METROPOLITAN WATER RECLAMATION DISTRICT RETIREMENT FUND

Actuarial Services

Request for Proposal

July 2022

I. RFP Summary

The Metropolitan Water Reclamation District Retirement Fund (Fund) requests proposals from qualified Consulting Actuaries (Responder) to provide a range of actuarial services to the Fund. This RFP is for the procurement of services over a five-year period; January 1, 2023 through December 31, 2027.

II. Background

The Fund is led by a seven-member Board of Trustees (Board), that administers a single employer defined benefit public employee retirement fund created in 1931 by the Illinois Pension Code (Code) to provide retirement, survivor, and disability benefits for qualified employees and their beneficiaries. The Fund is sponsored by the Metropolitan Water Reclamation District of Greater Chicago (MWRD), and as such, is included in their annual financial statements as a pension trust fund. The Fund is administered by a staff of 11 employees, led by an Executive Director appointed by the Board.

As of December 31, 2021, the Fund had 4,347 members, made up of 1,044 Tier 1 and 693 Tier 2 active employees, 128 inactive members, and 2,482 retirees and beneficiaries. The Fund was 58.7% funded with a Fiduciary Net Position of $1.724 billion and an Unfunded Actuarial Liability of $1.139 billion.

The Fund in governed in accordance with Articles 1, 13, and 20 of the Code. A summary plan description is included in this RFP as **Addendum C**. Further information about the Fund can be found on our website, www.mwrdrf.org.

III. Scope of Work

The Responder shall perform tasks which include but shall not be limited to the preparation of an annual actuarial valuation report (Valuation). The Valuation shall be performed in accordance with generally accepted actuarial principles and shall meet the parameters set for financial statement disclosures by the Governmental Accounting Standards Board (GASB) Statements 67 & 68 as well as any subsequent applicable Statements.

IV. Detailed Proposal Requirements

Additional specifications of the scope of work, minimum firm qualifications, proposal content requirements, additional items of information, and a firm diversity table are attached as **Addendum A, B, C, D, and E** and are to be considered a part of this request for proposal.

V. Potential Responders Inquiry Process

Responders submitting proposals may submit questions regarding this RFP to the Executive Director of the Fund at mohlerj@mwrdrf.org through July 29, 2022. Answers to questions received, without identifying the questioner, will be posted on our website at www.mwrdrf.org shortly thereafter.

VI. Proposal Evaluation

Full and complete proposals submitted in a timely fashion will be evaluated by Fund staff as reflected in **Addendum B, Section VI**.

VII. Proposal Schedule

If the following schedule changes, Responders will be notified by email.

RFP issuance	July 15, 2022
Written questions from potential responders	July 29, 2022
Answers to written questions	August 5, 2022
Proposals due	August 19, 2022
Finalist(s) notified	August 26, 2022
Finalists' presentations	TBD
Expected date of Board approval *(tentative)*	October 26, 2022
Selected firm notified *(tentative)*	October 28, 2022

VIII. Proposal Submission

An electronic copy of your proposals must be received by 4:30 CST on Friday August 19, 2022. Proposals must cover the entire scope of actuarial services requested in the **Addenda**.

An email confirmation is requested confirming receipt of the RFP. Proposals received will be confidential during the selection process and there will be a "Quiet Period" which will restrict any Responders from contacting any Trustee of the Retirement Board from date of issuance till the completion of the procurement. This RFP will be posted on our website at: www.mwrdrf.org.

ADDENDUM A
Detailed Scope of Work to be Performed

I. Comprehensive Actuarial Services

The Responder will be expected to provide various and ongoing consulting services including but not limited to the following:

a. Provide actuarial consultation and advisory services; services may be delivered in meetings, telephone calls, or written correspondence. Responder should be readily accessible to the Executive Director and be available for meetings upon reasonable request.
b. Attendance of a minimum of (2) Board meetings per year.
c. Lead educational discussions with the Board or Fund staff upon request.
d. Review actuarial methods and assumptions and make recommendations to the Board.
e. Assist Fund staff in the preparation and review of proposed changes to the governing pension statutes upon request.
f. Prepare timely actuarial cost estimates of proposed legislation (up to two proposal valuations per year to be included in base fee).
g. Prepare funding projections or any special studies requested by the Board (the fee for which shall be separately negotiated).
h. Prepare experience studies every 3-5 years (the fee for which shall be separately negotiated).
i. Recommend possible improvements in the financing and benefit structure of the Fund and inform the Fund of new developments in the retirement industry and their effect on the financing and benefit structure of a retirement system; keep the Board apprised of current trends and advancements within the actuarial profession.
j. Appear at selected meetings and hearings for discussion of actuarial standards and/or the principles used in the determination of the funding requirement and in the fiscal impact of legislation upon request.
k. Assist in establishing specifications for system data files. Periodically review the form and content of data files maintained by the Fund and make recommendations for modification, additions or deletions that will ensure the maintenance of the full range of data needed for legislative fiscal impact, actuarial studies, experience analysis and valuations.
l. Keep the Fund advised on developments in federal legislation and/or regulations regarding financing, benefits, vesting, fiduciary responsibility, disclosure, etc.
m. Provide actuarial data for the District for any possible bond sale and for the annual continuing disclosure requirements.
n. Provide a table of annual benefit limitations pursuant to Section 415 of the Internal Revenue Code based on the current IRS notice; life annuity factors for the coming year based on the mortality table and interest rate prescribed by the IRS and identification of the applicable interest rate for accumulating employee contributions for the purposes of the Section 415 limit calculations.

II. Valuation Services

The primary task is the preparation of the Valuation, in accordance with generally accepted actuarial principles and meeting the parameters set for financial statement disclosures by Governmental Accounting Standards Board (GASB) Statements 67 & 68 and any subsequent statements. In connection with the preparation of the Valuation, the Responder shall:

a. Review the form and content of data files maintained by the Fund and make recommendations for modification, additions, or deletions to insure an accurate valuation.
b. Review current actuarial methods and assumptions and make recommendations to the Board.
c. Develop and provide various tables and factors needed for the preparation of the Valuation including mortality tables, present value factors and survivor benefit factors.
d. Attend meetings for discussion of actuarial standards and the principles used in the determination of the funding requirement Valuation upon request.
e. Provide responses to the Fund Auditors upon request.
f. Prepare/update the necessary material for the Fund's Annual Comprehensive Financial Reports (ACFRs) to comply with GASB and GFOA reporting requirements, including Actuarial Certification, Summary of Plan Provisions, Glossary of Terms, and update of selected historical schedules.

III. Resources Available During the Assignment

The Responder will have access to the Fund's historical actuarial reports and work products. The Fund will furnish the consultant with such data as may be determined to be necessary for the performance of the work described herein. The data is from the Fund's proprietary benefits management system and will be provided in Excel. The Responder will be expected to treat all information as confidential.

IV. Timing of Delivery of Actuarial Services

The contract for this procurement is expected to begin on January 1, 2023. The Actuarial Valuation report shall be issued by mid-April each year, with a draft of the GASB section available for delivery to the District no later than March 31st.

ADDENDUM B
Detailed Proposal Requirements

I. Minimum Qualifications Standards and Important Qualification Factors

The Fund requires that the assigned firm personnel (Personnel) shall include Actuaries holding the qualification of Fellow or Associate of the Society of Actuaries and/or Fellow of the Conference of Actuaries in Public Practice and/or Member of the American Academy of Actuaries and/or meet standards of a qualified Actuary under the provisions of the Employee Retirement Income Security Act of 1974.

The Fund will also consider the following elements in reviewing Responders:

a. Public Pension Experience Experience in valuation assignments, experience analysis, and consulting services for public pension plans are important factors. Relative scope and complexity of the experience will be considered.

b. Public Pension Fund Experience by Personnel Because continuity is very important in establishing sound public policy in the pension area, the public pension plan experience of the firm personnel primarily assigned to the Fund's work and the potential for a long-term relationship with the Fund.

c. Experience in Testifying before Legislative Bodies The experience of Personnel in testifying in support of actuarial positions and/or the principles used in evaluating the Fund's financial position or defending the financial impact of legislation.

d. Sufficient Firm Size The extent to which the Responder has the capability to meet the Fund's needs as well as the needs of their other clients.

e. Ability to Discuss Actuarial Matters in Laymen's Terms The ability of Personnel to discuss actuarial theory, basis for assumptions, and other actuarial matters in a manner that is understandable to the Trustees and staff.

f. Accessibility The availability of Personnel to meet with the Board or staff, often on short notice, especially during the financial reports preparation season between January and June.

g. Absence of Contractual Liability Limits and Contractual Third-Party Reliance Disclaimers The extent to which the Responder seeks to limit its liability with respect to errors in its actuarial work or to disallow reliance on actuarial results by third parties.

II. Specific Proposal Contents

A. Firm Information

The Responder should indicate how it meets the minimum conditions described in **Section I**, and other pertinent qualifications through a narrative discussion of the following topics:

1. General Firm Description Provide the firm's name, home office address, address of the office providing the services under the contract, and telephone number. Provide a general description of the firm, including history, size, number of employees, primary business (consulting, pension planning, insurance, etc.), other business or services, type of organization (franchise, corporation, partnership, etc.) and other descriptive material.

2. Firm's Structure, Operational Method, and Communication Capability Describe the structure of the firm and its operational method. Include in the description an indication of how the firm communicates pension fundamentals in an understandable manner to audiences of diverse and non-technical backgrounds.

3. Firm's Public Pension Experience Provide a description of any public pension plan actuarial valuations and related experience rendered during the last five years with similar sized plans.

4. Function of Personnel and Experience For each non-clerical employee proposed to be assigned to the Fund, provide name and title, work location and the person's public pension plan experience. Provide brief biography of each, including professional and experience qualifications.

5. References Provide a list of a referral public pension plans by which the firm is currently retained, complete with the name and telephone number of the principal contact, who can be contacted about the Responder.

6. Client Additions and Subtractions Provide a list of public pension plan clients added and lost over the last five years.

7. Litigations Provide details of any litigation or pending litigation relating to your firm, any affiliate, or individual personnel over the last ten years.

8. Firm's Valuation System Describe your valuation system. Indicate whether the software proposed to be used has been obtained from an outside vendor or is proprietary software, and indicate the capabilities and procedures in retaining prior actuarial valuations and related data. Include information about the ownership and location of computer equipment, and your disaster recovery plan.

9. Potential Conflicts of Interest Provide an affirmative statement that the Responder is independent of the Fund and MWRD, and that it is unaware of any potential conflicts of interest if it were selected to perform the requested work.

10. Ethics Policy Provide your written code of conduct or standards for professional behavior.

11. Most Recent Audited Annual Financial Report Provide a copy of the most recent audited annual financial report.

12. Diversity Table Complete and submit the Diversity Table in **Addendum E**.

B. Approach and Work Plan

The Responder must specify how it will provide the required and requested services within the specified time frames and must indicate how Personnel will be organized to carry out the required tasks. The proposal must:

1. State the overall approach to conduct the Valuation, including objectives, scope of work to be performed and methodologies to be used; describe the approach to the transition from our current actuary, if applicable.

2. Describe the implementation procedures, which must specify:
    a. the Personnel who will be assigned overall responsibility for the work and the contact information of such Personnel
    b. how the work will be coordinated with Fund staff; listing of all data that will be required in order to perform the work set forth in this RFP, and what format in which it will be required
    c. the Personnel who will be responsible for presenting reports and results to the Board of Trustees, and
    d. the Personnel who will be assigned to back up the key Personnel.

3. Describe the Responder's capabilities to perform special projects and provide ancillary services such as:

    a. Data cleanup, Section 415 limit testing, discrimination testing, plan design asset/liability modeling, contributions estimation and projections, sensitivity analysis regarding actuarial assumption factors
    b. Fiscal impact studies of proposed legislation, complete with assumptions, pricing base, actuarial implications on total program, cost, and alternative funding techniques
    c. Experience in preparing analysis and/or testimony for the governing or regulatory bodies such as the Illinois State Legislature, and

d. Involvement in legislative and regulatory activities in Illinois and research capabilities, including actions taken to keep clients informed regarding legislative and regulatory developments.

C. Cost Proposal

Proposals shall indicate the following:

1. The proposed itemized fee for all services outlined in **Addendum A**. This fee shall be all-inclusive
2. The annual charge for the Valuation over the RFP time period
3. Fee to be invoiced and paid on a quarterly basis in arrears
4. Hourly rates for each Personnel member for any special projects outside the scope of this RFP
5. Proposed fee for an Experience Study expected to be performed every 3-5 years
6. Proposed fee for a 50-year Projection Modeler in Excel updated annually; and
7. Fee proposal to be on Responder's letterhead and signed by an officer who can bind the Responder to the proposed fee.

The Responder shall honor the proposal for one-year from the date of the proposal.

III. Insurance Requirements

Describe the levels of coverage and carriers for errors and omissions, fiduciary, and professional liability, fidelity insurance, and cyber security. State whether the coverage is on a per client or on a total firm basis.

IV. Proposal Document

A. Proposal Format

The Responder must provide a written proposal in PDF format and should contain all information as listed in **Addendum B, Section II (Specific Proposal Contents)** with sufficient detail to permit proper evaluation.

B. Proposal Submission

An electronic copy of your proposals must be received by 4:30 CST on Friday August 19, 2022. Proposals must cover the entire scope of actuarial services requested in the **Addenda**.

Failure to meet the terms and conditions of this RFP may result in disqualification.

V. Contract Duration

A five-year contract is contemplated, subject to satisfactory negotiation of terms (including a price acceptable to the Fund), and the concurrence of the Board.

VI. Evaluation and Selection Process

Selection of the Responder to provide the work will be based on the following criteria:

1. Qualification and experience of the firm and the Personnel

2. Soundness of methodology and work plan; and

3. Reasonableness of cost of services.

In evaluating the proposals, the Fund may consider any factors it deems necessary and proper for best value. The Fund reserves the right to reject all proposals received.

ADDENDUM C
Summary of Plan Provisions

Member

Tier I An employee of the District who first became a member before January 1, 2011, under any reciprocal retirement system or pension fund established under Chapter 40 of the Illinois Compiled Statutes other than a retirement system or pension fund established under Article 2, 3, 4, 5, 6, or 18 of Chapter 40 of the Illinois Compiled Statutes. This includes any Commissioner who fits the criteria above who elects to participate in the Fund within 90 days after becoming a Commissioner.

Tier II An employee of the District who first became a member on or after January 1, 2011, except for those who were members of any reciprocal retirement system or pension fund established under Articles 7, 8, 9, 10, 11, 12, 14, 15, 16, or 17 of Chapter 40 of the Illinois Compiled Statutes prior to January 1, 2011. This includes any Commissioner who fits the criteria above who elects to participate in the Fund within 90 days after becoming a Commissioner.

Retirement Annuity Eligibility

Tier I Tier I participants who withdraw from service after 30 years of service, or attainment of age 60 with at least 5 years of service, are eligible for an unreduced retirement annuity. Employees who withdraw from service at age 55 (50 if hired before June 13, 1997) or later with at least 10 years of service are entitled to receive a reduced retirement annuity. An employee who withdraws from service at age 55 (50 if hired before June 13, 1997) or after with 5 but less than 10 years of service is eligible for an unreduced retirement annuity upon attainment of age 62.

Employees who withdraw from service prior to age 55 (50 if hired before June 13, 1997) with at least 10 years of service are eligible for a retirement annuity upon attainment of age 55(50 if hired before June 13, 1997).

An employee who has at least 5 years of service (exclusive of service for periods of ordinary disability and duty disability if the employee entered service on or after August 18, 2005) and who has received an ordinary disability benefit for the maximum period and continues to be disabled and withdraws from service is eligible for a retirement annuity. The regular age and service requirements for eligibility are waived for such an employee, but age discount factors are applicable.

Tier II Tier II participants who withdraw from service after attainment of age 67 with at least 10 years of service, are eligible for an unreduced retirement annuity. Employees who withdraw from service who are at least age 62 with a minimum of 10 years of service are entitled to receive a reduced retirement annuity.

An employee who has at least 5 years of service (exclusive of service for periods of ordinary disability and duty disability) and who has received an ordinary disability benefit for the maximum period and continues to be disabled and withdraws from service is eligible for a retirement annuity. The regular age and service requirements for eligibility are waived for such an employee, but age discount factors are applicable.

Retirement Annuity Amount

A Tier I participant who withdraws on or after November 19, 1991, and who has met the requirements for a retirement annuity is entitled to an annuity equal to 2.2% of final average salary (FAS) for each of the first 20 years of service, and 2.4% of final average salary for each year of service in excess of 20. The annuity shall not exceed 80% of FAS. FAS equals the highest average annual earnable salary for any 52 consecutive pay periods within the last 10 years of service immediately preceding the date of retirement.

If an employee withdraws from service prior to the attainment of age 60, the benefit computed shall be reduced by .5% for each full month of service less than 30 years or age less than 60 years, whichever is less.

Retirement Annuity Amount for Tier II Participants A Tier II participant who has met the requirements for a retirement annuity is entitled to an annuity equal to 2.2% of final average salary (FAS) for each of the first 20 years of service, and 2.4% of final average salary for each year of service more than 20. The annuity shall not exceed 80% of FAS.

FAS equals the average monthly salary obtained by dividing the participant's total salary during the 96 consecutive months of service within the last 120 months of service in which the total compensation was the highest, by the number or months in that period. Salary for annuity and all other calculation purposes is limited to the Social Security wage base of $106,800 in 2011 and then adjusted for future years by the lesser of 3% or one-half of the percentage change in the Consumer Price Index-U for the 12-month period ending in September.

If a Tier II participant withdraws from service prior to the attainment of age 67, the benefit computed shall be reduced by .5% for each full month that the participant is below age 67.

Automatic Increase in Retirement Annuity for Tier I Participants. Annual increases shall be calculated at 3% of the monthly annuity payable at the time of the increase, except for a term annuity. The retirement annuity shall be increased on the first day of the month in which the first anniversary of the date of retirement occurs, and on the same date each year thereafter.

Automatic Increase in Retirement Annuity for Tier II Participants. Annual increases shall be calculated at the lesser of 3% or one-half the annual change in the Consumer Price Index-U, whichever is less, based on the originally granted retirement annuity. The retirement annuity shall be increased on the later of January 1st occurring on or after the attainment of age 67 or the first anniversary of the date of retirement occurs, and each January 1st thereafter.

Minimum Retirement Annuity. For an annuitant with at least 10 years of service, the minimum retirement annuity shall be $500 per month plus $25 per month for each year of service more than 10 years, to a maximum of $750. The maximum annuity is $250 per month for annuitants with less than 10 years of service.

Reversionary Annuity. An employee, prior to retirement, may elect a lesser amount of annuity and provide a reversionary annuity for a wife, husband, parents, children, brothers, or sisters by filing a written designation with the board. An employee shall not reduce his annuity by more than 25% nor elect to provide a reversionary annuity of less than $100 per month. No reversionary annuity shall be paid if the employee dies before the expiration of 730 days from the date his written designation was filed with the board.

Money Purchase. Employees who first entered service before January 1, 1992, would be eligible with the following ages and service: age 60 or more with 5 years of service; age 50 or more with 10 years of service; for employees under age 50 with 10 or more years of service, annuity is payable upon attainment of age 50 and proper application. Annuity is based on Money Purchase, which is the sums accumulated from salary deductions plus District contributions, combined to purchase an annuity.

Survivor's Annuity Eligibility and Amount

Surviving Spouse Annuity Eligibility. A surviving spouse of an employee or retiree is eligible for an annuity for life provided that the employee was in service for more than 36 months if the employee entered service on or after July 13, 1997. There is no service requirement for eligibility for a spouse annuity if the employee entered service prior to July 13, 1997. Dissolution of marriage after retirement shall not divest the retiree's former spouse of the entitlement if the marriage had been in effect at least 10 years on the date of retirement.

Surviving Spouse Annuity Amount for the Spouse of a Tier I Participant. The amount of the annuity for the surviving spouse of a Tier I participant is the product of the employee's earned annuity multiplied by a factor equal to 60% plus 1% for each year of total service up to a maximum of 85%.

For employees hired on or after January 1, 1992, the surviving spouse's annuities are discounted by 0.25% for each full month that the spouse is younger than the employee, to a maximum discount of 60%. The discount is reduced by 10% for each full year the marriage has been in effect.

If the employee's death is duty related, the minimum surviving spouse annuity is equal to 50% of the employee's earnable monthly salary on the date of death.

Surviving Spouse Annuity Amount for the Spouse of a Tier II Participant. The amount of the annuity for the surviving spouse of a Tier II participant is the product of 66 2/3% and the annuity that the employee would have been eligible to receive or the annuity the employee annuitant had been receiving at the time of death.

Automatic Increase in Surviving Spouse Annuity for the Spouse of a Tier I Participant. On each anniversary of the employee date of retirement or date of death, whichever occurs first, the widow(er)'s or surviving spouse allowance or annuity shall be increased by 3% of monthly annuity payable at the time of increase.

Automatic Increase in Surviving Spouse Annuity for the Spouse of a Tier II Participant. The spouse annuity will be increased by the lesser of 3% or one-half of the increase in the Consumer Price Index-U for the 12 months ending in September, based on the originally granted survivor's annuity. This increase will occur each January 1st on or after the commencement of the annuity if the deceased member died after retirement or January 1st occurring after the first anniversary of the commencement of annuity. Increases will occur each January 1st thereafter.

Minimum Surviving Spouse Annuity. Beginning August 1, 2001, the minimum monthly surviving spouse annuity shall be the greater of:

a) $500 per month for the surviving spouse of an employee with at least 10 years of District service, plus $25 per month for each year of service more than 10 years, to a maximum of $750 per month; or

b) 50% of retirement annuity of the deceased spouse at the time of death.

The minimum annuity shall be $250 per month for the surviving spouse of an employee with less than 10 years of District service other than for a term or reciprocal annuity.

Surviving Spouse Money Purchase. This annuity is based on the amount of accumulated credits for spouse's annuity purposes at the time the annuity is computed, which is then used to purchase an annuity based on the period of service, salary, and age of spouse.

If the annuity provided by Money Purchase gives a greater annuity than the spouse's annuity based on average final salary, the spouse is entitled to the greater amount. The Money Purchase annuity applies to spouses of employees who entered service prior to 1992.

Child's Annuity

A child's annuity is provided for each unmarried child under the age of 18 (under the age of 23 years in the case of a full-time student) whose employee parent dies while in service or whose deceased parent is an annuitant or former employee with at least 10 years of service. The amount of the annuity is:

a) $500 per month for each child if one parent is living; or

b) If neither parent is living, $1,000 per month for each child

In either case, the maximum benefit is $5,000 per month for all children of the employee, to be divided equally among the children.

Family Maximum for Duty & Non-Duty Death Benefits.
85% of annuity earned, plus annuity for children.

Duty Disability

Duty Disability is payable, if an injury or sickness arises out of employment, at the rate of 75% of the salary earned on date of disability less the amount paid by Workers' Compensation. Duty Disability benefits are payable during the period of disability but not beyond attainment of age 65, unless the employee became disabled at age 60 or later, in which case the benefits may be extended for a period of not more than 5 years after disablement.

For Tier II Participants the salary for duty disability benefit calculation purposes is limited to the Social Security wage base of $106,800 in 2011 and then adjusted for future years by the lesser of 3% or one-half of the percentage change in the Consumer Price Index-U for the 12-month period ending in September.

Ordinary Disability

Ordinary Disability is payable, if an employee is injured or sick not as a result of the performance of assigned duties, at the rate of 50% of the employee's earnable salary at date of disability. Ordinary disability benefits are limited to 25% of employee's actual service prior to the date of disability up to a maximum of 5 years where the employee has 20 or more years of service. Benefits are not payable beyond attainment of age 65, unless the employee became disabled at age 60 or later, in which case the benefits may be extended for a period of not more than 5 years after disablement.

For employees hired after June 13, 1997, there is no benefit for the first three days of disability that would otherwise be payable under this section, unless the disability continues for at least 11 additional days;

however, an employee who has used sick leave for at least 31 consecutive calendar days may be paid benefits for the first three days upon exhaustion of all sick.

For Tier II Participants the salary for ordinary disability benefit calculation purposes is limited to the Social Security wage base of $106,800 in 2011 and then adjusted for future years by the lesser of 3% or one-half of the percentage change in the Consumer Price Index-U for the 12-month period ending in September.

Refunds

To Tier I Participant. Upon separation from service, if the employee is under age 50 (age 55 if hired after June 13, 1997) or is between ages 50 (age 55 if hired after June 13, 1997) and 60 with less than 20 years of service or is age 60 or over with less than 5 years of service and upon application for such refund, the employee would be entitled to all amounts contributed from salary, without interest. Upon receipt of such refund, the employee forfeits all rights in the Fund.

To Tier II Participant. Upon separation from service, if the employee is under age 62 regardless of length of service, or who withdraws with less than 10 years of service regardless of age, is entitled to a refund of all amounts contributed from salary, without interest. Upon receipt of such refund, the employee forfeits all rights in the Fund.

To Employee for Spouse Annuity Contributions. If an employee is unmarried at the time of retirement, all amounts contributed for spouse's annuity would be refunded. Effective January 1, 1993, refunds of spouse annuity contributions include interest.

To Spouse. If an annuity is temporary rather than for life, the spouse may elect a refund in lieu of an annuity.

Forfeiture of Rights. An employee or surviving spouse who receives a refund forfeits the right to receive an annuity or any other benefit payable by this Fund except that if the refund is to a surviving spouse, any child or children of the employee shall not be deprived of the right to receive a child's annuity as provided above, and the payment of a child's annuity shall not reduce the amount refundable to the surviving spouse.

Remaining Amounts. In the event the employee dies in service without a spouse, a refund of the total sums contributed by employee, together with applicable interest, would be paid first to a spouse, then to beneficiary as designated by the employee, and if there is no beneficiary form, then to the late employee's children in equal parts. If there is no spouse, then payment is made to the designated beneficiary.

If there is no spouse or designated beneficiary, then payment is made to any children of the deceased employee. If there is no spouse, designated beneficiary, or child then distribution is made to the heirs in accordance with the laws of descent and distribution in the State of Illinois.

Deductions and Contributions

The District levies taxes per state statutes (40 ILCS 5), which dictate that the District shall annually levy a tax upon all the taxable real property within the District at a rate which, when extended, will produce a sum that

(1) when added to the amounts deducted from the salaries of employees, interest income and other income will be sufficient to meet the Fund's actuarially determined contribution requirement, but

(2) shall not exceed an amount equal to the total employee contributions 2 years prior to the year for which the tax is levied, multiplied by 4.19 (the tax multiple). The actuarially determined contribution requirement is equal to the employer's normal cost plus the annual amount needed to amortize the unfunded liability by the year 2050 as a level percent of payroll. The funding goal is to attain a funded ratio of at least 100% by the year 2050, with the funded ratio being the ratio of the actuarial value of assets to the total actuarial liability.

Tier I employees (hired prior to January 1, 2011) are required to contribute 12% of their salary to the Fund since 2015; this contribution rate will remain in effect until such time as the Fund reaches a funding level of 90%. Tier II employees (hired on or after January 1, 2011) are required to contribute 9%.

Tax Shelter of Employee Salary Deductions

Beginning January 1, 1982, the required 9% employee salary deductions were designated, for income tax purposes, to be made by the employer. Beginning with the July 3, 2003, payroll and through the end of 2007, the optional 4% employee salary deductions were also designated, for income tax purposes, to be made by the employer. The W-2 salary is therefore reduced by the amount of those designated contributions. For pension purposes the salary remains unchanged. Income tax will be paid when a refund or annuity is granted. For the purposes of benefits, refunds, or financing, these contributions are treated as employee contributions.

Alternative Plan of Contributions and Benefits for Commissioners

Alternative Plan of Additional Benefits and Contributions for District Commissioners allows an additional contribution of 3% of salary. Alternative benefits are payable if the Commissioner is age 55 (age 62 for Tier II) with at least 6 years of service. Annuities would be computed on the following basis:

1. 3% of average final salary for each of the first 8 years of service credit under the Alternative Plan;

2. 4% of average final salary for each of the next 4 years of service credit under the Alternative Plan; and

3. 5% of average final salary for each additional year thereafter subject to a maximum of 80% of average final salary.

Alternative Annuity for Survivors of Commissioners

Annuity is equal to the greater of 66-2/3%, or 60% plus 1% for each year of the Commissioner's total service, to a maximum of 85% of the amount of retirement annuity earned by the Commissioner on the date of death.

A more detailed description of plan provisions can be obtained from the Fund Administration's office. Complete provisions are set forth in the Illinois Compiled Statutes, Chapter 40, Act 5, Article 13.

ADDENDUM D
Summary of Actuarial Assumptions and Methods

ACTUARIAL ASSUMPTIONS

Below is a summary of the actuarial assumptions for the December 31, 2021 valuation. An experience study was performed in 2018 based on data for the period December 31, 2012 through December 31, 2017. The assumptions below are based on the experience study and were recommended by Foster & Foster Actuaries and adopted by the Board of Trustees.

Interest Rate 7.25%

Salary Increases

Service	Salary Increase Rate
0	7.00%
1	6.50%
2	5.75%
3	5.50%
4	5.25%
5	6.00%
6	5.00%
7	4.75%
8	4.50%
9	4.25%
10	5.00%

Cost-of-Living Adjustment - Annuitants

Members Hired On Or After January 1, 2011 1.25%

Members Hired Before January 1, 2011 3.00%

Payroll Growth 3.00%

Retirement Rates

Age	Retirement Rate
50 - 59	7%
60	20%
61-64	10%
65	15%
66	18%
67	25%
68	15%
69	30%
70	35%

Mortality Rates – Healthy Lives

RP-2000 Combined Healthy Mortality Table with Generational Mortality Improvements (Scale AA). Female rates are adjusted by a factor of 1.04 and male rates are unadjusted.

Mortality Rates – Disabled Lives

RP-2000 Disabled Retiree Mortality Table

Termination Rates

Service	Male Rate	Female Rate
0	5.00%	7.75%
1	3.50%	6.75%
2	3.50%	5.75%
3	2.60%	4.75%
4	2.24%	4.52%
5	2.15%	4.49%
6	1.75%	4.19%
7	1.70%	3.94%
8	1.65%	3.74%
9	1.55%	3.54%
10	1.55%	3.34%
11	1.55%	3.14%
12	1.45%	2.94%
13	1.40%	2.85%
14	1.35%	2.52%
15	1.20%	2.52%
16+	1.00%	2.52%

Disability Rates Sample rates

Age	Disability Rates
20	0.002%
25	0.003%
30	0.006%
35	0.014%
40	0.033%
45	0.065%
50	0.120%
55	0.225%
60	0.490%
65	0.000%

Load for Reciprocal Benefits

1.5% of active member costs and liabilities.

Percent Married

76%

Spousal Age Difference

Spouse of male member assumed to be 4 years younger than member; Spouse of female member assumed to be 4 years older than member.

Actuarially Determined Contribution Requirement

Section 13-503. Employer's normal cost plus the annual amount needed to amortize the unfunded liability by the year 2050 as a level percent of payroll.

The funding goal is to attain a funded ratio of 100% by the year 2050.

Source of Data

Data and audited financial information is provided by the Fund.

Valuation Date

December 31, 2021

ACTUARIAL METHODS

Actuarial Cost Method

The actuarial cost method is the procedure by which the total present value of pension plan benefits is allocated to past service and future service. The entry age normal cost method was used, with costs allocated on the basis of earnings. Under this cost method, the present value of the projected benefits of each individual included in the actuarial valuation is allocated as a level percent of the individual's earnings between entry age and assumed exit age. Actuarial gains and losses (differences between expected experience and actual experience) are recognized immediately in the unfunded actuarial liability.

Actuarial Value of Assets

The actuarial value of assets was determined by using the market related method of smoothing unexpected gains or losses from investment return over a period of 5 years. This method was adopted as of December 31, 1997.

ADDENDUM E
Firm Diversity Table

Males

	Caucasian	African American	Asian	Hispanic	Other	Total
Senior Executives / Mgmt.						
Professionals						
Technicians						
Office & Clerical						
Other Non-Professionals						
Total						

Females

	Caucasian	African American	Asian	Hispanic	Other	Total
Senior Executives / Mgmt.						
Professionals						
Technicians						
Office & Clerical						
Other Non-Professionals						
Total						