

Police and Firemen's Retirement System of New Jersey
State of New Jersey
50 West State Street – 9th Floor
P.O. Box 297
Trenton, NJ 08625-0297

June 8, 2020

The effective date of this RFQ is June 8, 2020. The response to the RFQ is to be submitted on or before 5:00 p.m. on July 8, 2020. A firm will be selected based on the criteria set forth in the RFQ.

The PFRSNJ Chairman requests that interested firms submit a proposal in accordance with this RFQ.

The response should be marked as follows: "Actuary RFQ"

Questions may be submitted no later than June 22, 2020 at 5:00 p.m. to PFRSNJ, Attention: Lisa Pointer, PFRSNJ Board Secretary, at the following address: Lisa.Pointer@treas.nj.gov

Please note that the "subject" line of your email address must specifically reference the RFQ as follows: "Actuary RFQ for PFRSNJ"

Sincerely yours,

Ed Donnelly
PFRSNJ Board Chairman

Police and Firemen's Retirement System of New Jersey

REQUEST FOR QUALIFICATIONS (“RFQ”) AND REQUEST FOR ACTUARY FIRM (“RFP”)

Issue Date: June 8, 2020

I. General Information for the Bidder

A. Invitation to Submit Proposal

The Board of Trustees (“Board”) for the Police and Firemen’s Retirement System (hereinafter “the System” or the “PFRS system”) is issuing this Request for Proposal (RFP) with the intent to select and hire an Actuary Consulting firm (“Firm”). The Firm is to perform the following: (1) perform yearly actuarial valuation report; (2) conduct an experience study every three years, and (3) conduct such stress modelling regarding changes in contributions and return on investments as requested by the Board. The Board expects to enter into a Master Services Agreement (“MSA”) with the selected Firm to last for three years with two one year options to renew.

B. PFRSNJ Contact Person

Direct all questions and correspondence regarding this RFP to:

Contact Person for All Matters Relating to this RFP	
Name & Title	Lisa Pointer – Board Secretary
Email	Lisa.Pointer@treas.nj.gov
Telephone	609-777-4138
Physical Address	50 West State Street, 9 th Floor, Trenton, NJ 08625-0297
Mailing Address	P.O. Box 297, 50 West State Street, Trenton, NJ 08625-0297

Only written questions submitted by the question deadline in Section I.C. will be accepted. Written answers to such questions shall be sent to those Firms notifying the Board of its intent to bid.

From the date of the issuance of this RFP until the selection of a Firm is completed and

announced, Firms that intend to submit a Proposal should not contact any PFRSNJ Staff or Board Trustee other than to submit written questions to the “Contact Person.” Communicating directly or indirectly with any other PFRSNJ staff or Board Trustee regarding the RFP process during this RFP process may result in immediate disqualification.

C. Proposal Timetable

Proposals are due by **5:00 PM EST on July 8, 2020** marked to the attention of the Contact Person in Section 1.B. It is the responsibility of the Firm to ensure the proposal arrives on or before the time and date in the RFP Schedule below. The Board reserves the right to reject any or all proposals submitted. To be considered, Firms must meet the requirements as noted below.

R F P S c h e d u l e		
Deliverable	Date	Time
RFP Issued	June 8, 2020	
Firm Questions on RFP Due to PFRSNJ	June 22, 2020	5:00 pm EST
PFRSNJ Answers to RFP Questions Sent to Firms	June 22 nd through 26. Can be extended as needed by the Board	
RFP Submission Due Date	July 8, 2020	5:00 pm EST
RFP Review Panel Selects Top Proposals	July 2020	
Firm On-site Presentation to Board’s Internal Audit Committee	Tentative July or August Board Meeting	
Board Awards the Contract	Tentative July or August Board Meeting	
Engagement Letter Executed	Tentative July or August 2020	

II. BACKGROUND

The PFRS system is a public retirement system that provides retirement benefits and administration for the approximately 80,000 active and retired police and firemen in the State of New Jersey. In 2019, the system was separated from the other state Pension Funds, under Chapter 55 of Public

Law 2018. The mission of the Board of Trustees is to provide stable and secure retirements for the police and firemen who serve the public in the State of New Jersey.

PFRS has approximately \$27 billion in assets under management and all full time police and firemen in state service are required to enroll in the system.

NOTICE TO ACTUARIAL SERVICES CONTRACTORS

The purpose of this Request for Proposal (RFP) is to provide the System full actuarial valuations, review of the system to determine whether assets and contributions are sufficient to provide prescribed benefits, and provide an appropriate funding schedule to reach the fund's goal of 100% funded status.

TERM OF CONTRACT

The term of the contract shall be three years, with two additional one year options to renew. The board reserves its right to terminate the contract for any reason, on thirty days' notice.

EXPECTED TIMELINE

The board is likely to award a firm the opportunity to enter into a contract and expects to award a contract in 2020. However, the board may cancel this RFP, or reject in whole or in part any and all submissions, if the board determines that cancellation or rejection serves the best interests of the system.

MINIMUM QUALIFICATIONS

Prior to a submission all firms, individuals, and/or companies must meet the below qualifications pertaining to specific staff assigned to the PFRS system:

1. Actuarial staff who have performed actuarial valuations for defined benefit plans for at least three years;
2. Minimally one staff member that is a Fellow or Associate of the Society of Actuaries or is a Fellow or Associate of the Conference of Actuaries in Public Practice;

3. Actuaries that have performed at least five actuarial valuations of a defined benefit pension plan sponsored by a governmental entity, making note of the state (e.g. New Jersey).

SUBMISSION OF PROPOSAL

Proposers shall submit one (1) original executed copy including all documents, six (6) additional board copies, and one (1) electronic copy of their proposal (USB flash drive or CD). Alternatively, a PDF copy may also be emailed to Lisa.Pointer@treas.nj.gov with "RFP: Actuarial Consulting Services" as the subject line. Physical materials sent in response to this RFP must be given ample time to assure prompt and compliant arrival.

DOCUMENTS TO BE SUBMITTED

The respondent must submit the following documents:

- Bidder's Submission Form (Appendix A)
- Certificate of Minimum Qualifications (Appendix B)
- Price Proposal Sheet (Appendix C)

INSTRUCTIONS TO PROPOSERS

Responses to this RFP must be submitted on or before July 8, 2020 by 5:00 PM EST. Any proposal that does not meet this deadline shall not be accepted or considered. All proposals must be submitted to:

Lisa Pointer
Board Secretary – Police and Firemen’s
Retirement System of New Jersey
50 West State, 9th Floor
Trenton, NJ 08625-0297
Lisa.Pointer@treas.nj.gov

All proposers must submit all required information, forms, and attachments as specified in this RFP. The board reserves the right to request additional information or clarifications to any proposal. The board

may, at its sole discretion, determine that a proposal has failed to meet the criteria of this RFP and may disqualify that proposal.

The board further reserves the right to waive any "minor informality" in any proposal received. The determination as to whether or not to make an award as a result of this RFP shall be at the sole and absolute discretion of the board. Proposers will be required to submit their proposals containing the firm's qualifications and forms in a sealed envelope, as required in this RFP.

An individual, corporation, or firm may correct, modify, or withdraw a bid by written notice received by the board prior to the Submission Deadline. After the Submission Deadline, provisions of the bids may not be changed in a manner prejudicial to the interests of PFRS Board or fair competition. The submission must remain firm after the Submission Deadline.

The board reserves the right to cancel this RFP, or to reject any and all proposals, or any portion of any proposal received in response to this RFP, upon its determination that such cancellation or rejection is in the best interests of PFRS. Proposers acknowledge that the board shall not be liable for any fees incurred in the preparation of their proposal.

SCOPE OF SERVICES

3.0 GENERAL INFORMATION

This Scope of Work (Section 3.0) pertains to the PFRS system.

3.1 INFORMATION SUPPLIED TO THE CONTRACTOR

The Vendor {Contractor} shall accept the actuarial data supplied by the Division of Pensions and Benefits and the Board. The Division of Pensions and Benefits, (DPB) which continues to provide administrative assistance to the Board of Trustees and the Board will furnish the data requested by the Vendor {Contractor} in the form of electronic media to be used in the preparation of the valuations. DPB will supply all financial statements, investment and group claim and retention data as the Vendor {Contractor} may require to complete Blanket P.O. {Contract} tasks.

The data referenced will be supplied to the Vendor {Contractor} for each retirement system and shall be used by the Vendor {Contractor} as follows:

3.1.1 CENSUS DATA

The Vendor {Contractor} shall normally use the data furnished for the following purposes:

- A. The annual actuarial valuation of the retirement system; and,
- B. The 3-year actuarial investigation of the system's experience with respect to members' withdrawal from service, age and service requirements, disability retirements, rates of pay increase, interest rate assumption and mortality, as they relate to the assumptions used in the past and to be used in the future in determining the changing cost of the system.

3.1.2 PENSIONERS

The Vendor {Contractor} shall normally use the following information that is maintained by DPB, which the Board will coordinate with DBP and the Vendor (Retired Actuarial CPI File Layout) and (Retired Actuarial Master File Layout) for the reasons indicated in [Section 3.2.1](#) (A) and (B). This information is as follows:

- A. Retirement number of the person who is to receive the benefit;
- B. The person's date of birth;
- C. The person's sex;
- D. Date benefit is to begin;
- E. Type of benefit: for instance, age and service retirement, service-connected or non-service retirement, service-connected or non-service-connected disability retirement, service-connected or non-service-connected death benefit;
- F. Date of retirement;
- G. Employer identification number;
- H. Period of credited service;
- I. Veteran or non-veteran status;
- J. Multiple memberships;
- K. Member's contributions to the date the benefit is to begin;
- L. Together with accumulated interest if interest is credited;
- M. Transfer from employer reserve account;
- N. Member's final average salary, computed in accordance with the provisions of the system;
- O. Optional retirement benefit, if any, selected by the member. If the optional benefit involves payment of benefits to a survivor, or if the system provides for the automatic continuation of benefits to a survivor, the date of birth and sex of the person who will be entitled to receive such benefits is required;
- P. Termination cause;
- Q. Pension adjustment data under separate tape;
- R. Early retirement incentive (ERI codes);
- S. Chapter 247 Codes for PFRS billing.

Completion of the benefit form by the retirement or Claims Bureau of DPB results in input data which is stored for annual submission to the Vendor {Contractor}, while a benefit estimate or award letter is directed to the prospective retiree. When the Vendor {Contractor} receives the information regarding new pensioners, it shall include the assigned identification number of the individual and the former employer.

3.1.3 ACTIVE MEMBERS

The Vendor {Contractor} shall normally use the following information that is maintained by the Division of Pensions and Benefits: (Active Actuarial Master File Layout): (Active Deferred Retirement Actuarial File Layout): (Active Location File Layout): (WRD Actuarial Master File Layout) for the reasons indicated in [Section 3.2.1](#) (A) and (B). This information is as follows:

- A. Active members:
 - 1. Member's and employer's identification numbers;
 - 2. Date of birth: only month and year of birth;
 - 3. Member's sex;
 - 4. Date of enrollment;
 - 5. Period of credited service split, if required by the benefit formula of the system, between prior

- (or past) service and membership (or current) service;
- 6. Member's classification. This is used for systems that provide different retirement conditions and benefits for different classes of members, or which are composed of more than one participating employer, (multiple membership);
- 7. Member's current rate of pay;
- 8. Member's total contributions to the valuation date, together with accumulated interest, if credited;
- 9. Member's age at entry into system; and,
- 10. Member's rate of contribution.

B. Inactive Members:

All information for inactive members is the same as active members with the exception of Item 7 above; inactive member's final salary or equivalent; and

C. Withdrawals, deaths and vested cases which terminated in the year.

The combination of this data is categorized with NIST as secure, with an impact of low.

3.2 FINANCIAL INFORMATION

The Vendor {Contractor} shall use the Financial Statements as of the close of the fiscal year, June 30, 2020, for the retirement system as provided by the Board and the DPB. The Board will provide the same financial information for the subsequent fiscal years. The Vendor {Contractor} shall accept the financial statements as submitted, since the system's fiscal affairs are subject to audit by professional accountants and the PFRS's independent auditor.

Upon the submission of the financial statements by the DPB to the Vendor {Contractor}, the Vendor {Contractor} shall provide a draft of the actuarial valuation report (see Section 3.5 of this Scope of Work) no later than November 20th of each year to the Board of Trustees.

3.3 THE VALUATION

The Vendor {Contractor} shall produce the annual valuation using the valuation methods prescribed by pension law. The liabilities of the plan are determined on the basis of the census data provided by the system and this should cover all active and retired employees and beneficiaries.

Samples of annual valuation reports can be found at the following website: <https://www.state.nj.us/treasury/pensions/actuarial-valuations.shtml>

3.4 THE ACTUARIAL VALUATION REPORT

The Vendor {Contractor} shall provide a clear recommendation of possible courses of future action in the actuarial valuation report in addition to a statement of the plan's current condition. The Vendor {Contractor} shall not stop with a presentation of the static circumstances of the plan's finances. Rather, it shall point to existing or prospective plan problems and outline recommended steps to solve the problems. If further analyses or studies are required, the Vendor {Contractor} shall state so in the report. In other words, an actuarial valuation report shall present results that show the current financial status, and, if possible, projections that give an insight into the future. Also, it shall include thoughtful and convincing recommendations for timely action whenever they are

needed. The Vendor {Contractor} shall provide the actuarial valuation report in hardcopy and electronic version. See the Time Line Chart in Section 3.5.1 of the Bid Solicitation {RFP} for due dates.

3.4.1 PROVISIONS OF THE REPORT

The actuarial valuation report shall include, but not limited to:

- A. An explanation of the purpose of the report;
- B. A summary of the principal financial results of the actuarial valuation;
- C. Current financial experience;
- D. A description of census data employed in the valuation and an explanation of any special assumptions made;
- E. A summary of statistics of the plan participants and the development of the actuarial value of assets, as well as the audited financial asset information on which such value is based;
- F. A summary of the basic actuarial valuation results with a suitable statement of the adequacy of the expected employer contributions;
- G. A statement of actuarial assumptions and method;
- H. Information concerning the funding standards maintained for the plan;
- I. An outline of plan benefits; and,
- J. Calculation of normal and accrued liability contribution rates and amounts.

Finally, the actuarial valuation report shall contain, where appropriate, an appraisal of the suitability of assumptions made and reference to factors which were not considered. Changes in assumptions from those used in previous reports shall be pointed out and their effects noted. The actuary's appraised statement shall not merely list the explicit assumptions but shall also mention the presence or absence of other factors which the actuary believes significant in the valuation of future costs or the incidence of future costs. Such factors could include inflation, margins for fluctuations in experience, a change in economic conditions, and the effect of possible employer terminations.

The actuarial valuation report shall be transmitted by a letter, calling attention to the important deviations of actual experience from actuarial assumptions, the progress in financing the obligations and any operational trends. The Vendor {Contractor} shall provide a valuation balance sheet to summarize the deferred obligations of employers and the unfunded accrued liabilities. The Vendor {Contractor} shall also comment concerning the suitability of the assumptions, given changes in the experience or legislation, which could be recommended for adoption immediately or for deferment until the three-year experience studies. The Vendor {Contractor} shall take care not to communicate the results of its work in such technical terms that the trustees are not in the position to understand the information which is being presented. In order to be meaningful, the past history of the funding of the plan shall be recalled where appropriate.

There are a number of terms and calculations reflected in the actuarial valuation report, which are prescribed by the statute or can be adopted by the trustees, at their option, on the recommendation of the actuary. The Vendor {Contractor} shall report these terms and calculations to the Board and explain their significance as they modify the valuation results. Such matters include:

- A. Asset valuation methods and the effort to smooth the effect of market value adjustments over time;
- B. The difference between the actuarial value of assets from the value assigned by the plan's accountant;
- C. The different types of unfunded actuarial values;
- D. The effect of the designated cost method on the level of funding;
- E. The influence of the unfunded portion of the actuarial value of vested benefits as a measure of the relative funding status;
- F. The influence of the unfunded portion of the actuarial present value of earned benefits in the same

- context; and
- G. The principal sources of actuarial gains and losses.

3.4.2 FUNDING STANDARDS

The actuarial report shall provide information regarding current level of employer funding and contribution information as required by GASB and other standards that would allow the reader to understand the funding level of the system.

3.5 SERVICES TO BE PROVIDED

The Vendor {Contractor} shall act as consulting actuary providing regular (recurring) and special (non-recurring) services to the PFRS system.

3.5.1 Recurring Services

- A. Preparation of the annual valuation consistent with the generally accepted actuarial standards determining the annual employer contribution requirements. The State's and local (if applicable) calculation will include the normal cost, accrued liability cost, early retirement incentive costs and any other costs required by statute.

For the local employer contribution amounts, a detailed billing file is required by employer for PFRS which will include:

1. Employer name;
2. Employer location number;
3. Pensionable salary;
4. Normal cost;
5. Accrued liability;
6. Chapter 19 PL 2009 deferral;
7. Early Retirement Incentive costs; and
8. A year to year comparison and separate detailed listing file per employer will be delivered as well.

A separate listing must be produced of individuals who elected to retire under the various early retirement incentive programs.

All required local employer billing information and reports must be produced in hard copy and electronic file per the requirements of Board. The final form and contents of the reports will be determined after the contract is awarded.

Samples of the current local employer billing reports for PFRS can be supplied as needed.

See the Time Line Chart in Section 3.5.1 of the Bid Solicitation {RFP} for due dates.

- B. Preparation of the annual GASB 67 and 68 reports in accordance with generally accepted actuarial standards. This will include preparation of the reports in compliance with the GASB standards and Independent auditor requirements. See the Time Line Chart in Section 3.5.1 of the Bid Solicitation {RFP} for due dates;
- C. A 30-year projection model that the Board can utilize to run projections of employer costs under different scenarios. The projection model shall be updated on an annual basis to reflect the latest actuarial valuation results and shall be provided to the Board within 30 days of completion and submission of the annual actuarial valuation report. The projection model shall forecast future normal and accrued liability employer contributions, market value of asset, actuarial value of assets, actuarial accrued liabilities, unfunded liabilities, and funded ratios based on market assets and actuarial assets. The projection model shall provide the ability to vary certain assumptions for each future valuation year including the assumed investment return, employee contribution rate, the percentage of the normal contribution made, the percentage of the accrued liability contribution made, the maximum contribution percentage increase in each future fiscal year and other valuation factors. Sample reports can be provided upon request. The final contents and form of the projection report will be determined after the contract has been awarded. See the Time Line Chart in Section 3.5.1 of the Bid Solicitation {RFP} for due dates;
- D. Preparation of factor tables of actuarial equivalents factors, for the optional retirement allowances in accordance with assumptions recommended by the actuary. Preparation of purchase of service credit factors and any other factors that will be required. See the Time Line Chart in Section 3.5.1 of the Bid Solicitation {RFP} for due dates;
- E. Preparation of the Consolidated Annual Financial Report Actuarial Section in accordance with the requirements of the Government Finance Officers Association;
- F. Presentation of reports to the Boards of Trustees, testimony before public bodies and attendance at conferences or other meeting required by the Board;
- G. Be technical advisor to the Board of Trustees; and
- H. All regular services listed above shall be compensated by the payment of the regular recurring annual fee.

Time Line Chart

Section #	Recurring Service	Due Date
3.5	First Draft Annual Valuation Reports	November 20 th
3.6.2	First Draft Experience Studies	9 months after the close of the reporting period
3.6.1 B	Annual GASB 67 and 68 Reports	67 - October 1 st 68 – November 1 st
3.6.1 A	Employer Bill Files	30 days after finalization of valuation report.
3.6.1 C	30 Year Projection Model	30 days after finalization of valuation.
3.6.1 D	Factor Tables	As requested
3.6.1 F	Consolidated Annual Financial Report	December 1 st

3.5.2 Other Recurring Services

- A. The Vendor {Contractor} shall provide for the reasonableness of the assumptions. An actuarial experience investigation of the PFRS system shall be performed every three (3) years for experience studies that will occur during this three (3) year Blanket P.O. {Contract} term, with its two options to renew. The schedule of the upcoming experience studies for each pension system can be seen in the chart above. See the Time Line Chart in Section 3.5.1 of the Bid Solicitation for due date information. The actuarial valuation report shall include a gain and loss analysis and a discussion of the effects of the current gains and losses on the financial status of the plan.

The actuarial experience investigation shall include all of the material normally involved in an annual valuation but the comments and the statistical data shall be expanded to cover the survey of operating experience for the period involved. The experience investigation shall include recommendations for changes in actuarial assumptions and as a result changes in the tables used in determining benefits and in calculating accrued liabilities. Samples of actuarial experience investigations/studies can be found at the following website:

<https://www.state.nj.us/treasury/pensions/experience-studies.shtml>

Preparation of the experience studies, every three (3) years, by comparing the basic assumption table against actual experience and recommending changes where appropriate in accordance with State and federal laws. The next experience studies to be completed under the upcoming Blanket P.O. {Contract} shall be for the PFRS and periods ending dates June 30, 2022.

- B. Development of early retirement incentive and Chapter 19, PL 2009 payoff amounts for employers as requested;
- C. Interfund Transfers-calculate the reserve transfer amount between systems when a member transfers from one retirement system to another;
- D. Option 4 Calculations-Calculate actuarially reduced benefit based on amounts provided by the DPB;
- E. Conduct an actuarial analysis of the Contributory Life Insurance accounts once during the term of this Blanket P.O. {Contract} (to be determined by SCM) to assess if:
 1. Current reserves are sufficient to cover accrued benefits
 2. Is the current member contribution rate sufficient to produce required revenue
- F. Optional Services – Develop Option 4 calculator for use by DPB personnel.

3.5.3 NON-RECURRING SERVICES

The Vendor {Contractor} shall perform Non-Recurring services including special services as requested by the Board, such as review of proposed legislation, studies involving proposals to alter the benefit and contribution schedules of the system, ad hoc reports and impact analyses of changes in federal and state law. These services shall be

compensated on a time cost basis and as detailed for payment.

In the case of Non-Recurring Services, the Vendor {Contractor} shall provide a proposed All-Inclusive Hourly Rates, limited to the eight (8) Non-Recurring Service categories provided for the three (3) price schedules for all three (3) years of the term Blanket P.O. {Contract}:

Principal, Consulting Actuary	Associate Principal
Consulting Actuary – Associate Principal	Retirement Actuary – Senior Consultant
Actuary - Consultant	Actuary – Senior Associate
Associate	General Support Staff

The Vendor {Contractor} shall have the resources to provide the Non-Recurring services on a scheduled basis as established by Board. The completion of these services are to have no impact on completion of the recurring services within the timeframes established by this Blanket P.O. {Contract}.

3.6 RELATED MATTERS

There are a number of other obligations which the Vendor {Contractor} may be called upon to perform and which amplify special services:

3.6.1 LEGAL AND LEGISLATIVE

The Vendor {Contractor} may be called upon to assist in the resolution of legal problems. This may involve the complications of the federal internal revenue code and other federal legislation and regulations. It may also involve the application of proper actuarial costs to proposed and adopted legislation. The Vendor {Contractor} shall be able to respond quickly to requests for estimate costs related to benefit and contribution changes.

The Vendor {Contractor} shall utilize the hourly rate offered in the Price Schedule as detailed below related to Litigation / Legal Support services.

3.6.2 PROJECTIONS

The Vendor {Contractor} may be called upon to prepare projections where all of the present assumptions are realized or where a change in such assumptions of one kind or the other may be evaluated and its results considered.

Normally, the Vendor {Contractor} assumes that the plan's annual normal cost and the covered population shall not change over time and that the plan shall continue indefinitely. These assumptions are the basis for the funding policy and the investment strategy. However, if the population declines, such assumptions will prove invalid and the cash flow and related investments will be affected.

The Vendor {Contractor}, therefore, may be called upon to prepare projections where all of the present assumptions are realized or where a change in such assumptions of one kind or the other may be evaluated and its results considered (see [Section 3.6.1 \(C\)](#)).

3.6.3 COMMUNICATIONS

The Vendor {Contractor} shall be able to express the results of a valuation in a manner that can be understood by the system's staff and Board.

The Vendor {Contractor} shall communicate with the Board and shall receive feedback from the Board in checking the appropriateness of the assumptions the Vendor {Contractor} regularly uses and in making estimates of the changes in the assumptions it regularly uses and in making estimates of the changes in the assumptions which would follow in any change in benefits or in the covered population. The Vendor {Contractor} may be called upon to verify the calculation used by the staff in determining benefits.

As pension financing involves substantial periods of time, the layman can often take issue with long-term projections that are not reflected in short-term results. The Vendor {Contractor} shall be prepared to defend his estimates and to explain his position in terms that are understandable to laymen.

Finally, the Vendor {Contractor} shall be called upon to review the literature drafted by the officers of the Board to assure his understanding of the benefit and contribution schedules and to make any recommendations for changes where the literature could be quoted more properly or where it needs correction.

3.6.4 NEGOTIATIONS

Where any portions of the benefits are provided by an insurance company and not by the trust itself, the Vendor {Contractor} shall review the group contracts, the assumptions used by the carriers and the premium arrangement approved by the plan as required by the carriers. The Vendor {Contractor} shall take a realistic view and develop a package of assumptions related to the group insurance in order to negotiate charges that the actuary of the insurance company is likely to advance in protecting the interest of the carrier.

3.6.5 ADMINISTRATIVE

When requested, the Vendor {Contractor} shall advise the Board on technical problems that arise in the operation of the system. The Vendor {Contractor} may be asked to work with the accountant in determining the language of the accountant's report and the annual reports to be issued by the system. The Vendor {Contractor} shall determine that the accounting system operated by the retirement plan provides the statistics and financial data required to construct actuarial tables, determine contribution rates, reserve valuations and actuarial liabilities. The Vendor {Contractor} shall know if the data is provided so that it can prepare other reports and information to meet the needs of their client. The Vendor {Contractor} shall take the lead in advising the system as to what information must be maintained and in what manner in order to assure that it can comply with the requirements of its contractual obligation. The Vendor {Contractor} may be called upon to work with those responsible for the investment of the pension corpus to assure that the investment mix is a proper selection designed to meet the needs of the plan and not one based on current fashion.

3.6.6 RECORDKEEPING

One of the things that a client normally points to in considering the degree of liability of an actuarial firm is the recordkeeping facility. This is especially true of cost projections in response to prospective legislation so that, years later, actuarial estimates can be researched and affirmed. One of the most difficult responses to make to a legislator or lobbying group is to deal with changes in such estimates that may occur over time.

Thus, the Vendor {Contractor} shall reflect in each such advice the basis for the projected cost and the implications of such projection for the near future.

The Vendor {Contractor} shall maintain the record of each quotation and the ability to retrieve them is a large measure of the firm's reliability.

3.6.7 ALL OTHER SERVICES

The Vendor {Contractor} shall be prepared to perform any other service which may be requested by the Board as one might normally expect of any consulting actuary.

3.6.8 CONFIDENTIALITY

In the course of its duties, the Vendor {Contractor} shall handle investment, financial, accounting and member and statistical information pertaining to the system. All such information is confidential and unless permitted by the system in writing, the Vendor {Contractor} shall not disclose such information, directly or indirectly, or use it in any way, either during the term of the Blanket P.O. {Contract} or at any time thereafter, except as required to perform his duties under the Blanket P.O. {Contract}. Any disclosure of information contrary to this provision shall be considered a material breach of the Blanket P.O. {Contract}.

3.7 SPECIAL REQUIREMENTS

3.7.1 CORRECTIONS

The error rate for data is about one-half (1/2) of 1% of all records in the system. These errors must be corrected whether common to many records or individual because of appropriation requirements. They cannot be estimated or allocated in any way; exact corrections with detailed supporting documentation only. All corrections must be accomplished before the valuation can proceed.

3.7.2 ACTUARY CHANGES

The Vendor {Contractor} may assume that the actuarial assumptions now in place will continue until the next three-year investigation is prescribed by the statute. Thus, the start-up costs of determining actuarial assumptions are not present in these specifications. However, legislation may be enacted that could change the economic assumptions or valuation methods at any time.

3.8 LITIGATION SUPPORT

The Vendor {Contractor} shall provide expert testimony regarding any litigation resulting from work performed in fulfillment of the requirements of this Bid Solicitation {RFP} upon request by the Board.

3.9 Assessments/Plans

The Vendor {Contractor} shall provide a detailed system design document showing Security Plan, Disaster Recovery Plan and Contingency Plan. Logical and physical diagrams are required.

SECURITY PLAN

The Vendor {Contractor} must provide a security plan for the proposed solution. The document shall describe the administrative, physical, technical and systems controls to be used by the system and/or services. The Vendor's {Contractor's} security plan must, at a minimum, provide security measures for the following areas:

- Facilities Physical Security and Environmental Protection

- System Security
- System Data Security
- Network Security
- Administrative and Personnel Security

The security plan shall provide for review of the Vendor's {Contractor's} operations and control system for the proposed solution. The Vendor {Contractor} shall have the capability to detect and report attempted unauthorized entries into the facility and system. All security requirements for the Vendor {Contractor} apply to development, testing, production and backup systems.

In addition, the security plan the Vendor {Contractor} shall identify, address and/or define:

- Regulations and security requirements – how the Vendor {Contractor} will address security requirements such as PCI, HIPAA, FISMA and etc.
- System, Administrative and Personnel Security - the security responsibilities of and supervision required for information owned and / or operated by the Vendor {Contractor}. Security responsibilities include responsibilities for administration of the infrastructure, implementing or maintaining security and the protection of the confidentiality, integrity, and availability of information systems or processes.
- Workforce Security - the control process for hiring and terminating of Vendor's {Contractor's} employees, and method used for granting and denying access to the Vendor's {Contractor's} network, systems and applications. Identify and define audit controls when employment of the employee terminates. Identify rules of behavior.
- Role-based security access – the products and methods provides role-based security, access enforcement and least privilege.
- Account Management – the products and methods identify and control the account types to meet defined regulation and security requirements.
- Password Management – the appropriate password management controls to meet defined regulation or security requirements.
- Logging / Auditing controls – the Vendor's {Contractor's} audit control methods and requirements. The controls must address but not limited to all user access and user identification linked to any changes to the system and data, and provide an audit process that will make all audit data accessible to state and federal audit staff. The audit trail of all transactions should track date, time, user, and end-user device that initiated the transaction. The audit data must be protected, non-repudiated and restricted to authorized staff. Retention of the audit records will be retained online for at least 90 days and further preserve offline for a period of the Blanket P.O. {Contract} or required State and Federal laws and regulations.
- Incident Management – the methods for detecting, reporting and responding to an incident, vulnerabilities and threats. The methods are tested and exercised.
- Vulnerability / Security Assessment – the products and methods used for scanning for vulnerabilities and remediation of the vulnerabilities. Identify and define methods used for initiating and completing security assessments. All systems and applications shall be subject to vulnerability assessment scans by an independent and accredited third party on an annual basis.
- Application Security – where the Vendor {Contractor} is providing application hosting or development services, the Vendor {Contractor} at a minimum shall run application vulnerability assessment scans during development and system testing. Vulnerabilities shall be remediated prior to production release.
- Application and Tenant Isolation – where the Vendor {Contractor} is providing application hosting and/or development services, the Vendor {Contractor} will isolate the computing environment (compute/partition, network and storage/media.)
- Anti-virus / malware controls – the products and methods for anti-virus and malware controls that meet industry standards. It shall include policy statements that require periodic anti-viral software checks of the

system to preclude infections and set forth its commitment to periodically upgrade its capability to maintain maximum effectiveness against new strains of software viruses.

- Network Security – where the Vendor {Contractor} has access to State confidential data, and that data will traverse the Vendor's {Contractor's} network, the Vendor {Contractor} shall maintain the Vendor's {Contractor's} network security to include, but not be limited to: network firewall provisioning, intrusion detection and prevention, denial of service protection, annual independent and accredited third party penetration testing, and maintain a hardware inventory including name and network address. The Vendor {Contractor} shall maintain network security that conforms to current standards set forth and maintained by the National Institute of Standards and Technology (NIST), including those at: <http://web.nvd.nist.gov/view/ncp/repository>.
- Database – the products and methods for safeguarding the database(s).
- Data Integrity – the products and methods on the integrity of all stored data and the electronic images, and the security of all files from unauthorized access. The Vendor {Contractor} must be able to provide reports on an as-needed basis on the access or change for any file within the system.
- Server and infrastructure – the products and methods for "hardening" of the hardware' operating systems and software.
- Wireless, Remote and Mobile Access – where the Vendor {Contractor} has access to State confidential data, and that data traverses the Vendor's {Contractor's} network, the Vendor {Contractor} shall have security controls for provisioning accounts, authorization, account/credential verification, audit/logging, VPN, and TCP/UDP ports restrictions.
- Transmission - the products and methods on how its system addresses security measures regarding communication transmission, access and message validation.
- Continuous Monitoring – where the Vendor {Contractor} has access to Board confidential data, and that data will traverse the Vendor's {Contractor's} network, the Vendor {Contractor} shall have products and methods for monitoring malicious activity, malware, intrusions and audit records within the Vendor's {Contractor's} network.
- Security Audit – the Vendor {Contractor} must allow Board assigned staff full access to all operations for security inspections and audits which may include reviews of all issues addressed in description of the security approach and willingness to enter into good faith discussions to implement any changes.
- Change / Configuration Management and Security Authorization – the Vendor {Contractor} has established a change / configuration methodology, establish a baseline configuration and track changes to the configuration. Identify and maintain a list of software programs authorized to execute on a system. When the Vendor {Contractor} has a major change to the system or application, the State's project manager is notified and a security reauthorization must be approved.
- Risk Management – the Vendor {Contractor} has established a risk management plan, technical and security risks are identified, reported and mitigated.
- Confidentiality and Non-Disclosure Agreements – when requested, the Vendor {Contractor} and all project staff including its subcontractor(s) must complete and sign confidentiality and non-disclosure agreements provided by the Board. The Vendor {Contractor} may be required to view yearly security awareness and confidentiality training modules provided by the State. Where required, it shall be the Vendor's {Contractor's} responsibility to ensure that any new staff sign the confidentiality agreement and complete the security awareness and confidentiality training modules within one (1) month of the employees' start date.

The Board reserves the right to obtain, or require the Vendor {Contractor} to obtain, criminal history background checks from the New Jersey State Police for all Vendor {Contractor} and project staff (to protect the State of New Jersey from losses resulting from Vendor {Contractor} employee theft, fraud or dishonesty) when requested. If the Board exercises this right, the results of the background check(s) must be made available to the Board for consideration before the employee is assigned to work on the Board's project. Prospective employees with positive criminal backgrounds for cyber-crimes will not be approved

to work on Board Projects. Refer to the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-12, An Introduction to Computer Security: The NIST Handbook, Section 10.1.3, Filling the Position – Screening and Selecting.

The Vendor {Contractor} shall disclose to the Board a description of their roles and responsibilities related to electronic discovery, litigation holds, discovery searches, and expert testimonies. The Vendor {Contractor} shall disclose its process for responding to subpoenas, service of process, and other legal requests.

Disaster Recovery Plan

The Vendor {Contractor} is required to submit their Disaster Recovery plan, identifying locations and systems – to ensure that they can continue to satisfy Bid Solicitation {RFP} requirements within not more than five days, in the event their primary location is rendered unusable. The plan must detail how the Vendor {Contractor} will ensure that the primary location and/or systems destroyed in such a disaster would be made available to meet the 24 hour time frame. The plan is tested. The plan is reviewed and updated annually.

Contingency Plan

The Vendor {Contractor} is required to have a contingency plan identifying key personnel, organization units and alternate sites with telecommunications and computers. The plan is tested. The plan is reviewed and updated annually.

Reference:

NIST Special Publication 800-53A - Guide for Assessing the Security Controls in Federal Information Systems and Organizations (http://csrc.nist.gov/publications/nistpubs/800-53-Rev3/sp800-53-rev3-final_updated-errata_05-01-2010.pdf)

3.10 TECHNICAL ENVIRONMENT

3.10.1 State Technology Requirements and Standards

The Vendor {Contractor} shall be subject to the same security and infrastructure review processes that are required by NJOIT and its partner Departments and Agencies. The Vendor {Contractor} shall submit relevant documentation, applicable metadata, and participate in the System Architecture Review (SAR) process. Additional information on this process can be found at: <http://www.nj.gov/it/reviews/>.

3.10.2 System Design

The Board and the Vendor {Contractor} shall identify a collaborative governance structure as part of the design and development of service delivery and service agreements.

The Vendor {Contractor} shall identify all of its strategic business partners who will be involved in any application development and/or operations.

The State has a mature enterprise data warehousing environment that is based upon a hub-and-spokes model, with a fairly normalized data warehouse hub supplying data to multiple physical and virtual data marts using conformed dimensions. The data warehouse hub is the State's interface mechanism for system-to-system batch data transfers.

1. Where batch data from other State systems is required by the Vendor's {Contractor's} system for operational functionality, that data shall be routed through the enterprise data warehousing staging area. Independent feeds of operational data from individual source systems are not permitted.

The Vendor {Contractor} shall be required to coordinate these efforts with the State's Office of Enterprise Data Services (OEDS).

3.10.2.1 HOSTING AND BACKUP SERVICES (IF APPLICABLE)

For "outsourced hosting services", the Vendor {Contractor} must demonstrate the ability to not only secure the physical application infrastructure utilizing the above mentioned security requirements, but also control and secure physical access to the application hosting facilities, the racks supporting network infrastructure and processing server equipment, web, application and database servers. The backed-up data is not commingled with other customer data.

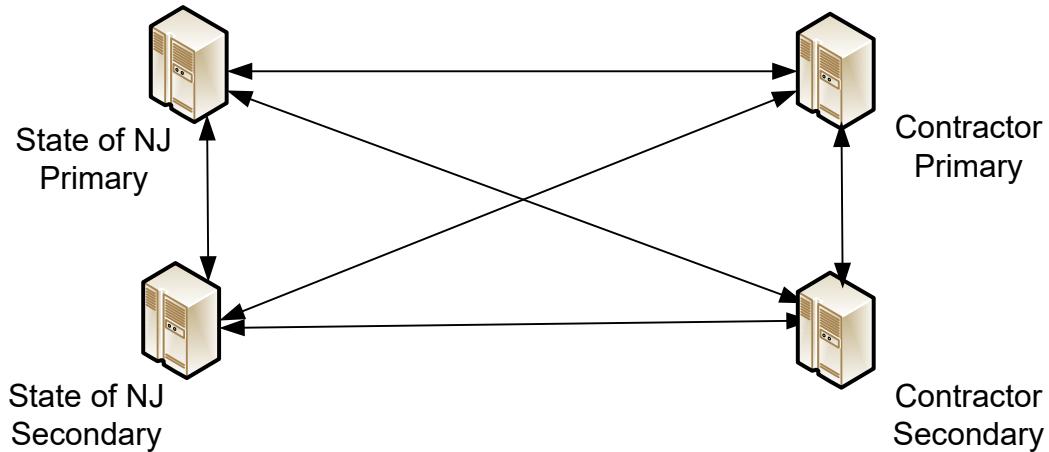
If the Vendor {Contractor} is not supplying "dedicated" hardware resources to host State of New Jersey applications and data, the Vendor {Contractor} must demonstrate its strategy to maintain application and/or stack isolation using commercially available security devices to maintain security zones, routing isolation and access control to infrastructure devices and access/security logging (AAA) within its infrastructure.

3.10.3 Extranet Plan (OPTIONAL)

The communication links between the State of New Jersey and the Vendor {Contractor} can be through a MPLS cloud (preferred) or IPSEC tunnel over the Internet based upon the connectivity requirements and cost constraints.

The Vendor {Contractor} shall provide and maintain two (2) extranet communication links into the State of New Jersey. One of these links will be active and one will be a "hot" spare. These links shall terminate as follows:

- Link 1 – Ethernet speed or greater communication circuit shall be established from the contractor's data or communication center to the State of New Jersey's Primary Data Center at OIT HUB, 1 Schwarzkopf Drive, West Trenton, NJ to operate as the primary data path. This data circuit shall provide the primary path and should terminate on the State of New Jersey side into the contractor-owned and maintained equipment, which in turn would provide an Ethernet connection to the State's Extranet Partner access point at OIT Hub (firewall).
- Link 2 – Ethernet speed or greater communication circuit shall be established from the contractor's data or telecommunication center to the State of New Jersey's SAC Data Center - River Road PO Box 7068 W. Trenton, NJ 08628 to operate as the secondary data path. This data circuit will provide a secondary backup path and should terminate on the State of New Jersey side into the contractor-owned and maintained equipment, which in turn would provide an Ethernet connection to the State's Extranet access point at SAC (firewall).



Once the communication links are established and testing is completed, the OIT Hub will be the primary link to the contractor.

The Vendor {Contractor} must work with the sponsoring agency and OIT to establish an Extranet Partner relationship. This would require completion of an Extranet Partner agreement and supporting documentation; reference the State of New Jersey's extranet policy 09-11-NJOIT (<https://www.state.nj.us/it/docs/ps/09-11-NJOIT%20Extranet%20Policy.pdf>). In addition, the Vendor {Contractor} must work with OIT network group to establish the appropriate routing protocols based on the system requirements and OIT security group to establish appropriate firewall rule sets to accomplish necessary business data flow.

The communication links can connect to a MPLS cloud or IPSEC tunnel over the Internet based upon the connectivity requirements and cost constraints. Once the communication links are established and testing is completed, the OIT Hub will be the primary link to the Vendor {Contractor}.

The State of New Jersey and the Vendor {Contractor} will be required to follow the State's Extranet Policy and Procedure, and complete the application form, MOU, operational form and security controls assessment checklist.

3.10.4 Transmission of Files

The State of New Jersey supports multiple methods for data transfers internally within the Garden State Network or external to an extranet or business partner. The transmission of all files between the contractor and the State system must be transferred securely using the State file transfer methodology. The State will work with the Vendor {Contractor} in the implementation of the file transfer process. The secure file transfer must meet the state and federal security guidelines and standards.

The State of New Jersey provides both asynchronous and synchronous file transfer methodologies.

Synchronous:

- 1) Connect: Direct Secure ++ is a supported option for file exchange with the State of New Jersey IBM mainframe.

- 2) FTPS over SSL (Explicit – port 21) is a supported option for file exchange for connections originating from the State of New Jersey IBM Mainframe. Must support RFC2228.
- 3) SFTP (FTP over SSHv2 or greater) is a supported option for file exchange with State of New Jersey distributed servers (non-IBM Mainframe).

Asynchronous:

- 1) The State of New Jersey's DataMotion is a supported option for non-automated or "ad-hoc" file exchange with State of New Jersey. A client license is required.
- 2) The State of New Jersey's DataMotion-DataBridge is a supported option for automated file exchange with the State of New Jersey.

The Vendor {Contractor} will be required to test the file transfer with the State system on all file transfers prior to full implementation.

During the life of the Blanket P.O. {Contract}, the Board and the State may revise or change the file transfer method and/or format for the transmission of files to accommodate real time processing, and use case specific information and the contractor shall be required to conform to all requirements.

Reference:

NIST Special Publication 800-47 - Security Guide for Interconnecting Information Technology Systems
[\(http://csrc.nist.gov/publications/nistpubs/800-47/sp800-47.pdf\)](http://csrc.nist.gov/publications/nistpubs/800-47/sp800-47.pdf)

4.0 SELECTION CRITERIA

The PFRSNJ's selection of a provider for actuarial services will be based on its determination of overall best value. This determination will be influenced by the following criteria:

- Experience in providing services similar in scope and size
- Public Pension Plans
- Clarity of written and/or oral presentations
- Availability of lead actuary or consultant to meet with the Board
- Resources (both technical and personnel) to fully and satisfactorily execute system valuation qualifications and experience of staff assigned to project
- Proposed schedule for delivery of service
- Willingness and ability to comply with mandatory contractual terms and any and all the PFRS requirements
- References

5.0 MANDATORY CONTRACTUAL TERMS AND CONDITIONS

1. The contractor shall not be indemnified by the Board.

2. The contractor shall annually inform the PFRSNJ Board of any arrangements in oral or in writing, for compensation or other benefit received or expected to be received by the contractor or a related person from others in connection with the contractor's services to the retirement board.
3. The contractor shall annually disclose to PFRSNJ Board any compensation, in whatever form, paid or expected to be paid, directly or indirectly, by the contractor or a related person to others in relation to the contractor's services to the PFRSNJ Board.
4. The contractor shall annually disclose to the Board in writing any conflict of interest the contractor may have that could reasonably be expected to impair the contractor's ability to render unbiased and objective services to the Board.
5. The Board shall have the ability to cancel this contract on thirty days' notice to the actuary. Any work up to that point shall be paid for, but there will be no further costs associated with cancellation after it has occurred.

6.0 PROPOSAL CONTENT

The respondent should provide a narrative response to the tasks and questions listed below. This narrative should demonstrate an understanding of the needs of the Board, relative to the tasks, and should provide a comprehensive statement of the approach the respondent would take in order to meet those needs. Do not include any reference to pricing in proposal.

1. List the name of your firm, address, and telephone number of the home office and address of the office(s) providing services under the contract.
2. Provide a general description of the firm including size, number of employees, primary business, other businesses or services, and type of organization (franchise, partnership, corporation, etc.).
3. Identify the staff actuaries who will render services under the contract, including a summary of their professional qualifications and experiences, and any specific experience performing actuarial valuations for and/or providing actuarial services to public pension systems.
4. Identify the actuary or actuaries who would have direct contact with the board.
5. Identify non-actuarial professional personnel who would perform work under the contract, including a summary of their professional qualifications and experiences.
6. State the availability and location of staff and other required resources for performing all services responsive to this RFP and whether the current staff is capable of performing said duties.
7. Identify any public pension plans, and their respective asset sizes for which the actuaries identified in items #3 and #4 above have provided actuarial services for within the last three (3)

years or those pension plans held to similar governmental standards, listing the state and standards applied to such work. Provide the name, title, address, and telephone number of the person(s) responsible for the administration of each plan.

8. List any formal complaints, claims, legal actions, or other proceedings filed with the regulatory agencies, administrative agencies, arbitrators, or courts against an individual or entity as a result of actuarial services provided by the firm and/or its actuaries within the last five (5) years.
9. Provide a detailed description of the proposed methodology to be employed in performing the valuation.
10. Provide a detailed description of the proposed method whereby the bidder and the board will determine each of the actuarial assumptions to be employed in performing the valuation.
11. Provide a detailed description of the methods and procedures to be used in editing and "cleaning" the member data that will be provided by the board. Be sure to describe in detail your proposed method of accounting for missing data elements such as age or service.
12. Describe the format in which the results of the valuation will be presented. Please submit an example of a valuation report.
13. Propose a time schedule for the completion of the valuation and the associated forecast schedules. Indicate that the time schedule will be binding. Completion dates shall be proposed in terms of a specified period of time after receipt of all member data that the board maintains in machine-readable form and receipt of relevant asset data.

COST PROPOSAL

1. The Cost Proposal must be submitted in sealed envelope separate from the Proposal. All proposals will be evaluated prior to consideration of costs; therefore all references to cost should be separated from the original proposal.
2. The price quoted by the bidder for the services performed under this contract shall be commensurate with the aggregate charges for services rendered for each of the valuation periods (full actuarial valuations and partial valuations). Pricing must be guaranteed for the full contract period and any option years.
3. Include your hourly billing rate for the performance of additional services not considered by this proposal.
4. The Cost Proposal must remain valid from date of submission or revision.
5. The Cost Proposals will remain confidential until a formal and finalized contract has been executed.

APPENDIX A - BIDDER'S SUBMISSION FORM

Bid Offer and Proposal

Bidders are required to sign this form and submit it with their bid proposal.

To the Board of Trustees of the Police and Firemen's Retirement System of New Jersey, the undersigned proposes to provide services for the PFRS in accordance with the terms specified below and the terms of this request:

The undersigned also hereby declares that it is the only person or persons interested in this proposal, that the proposal is made without any connection with other persons making any bid for the same work; that no person or persons directly or indirectly interested in this proposal, or in any contract which may be made under it, is expecting profits to arise therefrom; and without directly or indirectly influencing or attempting to influence any other person bidding for the same work; and that this proposal is made with distinct reference and relation to the specifications prepared for this case and herein mentioned. The undersigned declares that, in regard to the conditions affecting the work to be done; this proposal is based solely on their own investigations and research and not in reliance upon any representations of any employee, officer, or agent of the Police and Firemen's Retirement System of New Jersey.

Date: _____

Company/Firm Name of Bidder: _____

Name of Signatory (person signing below): _____

Contact Name: _____

Contact Telephone Number: _____

Contact Business Address: _____

Contact City and State: _____

Authorized Signature: _____

Printed Name and Title: _____

Date of Offer: _____

Duration of Offer (minimum 120 Days) _____

APPENDIX B - CERTIFICATION OF MINIMUM QUALIFICATIONS

ACTUARIAL SERVICES MINIMUM QUALIFICATIONS

BIDDERS MUST CERTIFY THAT EACH OF THE FOLLOWING MINIMUM QUALIFICATIONS ARE MET

PLEASE RESPOND TO EACH OF THE FOLLOWING BY INITIALING THE "YES" OR "NO" RESPONSE TO CERTIFY THAT YOU DO OR DO NOT MEET THE MINIMUM QUALIFICATIONS FOR STAFF ASSIGNED TO PFRSNJ.

1. Actuarial staff that has performed actuarial valuations for defined benefit pension plans for at least three years:

YES NO

2. A minimum of one staff member that is a Fellow or Associate of the Society of Actuaries, or is a Fellow or Associate of the Conference of Actuaries in Public Practice, or is a member of the American Academy of Actuaries, and an otherwise Enrolled Actuary (making note of specific designations):

YES NO

3. Actuaries that have performed at least five actuarial valuations of defined benefit pension plans sponsored by a governmental entity, making note of the state (e.g. New Jersey):

YES NO

Certified by:

Name

Title

Date

APPENDIX C - PRICE PROPOSAL FORM (Additional Sheets can be attached as needed). Please provide detailed breakdown of costs for extra services not contemplated by MOU and cost of any workers to provide service, and what your firm expects to charge for each level of professional in your organization.

Full Valuation #1 for Fiscal Year 2021 as of June 30, 2021		
GASB Statement Number 67		
GASB Statement Number 68		
Full Valuation #2 for Fiscal Year 2022 as of June 30, 2022		
GASB Statement Number 67		
GASB Statement Number 68		
Full Valuation #3 For Fiscal Year 2023 as of June 30, 2023		
GASB Statement Number 67		
GASB Statement Number 68		
First Option – Valuation #4 for Fiscal Year 2024 as of June 30, 2024		
GASB Statement Number 67		
GASB Statement Number 68		
Second Option – Valuation #5 for Fiscal Year 2025 as of June 30, 2025		
GASB Statement Number 67		
GASB Statement Number 68		
Hourly rate for services not contemplated by this MOU		

Signature:

Date: