASSUMPTIONS

ECONOMIC ASSUMPTIONS

The economic assumptions used in the MUD valuation include price inflation, cost-of-living adjustment, long-term investment return, general wage inflation (the across-the-board portion of salary increases), payroll growth, and salary increases for individual members. Unlike demographic assumptions, economic assumptions do not lend themselves to analysis based heavily upon internal historical patterns, because both salary increases and investment returns are influenced more by external forces which are difficult to accurately predict over the long term. The investment return and salary increase assumptions are generally selected on the basis of expectations in an inflation-free environment and then increased by the long-term expectation for price inflation, called the “building block” approach.

Sources of data considered in the analysis and selection of the economic assumptions included:

- The 2025 Social Security Trustees Report;
- Data from the Bureau of Labor Statistics;
- Bond pricing from the Department of the Treasury;
- Future expectations of MUD’s investment consultant, PNC;
- Historical observations of price and wage inflation statistics and investment returns;
- Survey information from large public retirement systems (National Association of State Retirement Administrators (NASRA)).

ACTUARIAL STANDARD OF PRACTICE NUMBER 27

Guidance regarding the selection of economic assumptions for measuring pension obligations is provided by Actuarial Standard of Practice (ASOP) No. 27, *Selection of Assumptions for Measuring Pension Obligations*. Because no one knows what the future holds, the best an actuary can do is to use professional judgment to estimate possible future economic outcomes. These estimates are based on a mixture of past experience, future expectations, and professional judgment.

ASOP 27 requires the actuary to select a “reasonable” assumption. For this purpose, an assumption is reasonable if it has the following characteristics:

- a. it is appropriate for the purpose of the measurement;
- b. it reflects the actuary’s professional judgment;
- c. it takes into account historical and current economic data that is relevant as of the measurement date;
- d. it reflects the actuary’s estimate of future experience, the actuary’s observation of the estimates inherent in market data, or a combination thereof; and
- e. it has no significant bias (i.e., it is neither significantly optimistic nor pessimistic) except when provisions for adverse deviation or plan provisions that are difficult to measure are included.





SECTION IV – ECONOMIC ASSUMPTIONS

With respect to relevant data, the standard recommends the actuary review appropriate recent and long-term historical economic data but advises the actuary not to give undue weight to recent experience. Furthermore, it advises the actuary to consider that some historical economic data may not be appropriate for use in developing assumptions for future periods due to changes in the underlying environment. In addition, with respect to any particular valuation, each economic assumption should be consistent with all other economic assumptions over the measurement period.

ASOP 27 recognizes that economic data and analyses are available from a variety of sources, including representatives of the plan sponsor, investment advisors, economists, and other professionals. The actuary is permitted to incorporate the views of experts, but the selection or advice must reflect the actuary’s professional judgment.

The standard also notes that “the actuary should also recognize that different actuaries will apply professional judgment and may choose different reasonable assumptions.” As a result, a range of reasonable assumptions may develop both for an individual actuary and across actuarial practice. For this study, we have selected a single set of recommended economic assumptions, but there are other sets of economic assumption that would also be reasonable.

The following table summarizes the current and recommended economic assumptions:

	Current Assumptions	Recommended Assumptions
Price Inflation	2.50%	2.50%
Real Rate of Return	4.25%	4.25%
Investment Return	6.75%	6.75%*
Productivity	0.90%	1.00%
General Wage Growth	3.40%	3.50%
Payroll Growth	3.00%	3.00%
Cost of Living Adjustment	2.50%	2.50%

*Consider lowering the investment return assumption as the Plan reaches full funding.





SECTION IV – ECONOMIC ASSUMPTIONS

PRICE INFLATION

Use in the Valuation: Price inflation is typically measured by the annual increase in the Consumer Price Index (CPI). This assumption underlies most of the other economic assumptions, either directly or indirectly. The current assumption for price inflation is 2.50% per year.

Future price inflation is used directly in developing the actuarial assumption for cost-of-living increases since they are based on the change in the Consumer Price Index (CPI). Inflation is used indirectly in the development of the assumptions for investment return and general wage increase, which also impacts individual salary increases and payroll growth. Under ASOP 27, the price inflation assumption must be consistent among all economic assumptions.

Historical Experience

Although economic activities, in general, and inflation in particular, do not lend themselves to prediction solely on the basis of historical analysis, historical patterns and long-term trends are factors to be considered in developing the inflation assumption. The Consumer Price Index, US City Average, All Urban Consumers, CPI (U), has been used as the basis for reviewing historical levels of price inflation. The following table provides historical annualized rates and annual standard deviations of the CPI-U over periods ending December 31st.

Period	Number of Years	Annualized Rate of Inflation
1974 – 2024	50	3.68%
1984 – 2024	40	2.78%
1994 – 2024	30	2.52%
2004 – 2024	20	2.65%
2014 - 2024	10	3.00%

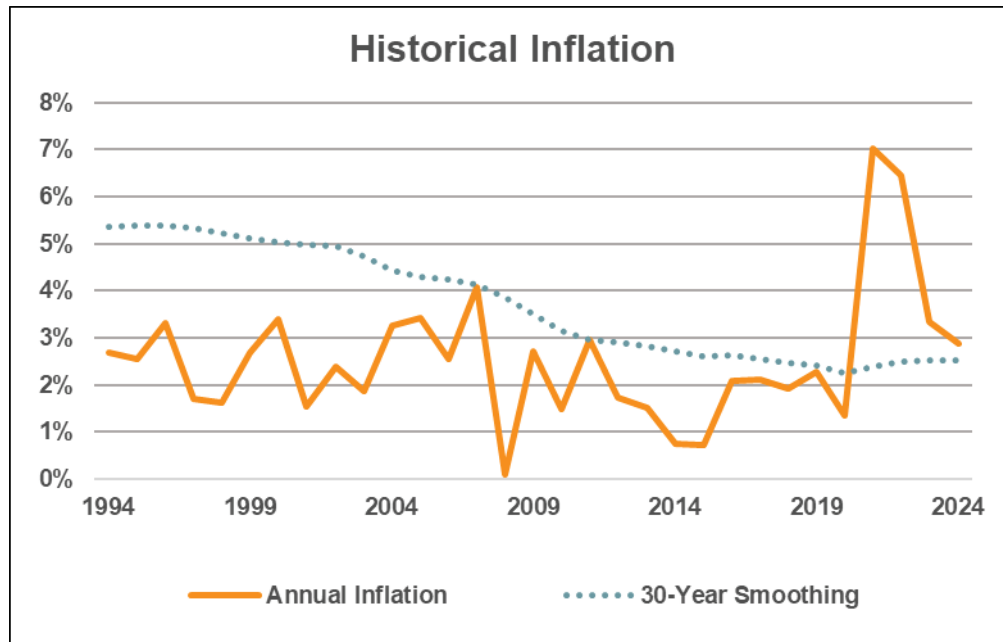
Historical averages are heavily dependent on the period selected. For example, the period of high inflation from 1973 to 1981 has a significant impact on the averages over periods which include these years. Over more recent periods (last 20 to 30 years) measured from December 31, 2024, the average annual rate of increase in the CPI-U has been closer to the current assumption of 2.50%.

The following graph illustrates the historical annual change in price inflation, measured as of December 31 for each of the last 30 years, as well as the thirty-year rolling average.





SECTION IV – ECONOMIC ASSUMPTIONS



While inflation has been relatively low for most of the last 30+ years, there have been periods when higher inflation has occurred. While there has been a general downward trend since the early 1980's, the recent brief spike is a reminder that there can be unexpected changes.

Forecasts Implied from the Bond Market

Additional information to consider in formulating this assumption is obtained from measuring the spread on Treasury Inflation Protected Securities (TIPS) and from the prevailing economic forecasts. The spread between the nominal yield on treasury securities (bonds) and the inflation indexed yield on TIPS of the same maturity is referred to as the “breakeven rate of inflation” and represents the bond market’s expectation of inflation over the period to maturity.

The table below provides the calculation of the breakeven rate of inflation as of December 31, 2024.

Years to Maturity	Nominal Bond Yield	TIPS Yield	Breakeven Rate of Inflation
5	4.38%	2.00%	2.38%
10	4.58	2.24	2.34
20	4.86	2.41	2.45
30	4.78	2.48	2.30





SECTION IV – ECONOMIC ASSUMPTIONS

As this data indicates, the bond market is anticipating inflation of 2.3% to 2.5% for both the short and long term. The bond market expectations may be heavily influenced by the expectations of actions by the Federal Reserve Bank. We note that measures can move fairly significantly over just a few months.

Forecasts from the Social Security Administration

Although many economists forecast lower inflation than the assumptions used by retirement systems, they are generally looking at a shorter time horizon (10 years) than is appropriate for a pension valuation. To consider a longer, similar time frame, we looked at the expected increase in the CPI by the Office of the Chief Actuary for the Social Security Administration. In the most recent report (June 2025), the projected average annual increase in the CPI over the next 75 years was estimated to be 2.4%, under the intermediate (best estimate) cost assumption. The range of price inflation used in the Social Security 75-year modeling, which includes a low and a high-cost scenario, in addition to the intermediate cost projection, was 1.8% to 3.0%.

Forecasts from Investment Consulting Firms and Other Professionals

In setting their capital market assumptions, most investment consulting firms use an inflation assumption. The 2025 capital market assumptions for MUD's investment consultant, PNC, include a 10-year forecast of inflation to be 2.25%.

Horizon Actuarial Services, LLC publishes a survey of capital market assumptions obtained from various investment consultants. The 2025 Horizon Survey, published in August of 2025, includes the assumptions, including the expected rate of inflation, for twenty-seven advisors who develop longer-term assumptions (20 years or more). The Survey showed a range of expected inflation for the next 20 years, for these consultants, of 2.2% to 2.7%, with a median of 2.4%. Inflation over a shorter time horizon (and including another 15 consultants), for the next 10 years, was very similar range of 2.0% to 2.9%, with a median of 2.4%.

Another source to consider in setting this assumption is a quarterly survey of the Society of Professional Forecasters that is conducted by the Philadelphia Federal Reserve of economists. Their most recent forecast (second quarter of 2025) was for inflation over the next ten years (2025 to 2034) to average 2.35%.

Forecasts from Peer System Comparison

While we do not recommend the selection of any assumption based on what other systems use, it does provide another set of relevant information to consider. Based on the Public Plan Database (a survey of over 130 state and local retirement systems maintained by a collaboration between the Center for Retirement Research at Boston College, the Center for State and Local Government Excellence, and the National Association of State Retirement Administrators), the average inflation assumption for governmental plans is 2.46%. This data is largely based on





SECTION IV – ECONOMIC ASSUMPTIONS

actuarial valuations prepared with measurement dates in 2023. Based on our experience, we believe the inflation assumption has been steady for most systems over the last few years.

Recommendation

The following table provides a comparison of the current levels of expected inflation.

Source	Expected Inflation
PNC Investment Consultant (10 years)	2.25%
2025 Horizon Survey (20 years)	2.40%
Bond Market (30 years)	2.30%
2025 SSA Trustees Report (75 years)	2.40%
Survey of Professional Forecasters (10 years)	2.35%
Peer Retirement Systems	2.46%

Based on the various forecasts for inflation, **we believe the current assumption of 2.50% remains reasonable and we recommend it be retained.**

Consumer Price Inflation	
Current Assumption	2.50%
Recommended Assumption	2.50%

COST OF LIVING ADJUSTMENT (COLA)

The MUD Plan provides for a cost-of-living adjustment (COLA) based on actual inflation, measured by the change in the CPI-W. The retirees' benefits are adjusted semi-annually, but the increase cannot exceed 3.0% in a calendar year. The current COLA assumption is 2.50%, the same as the price inflation assumption. It is important to remember that the inflation assumption represents the expected average rate of inflation, recognizing that variability exists. This variation means that there will likely be some years when the COLA granted will be less than 2.5% and some when the COLA granted will be more than 2.5%, but no more than 3.0%. **Given that we are recommending no change to the inflation assumption, we recommend the COLA assumption also remain 2.50%.** Note that setting this assumption equal to the price inflation assumption provides a small margin of conservatism for adverse deviation.





SECTION IV – ECONOMIC ASSUMPTIONS

INVESTMENT RETURN

Use in the Valuation

The investment return assumption reflects the anticipated returns on the current and future assets. It is one of the primary determinants in the allocation of the expected cost of the promised benefits, providing a discount of the estimated future benefit payments to reflect the time value of money. Generally, the investment return assumption should be set with consideration of the asset allocation policy, expected long term real rates of return on the specific asset classes, the underlying inflation rate, and any investment expenses.

The current investment return assumption is 6.75% per year, net of all investment-related and administrative expenses. The 6.75% rate of return is referred to as the nominal rate of return and is composed of two components. The first component is price inflation (previously discussed). Any excess return over price inflation is referred to as the real rate of return. The real rate of return, based on the current set of assumptions, is 4.25% (6.75% nominal return less 2.50% inflation).

Because the economy is constantly changing, assumptions about what may occur in the near term are volatile. Asset managers and investment consultants usually focus on this near-term horizon to make prudent choices regarding how to invest the trust funds, i.e., asset allocation. For actuarial calculations, we typically consider very long periods of time as some current employees will be receiving benefit payments more than 70 years from now. It is important to remember that the retirement plan is investing assets on behalf of the member during both his working career employee and while he is receiving benefit payments. Often more than one-half of the investment income earned on assets accumulated to pay benefits is received after the employee retires. In addition, in an open plan like MUD, the stream of benefit payments is continually increasing as new hires replace current members who leave covered employment due to death, termination of employment, and retirement. This difference in time horizon between investment consultants and actuaries is frequently a source of debate and confusion when setting economic assumptions.

Investment Return Assumption for Retirement Plan

Historical Perspective

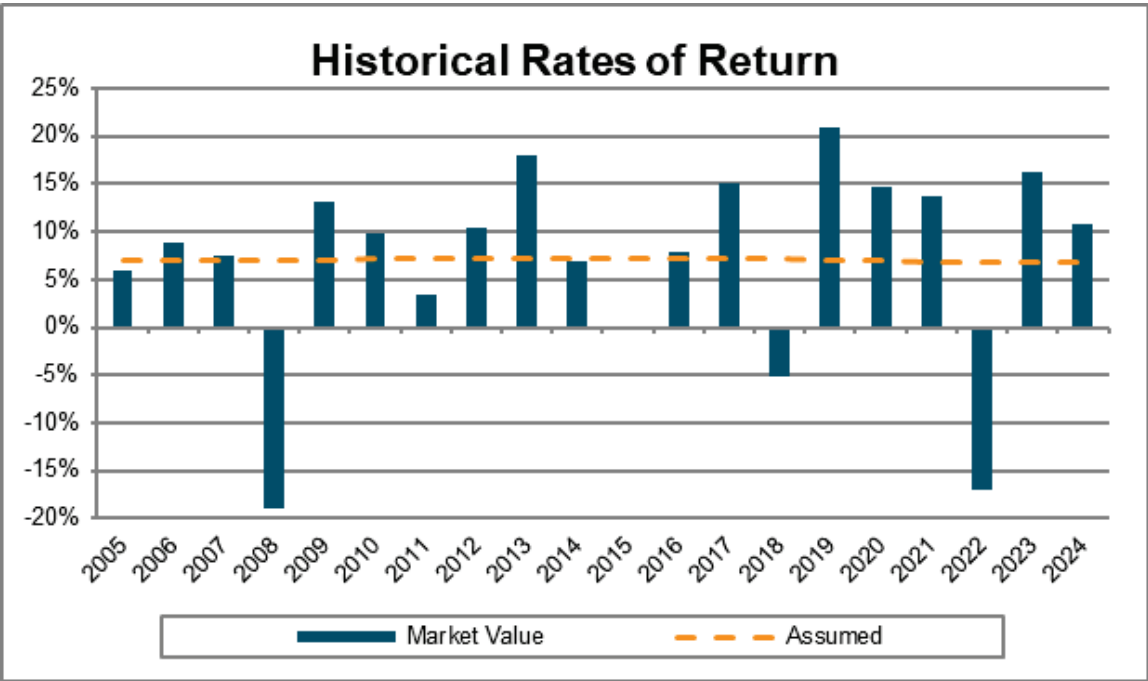
One of the inherent problems with analyzing historical data is that the results can look significantly different depending on the time frame used, given that year-to-year results vary widely. Even though history provides a valuable perspective for setting this assumption, the economy of the past is not necessarily the economy of the future. In addition, asset allocations may have changed over the period so returns may not be directly comparable.





SECTION IV – ECONOMIC ASSUMPTIONS

The System’s actual investment return on the market value of assets is shown in the following graph:



The compound return has varied significantly when viewed over different time periods. For example, the rate of return over the ten-year period ending December 31, 2024 was 7.06%, the rate of return over the twenty-year period ending December 31, 2024 was 6.74% and the rate of return over the thirty-year period ending December 31, 2024 was 7.80%. However, historical investment performance is a poor indicator of what to expect in the future. Past performance is heavily impacted by past inflation rates, the interest rate environment and the asset allocation.

Forward Looking Analysis

We believe the most appropriate analysis to consider in setting the investment return assumption is to model the expected returns, given the system’s target asset allocation and forward-looking capital market assumptions. However, we are trained as actuaries and not as investment professionals. As such, we rely heavily on professional investment consultants, such as PNC, to provide investment expertise including capital market assumptions.

In performing our analysis, we use the building block approach so the underlying inflation assumption must be consistent with our recommended assumption of 2.50%. The analysis of the investment consultants typically focuses on the nominal return so if the investment consultant’s inflation assumption differs from our assumption, an adjustment to the expected return is necessary. MUD’s current target asset allocation, along with their investment consultant’s (PNC’s) capital market assumptions, are shown in the following table:



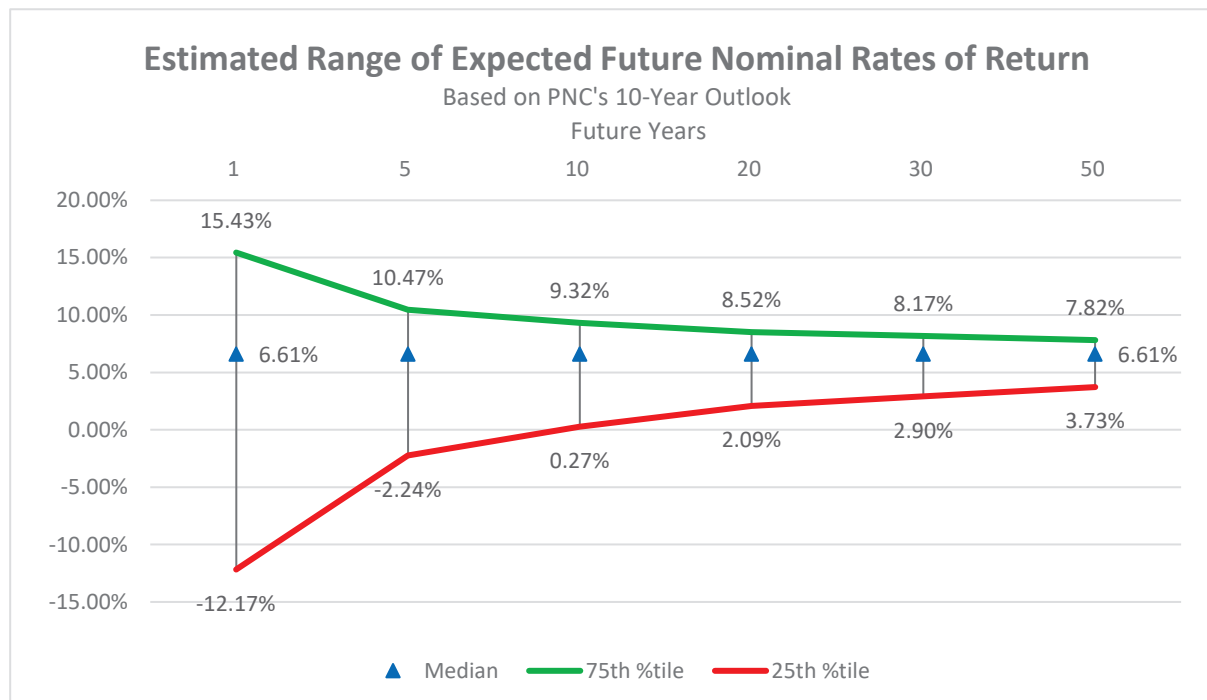


SECTION IV – ECONOMIC ASSUMPTIONS

Asset Category	Asset Allocation	Expected Rate of Return*	Standard Deviation
U.S. Equities			
US Large Cap	34.1%	7.5%	17.3%
US Mid Cap	2.7%	9.0%	21.1%
US Small Cap	1.2%	8.0%	23.2%
Non-US Equities	19.2%	9.25%	19.1%
Emerging Markets	6.8%	9.5%	24.6%
U.S. Aggregate Bonds	15.0%	4.6%	4.4%
International Bonds	3.0%	4.6%	4.4%
Intermediate Term Credit	11.0%	4.6%	4.4%
Short Term Credit	3.0%	3.4%	1.5%
REITS	4.0%	8.75%	24.1%
Total	100.0%		

* Arithmetic return

Using PNC's capital market assumptions, shown above, the nominal expected return is 6.4%. Adjusting for an underlying inflation assumption of 2.50% rather than 2.25%, the distribution of returns is shown in the following graph. The expected return is very close to the current investment return assumption of 6.75%.





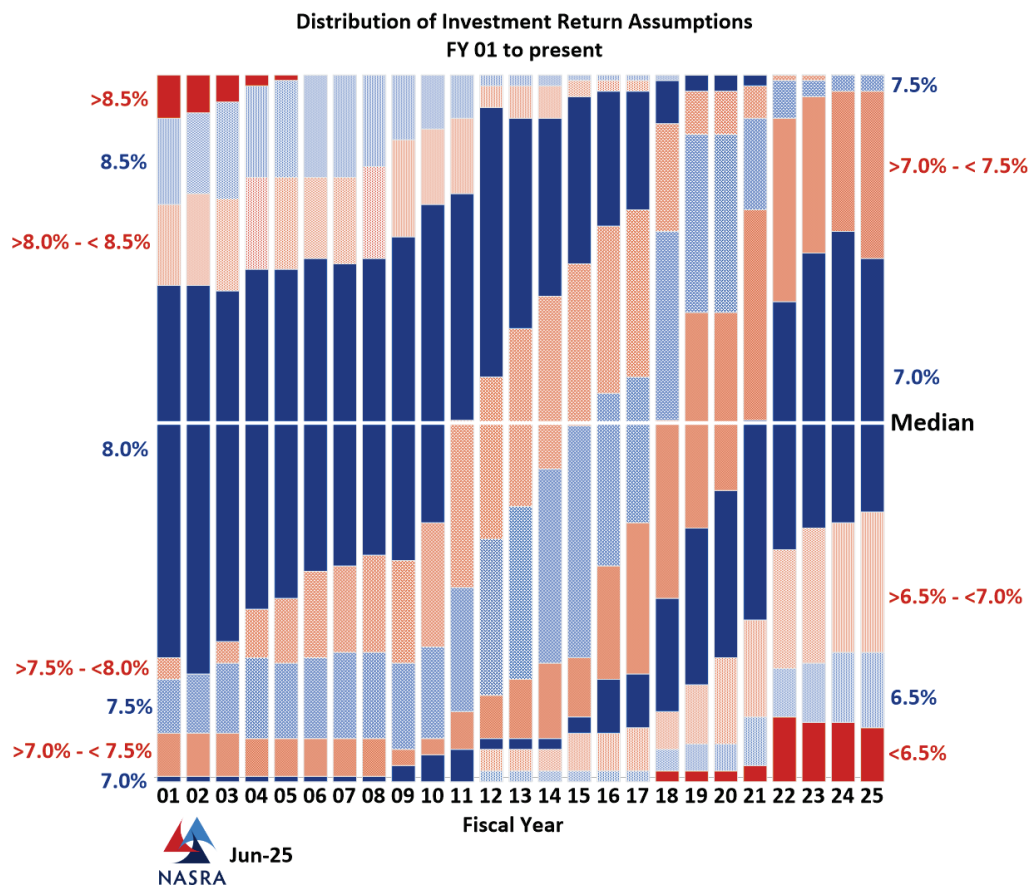
SECTION IV – ECONOMIC ASSUMPTIONS

The Horizon Actuarial Survey compiles the data on capital market assumptions from many different investment consultants and provides medians as well as the range of results. Based on the median assumptions in the Horizon Survey, the expected rate of return of the MUD portfolio was 7.0% using the long-term assumptions.

Peer System Comparison

In general, we have observed a marked reduction in the capital market assumptions by both actuarial firms and investment consultants over the last decade. The impact of this trend on public pension funds is evident in the Public Fund Survey (published by the National Association of State Retirement Administrators). The median investment return assumption, which was 8.0% from 2001 to 2011, is now 7.0%.

While we do not recommend the selection of an investment return assumption be based on the assumptions used by other public retirement systems, this information does provide another set of relevant data to consider if we recognize that asset allocation varies from system to system, as does the risk profile of Boards. The following graph shows the change in the distribution of the investment return assumption from fiscal year 2001 through 2025 for the 130+ large public retirement systems included in the NASRA Public Fund Survey.

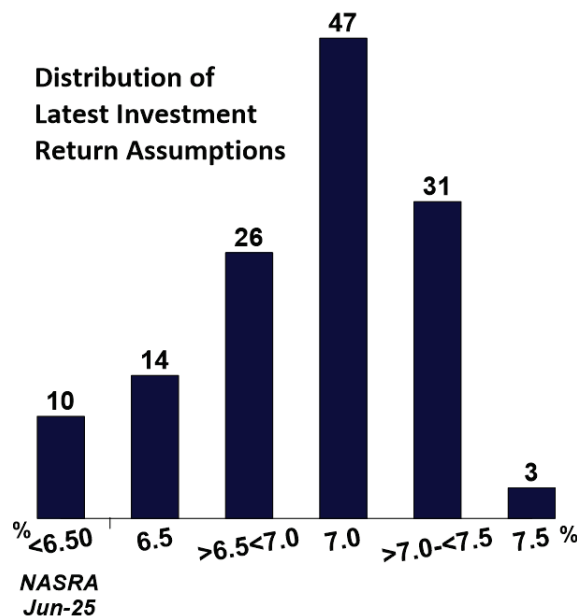




SECTION IV – ECONOMIC ASSUMPTIONS

As the graph indicates, the investment return assumptions used by public plans have decreased significantly over the last decade, likely impacted by a corresponding decrease in the underlying inflation assumption over the same period.

As the following graph illustrates, there are 50 of the 131 plans (38%) using an assumption below 7.0%. The distribution of current investment return assumptions is shown below:



Summary and Recommendation

Because investment earnings account for the majority of revenue for most public plans, the choice of an investment return assumption has a major impact on a plan's financing and actuarial funded status. An investment return assumption that is too low will overstate liabilities and costs, causing current members/ratepayers to be overcharged and future members/ratepayers to be undercharged. An investment return assumption that is too high will understate liabilities and undercharge current members/ratepayers at the expense of future members/ratepayers. An assumption that is significantly wrong in either direction will cause a misallocation of resources and inequitable distribution of costs among generations of members/ratepayers. Because of this, setting the investment return assumption requires a balancing act with an attempt to not be overly conservative nor aggressive, although some margin for adverse deviation is acceptable under actuarial standards.

Actuarial standards require us to maintain a long-term perspective in setting all assumptions, including the investment return assumption. Therefore, we believe we must be careful not to let recent experience or short-term expectations impact our judgement regarding an appropriate investment return assumption over the long term.





SECTION IV – ECONOMIC ASSUMPTIONS

We believe the current assumption is reasonable and we recommend it be retained. As the Plan moves to full funding, it may be prudent to lower the investment return assumption to improve the likelihood of meeting/exceeding the assumed return or reflect potential derisking of the portfolio. We will work closely with PNC when the appropriate time comes to take action.

The components of the nominal return are shown in the table below:

	Current Assumption	Proposed Assumption
Real return	4.25%	4.25%
Price inflation	2.50%	2.50%
Nominal return	6.75%	6.75%

ADMINISTRATIVE EXPENSE ASSUMPTION

All investment-related expenses are paid from returns on the plan assets, but an explicit expense assumption is necessary for any fees that are paid from plan assets that are considered an administrative expense. The expense assumption is added to the normal cost in calculating the actuarial contribution each year. The current expense assumption uses the actual administrative expenses in the prior year as an estimate for the current year. On that basis, the expense component of the contribution rate in the January 1, 2025 valuation was 0.11% of covered payroll. This is a commonly used approach, and **we recommend the current assumption be retained.**

OTHER POST-EMPLOYMENT BENEFITS (OPEB) INVESTMENT RETURN ASSUMPTION

The previous discussion regarding the development of the investment return assumption for the Retirement Plan is also applicable to the investment return assumption for the OPEB valuation. However, the OPEB Plan has a different asset allocation (75% equities and 25% fixed income) and, therefore, a different expected return and standard deviation. This leads to a different distribution of potential outcomes. Rather than repeat the full analysis shown earlier for the Retirement Plan, a summary of the findings is included here.





SECTION IV – ECONOMIC ASSUMPTIONS

The asset allocation for the OPEB Plan is as follows:

Asset Category	Asset Allocation	Expected Rate of Return*
U.S. Equities	42%	8.2%
Non-US Equities	29%	8.7%
U.S. Aggregate Bonds	11%	3.7%
Non-US Bonds	3%	4.7%
Intermediate Term Credit	9%	4.1%
Short Term Credit	2%	3.9%
REITS	4%	9.5%
Total	100%	

* Arithmetic return

The current investment return assumption for the OPEB Plan is 6.75%, the same as for the Retirement Plan. Based on the target asset allocation shown in the table above, the expected return is slightly higher than the expected return for the Retirement Plan, 6.75% versus 6.61% for the Retirement Plan. This simply means there is a slightly higher probability of meeting or exceeding the assumed return which is a positive outcome from a funding perspective. **We recommend retaining the current assumption of 6.75%.**

SALARY INCREASES

Estimates of future salaries are based on assumptions for two types of increases:

1. Increases in each individual's salary due to promotion or longevity (often called merit scale), and
2. Increases in the general wage level of the membership, which are directly related to price and wage inflation.

General Wage Inflation

The general wage inflation assumption is used to model real wage growth over time in the general economy, i.e. "across the board" rate of salary increases or how much the pay scales will change year to year. The general wage inflation assumption is composed of the price inflation assumption and an assumption for the real rate of wage increases/real wage growth. It was discussed earlier, and our recommendation is to increase the general wage increase from 3.40% to 3.50%.





SECTION IV – ECONOMIC ASSUMPTIONS

Given the current price inflation assumption of 2.50%, the current general wage inflation assumption of 3.40% implies an assumed real wage increase/real wage growth assumption of 0.90%.

The excess of wage growth over price inflation represents the real wage growth rate. The following table shows the compounded wage growth over various periods, along with the comparable price inflation rate for the same period. The differences represent the real wage growth rate. Note that there is a delay in the date the national average wage for the prior year is released so the most recent data is for 2023.

Years	Period	General Wage Inflation	CPI Increase	Real Wage Inflation
2013-2023	10	4.03%	2.79%	1.24%
2003-2023	20	3.41%	2.58%	0.83%
1993-2023	30	3.59%	2.51%	1.08%
1983-2023	40	3.76%	2.81%	0.95%
1973-2023	50	4.44%	3.86%	0.58%

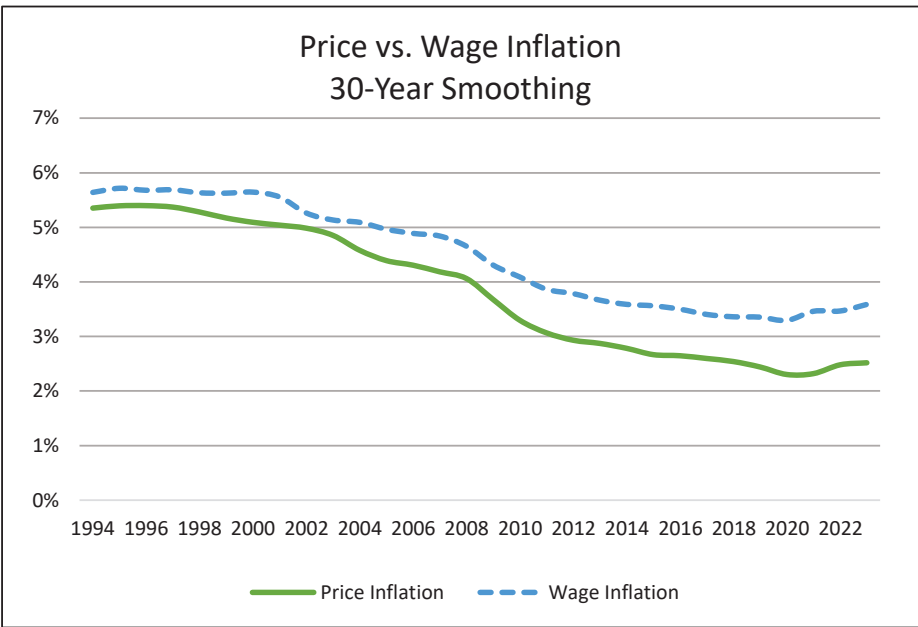
Because the National Average Wage is based on all wage earners in the country who are covered by Social Security, it can be influenced by the mix of jobs (full-time vs. part-time, manufacturing vs. service, etc.) as well as by changes in some segments of the workforce that are not seen in all segments (e.g. regional changes or growth in computer technology). Furthermore, if compensation is shifted between wages and benefits, the wage index would not accurately reflect increases in total compensation. MUD's membership is composed exclusively of governmental employees working in Nebraska, whose wages and benefits are somewhat linked as a result of the state and local economy, funding allocations, and governing policies. Because the competition for workers can, in the long term, extend across industries and geography, the broad national earnings growth will have some impact on MUD members. In the shorter term, however, the wage inflation of MUD employees and the nation may be less directly correlated.





SECTION IV – ECONOMIC ASSUMPTIONS

The difference between wage and price inflation over rolling 30-year periods is shown in the following graph:



Over the last 30 years, the real wage increase, as measured by the increase in the National Average Wage Index, has been about 1.0% per year on average.

Forecasts of Future Wages: The wage index used for the historical analysis is projected forward by the Office of the Chief Actuary of the Social Security Administration in their 75-year projections. In the June 2025 Trustees Report, the annual increase in the National Average Wage Index under the intermediate cost assumption (best estimate) was 3.53%, 1.13% higher than the Social Security Administration’s intermediate inflation assumption of 2.40% per year. The range of the assumed real wage growth in the 2025 Trustees report was 0.53% to 1.73% per year.

MUD Actual Experience: The average salary, which accounts for the change in the size of the active membership each year, increased 3.26% per year over the last 19 years. This is a reasonable estimate of the actual general wage increase experienced by MUD over this timeframe. Actual price inflation over the same period was around 2.56% which results in about a 0.70% increase in wages due to productivity. However, the high inflation in 2021 and 2022 somewhat inflates the actual inflation of 2.56%. We would not expect wage increases to fully reflect the impact of extremely high inflation as observed in those years. If those high years are excluded, the actual inflation for the remaining years is about 2.10%, resulting in a real wage increase for MUD employees of about 1.16%.

The across-the-board increases granted over the last six years have averaged 3.1%, with a low of 2.25% in 2020, 2021 and 2022 and a high in 2023 of 5.00%. The average across the board increase in the last two years has been 3.50%.





SECTION IV – ECONOMIC ASSUMPTIONS

Recommendation

National wage statistics for the last 30 years indicate a productivity increase of around 1.00% and the Social Security projections assume somewhat larger increases (over 1.0%). Public sector compensation in the past few decades, however, also has a significant portion of its growth in non-wage areas. We also note that the recent inflation spike and a tight labor market are likely to put some additional upward pressure on wages, at least for the short term. Based on the available data and our professional judgment, **we recommend the current assumption be modestly increased to 3.50%, reflecting a real wage increase assumption of 1.00%.**

Merit Salary Increase Assumption

As noted above, future salary increases are the result of two components. However, actual salary experience is typically reported in total, rather than by components, so the experience study reviewed total salary increases for the study period. The overall salary increase in each year of the study period is shown in the table below:

Year	Total Salary Increases		
	Actual	Expected	Difference
2021	5.52%	5.33%	0.19%
2022	5.94%	5.35%	0.59%
2023	7.93%	5.51%	2.42%
2024	7.92%	5.63%	2.29%
2021-2024	6.92%	5.47%	1.45%
2017-2020	4.91%	5.45%	(0.54%)
2017-2024	5.92%	5.46%	0.46%

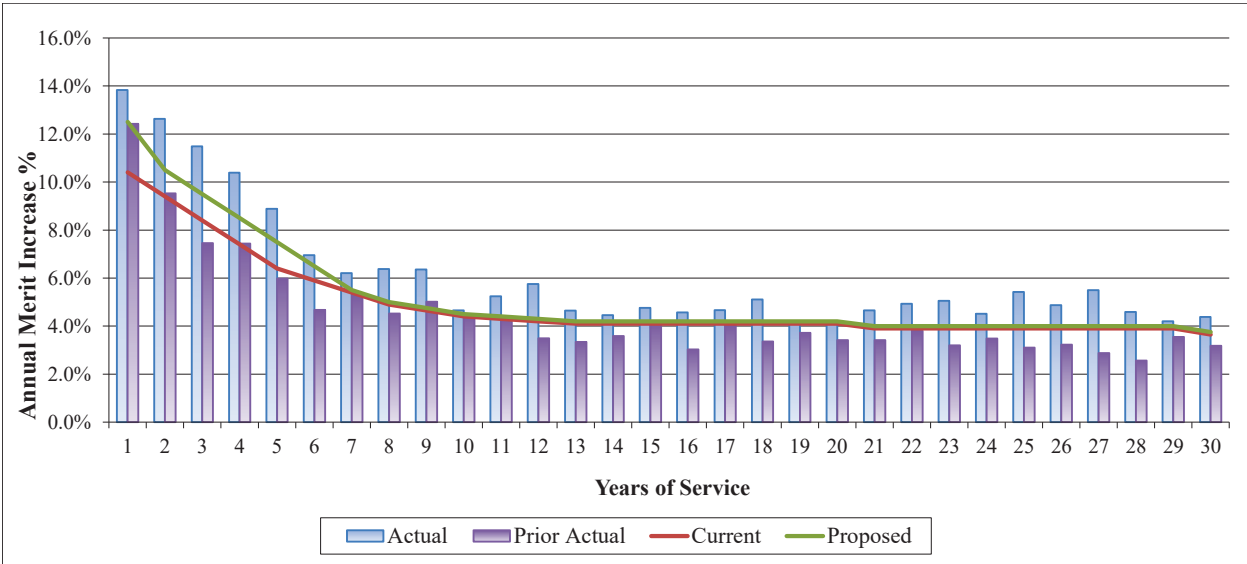
Four years is a relatively short period to analyze individual salary increases. As a result, variations that occur in one or two years can have a dramatic impact on the overall results. As the last few rows in the table above show, actual increases were about 0.54% lower than expected in the prior study and 1.45% higher than expected in the current study. Over the entire 8 years, the current assumption has been about 0.50% lower than actual salary increases for individual members, but if the high increases in 2023 and 2024 are excluded, the actual salary increases are close to the current assumption. Given the tight labor market and continued pressure on wages, actual increases may be higher than the assumption in the short term, but we expect the labor market will adjust over the longer term.

The following graph shows the observed increases for all years (the bars) compared to the current assumption (the red line). As can be seen, the shape of the assumption and the actual salary increases exhibit a similar pattern. We are recommending a few minor adjustments to the merit salary increase assumption along with the 3.50% general salary increase assumption (green line), as shown in the following graph:





SECTION IV – ECONOMIC ASSUMPTIONS



The overall salary increase expected using the proposed assumption is 5.92%, up from 5.47% under the current assumption.

PAYROLL GROWTH ASSUMPTION

Amortization payments on the unfunded actuarial liability are currently determined as a level percent of payroll. Therefore, the valuation requires an assumption regarding future annual increases in covered payroll. The wage growth assumption is often used for this purpose. The current payroll growth assumption is 3.00%, slightly lower than the current wage growth assumption.

Actual covered payroll for the MUD Plan increased an average of 3.73% per year over the last 10 years, largely due to an increase in the number of active members. The number of active members in the January 1, 2015 valuation was 856 compared to 896 in the January 1, 2025 valuation. Despite the fact the number of active members has increased in the past, we do not have any knowledge that a continued increase is expected in the future. Therefore, we propose continuing the current assumption that no future growth or decline in the number of active members will occur. With no assumed growth in membership, future salary growth close to general wage increases is generally anticipated. We believe it is prudent to set the payroll growth assumption slightly lower than the general wage inflation assumption to increase the stability of the UAL contribution rate. Therefore, **we recommend the current payroll growth assumption of 3.00% be retained.**





SECTION V – DEMOGRAPHIC ASSUMPTIONS

DEMOGRAPHIC ASSUMPTIONS

Actuarial Standard of Practice (ASOP) No. 27 provides guidance to actuaries regarding the selection of assumptions for measuring pension obligations. Each individual demographic assumption should satisfy the criteria of ASOP 27. In selecting demographic assumptions, the actuary should also consider: the internal consistency between the assumptions, materiality, cost effectiveness, and the combined effect of all assumptions. At each measurement date, the actuary should consider whether the selected assumptions continue to be reasonable, but the actuary is not required to do a complete assumption study at each measurement date. In our opinion, the demographic assumptions recommended in this report have been developed in accordance with ASOP 27.

Overview of Analysis

The purpose of a study of demographic experience is to compare what actually happened to the individual members of the System during the study period (calendar years 2021 through 2024) with what was expected to happen, based on the actuarial assumptions. A single four-year period is a relatively short observation period, particularly given the size of the group. Therefore, we have considered the results of the prior Experience Study when deemed appropriate.

Studies of demographic experience generally involve three steps:

- First, the number of members changing membership status, called decrements, during the study is tabulated by age, duration, gender, group, and membership class (active, retired, etc.).
- Next, the number of members expected to change status is calculated by multiplying certain membership statistics, called exposure, by the expected rates of decrement.
- Finally, the number of actual decrements is compared with the number of expected decrements. The comparison is called the actual to expected ratio (A/E Ratio), and is expressed as a percentage.

In general, if the actual experience differs significantly from the overall expected results, or if the pattern of actual decrements, or rates of decrement, by age, sex, or duration deviates significantly from the expected pattern, new assumptions are considered. Recommended revisions are normally not an exact representation of the experience during the observation period. Judgement is required to anticipate future experience from past trends and current evidence, including a determination of the amount of weight to assign to the most recent experience.





SECTION V – DEMOGRAPHIC ASSUMPTIONS

It takes a fair amount of data to provide experience study results that are fully credible for demographic assumptions. Because the membership or certain subsets of the membership are relatively small, some assumptions have been selected based more on our professional judgement of reasonable future outcomes than actual experience.

ASOP 27 states that the actuary should use professional judgement to estimate possible future outcomes based on past experience and future expectations, and select assumptions based upon application of that professional judgement. The actuary should select reasonable demographic assumptions in light of the particular characteristics of the defined benefit plan that is the subject of the measurement. A reasonable assumption is one that is expected to appropriately model the contingency being measured and is not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

Pursuant to ASOP 27 the actuary should follow the following steps in selecting the demographic assumptions:

1. Identify the types of assumptions. Types of demographic assumptions include but are not limited to retirement, mortality, termination of employment, disability, election of optional forms of payment, administrative expenses, family composition, and treatment of missing or incomplete data. The actuary should consider the purpose and nature of the measurement, the materiality of each assumption, and the characteristics of the covered group in determining which types of assumptions should be incorporated into the actuarial model.
2. Consider the relevant assumption universe. The relevant assumption universe includes experience studies or published tables based on the experience of other representative populations, the experience of the plan sponsor, the effects of plan design, and general trends.
3. Consider the assumption format. The assumption format includes whether assumptions are based on parameters such as gender, age or service. The actuary should consider the impact the format may have on the results, the availability of relevant information, the potential to model anticipated plan experience, and the size of the covered population.
4. Select the specific assumptions. In selecting an assumption, the actuary should consider the potential impact of future plan design as well as the factors listed above.
5. Evaluate the reasonableness of the selected assumption. The assumption should be expected to appropriately model the contingency being measured. The assumption should not be anticipated to produce significant cumulative actuarial gains or losses over the measurement period.





SECTION VI – MORTALITY

MORTALITY

One of the most important demographic assumptions in the valuation is the mortality assumption. The post-retirement mortality rates used in the actuarial valuation project the percentage of retirees who are expected to die in a given future year. Of all of the demographic assumptions, the mortality assumption typically has the most significant impact on liability projections because it projects the duration of retirement benefit payments. If members live longer than expected, the true cost of future benefit obligations will be understated.

We anticipate that mortality tables will need to be updated periodically even if we are anticipating some increase in longevity. Because of potential differences in mortality, we break down our study by gender (males and females) and by status (healthy retirees, disabled retirees, and active members).

Because of the substantial amount of data required to construct a mortality table, actuaries usually rely on standard tables published by the Society of Actuaries. Actuaries then use various adjustments to the standard, published mortality tables in order to better match the observed mortality rates of a specific group:

- (1) Age adjustments
- (2) Benefit Size (Above or Below Median)
- (3) Scaling of rates

The first of these adjustments is an age adjustment that can be either a “setback” or a “set forward”. A one-year age set forward treats all members as if they were one year older than they truly are when applying the rates in the mortality table. So, a one year set forward would treat a 61-year-old retiree as if he will exhibit the mortality of a 62-year-old in the standard mortality table.

The second adjustment is based on the average benefit size. We know there is a correlation between the size of benefits and the longevity of the group, i.e., those with higher benefit amounts tend to live longer. Selecting a table using the benefit level of the group is expected to better anticipate the longevity of the underlying population.

A third adjustment, which requires a significant amount of data, that can be used to adjust the mortality rates in a standard table to better fit actual experience is to “scale” a mortality table by multiplying the probabilities of death by factors less than one (to reflect better mortality) or factors greater than one (to reflect poorer mortality). Scaling factors can be applied to an entire table or a portion of the table. Of course, if needed, actuaries may use two or even all three of these methods to develop an appropriate table to model the mortality of the specific plan population.

The issue of future mortality improvement is one that the actuarial profession has become increasingly focused on studying and monitoring. ASOP 27 requires the pension actuary to make and disclose a specific recommendation with respect to future improvements in mortality after the valuation date, although it does not require that an actuary assume there will be future improvements. There have been significant improvements in longevity in the past, although there





SECTION VI – MORTALITY

are different opinions about future expectations, and thus there is a subjective component in the estimation of future mortality improvement.

Based upon the long-term trend of mortality improvement, actuaries seek to account for future improvements in longevity. The most direct approach is a projection of mortality improvements – also called generational mortality – starting with a base table and then estimating mortality rates for each year in the future based on expected improvements in mortality over time. The generational approach is our preferred method for recognizing future mortality improvements in the valuation process because it is more direct and results in longer life expectancy for members who are younger, consistent with what we believe is more likely to occur. This is the method currently used in the MUD valuation and we recommend it continue to be used.

The MUD Retirement Plan does not have enough members for its mortality experience to be considered “credible”. As a result, we look to relevant large-scale studies of mortality to set this assumption. In 2019, the Society of Actuaries released a family of mortality tables based entirely on public retirement plan data for the first time (Pub-2010 Mortality Tables). Different mortality tables were developed for general government employees and retirees, public safety employees and retirees, and teacher employees and retirees. This set of mortality tables, based on public plan data, was updated and new mortality tables were published earlier this year, the Pub-2016 Mortality Tables. The same sets of tables were published again this time. We have typically found that these tables are a better fit for public plans. We are currently using the Pub-2010 Median Mortality Tables for General Employees with the MP 2020 Scale. We recommend moving to the Pub-2016 Median Mortality Table for General Employees with the MP2021 Scale (the most recent mortality improvement scale).

The table below shows the life expectancy at age 65 under generational mortality, an indication of how long a new retiree, Age 65, would be expected to receive monthly payments, at various points in time using the Pub-2016 Median General Employees Mortality Table and the MP-2021 Improvement Scale.

Year	Life Expectancy at Age 65	
	Males	Females
2025	21.5	23.8
2035	22.2	24.5
2045	22.9	25.1
2055	23.6	25.7





SECTION VI – MORTALITY

Healthy Retirees: Although there is insufficient data to provide credible results, we did analyze retiree mortality experience. In examining the results of the Experience Study, if the A/E Ratio is greater than 100%, the assumptions have predicted fewer deaths than actually occurred (indicating longer lifetimes than expected) and with an A/E Ratio less than 100%, the assumptions have predicted more deaths than have actually occurred (shorter lifetimes than expected).

We also analyzed experience on a benefit-weighted basis where the exposures and deaths are multiplied by the monthly retirement benefit amount. This helps to reflect any differences that arise from better mortality experience among those with larger benefits. Because a valuation is designed to measure the amount and timing of future benefit payments (liability) rather than simply the number of retirees leaving pay status, this benefit-weighted approach is an important factor in developing a mortality assumption to value plan obligations. In addition, the mortality rates in the mortality tables are developed using the benefit-weighted approach so we want to be consistent in the application of the table to our data. While we have completed an analysis of actual experience to that anticipated by the assumptions, it does not have sufficient credibility to warrant adjustments to the standard tables.

The aggregate observed experience for healthy (not disabled) male and female retirees, from ages 60 to 85, during the study period is shown in the following chart.

All Healthy Retirees					
	Exposure	Observations		A/E Ratio	A/E Ratio
		Actual	Expected	Current (Count)	Current (Weighted)
Males	2,651	77	59	131%	133%
Females	1,054	13	12	108%	90%
Total	3,705	90	71	127%	N/A

Actual deaths during the study period were higher than the number expected for males (77 actual and 59 expected for an A/E ratio of 131%) on a count basis. The experience was consistent on a benefit-weighted basis (133%). For females, there was one more death than expected during the four-year study period. On a benefit-weighted basis, the A/E ratio for females was 90%. It is worth noting that the size of the female group is much smaller than the male group, so volatility is to be expected.

We recognize the MUD retiree dataset is extremely small and, therefore, the credibility of the data/findings is limited so the base table without adjustments seems appropriate. Therefore, **we recommend updating to the Pub-2016 General Employees Median Mortality Tables for both males and females with future mortality improvements modeled using MP-2021, the most recent improvement scale.**

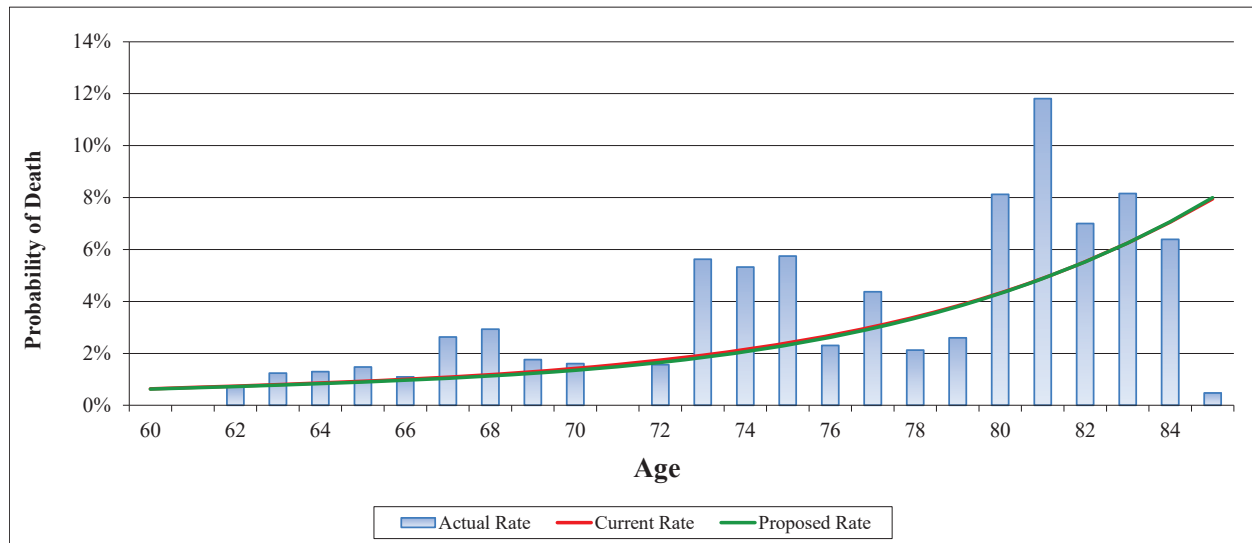




SECTION VI – MORTALITY

The comparison of the current and proposed assumption for males, ages 60 to 85, is shown in the following graph. The proposed assumption results in an A/E ratio of 135% on a benefit-weighted basis (see graph below), consistent with the results using the current assumption.

Retiree Mortality - Males



Disabled Retirees: Typically, the mortality of disabled retirees is higher than that of healthy retirees. The current assumption is the Pub-2010 Non-Safety Disabled Mortality Table projected generationally using MP-2020. There is far too little data to perform any reliable analysis, so our recommendation is based on professional judgement. We prefer to use a table for disabled members that is in the family of the Pub-2016 Tables. Therefore, **we recommend the Pub-2016 Non-Safety Disabled Mortality Table. Future mortality improvements will be modeled using MP-2021.**

Beneficiaries: The mortality of beneficiaries generally applies to the survivors of members who have elected a joint and survivor option. There is insufficient data to analyze and rely on those results to set an assumption. Therefore, **we recommend using the Pub-2016 General Employees Median Contingent Survivor Mortality Table, and MP-2021 for future mortality improvements, to value beneficiaries in the valuation.**

Active Members: This assumption predicts eligibility for death benefits for active employees prior to retirement, rather than the expected lifetime for pension payments. In smaller groups, the mortality rates for active members are often set based on the same assumption as is used for healthy retirees. Given the low probability of death while active, the results cannot be credible on their own without much larger numbers of employees than are in the MUD active group. We prefer to keep the mortality assumption for active and retired members on a consistent basis. Therefore, **we recommend the active member mortality assumption be the Pub-2016 General Employees Median Mortality Table, and the MP-2021 projection scale to reflect future mortality improvements.**





SECTION VII – SERVICE RETIREMENT

SERVICE RETIREMENT

Service retirement measures the change in status from active membership directly to retirement. This assumption does not include the retirement patterns of members who terminated from active membership years prior to their retirement (terminated vested members). A separate assumption addresses that situation.

Members can retire with unreduced benefits at age 60 with 5 years of service (referred to as “normal retirement”). Early retirement (with reduced benefits) is available at age 55 with 5 years of service. Different assumptions are used for early and normal retirement provisions so each is studied separately.

Actual experience for ages 55 to 69 during the study period is shown below.

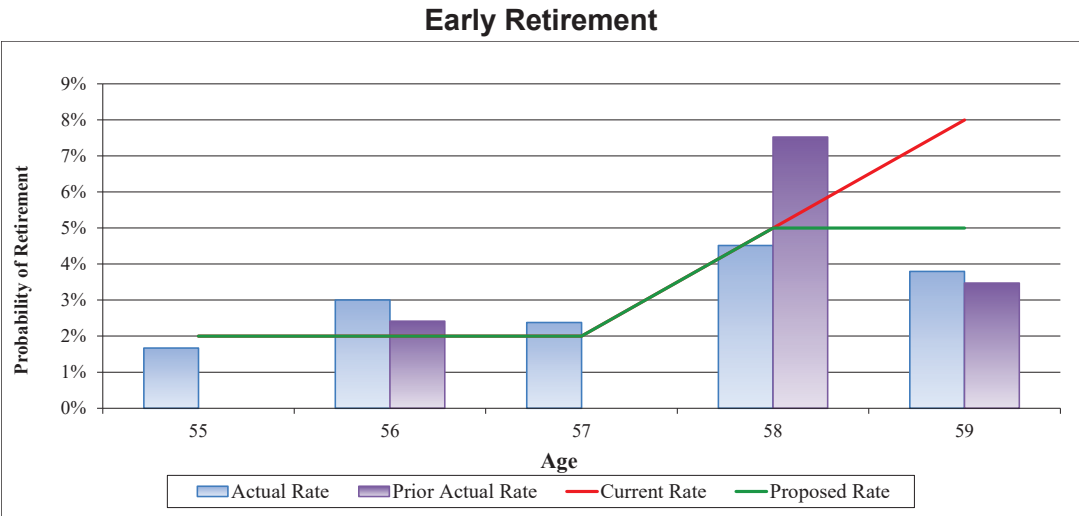
Retirement Type	Exposure	2021 to 2024 Retirement Experience			
		Observations		A/E Ratio	A/E Ratio
		Actual	Expected	(Count)	(Weighted)
Early	595	16	24	67%	78%
Normal	478	95	146	65%	77%
Total	1,073	111	169	66%	77%

The overall A/E ratio for the current study period on a count basis was 66%, indicating a lower number of retirements than expected during the study period for both early and normal retirement. This experience is consistent with the retirement experience in the last study. The fit of the early retirement assumption is reasonably good at ages 55 to 58, but an adjustment is needed at age 59. However, we do not want to over-adjust so we are only moving part of the way toward the observed experience. **We recommend the early retirement rate at age 59 be decreased as shown in the following graph.** The revised A/E ratio using the recommended assumption is 80% on a count basis and 95% on a liability-weighted basis.



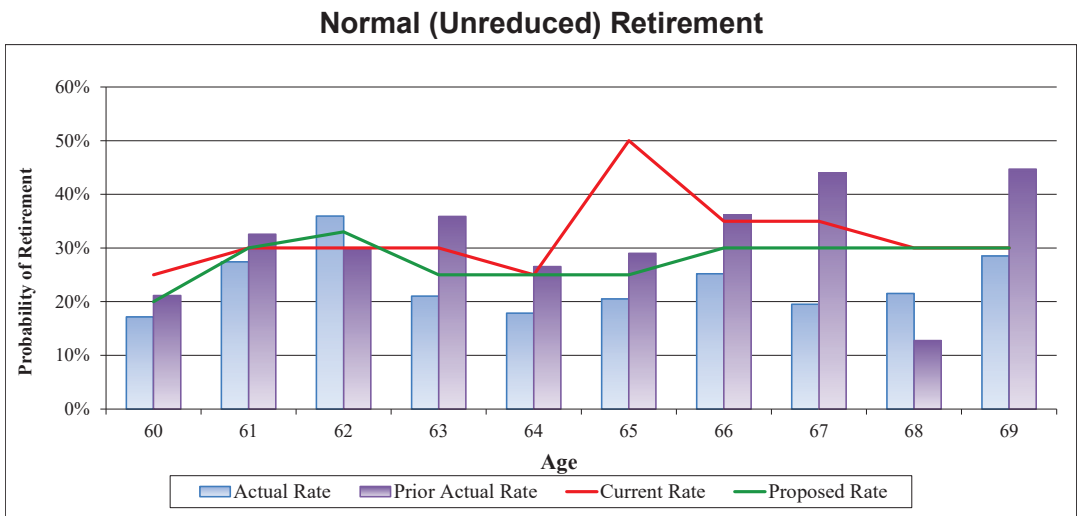


SECTION VII – SERVICE RETIREMENT



The A/E ratio, on a liability-weighted basis, for normal retirement is 77% and, on a count basis, 65%. Note the age 70 experience is excluded from this analysis as the probability of retirement is 100% at age 70 (certain retirement age) and actual experience that differs significantly from the assumption may skew the overall A/E ratio.

Given the difference in the actual experience and current assumption and the fit of the current assumption at certain other ages, we believe some adjustment to the assumption is appropriate. However, the experience in the current study period could have been impacted by the Covid pandemic so we want to be cautious and not overreact. Our recommended changes are shown in the green line in the following graph. Based on the recommended assumption, the A/E ratio is 74% on a count basis. However, on a liability-weighted basis the A/E ratio is 88% and the overall fit of the assumption to the actual experience over the last two studies has improved.





SECTION VII – SERVICE RETIREMENT

Inactive Vested Members

Currently, inactive vested members who leave their contributions in the Plan are assumed to retire at age 58. The data is very limited, but the average age for the twelve inactive vested members who retired in the current study period was 58. Based on our professional judgement, the assumption is reasonable. **We recommend the current assumption be retained.**





SECTION VIII – TERMINATION OF EMPLOYMENT (WITHDRAWAL)

TERMINATION OF EMPLOYMENT (WITHDRAWAL)

This section of the report summarizes the results of our study of termination of employment for reasons other than retirement. Rates of termination can vary by both age, years of service, and gender. In general, rates of termination tend to be highest at younger ages and in the early years of employment.

The number of terminations includes all members who were reported as active in one valuation and not active nor retired in the following valuation data. Some of these members subsequently receive refunds of contributions, some return to active membership, and some leave their contributions with the Plan until retirement and receive a monthly benefit.

The current assumption is a service-based assumption where the probability of termination decreases as the employee earns additional years of service. The current assumption reflects some probability of termination through 20 years of service for both males and females.

The following table summarizes the terminations that occurred for durations 1 through 20 during the study period:

2021 to 2024 Termination Experience					
	Exposure	Observations		A/E Ratio Count	A/E Ratio Weighted
		Actual	Expected		
Male	1,501	36	39	91%	129%
Female	395	17	15	117%	121%
Total	1,896	53	54	98%	N/A

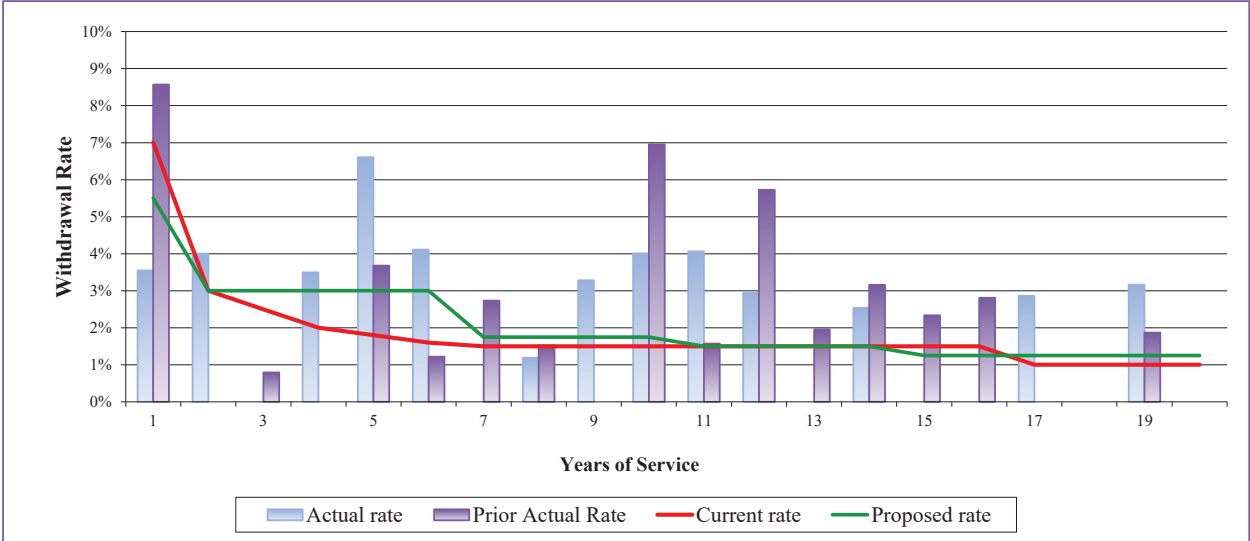
Since termination of employment often involves a decision by the employee to voluntarily leave covered employment, the actual experience can be heavily influenced by the economic conditions during the study period. The current study period covered calendar years 2021 through 2024 so it is possible the post-Covid 19 pandemic may have impacted experience. Therefore, any changes to the current assumptions are modest to ensure we do not over adjust for actual experience in the current study period.

Males: As the table above indicates, the A/E ratio is below 100% on a count analysis but is higher than 100% when considering the liability-weighted results. Our focus is on modeling changes in liability resulting from demographic experience, not just changes in the number of members. Therefore, we assign more credibility to the liability-weighted results. As a result, we are recommending some adjustments to the current assumption, as shown in the following graph.



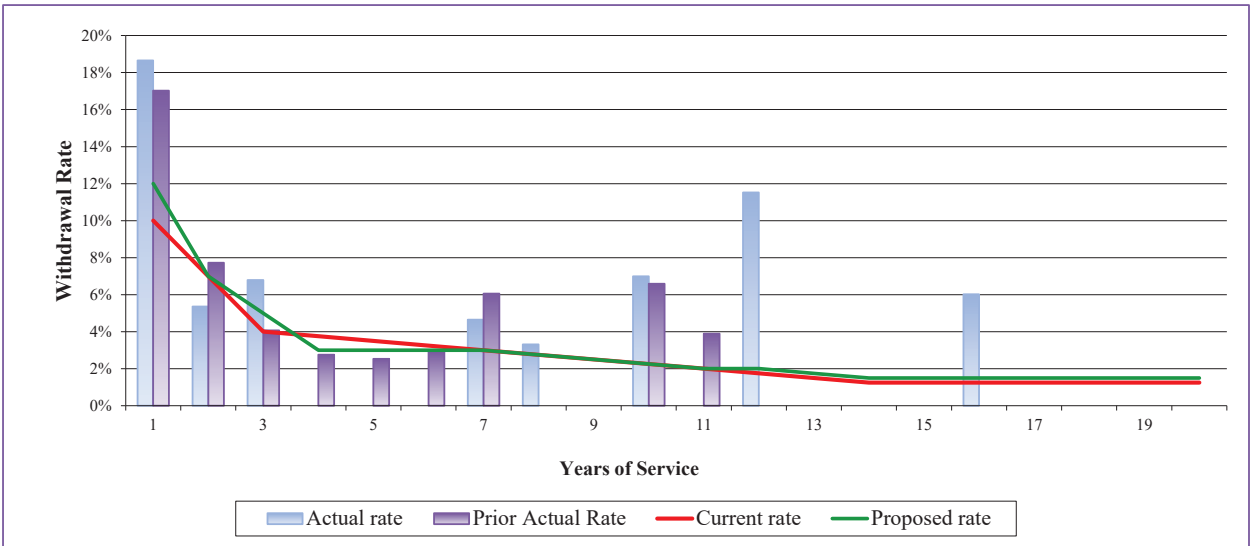


SECTION VIII – TERMINATION OF EMPLOYMENT (WITHDRAWAL)



Given the small dataset, we are moving part of the way toward the actual experience in order to avoid over-correcting in this study. Using the recommended assumption, the A/E ratio for males for durations 1 through 20 is 88% on a count basis and 114% on a liability-weighted basis.

Females: There is far less data for females than for males. As a result, we expect to observe more volatility in the termination rates over the range of service, as exhibited by high rates are some ages and 0% rates at others. This volatility occurred in both the current study and the prior study, as shown below.



We recommend the termination rates be adjusted as shown in the graph above to better fit the actual observed experience. The A/E ratio, using the proposed assumption, is 108% on a count basis and 113% on a liability-weighted basis.





SECTION VIII – TERMINATION OF EMPLOYMENT (WITHDRAWAL)

Withdrawal of Employee Contributions by Vested Terminating Members

Some vested employees who terminated employment elect to take a refund of their employee contribution balance, thereby forfeiting the right to receive a monthly benefit at retirement. The current assumption used to anticipate this event for current active members who are expected to terminate employment after becoming vested is that the terminating vested member will elect a refund of employee contributions if the value is greater than the present value of the deferred monthly benefit.

The number of vested members who terminate employment is very small, so any numerical analysis is of very limited value. Furthermore, the current assumption ensures there is no actuarial loss from actual experience because the larger value is used to determine the liability upon termination. **Therefore, we believe the current assumption is reasonable and we recommend retaining it.**





SECTION IX – OTHER ASSUMPTIONS

OTHER ASSUMPTIONS

RETIREMENT PLAN

LOAD ON JOINT AND CONTINGENT ANNUITANT FORM OF PAYMENT

When a member elects to retire under a joint and contingent annuitant form of payment, the monthly benefit amount is reduced to reflect the longer expected payment period. However, if the contingent annuitant predeceases the retiree, the benefit amount “pops up” to the amount the retiree would be receiving if the joint and contingent annuitant form of payment had not been elected. In the valuation process, active liabilities are increased by 0.50% to estimate the higher liability associated with the pop-up feature for those receiving benefit as a joint and contingent annuitant form.

Based on our analysis of the percentage of retirees electing a joint and survivor form of payment and the inherent cost of the “pop up” feature, **the current load of 0.50% of active liability is a reasonable load and we recommend it be retained.**

ANNUITY FACTORS FOR OPTIONAL FORMS OF PAYMENT

The Plan permits a retiring employee to elect to receive their benefit under a different form of payment, i.e., a joint and contingent survivor annuity. Under this option, the benefit amount is reduced, but all or a specified portion is continued to a designated contingent annuitant after the employee’s death. The Plan document provides that the benefit payable under the joint and contingent annuity option shall be an “actuarially equivalent amount”. This means that the two benefit payment streams have the same present value under a given set of actuarial assumptions.

The assumptions that impact the definition of actuarially equivalent include the interest rate (the investment return assumption), the mortality assumption and the COLA assumption. A change to any of these three assumptions will impact the factors used to calculate the optional forms of benefit. While it is not required that the administrative factors automatically be updated with a change in one or more of these assumptions, the impact should be studied so that a determination can be made as to whether to update the joint and contingent annuity factors used for benefit calculations.

In the current experience study, a recommendation was made to change the mortality assumption, but the investment return and COLA assumptions were unchanged. The change to the mortality assumption had a minor impact on the optional form factors. Our analysis indicates that the optional form factors would only be impacted by 0.1% to 0.5% for the key retirement ages of 60 to 70. Therefore, **we recommend the current factors be retained until additional assumption changes occur which have a larger impact on benefit amounts.**





SECTION IX – OTHER ASSUMPTIONS

We recommend the current assumptions for the optional form of payment factors be retained, as shown below:

Interest rate: 6.75%

Mortality: Pub 2010 Median Mortality Table, projected to 2037 using Scale MP-2020

COLA: 2.50%

Member Gender: Blended 90% Male/10% Female

Joint Annuitant Gender: Blended 10% Male/90% Female

MARRIAGE ASSUMPTION (RETIREMENT VALUATION)

The current assumption is that 90% of all employees are married with the male spouse three years older than the female spouse. As there is no valuation data available to evaluate the marriage assumption for active members, professional judgement is used to set this assumption. Based on updated U.S. census data, recent SOA experience studies, and peer practice in public sector plans, we believe 80% is a more appropriate reflection of current and expected future marital patterns. **We recommend lowering the marriage assumption to 80%.** Note that this assumption has a very minor cost impact on the valuation results.

OPEB PLAN ONLY ASSUMPTIONS

OPEB ELECTION RATES

Health benefits after retirement are voluntary and retiring employees may elect or waive coverage. During the current study period, 130 retirees were eligible to participate in the retiree medical plan. Of that group, 6 waived coverage (about 5%) and 124 elected to participate. Of the 124, 75 retirees (60%) covered their spouse in addition to themselves.

Based on this information and our professional judgement, **we recommend the participation rate continue to be 95% (current assumption) and the spousal coverage assumption continue to be 60% (current assumption).**

HEALTH CARE COST TREND RATE

The health care cost trend rate is reviewed in each OPEB valuation and updated so no analysis is included for this assumption here.





APPENDIX A – CURRENT ACTUARIAL ASSUMPTIONS

Investment Return: (revised 2021) 6.75% per annum, compounded annually

Payroll Growth: (revised 2021) 3.00% per year

Inflation: (revised 2021) 2.50% per year

Mortality Rates: (revised 2021)

Active Pub-2010 General Members (Median) Employee Mortality Table projected generationally using the MP-2020 Scale

Retired Pub-2010 General Members (Median) Retiree Mortality Table projected generationally using the MP-2020 Scale

Beneficiary Pub-2010 General Members (Median) Contingent Survivor Mortality Table projected generationally using the MP-2020 Scale

On Long Term Disability Pub-2010 Non-Safety Disabled Retiree Mortality Table projected generationally using the MP-2020 Scale

Withdrawal Rates: (revised 2021)

Years of Service	Annual Rate	
	Male	Female
1	7.00%	10.00%
5	1.80%	3.50%
10	1.50%	2.25%
15	1.50%	1.25%
20	1.00%	1.25%
25	0.00%	0.00%





APPENDIX A – CURRENT ACTUARIAL ASSUMPTIONS

Retirement Rates: (revised 2021)

<u>Age</u>	<u>Annual Rate</u>
55 to 57	2%
58	5%
59	8%
60	25%
61-63	30%
64	25%
65	50%
66-67	35%
68-69	30%
70	100%

Retirement benefits are assumed to commence at age 58 for vested terminated members and age 62 for disabled members.

Salary Scale: (revised 2021)

Salaries of the employees are assumed to increase according to the following schedule:

<u>Years of Service</u>	<u>Annual Percentage Increase</u>
1	10.40%
5	6.40%
10	4.40%
15	4.10%
20	4.10%
25	3.90%
30	3.65%
35	3.65%

Note: Includes salary inflation at 3.40%

Spouse's Benefit: (revised 2015)

It is assumed that 90% of employees are married, with wives three years younger than husbands.

Form of Payment:

Members who terminated vested are assumed to take a refund of contributions if it is more valuable than their deferred benefit.

Cost of Living Adjustment:
(revised 2021)

Retirement benefits are assumed to increase at 2.50% per year.

Administrative Expense:
(implemented 2015)

Component of contribution rate, based on the prior year's actual administrative expenses.





APPENDIX A – CURRENT ACTUARIAL ASSUMPTIONS

Decrement Timing:	Middle of year
Other:	Active liabilities for withdrawal and retirement benefits are loaded 0.50% for those members expected to elect a Joint and Contingent Annuitant form of payment that has a pop-up feature. Missing contribution balances with interest are assumed to equal three times the annual benefit amount for inactive members. The salary amounts used as an input for valuation purposes represent pensionable compensation for the 12-month period immediately preceding the valuation date. These amounts are calculated by using the employees' contribution amounts for the 12-month period immediately preceding the valuation date, as provided to us by the client.





APPENDIX B – PROPOSED ACTUARIAL ASSUMPTIONS

Investment Return: (revised 2021)	6.75% per annum, compounded annually
Payroll Growth: (revised 2021)	3.00% per year
Inflation: (revised 2021)	2.50% per year
Mortality Rates: (revised 2025)	
Active	Pub-2016 General Members (Median) Employee Mortality Table projected generationally using the MP-2021 Scale
Retired	Pub-2016 General Members (Median) Retiree Mortality Table projected generationally using the MP-2021 Scale
Beneficiary	Pub-2016 General Members (Median) Contingent Survivor Mortality Table projected generationally using the MP-2021 Scale
On Long Term Disability	Pub-2016 Non-Safety Disabled Retiree Mortality Table projected generationally using the MP-2021 Scale

Withdrawal Rates: (revised 2025)

Years of Service	Annual Rate	
	Male	Female
1	5.50%	12.00%
5	3.00%	3.00%
10	1.75%	2.25%
15	1.25%	1.50%
20	1.25%	1.50%
25	0.00%	0.00%





APPENDIX B – PROPOSED ACTUARIAL ASSUMPTIONS

Retirement Rates: (revised 2025)

<u>Age</u>	<u>Annual Rate</u>
55 to 57	2%
58 to 59	5%
60	20%
61	30%
62	33%
63 to 65	25%
66 to 69	30%
70	100%

Retirement benefits are assumed to commence at age 58 for vested terminated members and age 62 for disabled members.

Salary Scale: (revised 2025)

Salaries of the employees are assumed to increase according to the following schedule:

<u>Years of Service</u>	<u>Annual Percentage Increase</u>
1	12.50%
5	7.50%
10	4.50%
15	4.20%
20	4.20%
25	4.00%
30	3.75%
35	3.75%

Note: Includes salary inflation at 3.50%

Spouse's Benefit: (revised 2015)

It is assumed that 80% of employees are married, with wives three years younger than husbands.

Form of Payment:

Members who terminated vested are assumed to take a refund of contributions if it is more valuable than their deferred benefit.

Cost of Living Adjustment: (revised 2021)

Retirement benefits are assumed to increase at 2.50% per year.

Administrative Expense: (implemented 2015)

Component of contribution rate, based on the prior year's actual administrative expenses.

Decrement Timing:

Middle of year





APPENDIX B – PROPOSED ACTUARIAL ASSUMPTIONS

Other:

Active liabilities for withdrawal and retirement benefits are loaded 0.50% for those members expected to elect a Joint and Contingent Annuitant form of payment that has a pop-up feature.

Missing contribution balances with interest are assumed to equal three times the annual benefit amount for inactive members.

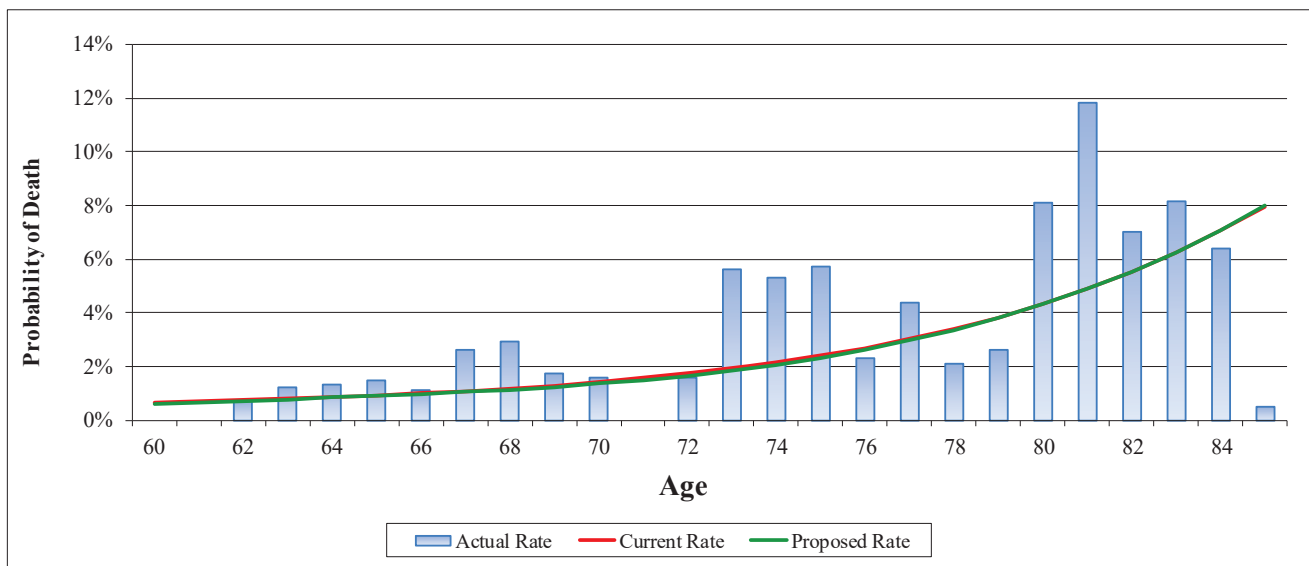
The salary amounts used as an input for valuation purposes represent pensionable compensation for the 12-month period immediately preceding the valuation date. These amounts are calculated by using the employees' contribution amounts for the 12-month period immediately preceding the valuation date, as provided to us by the client.





APPENDIX C – DECREMENT EXPERIENCE GRAPHS

EXHIBIT C-1
Retiree Mortality - Males



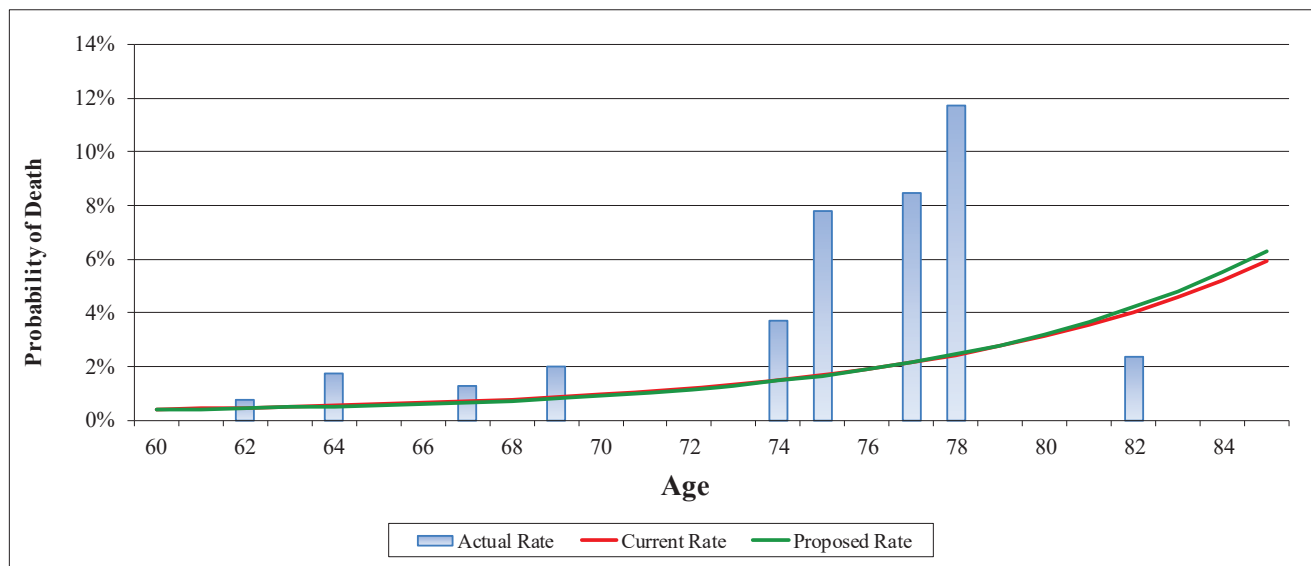
	Actual	Expected - Current Assumptions	Expected - Proposed Assumptions
Weighted Count	255,253	192,140	188,666
Actual/Expected		133%	135%





APPENDIX C – DECREMENT EXPERIENCE GRAPHS

EXHIBIT C-2
Retiree Mortality - Females



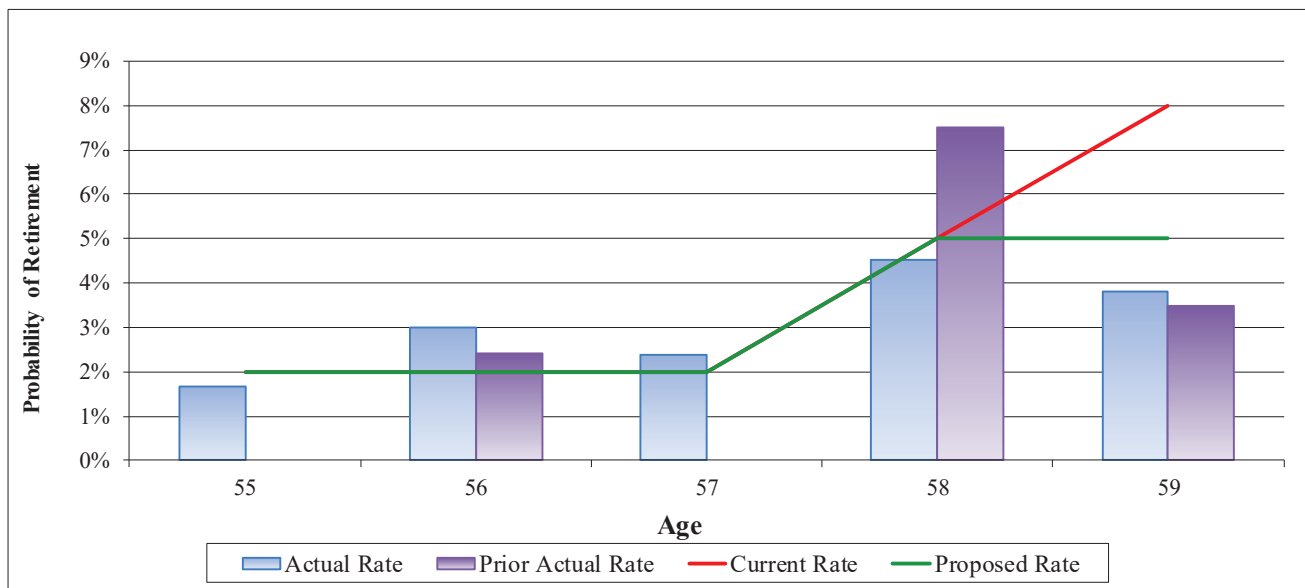
	Actual	Expected - Current Assumptions	Expected - Proposed Assumptions
Weighted Count	28,262	31,265	30,719
Actual/Expected		90%	92%





APPENDIX C – DECREMENT EXPERIENCE GRAPHS

EXHIBIT C-3
Early Retirement



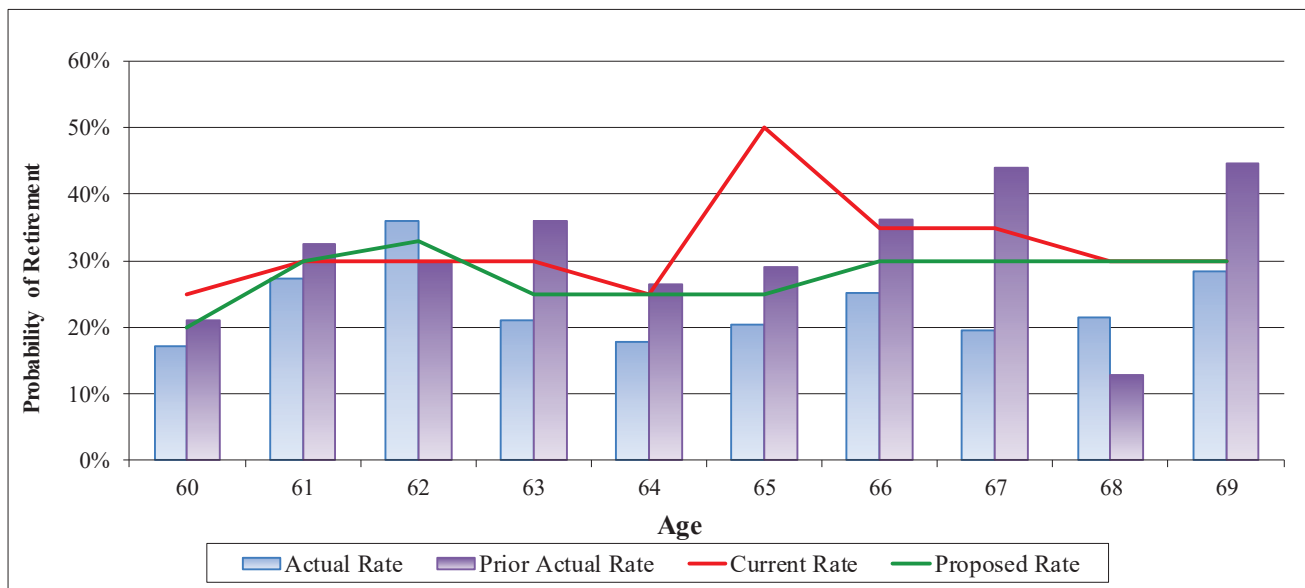
	Actual	Expected - Current Assumptions	Expected - Proposed Assumptions
Weighted Count	40	51	42
Actual/Expected		78%	95%





APPENDIX C – DECREMENT EXPERIENCE GRAPHS

EXHIBIT C-4
Unreduced Retirement



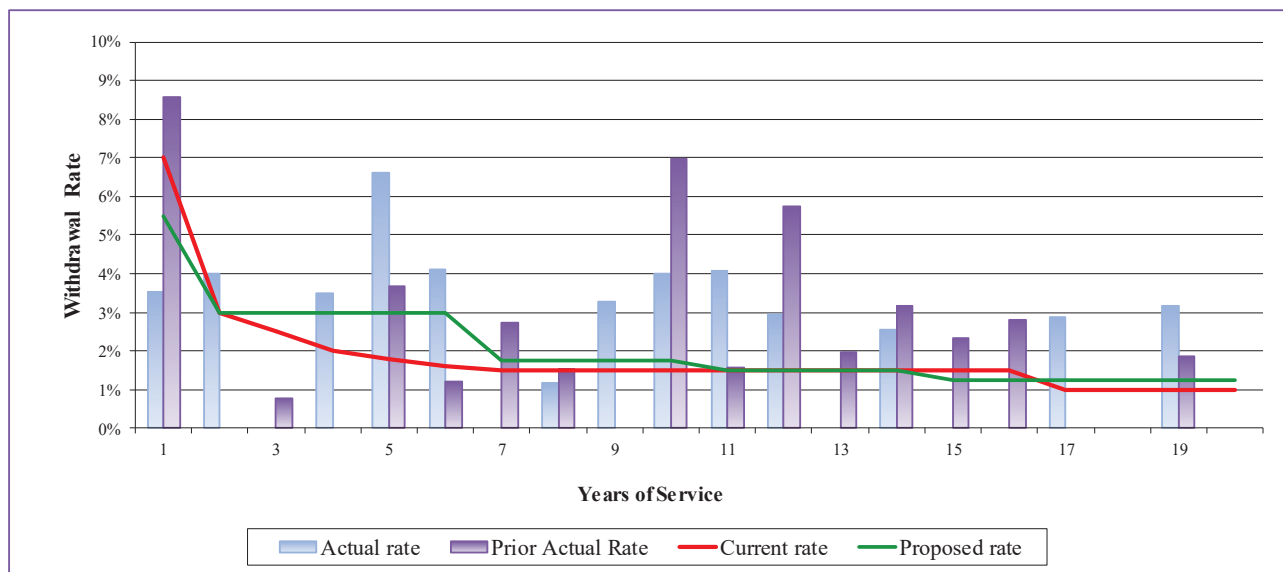
	Actual	Expected - Current Assumptions	Expected - Proposed Assumptions
Weighted Count	243	314	275
Actual/Expected		77%	88%





APPENDIX C – DECREMENT EXPERIENCE GRAPHS

EXHIBIT C-5
Termination of Employment – Males



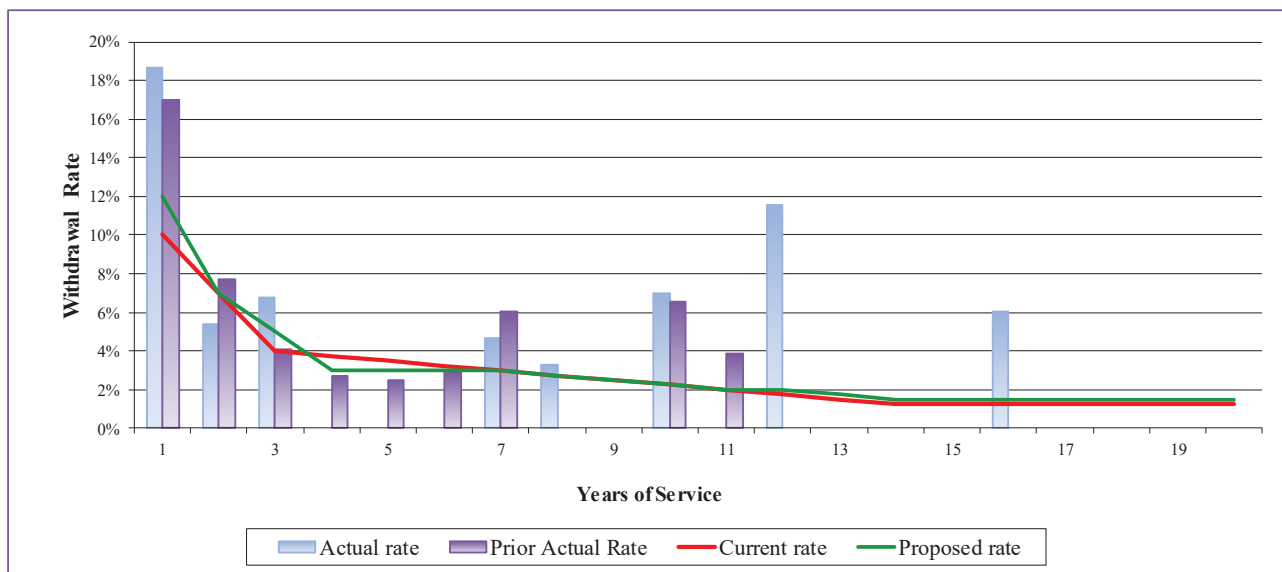
	Actual	Expected - Current Assumptions	Expected - Proposed Assumptions
Weighted Count	19	14	16
Actual/Expected		129%	114%





APPENDIX C – DECREMENT EXPERIENCE GRAPHS

EXHIBIT C-6
Termination of Employment - Females



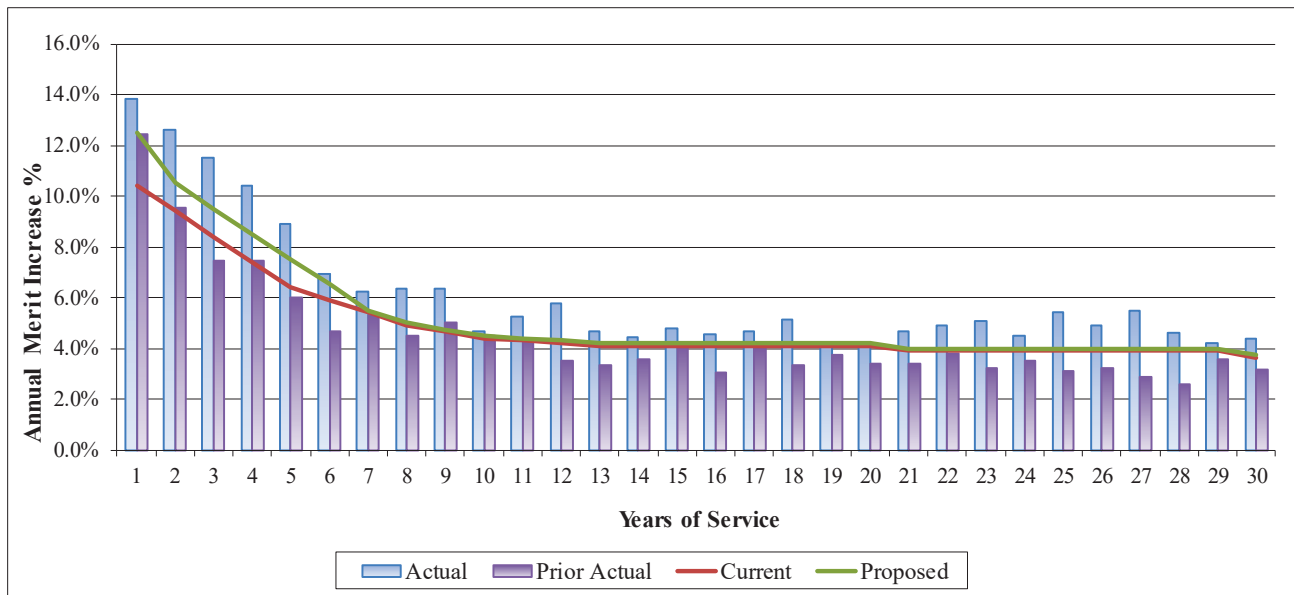
	Actual	Expected - Current Assumptions	Expected - Proposed Assumptions
Weighted Count	7	6	6
Actual/Expected		121%	113%





APPENDIX C – DECREMENT EXPERIENCE GRAPHS

EXHIBIT C-7
Total Salary Scale



	Actual	Expected - Current Assumptions	Expected - Proposed Assumptions
Average Increase	6.92%	5.47%	5.92%
Actual/Expected		127%	117%





APPENDIX D – LIABILITY WEIGHTED DATA SUMMARY TABLES

EXHIBIT D-1 Retiree Mortality – Males

Age	Exposure	Actual Deaths	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
60	228,927	-	0.000%	1,458.0	0.637%	1,428.3	0.624%
61	360,136	-	0.000%	2,478.7	0.688%	2,424.7	0.673%
62	477,724	3,385	0.709%	3,547.8	0.743%	3,464.4	0.725%
63	553,172	6,868	1.242%	4,415.8	0.798%	4,305.1	0.778%
64	538,730	7,000	1.299%	4,623.7	0.858%	4,502.9	0.836%
65	529,823	7,800	1.472%	4,899.0	0.925%	4,755.5	0.898%
66	517,866	5,678	1.096%	5,176.4	1.000%	5,008.4	0.967%
67	500,603	13,191	2.635%	5,431.2	1.085%	5,225.5	1.044%
68	440,470	12,912	2.931%	5,210.0	1.183%	4,989.6	1.133%
69	431,576	7,592	1.759%	5,589.4	1.295%	5,326.0	1.234%
70	386,668	6,206	1.605%	5,504.9	1.424%	5,227.0	1.352%
71	360,003	-	0.000%	5,650.0	1.569%	5,365.3	1.490%
72	333,392	5,233	1.570%	5,793.1	1.738%	5,510.0	1.653%
73	313,669	17,647	5.626%	6,049.3	1.929%	5,778.1	1.842%
74	312,132	16,621	5.325%	6,706.8	2.149%	6,444.5	2.065%
75	275,210	15,810	5.745%	6,610.1	2.402%	6,391.5	2.322%
76	263,172	6,066	2.305%	7,082.0	2.691%	6,895.2	2.620%
77	233,238	10,194	4.371%	7,048.5	3.022%	6,908.7	2.962%
78	252,820	5,371	2.125%	8,597.0	3.400%	8,483.2	3.355%
79	269,273	6,992	2.597%	10,318.6	3.832%	10,239.5	3.803%
80	263,941	21,435	8.121%	11,414.6	4.325%	11,370.2	4.308%
81	267,991	31,652	11.811%	13,097.8	4.887%	13,076.9	4.880%
82	224,706	15,724	6.998%	12,421.5	5.528%	12,410.4	5.523%
83	215,427	17,560	8.151%	13,458.9	6.248%	13,459.2	6.248%
84	210,377	13,442	6.389%	14,839.7	7.054%	14,870.8	7.069%
85	185,118	875	0.473%	14,717.7	7.950%	14,805.3	7.998%
	8,946,165	255,253	2.853%	192,140.4	2.148%	188,666.4	2.109%





APPENDIX D – LIABILITY WEIGHTED DATA SUMMARY TABLES

EXHIBIT D-2 Retiree Mortality - Females

Age	Exposure	Actual Deaths	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
60	67,173	-	0.000%	272.0	0.405%	260.7	0.388%
61	102,965	-	0.000%	446.7	0.434%	426.4	0.414%
62	148,204	1,128	0.761%	690.5	0.466%	656.2	0.443%
63	192,639	-	0.000%	968.6	0.503%	910.6	0.473%
64	221,951	3,890	1.753%	1,204.6	0.543%	1,124.6	0.507%
65	221,055	-	0.000%	1,301.9	0.589%	1,208.6	0.547%
66	235,664	-	0.000%	1,510.8	0.641%	1,401.8	0.595%
67	227,974	2,906	1.274%	1,596.9	0.700%	1,486.3	0.652%
68	210,577	-	0.000%	1,621.6	0.770%	1,517.6	0.721%
69	177,048	3,512	1.984%	1,506.8	0.851%	1,419.9	0.802%
70	164,879	-	0.000%	1,557.5	0.945%	1,478.3	0.897%
71	139,819	-	0.000%	1,473.5	1.054%	1,408.0	1.007%
72	106,408	-	0.000%	1,255.9	1.180%	1,208.2	1.135%
73	94,489	-	0.000%	1,252.3	1.325%	1,213.7	1.284%
74	79,845	2,952	3.697%	1,191.8	1.493%	1,162.8	1.456%
75	54,873	4,289	7.816%	923.6	1.683%	907.8	1.654%
76	43,055	-	0.000%	817.8	1.899%	810.4	1.882%
77	46,893	3,962	8.448%	1,006.8	2.147%	1,005.9	2.145%
78	41,829	4,904	11.724%	1,015.7	2.428%	1,023.0	2.446%
79	37,722	-	0.000%	1,036.8	2.748%	1,053.8	2.794%
80	39,440	-	0.000%	1,228.9	3.116%	1,260.1	3.195%
81	36,281	-	0.000%	1,282.8	3.536%	1,328.5	3.662%
82	30,262	721	2.381%	1,215.5	4.017%	1,270.8	4.199%
83	33,427	-	0.000%	1,526.0	4.565%	1,608.6	4.812%
84	31,696	-	0.000%	1,645.6	5.192%	1,744.8	5.505%
85	29,019	-	0.000%	1,714.3	5.908%	1,821.2	6.276%
	2,815,185	28,262	1.004%	31,264.9	1.111%	30,718.5	1.091%





APPENDIX D – LIABILITY WEIGHTED DATA SUMMARY TABLES

EXHIBIT D-3
Early Retirement

Age	Exposure	Actual Retirements	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
55	192	3	1.671%	3.8	2.000%	3.8	2.000%
56	246	7	3.003%	4.9	2.000%	4.9	2.000%
57	241	6	2.378%	4.8	2.000%	4.8	2.000%
58	269	12	4.518%	13.5	5.000%	13.5	5.000%
59	296	11	3.795%	23.7	8.000%	14.8	5.000%
	1,245	40	3.193%	50.8	4.078%	41.9	3.363%





APPENDIX D – LIABILITY WEIGHTED DATA SUMMARY TABLES

EXHIBIT D-4 Unreduced Retirement

Age	Exposure	Actual Retirements	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
60	264	45	17.174%	66.0	25.000%	52.8	20.000%
61	213	58	27.420%	63.9	30.000%	63.9	30.000%
62	154	55	35.964%	46.1	30.000%	50.7	33.000%
63	86	18	21.038%	25.9	30.000%	21.6	25.000%
64	81	14	17.864%	20.3	25.000%	20.3	25.000%
65	85	17	20.499%	42.3	50.000%	21.1	25.000%
66	68	17	25.209%	23.7	35.000%	20.3	30.000%
67	45	9	19.515%	15.8	35.000%	13.5	30.000%
68	26	6	21.527%	7.9	30.000%	7.9	30.000%
69	9	3	28.501%	2.6	30.000%	2.6	30.000%
	1,030	243	23.585%	314.4	30.517%	274.8	26.665%





APPENDIX D – LIABILITY WEIGHTED DATA SUMMARY TABLES

EXHIBIT D-5 Termination of Employment – Males

Duration	Exposure	Actual Terminations	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
1	13	-	3.550%	0.9	7.000%	0.7	5.500%
2	25	1	4.003%	0.8	3.000%	0.8	3.000%
3	32	-	0.000%	0.8	2.500%	1.0	3.000%
4	37	1	3.493%	0.7	2.000%	1.1	3.000%
5	34	2	6.609%	0.6	1.800%	1.0	3.000%
6	33	1	4.112%	0.5	1.600%	1.0	3.000%
7	45	-	0.000%	0.7	1.500%	0.8	1.750%
8	54	1	1.191%	0.8	1.500%	1.0	1.750%
9	60	2	3.283%	0.9	1.500%	1.0	1.750%
10	55	2	4.009%	0.8	1.500%	1.0	1.750%
11	34	1	4.065%	0.5	1.500%	0.5	1.500%
12	40	1	2.946%	0.6	1.500%	0.6	1.500%
13	52	-	0.000%	0.8	1.500%	0.8	1.500%
14	64	2	2.539%	1.0	1.500%	1.0	1.500%
15	70	-	0.000%	1.0	1.500%	0.9	1.250%
16	57	-	0.000%	0.9	1.500%	0.7	1.250%
17	51	1	2.863%	0.5	1.000%	0.6	1.250%
18	38	-	0.000%	0.4	1.000%	0.5	1.250%
19	54	2	3.163%	0.5	1.000%	0.7	1.250%
20	60	-	0.000%	0.6	1.000%	0.7	1.250%
	909	19	2.045%	14.4	1.580%	16.3	1.793%





APPENDIX D – LIABILITY WEIGHTED DATA SUMMARY TABLES

EXHIBIT D-6 Termination of Employment - Females

Duration	Exposure	Actual Terminations	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
1	3	1	18.659%	0.3	10.000%	0.4	12.000%
2	5	-	5.363%	0.3	7.000%	0.3	7.000%
3	6	-	6.792%	0.2	4.000%	0.3	5.000%
4	5	-	0.000%	0.2	3.750%	0.1	3.000%
5	7	-	0.000%	0.2	3.500%	0.2	3.000%
6	12	-	0.000%	0.4	3.250%	0.3	3.000%
7	15	1	4.648%	0.4	3.000%	0.4	3.000%
8	16	1	3.314%	0.4	2.750%	0.4	2.750%
9	16	-	0.000%	0.4	2.500%	0.4	2.500%
10	18	1	6.986%	0.4	2.250%	0.4	2.250%
11	12	-	0.000%	0.2	2.000%	0.2	2.000%
12	11	1	11.525%	0.2	1.750%	0.2	2.000%
13	12	-	0.000%	0.2	1.500%	0.2	1.750%
14	15	-	0.000%	0.2	1.250%	0.2	1.500%
15	22	-	0.000%	0.3	1.250%	0.3	1.500%
16	29	2	6.022%	0.4	1.250%	0.4	1.500%
17	20	-	0.000%	0.2	1.250%	0.3	1.500%
18	14	-	0.000%	0.2	1.250%	0.2	1.500%
19	12	-	0.000%	0.1	1.250%	0.2	1.500%
20	11	-	0.000%	0.1	1.250%	0.2	1.500%
	259	7	2.580%	5.5	2.130%	5.9	2.277%





APPENDIX D – LIABILITY WEIGHTED DATA SUMMARY TABLES

EXHIBIT D-7
Total Salary Scale

Duration	Initial Salary (Millions)	Subsequent Salary (Millions)	Actual Rate	Current Expected (Millions)	Current Rate	Proposed Expected (Millions)	Proposed Rate
0	7.0	8.0	15.1%	7.7	11.4%	7.9	13.5%
1	15.3	17.4	13.8%	16.9	10.4%	17.2	12.5%
2	14.3	16.2	12.6%	15.7	9.4%	15.9	10.5%
3	12.4	13.8	11.5%	13.4	8.4%	13.5	9.5%
4	11.3	12.5	10.4%	12.1	7.4%	12.2	8.5%
5	9.0	9.9	8.9%	9.6	6.4%	9.7	7.5%
6	8.8	9.4	7.0%	9.3	5.9%	9.4	6.5%
7	10.3	10.9	6.2%	10.8	5.4%	10.8	5.5%
8	10.8	11.5	6.4%	11.4	4.9%	11.4	5.0%
9	11.4	12.1	6.4%	11.9	4.7%	11.9	4.8%
10	10.0	10.4	4.7%	10.4	4.4%	10.4	4.5%
11	6.4	6.7	5.2%	6.7	4.3%	6.7	4.4%
12	6.6	6.9	5.8%	6.8	4.2%	6.8	4.3%
13	7.4	7.7	4.6%	7.7	4.1%	7.7	4.2%
14	7.6	8.0	4.5%	7.9	4.1%	8.0	4.2%
15	8.7	9.1	4.8%	9.1	4.1%	9.1	4.2%
16	8.7	9.1	4.6%	9.1	4.1%	9.1	4.2%
17	7.0	7.3	4.7%	7.3	4.1%	7.3	4.2%
18	5.7	6.0	5.1%	5.9	4.1%	5.9	4.2%
19	6.4	6.7	4.2%	6.7	4.1%	6.7	4.2%
20	5.9	6.2	4.1%	6.2	4.1%	6.2	4.2%
21	7.6	7.9	4.7%	7.9	3.9%	7.9	4.0%
22	7.8	8.2	4.9%	8.1	3.9%	8.1	4.0%
23	6.5	6.8	5.0%	6.8	3.9%	6.8	4.0%
24	6.5	6.8	4.5%	6.8	3.9%	6.8	4.0%
25	4.8	5.1	5.4%	5.0	3.9%	5.0	4.0%
26	4.7	4.9	4.9%	4.9	3.9%	4.9	4.0%
27	4.3	4.6	5.5%	4.5	3.9%	4.5	4.0%
28	3.6	3.8	4.6%	3.7	3.9%	3.7	4.0%
29	2.8	2.9	4.2%	2.9	3.9%	2.9	4.0%
30	2.4	2.5	4.4%	2.5	3.7%	2.5	3.8%
	242.1	259.4	7.2%	255.7	5.6%	256.9	6.1%





APPENDIX E – COUNT WEIGHTED DATA SUMMARY TABLES

EXHIBIT E-1
Retiree Mortality - Males

Age	Exposure	Actual Deaths	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
60	66	-	0.000%	0.4	0.637%	0.4	0.624%
61	99	-	0.000%	0.7	0.688%	0.7	0.673%
62	130	1	0.769%	1.0	0.743%	0.9	0.725%
63	148	1	0.676%	1.2	0.798%	1.2	0.778%
64	154	2	1.299%	1.3	0.858%	1.3	0.836%
65	156	3	1.923%	1.4	0.925%	1.4	0.898%
66	151	2	1.325%	1.5	1.000%	1.5	0.967%
67	147	3	2.041%	1.6	1.085%	1.5	1.044%
68	131	2	1.527%	1.5	1.183%	1.5	1.133%
69	129	2	1.550%	1.7	1.295%	1.6	1.234%
70	115	2	1.739%	1.6	1.424%	1.6	1.352%
71	104	-	0.000%	1.6	1.569%	1.5	1.490%
72	91	1	1.099%	1.6	1.738%	1.5	1.653%
73	86	5	5.814%	1.7	1.929%	1.6	1.842%
74	90	5	5.556%	1.9	2.149%	1.9	2.065%
75	84	4	4.762%	2.0	2.402%	2.0	2.322%
76	80	2	2.500%	2.2	2.691%	2.1	2.620%
77	75	4	5.333%	2.3	3.022%	2.2	2.962%
78	83	2	2.410%	2.8	3.400%	2.8	3.355%
79	90	2	2.222%	3.4	3.832%	3.4	3.803%
80	88	10	11.364%	3.8	4.325%	3.8	4.308%
81	85	9	10.588%	4.2	4.887%	4.1	4.880%
82	71	6	8.451%	3.9	5.528%	3.9	5.523%
83	68	5	7.353%	4.2	6.248%	4.2	6.248%
84	68	3	4.412%	4.8	7.054%	4.8	7.069%
85	62	1	1.613%	4.9	7.950%	5.0	7.998%
	2,651	77	2.905%	59.3	2.239%	58.3	2.200%





APPENDIX E – COUNT WEIGHTED DATA SUMMARY TABLES

EXHIBIT E-2 Retiree Mortality - Females

Age	Exposure	Actual Deaths	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
60	26	-	0.000%	0.1	0.405%	0.1	0.388%
61	38	-	0.000%	0.2	0.434%	0.2	0.414%
62	51	1	1.961%	0.2	0.466%	0.2	0.443%
63	65	-	0.000%	0.3	0.503%	0.3	0.473%
64	75	1	1.333%	0.4	0.543%	0.4	0.507%
65	76	-	0.000%	0.4	0.589%	0.4	0.547%
66	83	-	0.000%	0.5	0.641%	0.5	0.595%
67	82	2	2.439%	0.6	0.700%	0.5	0.652%
68	77	-	0.000%	0.6	0.770%	0.6	0.721%
69	64	1	1.563%	0.5	0.851%	0.5	0.802%
70	61	-	0.000%	0.6	0.945%	0.5	0.897%
71	53	-	0.000%	0.6	1.054%	0.5	1.007%
72	45	-	0.000%	0.5	1.180%	0.5	1.135%
73	39	-	0.000%	0.5	1.325%	0.5	1.284%
74	34	2	5.882%	0.5	1.493%	0.5	1.456%
75	25	1	4.000%	0.4	1.683%	0.4	1.654%
76	19	-	0.000%	0.4	1.899%	0.4	1.882%
77	21	1	4.762%	0.5	2.147%	0.5	2.145%
78	19	3	15.789%	0.5	2.428%	0.5	2.446%
79	16	-	0.000%	0.4	2.748%	0.4	2.794%
80	15	-	0.000%	0.5	3.116%	0.5	3.195%
81	14	-	0.000%	0.5	3.536%	0.5	3.662%
82	13	1	7.692%	0.5	4.017%	0.5	4.199%
83	15	-	0.000%	0.7	4.565%	0.7	4.812%
84	15	-	0.000%	0.8	5.192%	0.8	5.505%
85	13	-	0.000%	0.8	5.908%	0.8	6.276%
	1,054	13	1.233%	12.5	1.183%	12.3	1.168%





APPENDIX E – COUNT WEIGHTED DATA SUMMARY TABLES

EXHIBIT E-3 Early Retirement

Age	Exposure	Actual Retirements	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
55	100	1	1.000%	2.0	2.000%	2.0	2.000%
56	123	2	1.626%	2.5	2.000%	2.5	2.000%
57	115	2	1.739%	2.3	2.000%	2.3	2.000%
58	124	5	4.032%	6.2	5.000%	6.2	5.000%
59	133	6	4.511%	10.6	8.000%	6.7	5.000%
	595	16	2.689%	23.6	3.966%	19.6	3.296%





APPENDIX E – COUNT WEIGHTED DATA SUMMARY TABLES

EXHIBIT E-4 Unreduced Retirement

Age	Exposure	Actual Retirements	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
60	114	17	14.912%	28.5	25.000%	22.8	20.000%
61	96	20	20.833%	28.8	30.000%	28.8	30.000%
62	74	21	28.378%	22.2	30.000%	24.4	33.000%
63	47	8	17.021%	14.1	30.000%	11.8	25.000%
64	38	6	15.789%	9.5	25.000%	9.5	25.000%
65	36	7	19.444%	18.0	50.000%	9.0	25.000%
66	31	7	22.581%	10.9	35.000%	9.3	30.000%
67	22	5	22.727%	7.7	35.000%	6.6	30.000%
68	13	3	23.077%	3.9	30.000%	3.9	30.000%
69	7	1	14.286%	2.1	30.000%	2.1	30.000%
	478	95	19.874%	145.7	30.471%	128.2	26.814%





APPENDIX E – COUNT WEIGHTED DATA SUMMARY TABLES

EXHIBIT E-5 Termination of Employment – Males

Duration	Exposure	Actual Terminations	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
1	223	8	3.587%	15.6	7.000%	12.3	5.500%
2	192	7	3.646%	5.8	3.000%	5.8	3.000%
3	150	-	0.000%	3.8	2.500%	4.5	3.000%
4	121	4	3.306%	2.4	2.000%	3.6	3.000%
5	83	4	4.819%	1.5	1.800%	2.5	3.000%
6	70	3	4.286%	1.1	1.600%	2.1	3.000%
7	79	-	0.000%	1.2	1.500%	1.4	1.750%
8	77	1	1.299%	1.2	1.500%	1.3	1.750%
9	72	2	2.778%	1.1	1.500%	1.3	1.750%
10	57	2	3.509%	0.9	1.500%	1.0	1.750%
11	32	1	3.125%	0.5	1.500%	0.5	1.500%
12	39	1	2.564%	0.6	1.500%	0.6	1.500%
13	44	-	0.000%	0.7	1.500%	0.7	1.500%
14	51	1	1.961%	0.8	1.500%	0.8	1.500%
15	49	-	0.000%	0.7	1.500%	0.6	1.250%
16	38	-	0.000%	0.6	1.500%	0.5	1.250%
17	31	1	3.226%	0.3	1.000%	0.4	1.250%
18	24	-	0.000%	0.2	1.000%	0.3	1.250%
19	34	1	2.941%	0.3	1.000%	0.4	1.250%
20	35	-	0.000%	0.4	1.000%	0.4	1.250%
	1,501	36	2.398%	39.5	2.629%	40.9	2.722%





APPENDIX E – COUNT WEIGHTED DATA SUMMARY TABLES

EXHIBIT E-6 Termination of Employment - Females

Duration	Exposure	Actual Terminations	Actual Rate	Current Expected	Current Rate	Proposed Expected	Proposed Rate
1	45	7	15.556%	4.5	10.000%	5.4	12.000%
2	35	2	5.714%	2.5	7.000%	2.5	7.000%
3	27	2	7.407%	1.1	4.000%	1.4	5.000%
4	17	-	0.000%	0.6	3.750%	0.5	3.000%
5	17	-	0.000%	0.6	3.500%	0.5	3.000%
6	25	-	0.000%	0.8	3.250%	0.8	3.000%
7	28	1	3.571%	0.8	3.000%	0.8	3.000%
8	27	1	3.704%	0.7	2.750%	0.7	2.750%
9	25	-	0.000%	0.6	2.500%	0.6	2.500%
10	24	2	8.333%	0.5	2.250%	0.5	2.250%
11	14	-	0.000%	0.3	2.000%	0.3	2.000%
12	11	1	9.091%	0.2	1.750%	0.2	2.000%
13	10	-	0.000%	0.2	1.500%	0.2	1.750%
14	12	-	0.000%	0.2	1.250%	0.2	1.500%
15	17	-	0.000%	0.2	1.250%	0.3	1.500%
16	22	1	4.545%	0.3	1.250%	0.3	1.500%
17	16	-	0.000%	0.2	1.250%	0.2	1.500%
18	10	-	0.000%	0.1	1.250%	0.2	1.500%
19	7	-	0.000%	0.1	1.250%	0.1	1.500%
20	6	-	0.000%	0.1	1.250%	0.1	1.500%
	395	17	4.304%	14.6	3.689%	15.7	3.985%

