

02/27/23 09:55:22
WV Purchasing Division

ORIGINAL

Request for Proposals CRFP 0203 Outside Actuarial Services

TECHNICAL PROPOSAL

PREPARED FOR

West Virginia Consolidated Public Retirement Board

DUE BY

March 1, 2023

Prepared by:

James Ritchie, ASA, EA, FCA, MAAA
President of Bolton Retirement
jritchie@boltonusa.com
p: (443) 573-3924
f: (410) 685-1924

Thomas Vicente, FSA, EA, FCA, MAAA
Senior Consulting Actuary
tvicente@boltonusa.com
p: (443) 573-3918
f: (410) 685-1924



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

State of West Virginia
 Centralized Request for Proposals
 Service - Prof

Proc Folder: 1161206		Reason for Modification:	
Proc Description: Outside Actuarial Services			
Proc Type: Central Master Agreement			
Date Issued	Solicitation Closes	Solicitation No	Version
2023-02-02	2023-02-21 13:30	CRFP 0203 CPR2300000002	1

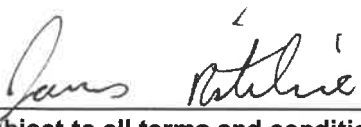
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ENDORSEMENT

Vendor Customer Code: VS0000017365
 Vendor Name : Bolton Partners, Inc.
 Address : 36 S. Charles Street, Suite 1000, Baltimore, MD 21201
 Street : 36 S. Charles Street, Suite 1000
 City : Baltimore
 State : MD Country : United States Zip : 21201
 Principal Contact : Jim Ritchie
 Vendor Contact Phone: (443) 573-3924 Extension:

BUYER INFORMATION CONTACT THE BUYER
 Elissa Pettrey
 (443) 558-0094
 elissa.k.pettrey@wv.gov

Vendor Signature X  FEIN# 52-1231144 DATE 2/28/2023
 offers subject to all terms and conditions contained in this solicitation



Employee Benefits, Actuarial & Investment Consulting

March 1, 2023

Melissa Pettrey
2019 Washington Street, East
Post Office Box 50130
Charleston, WV 25305-0130

Re: CRFP 0203 Outside Actuarial Services

Dear Ms. Pettrey,

Bolton Partners, Inc. (DBA Bolton) is pleased to present this response to West Virginia Consolidated Public Retirement Board's (the Agency) Request for Proposals (RFP) for Outside Actuarial Services. Our firm provides actuarial services for public sector clients throughout the country, particularly in the mid-Atlantic area, and is well qualified to provide all the actuarial services described in your RFP. We are also the actuary for the West Virginia Municipal Pensions Oversight Board (MPOB) and have a deep understanding of the West Virginia Code and the West Virginia legislative process.

As shown in this proposal, Bolton has the extensive experience and expertise necessary to provide the requested services in a timely manner with a commitment to the highest quality standards. Key advantages Bolton offers include:

- **Innovation.** We are continuously working to improve processes and outcomes for our clients. We are currently working on initiatives to leverage retirement plans to create effective retention policies. We are also developing new approaches and analyses to help our clients navigate the "post-pandemic" environment of higher inflation and volatile returns and to understand how the pandemic may influence longevity trends. This results in lower long-term costs for our clients and less volatility.
- **Extensive public sector expertise.** We have rich practical and theoretical experience with public sector pension and post-retirement medical benefit valuations, consulting, and administration. The team that we are offering to you has worked with many similar projects and clients.
- **Local expertise.** The Bolton team has worked with the West Virginia Municipal Pension Oversight Board for four years and has helped with a variety of challenges over that period. We are knowledgeable about West Virginia's legislative process and can use that knowledge to provide support as well as targeted advice and suggestions. Additionally, our close proximity to West Virginia allows our consultants to be present in person for most Board and Actuarial Assumptions Review Committee meetings.
- **Accessible experts.** Our firm is just the right size to fit your needs: we have the experience and expertise of a larger firm with the personalized attention that smaller firms can offer. Our actuarial consultants are accessible and knowledgeable about your plan. Tom Vicente, your proposed Lead Actuary, specializes in public sector retirement,

pension, and Other Post Employment Benefit (OPEB) consulting, is current on local and national trends in the public sector, and is a Fellow of the Society of Actuaries (FSA), the highest actuarial designation. Jim Ritchie, your proposed Relationship Manager currently leads the WV MPOB engagement. Jim and Tom have been working with public sector pension plans for over 30 years. Jim and/or Tom will attend all annual valuation results and actuarial assumption setting meetings in person.

- **Clear communication.** We work with our clients to ensure our communications are comprehensive, understandable, and meet their needs. This includes the use of framing, summary tables, and graphs, and providing materials prior to meetings so that our clients have time to review and provide any feedback or requests for additions or clarifications.

Bolton can provide the Agency with the required valuation services and valuable consulting from experienced professionals. We look forward to the opportunity to work with the Agency and develop our partnership. Please let us know if you have any questions regarding this proposal by contacting Jim Ritchie at 410-573-3924.

Sincerely,

Bolton



James Ritchie, ASA, EA, FCA, MAAA
President of Bolton Retirement



Thomas Vicente, FSA, EA, FCA, MAAA
Senior Consulting Actuary

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I. QUALIFICATIONS AND EXPERIENCE

Qualifications and Experience: Vendor should provide information and documentation regarding its qualifications and experience in providing services or solving problems similar to those requested in this RFP. Information and documentation should include, but is not limited to, copies of any staff certifications or degrees applicable to this project, proposed staffing plans, descriptions of past projects completed (descriptions should include the location of the project, project manager name and contact information, type of project, and what the project goals and objectives were and how they were met.), references for prior projects, and any other information that vendor deems relevant to the items identified as desirable or mandatory below. [4.3]

Qualification and Experience Desirable 1: Please describe the firm, the firm's qualifications for this engagement, the firm's experience in providing actuarial valuations/studies to state sponsored retirement systems, and the firm's experience working with government retirement systems. [4.3.1.1]

About Us

Bolton is a full-service actuarial, employee benefits, compensation, and investment consulting firm with 40 years of experience providing consulting services to clients in the public and corporate sectors, non-profit organizations, as well as for the Federal Government. Bolton was founded in 1981 by Mr. Robert G. Bolton as an independent actuarial and employee benefits consulting firm, and since our founding, actuarial services and benefit plan consulting have been our primary focus.

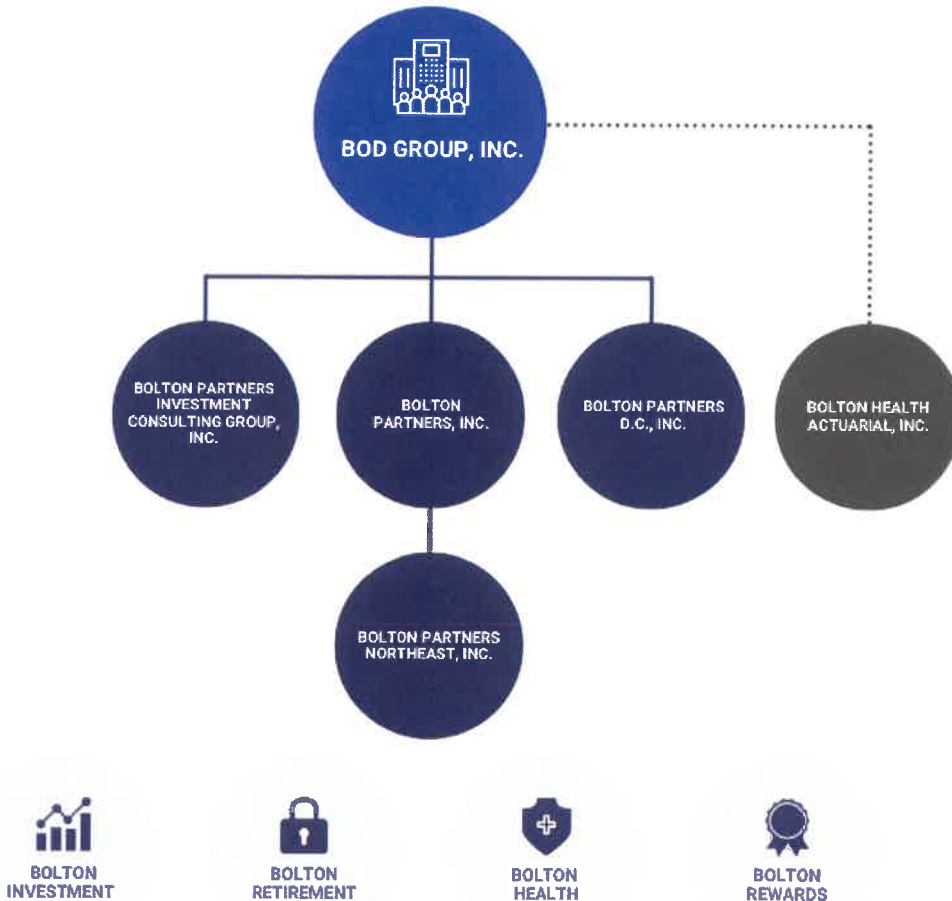
Our four consulting divisions provide pension and retirement, health and benefits, compensation, and investment consulting services for public sector, corporate, multi-employer plans, and non-profit organizations:

 RETIREMENT	 HEALTH	 INVESTMENT	 REWARDS
<ul style="list-style-type: none"> • Retirement Strategy & Plan Design • Actuarial Services • Administration & Compliance • Actuarial Audits • Asset/Liability Studies • Risk Management Consulting • Plan Terminations • Defined Contribution Consulting • Plan Compliance 	<ul style="list-style-type: none"> • Strategy & Plan Design • Plan Benchmarking & Performance • Health Actuarial Services • Wellbeing & Population Health • Brokerage & Exchange Services • Pharmacy Benefit Management • Group and Voluntary Benefits • Claim and Dependent Verification Audits • Vendor Evaluation & Selection • Compliance Support • Retiree Medical • Benefits Administration & Enrollment Services 	<ul style="list-style-type: none"> • Investment Policy Review & Deployment • Manager Evaluations & Searches • Performance Measurement, Modeling & Monitoring • Defined Contribution Consulting • Vendor Searches • Compliance Support • Plan Governance & Fiduciary Services • Asset Allocation Studies 	<ul style="list-style-type: none"> • Reward Strategy • Board & Executive Compensation • Broad-Based Employee Pay • Sales Compensation • Global Renumeration • Surveys & Research

Bolton serves a national client base and has earned a reputation for integrity and the highest quality of work. We build long-term partnerships with our clients by delivering understandable, insightful, and impactful solutions to complex benefits issues so that they can best manage future financial risks and provide valuable benefits to their employees.

Headquartered in Baltimore, Maryland, we also maintain offices in Arlington, VA; Mt. Laurel, NJ; Blue Bell, PA; Atlanta, GA; Cincinnati, OH; and Denver, CO. Bolton's 115+ employees serve our clients throughout the United States, with an emphasis on the East Coast market.

We are part of BOD Group, Inc. and are a 100% employee-owned C corporation. Our private ownership allows us to put our clients ahead of everything else. We do not have shareholders that force us to focus on the next quarterly reporting. Instead, we can focus on what is best for our clients and provide truly unbiased consulting. We not only provide proactive consulting on what our clients should do, but we also provide our clients with recommendations on what they do not need to do, which results in efficient and cost-effective solutions for our clients. The ownership structure of our firm is depicted below.



What Sets Us Apart

Bolton is one of a select few firms with subject matter expertise in retirement consulting (both defined benefit and defined contribution), pension/OPEB actuarial services, retirement investment advisory services, health and welfare benefits, wellness and population health, healthcare actuarial services, and voluntary benefits.

Since our inception, Bolton has thrived in our industry and maintained our financial health and solvency. Our success over the last 40+ years is due to the strength of our relationships with our clients, our technical knowledge, and our work product. Our strengths are impeccable client service, straightforward management style, and meticulous attention to detail all of which are critical to the success of our client relationships. Bolton has maintained its success through the years because of our industry-leading professional depth and expertise – which is not only a strong point of our firm but also a major asset to our clients. The driving theme of our consulting practice is our focus on solutions and results for our clients. Our success in building and retaining a solid client base is attributed, in part, to principles that have served us well over time. Those principles include:

- **Knowing our clients.** We spend a great deal of time listening to and understanding our clients. We want to understand the relationship and culture the client wants to construct with employees. We need to know our client's perspective on overall costs, budget accountability, risk retention/transfer, competitive pressure on providing benefits, and anything else that impacts human resources and finance.
- **Expectation setting.** This is particularly important for a successful client/consultant relationship. A clear understanding of your requirements and expectations is critical. We take the lead in accomplishing this understanding.
- **Value.** We offer excellent value to our clients, providing competitive pricing combined with a finished product that exceeds expectations. In addition, most of our projects are on fixed fees, so that you have no exposure to cost overruns.
- **Feedback and measurement.** One of our responsibilities as your consultant is to provide sufficient feedback on goals and milestones. We are in regular contact with our annual recurring services and any special projects requested are documented through timelines and work plans that are shared with you annually or at the start of a project. Any changes are discussed with and approved by our client.

Our clients consistently say that the following key items distinguish us from our competition:

- Commitment and expertise in consulting to Public Sector clients
- References and experience with similar clients
- Subject matter experts to assist clients with special projects
- Access to the same resources as national firms at a significantly lower cost
- Passion to provide value to our clients and their employees at every opportunity

Although not directly relevant to the work we would perform for the Agency, it is notable (as a testament to the overall quality of the work Bolton performs for its clients) that we are the primary contractor to the Pension Benefit Guaranty Corporation and have received their highest rating since the inception of our contract with them 20 years ago. Bolton provides a variety of other services to PBGC, including annual valuations of the system’s future benefit liabilities actuarial experience studies, research projects, and administration of trustee pension plans.

Our Professional Staff

At Bolton, we embrace a “build it together” service delivery model focused on alignment to the highest standards, continuous improvement, empowerment and accountability, and teamwork and collaboration. The driving theme of our consulting practice is to focus on solutions and results for our clients. To accomplish this, we prioritize constant communication with our clients. We will set up periodic meetings (i.e., weekly, bi-weekly, or monthly) with key members of your staff to ensure we have open communication and are accurately covering the issues we need to address in a timely and efficient manner. In addition, we operate in a horizontal organizational structure without layers of management, whereby even the most senior members of the firm are actively engaged in servicing clients. Our flat organizational structure allows our senior actuaries and consultants to work on fewer clients and be more focused on and detailed with each.

Our staff, with its combined level of experience and expertise, is unique. Our senior consulting actuaries come from a variety of backgrounds, benefiting from their work with a wide variety of plan sponsors in the public and private sectors and ensuring that our clients are provided with thoughtful, innovative advice on managing their retirement systems.

Our actuaries take senior leadership positions within the U.S. actuarial organizations, affording us insights into the latest trends and developments that affect public pension plan sponsors. We also have senior consultants with experience on the plan sponsor side, providing a different perspective on how workforce dynamics may influence plan design and effective communication with members about their benefit programs.

We are proud of the fact that we have had little professional staff turnover (other than normal retirements) which gives our clients the opportunity to have long-term relationships and continuity in their service with our consultants.

Our professional staff includes:

Title	Count
Credentialed Actuaries*	22
Actuarial Consultants	16
Actuarial Analysts	21
Benefit Consultants	15
Benefit Analysts	6
Administrators	3

Title	Count
Other	35
Total	118

*Includes 10 Fellows and 10 Associates of the Society of Actuaries, 9 Fellows of the Conference of Consulting Actuaries, 14 Members of the American Academy of Actuaries, and 17 Enrolled Actuaries

Bolton consultants are active participants in the actuarial and benefits community. We are members of the Society of Actuaries (SOA), the American Academy of Actuaries (AAA), the Conference of Consulting Actuaries (CCA), the International Foundation of Employee Benefit Plans (IFEBC), the International Society of Certified Employee Benefit Specialists (ISCEBS), and Working in Employee Benefits (WEB). We take significant research and leadership roles with these organizations. For example:

- Jim Ritchie, President of Bolton Retirement, was a member of the Pension Committee of the American Academy of Actuaries, serves as the chairman of the Archdiocese of Baltimore Lay Employees Retirement Committee, and is a member of the Archdiocese of Baltimore Board of Financial Administration.
- Tom Vicente, Senior Consulting Actuary, is the chair of the Society of Actuaries' Social Insurance and Public Finance Section Council and serves as the Newsletter editor. He is also a member of the American Academy of Actuaries Public Plans Committee.
- Ellen Kleinstuber, our Chief Actuary, is the immediate past president of the Conference of Consulting Actuaries, a member of the Conference of Consulting Actuaries Professionalism and DE&I Committees, a past chairperson of the American Academy of Actuaries Pension Committee (2015 - 2018) and the Joint Program Committee for the annual Enrolled Actuaries Meeting, and a former member of the Society of Actuaries Retirement Section Council.
- Ann Sturner, Senior Consulting Actuary, is a former member of the Society of Actuaries Retirement Section Research Team.
- Kevin Binder, our emeritus OPEB actuarial practice leader, is a past chair and member of the Society of Actuaries Retirement Section Research Team and has served on the project oversight group for the development of the RP-2000 mortality tables.

Our actuaries are frequent speakers at continuing education meetings of the various actuarial organizations and have presented to diverse audiences, including the National Conference of Insurance Legislators, the Pension Rights Center, the National Conference on Public Employee Retirement Systems, and the National Institute for Retirement Security.

Qualifications and Experience

Bolton has the qualifications and experience to provide all work described in the scope of services. Bolton's expertise is not limited by plan or employer size – our client base represents a broad spectrum, from small cities to large counties to states. Unlike our larger competitors, we are ideally suited to be more responsive and tailored to each client. Our valuation software and reporting tools allow for flexibility in how we do our work, and our firmwide commitment to integrity and technical excellence ensures that any modifications to our standard procedures will conform to the highest standards.

We have a depth and breadth of experience working with public sector employers, with government plans constituting about 75% of our revenue (across all our consulting services). Over the past 40 years, we have performed hundreds of valuations and experience studies for public sector plans or systems, many with multiple groups and benefit tiers. We are the actuaries for more than 85 public pension plans and over 150 OPEB plans.

Most of our clients are smaller and mid-sized plans, and we also provide actuarial consulting and audit services to several very large retirement systems (such as the City of New York’s five retirement systems, the State of Maryland, the State of Texas, and CalPERS). Working with these large systems requires us to have best-in-class tools and procedures to support our work.

Our experience with large public sector retirement systems includes states, large cities, and the federal government.

- We have completed several actuarial audits for the California State Auditors’ office of the five major CalPERS pension plans as well as the State’s OPEB valuation.
- We provide actuarial support to the State of Maryland’s Department of Legislative Services to value the impact of any legislation changes on the Maryland State Retirement System.
- We conducted several actuarial audits for the Maryland State Retirement System, the State of Texas retirement system (pension and OPEB), the State of Maine retirement system, the City of New York’s five retirement systems, and the City of Denver. As part of our engagement with the City of New York, we also completed two multi-year experience studies.
- We are the valuation actuary for the West Virginia Municipal Pensions Oversight Board. In our role as the actuary for the MPOB, we do funding and GASB 67/68 valuation for 53 Municipal Policemen and Firemen Pension Plans.
- We recently conducted a DROP study for the West Virginia State Police.
- Earlier this year, we were selected as the new actuary for the Maryland 529 program, whose programs in total hold \$8.95 billion in assets.
- We are the primary actuarial contractor for the Pension Benefit Guarantee Corporation, and we perform actuarial valuation and audit work for the U.S. Secret Service and the U.S. State Department.

The following table shows some of our largest clients for whom we provide pension actuarial work similar to the services we are proposing for the Agency.

Client	Type of Client	Plan Size (\$m)	No. of Members	Specific Services Provided	No. of Years as Client
District of Columbia Retirement Board	DB	\$9,000	20,000	Valuations, Experience Studies and Consulting	3
West Virginia Municipal Pensions Oversight Board	DB	\$1,500	3,700	Pension Valuation Audits	3

Client	Type of Client	Plan Size (\$m)	No. of Members	Specific Services Provided	No. of Years as Client
Frederick County, MD	DB/OPEB	\$464/\$129	2,800/9,300	Valuations, Experience studies, and Consulting	14
Anne Arundel County, MD	DB/OPEB	\$1,680	7,700	Valuations, Experience Studies, and Consulting	20
Howard County, MD	DB/OPEB	\$704	3,880	Valuations, Experience Studies, and Consulting	12
PBGC	DB	\$88,000	1.4 million	Valuation and Benefit Calculations	20
California State Auditor	DB/OPEB	\$104,000	227,000	GASB 68 and 75 Valuation Audits	5
New York City	DB	\$188,000	678,000	Replication Audit and Experience Study	5
State of Texas	DB/OPEB	\$32,000/\$0	360,000/ 1.3 million	Pension and OPEB Valuation Audits	5
U.S. State Department	DB	\$18,300	57,000	Annual Audit of Pension Valuations and Financial Statements	10

Approach and Methodology

Bolton takes pride in the long-term client relationships that we have established. Not only are we technical experts, but we also strive to be trusted advisors and partners with our clients. Typically, we begin any client engagement with a stewardship and planning meeting. This allows us to set very specific short-term and long-term goals relative to support of your programs. We believe that success with our clients is defined by you, not by us. We frequently have periodic status meetings with our clients to ensure that we are all on the same page and that the communication flows freely between you and us. Each year we conduct Client Success Meetings with several of our largest clients, in which a member of the firm's executive leadership team meets with key contacts to assess our performance and identify opportunities to further improve the quality of our consulting services.

Clients tell us that these characteristics are of value to them, and we work every day to make sure we meet and exceed these expectations:

- **Listen before we advise.** Each client and each organization have their own set of issues and challenges that need to be solved. We listen to what clients need, seek to understand their culture and business, and work hard to imagine how an idea will work in their situation.
- **Solve specific problems.** We will examine your data to understand your organization. This allows us to pinpoint problems and leverage the appropriate resources.
- **Garner trust and openness.** These characteristics are driven by honest, transparent personal relationships. We look for and encourage straight talk and work to earn your trust.

- **Be proactive.** We thoughtfully bring any reasonable idea and solution to the problems at hand and recognize that part of our value is to 'see the future' and lead with both innovative and proven solutions that will work.
- **Ensure compliance.** We ensure that our clients are aware of all applicable compliance and legislative requirements.

Our teams are structured with the following qualities to effectively carry out project plans:

- **Accountability.** Your relationship manager will ensure that you, our client, are kept informed of important milestones and you will have direct access to them for any questions, issues, or concerns.
- **Redundancy.** To ensure that there is always continuity and accessibility, we have structured our teams to have redundancies at each level. In case of any absences, we will have the necessary backup leadership and support to continue to provide our services seamlessly.
- **Appropriate staffing.** Our staff is what makes our practice excellent. Our team members are experienced, knowledgeable, and devoted to providing the highest quality work to our clients.

Method of Managing the Required Services

Each year we will have a call with you to confirm deliverables, responsibilities, timelines, and any other relevant information. For any additional requests for support, we will discuss the project in-depth to make sure we understand your needs and your objectives.

- You will receive a clear, concise description of services that will be provided by us, including fees and timing, before we begin any project.
- You will receive a specific project manager for each project, who will be responsible for making sure the project stays on track.
- You will receive constant communication from us so that you will never be surprised by any disruptions to the project timeline, and you are aware of any issues that require your attention.

This approach will help you manage your actuarial consulting budget and will significantly reduce your burden for these projects.

Pension Valuation Process

Objectives

The objective of the valuation report is to provide a complete picture of the financial status of the pension plan that can readily be used by all interested parties including the Agency staff and other users of the financial statements.

To meet these goals, it is critical that the report be:

- Clear

- Comprehensive
- Accurate

Bolton has an outstanding reputation for thorough, accurate work. The quality and experience of our staff and the direct involvement in the daily processing of tasks by senior actuaries ensure that we deliver the highest quality of work. A basic outline of our approach to providing actuarial valuation services is:

- Assign the work on the case to an employee whose abilities are suited to the complexity of the assignment.
- Organize all case-related materials provided by the Plan and identify and obtain any missing items that may be available.
- Identify potential problems and additional data requirements early.
- Follow a comprehensive valuation standards checklist. Each step in the valuation has an independent review.
- Ask for feedback from the client once work is complete. We will incorporate your feedback into our processes and checklists and share your input with all staff members.

Bolton has a multi-level review process for every aspect of our actuarial consulting and plan administration work. We maintain a checklist detailing each part of the valuation process which must be completed and initialed by the person responsible for that function (including the preparer, checker, reviewer, and the peer reviewer). This creates a higher level of accountability for each of our employees and ensures that steps are not skipped when preparing our work.

Actuarial Valuation Report

The objective of the actuarial valuation report is to provide a picture of the financial status of the plan that can readily be used by the plan sponsor, plan administrator, and your auditors. To meet these goals, it is critical that the report be:

- **Clear:** Our clients have a wide range of plan designs and governance structures. We have extensive experience in communicating results to a variety of users so that they are easily understood.
- **Comprehensive:** The report must provide the information needed by the various stakeholders who rely on our financial analysis. In addition to the information required to illustrate compliance with the regulatory requirements, we provide commentary on other plan costs, a summary of the plan's reporting requirements, and a comparison of actual and expected plan experience.
- **Accurate:** We have a rigorous quality control process with multiple levels of checking and review to ensure our work complies with the applicable legal and regulatory requirements, conforms to generally accepted actuarial practice, and meets the requirements of the Actuarial Standards of Practice.

Prior to formalizing the valuation report, results are summarized in a presentation that we use as a discussion tool when we meet with you to review the preliminary valuation results. Comparative results for

the last several years are presented and are generally accompanied by a forecast of future years' results to give a complete picture of the historical, current, and projected future financial state of the plan.

We will provide a clear recommendation of possible courses of future action for the Agency's consideration in the actuarial valuation report in addition to a statement of the plan's current condition. For example, if the results of our standard ASOP 51 risk assessment indicate that further analysis or study may be beneficial, we will include suggestions for the Agency's consideration. We will identify existing or prospective plan problems and outline recommended steps to solve the problems.

Work Plan

Our work plan can be shown in steps described below followed by a sample timeline for completion of the annual actuarial valuation.

Data Processing

Bolton will send a formal request for census and asset data annually to the Consolidated Public Retirement Board (CPRB). Once the CPRB actuarial group submits the data, we will verify its completeness and begin processing and reconciling it with the prior year's data. As part of the processing, we will ask the Agency to clarify any data discrepancies. Because this will be the first year we do the valuation, we will also request the participant data used for the previous valuation (from both the Agency and the prior actuary), so that we can reproduce the prior valuation results to assure that our model of future experience matches the model previously used, or if not, we are aware of the reasons for the differences and can explain them to you. We expect to review the data for consistency, both to the prior year and for internal consistency, and provide you with data questions on these issues.

An actuarial analyst completes the annual data reconciliation used for the actuarial valuation, participant statements (if applicable), and other correspondence. Before any reconciliation work is done, the prior year's files are reviewed for any special notes made in the prior year as part of the recordkeeping process. As part of the data reconciliation, the following items are required to be checked:

- Basic member information (e.g., name, unique identification number, gender, date of birth, date of hire) is unchanged from the prior year
- No duplicate records
- Dates of birth and hire are reasonable
- Compensation is consistent with prior year; if not, can the change be justified
- Service credit is consistent with prior year; if not, can the change be justified
- Members reported in the prior year who are not reported in the current year are checked
- Active members reported for the first time in the current year with a date of hire more than one year prior are checked

A full reconciliation of status changes is done as part of this process to confirm no members were omitted. This reconciliation is included in our valuation report. A peer actuarial analyst reviews the completed data

file, using the same checklist, to ensure nothing was missed. If the reviewer makes any changes to the data, the file will go back to the original analyst who will review the changes.

Once we receive the asset information, including benefit payments to retired, disabled, and terminated participants as well as to the spouses and beneficiaries of deceased participants, we review this against the participant information we received previously, which may result in additional data questions.

Valuation Processing

We will then update the valuation programming and run the data through our valuation program (ProVal) to determine the liabilities. As part of the process, we will check detailed test cases to validate that the programming is working as expected and perform a gain/loss analysis to determine reasons for changes in the plan's liabilities from the prior year's valuation to the current year. A summary of the findings of our gain/loss analysis (as required by ASOP No. 4), is included in the actuarial valuation report.

An actuarial analyst does the valuation programming. A second analyst will check the programming, while an actuary will check the output of several sample members (some active, terminated with a deferred benefit and retired, referred to as "sample lives"). One thing we do that other firms typically do not is that we create independent Microsoft® Excel sample life files each year and compare them to the sample life results from our valuation software, ProVal. While it takes time, this makes it much easier to spot problems. In addition to checking individual sample life output, we also do an annual gain/loss analysis by participant to identify sources of significant experience that deviates from expectations and affects the measurement of plan liabilities. This allows us to review general plan experience with the plan sponsor on an annual basis and identify emerging trends in the data that may warrant a more comprehensive experience study.

Once we are satisfied with the results, we will determine the contribution amounts. In the first year, we will build our model, test it against our understanding of the plan, and then test it against the prior actuary's model to make sure that our model accurately reflects the plan benefits, actuarial assumptions, and methods.

Draft and Final Actuarial Valuation Report

Bolton will submit a draft of the actuarial valuation report (if requested), our summary presentation, and an agenda of items to be discussed with the Trustees prior to the meeting where we present the valuation results. Following the Trustees' meeting, we will submit the final valuation report.

Presentation to the Board of Trustees

Bolton's team has extensive experience presenting valuation results and discussing issues of concern both with respect to the current valuation and those that may emerge in the coming years. Our meeting presentation will discuss current year results and contribution projections along with topics of importance to the Plan and the Trustees, such as recent developments and emerging trends for public sector retirement systems.

Timeline for Valuation

The core annual work, including the valuation, will generally follow the schedule below. Actual due dates will be determined in consultation with the Trustees at an initial planning meeting and inserted as agreed to following that discussion.

Activity	Date	Responsibility
Written request for valuation census data	July 1	Bolton
Active and inactive census information for valuation provided, along with any changes to plan benefit provisions	Varies*	The Agency
Asset information provided	September 30	The Agency
Provide Actuarial Information Required for ACFR	September 15	Bolton
Census questions given to Plan	2 to 3 weeks after receipt of data	Bolton
Responses to census questions given to Bolton	1 to 2 weeks after receipt	The Agency
Valuation processing: <ul style="list-style-type: none"> · Determine liabilities and costs using prior year assumptions · Finalize current year actuarial assumptions with the Agency · Finalize liability and cost calculations · Calculate expected benefit payments and expenses 	December 31	Bolton
Prepare and review draft actuarial valuation report, presentation of results and agenda available for Trustees	First week in January	Bolton
Presentation at Trustees meeting	Mid-January	The Agency/Bolton

*We understand that data for each of the five retirement systems will be made available between the third week of October (PERS) and the second week in December (JRS), with other plans provided between mid-November and early December.

ASOP 51

Actuarial Standards of Practice No. 51 requires actuaries to present some level of analysis to help clients understand the risk profile of their pension programs. We have found that there is not a universal solution for our clients. We consult with our clients to determine the appropriate analysis that meets our client's goals and objectives instead of providing a "one-size-fits-all" solution that many of our competitors provide.

Our analysis can be as simple as providing certain risk metrics to our clients to as complicated as providing a detailed stochastic risk analysis. Our simple analysis provides metrics related to contribution-to-benefit ratio, asset to payroll ratio, liability to payroll ratio and historical changes in the funded status and contribution requirements.

Our mid-level solution would include sensitivity analysis around changes in expected asset returns and certain assumptions. We would recommend looking at five-to-ten-year projections under your expected asset return and your 95th, 75th, 25th, and 5th percentile expected returns. We would also recommend returns under historical returns (e.g., repeat the returns over the last 10 years or look at a 10-year historical period that represents a likely scenario for the future). We could also vary the projections by changes in different economic and demographic assumptions. For example, we would vary the projections by different salary increases, retirement experience, or mortality experience based on what you might think is most likely to deviate from our assumptions over a short period of time.

Finally, our more detailed solution would be a full stochastic projection. A stochastic projection involves using Monte Carlo simulations to run thousands of random investment return scenarios to determine the future impact of contributions and funded status. The results of these simulations provide percentiles of future funded status over the projection period (e.g., ten years) and total contributions over that period as well to help put a probability around future financial expectations.

Competitive Advantages and Innovations

There are several firms that can put together experienced, knowledgeable teams. Where Bolton stands out from those other actuarial firms is in the innovation and thought leadership we bring to our clients. Several recent examples include:

- **Fine tuning plan mortality/longevity factors.** Bolton has been on the forefront of discussing and using “augmented mortality tables” with our clients. This advancement allows us to help our client avoid inadvertent under- or overestimates of longevity in their pension plans as well as lower the level of cost volatility associated with these factors. Bolton has created a partnership with Club Vita that allows us to have additional insight into many different mortality risks and projections as to where those may lead in the future. We can bring Club Vita’s findings to the Agency to enhance future discussions and provide more accurate results. Bolton is one of only five firms in the U.S. that is a Licensed Pension Advisor with Club Vita, an organization that provides custom longevity profiling services for pension plans based on socioeconomic factors. This is an optional service we offer. The Club Vita longevity analytics can be used in conjunction with the annual valuation (on a one-time or annual basis) to benchmark the longevity profile of the current participants population. This validates the selection of mortality tables to use for preparing estimates of settlement costs and can also be used to produce benefit payment projections for the plan’s investment advisor to use in calibrating the investment portfolio. Finally, Club Vita has done significant research on the impact of COVID on mortality experience and has given us great insights on how COVID is affecting future mortality experience. These services are available for an additional fee.
- **Raising the topic of “line of duty” disability and death benefits at the outset of the COVID pandemic.** Our discussions and communications with clients allowed them to be prepared and develop appropriate policies before the COVID-related claims came in.
- **Holistic response to pandemic era turnover and retirement patterns.** The best way to ensure the long-term strength of a pension plan is to make sure the sponsoring entity is healthy and robust. Bolton has developed a solution set of cost-effective and efficient ways the pension systems can highlight value and provide retention incentives which helps insulate the employer and the plan from higher turnover and retirements.

Transition

Transitioning from your current actuary can create some anxiety about what the process will involve and what the time commitment will be for your HR and finance personnel. We endeavor to make this a painless process for you by providing a detailed list of the required documentation and data, establishing a timeline for completion that identifies who is responsible for each step, and being as flexible as we can while still meeting our professional standards.

Our initial assessment of a new client begins with a complete review of plan documents, actuarial valuations, WV state code, audits, experience studies, Board minutes, and other information necessary to gain a thorough understanding of the plan and to identify potential issues for discussion. Following this review, we would schedule an initial meeting with your staff to present what we have learned and to further identify any issues of particular interest to the parties. This meeting, and any follow-up discussions or meetings that may take place, is part of our transition process and is not billed as an out-of-scope project. Concurrent with this process, we will request information from the current service providers that will allow us to provide the necessary services for the upcoming year.

We request participant data from the prior actuary that was used for valuation purposes. We also request any historical participant data related to salary, service dates, and employment status. The valuation data is used to be sure we are starting in the same place as the prior actuary ends. We prefer to gather as much historical data as possible up front to avoid the time and expense of researching items in the future. Sometimes, this includes final benefit calculations for all current plan participants which will enable us to confirm how certain plan provisions are applied when determining benefits and allow us to assist the Agency in responding to periodic participant inquiries about their benefit entitlement. We will not be auditing prior calculations unless requested as an out-of-scope project.

We utilize a secure file transfer system to obtain data while maintaining the security of confidential and personal identification information.

The prior actuary may charge for time and expenses during the transition. To reduce these costs, we try to obtain as much as possible from our clients. For example, plan documents, historical valuation reports, experience studies, and GASB reports do not need to come from the prior actuary. We do, however, want to get the prior valuation data directly from the prior actuary to ensure we fully understand exactly how the plan was valued.

During our process of matching the prior pension plan valuations, we may have a few questions for the actuary. Again, we keep this to a minimum and can usually accomplish a match valuation based on the data and valuation reports provided. There is generally no problem with professional cooperation, so we do not expect any time delays caused by any requests to the prior actuary.

For a qualified pension plan matching results from the prior valuation is crucial, as there are specific thresholds for how closely we match their results that must be met before we can proceed as the new actuary.

The involvement of client staff in the transition process will be limited to providing background information and answering questions related to plan administration. Generally, our work with the client team on the current valuations will provide what is needed for the transition.

Once notified of our selection as the Agency’s actuary, we anticipate the following timeline for the completion of key steps in the transition process.

Action	Timing	Responsible Party
Provide data and documentation requests to the Agency and the prior actuary	Week 1	Bolton
Receive requested data and documentation	Weeks 2-4	The Agency and prior actuary
Complete initial programming of valuation model and send follow up request to prior actuary (if needed)	Week 4-6	Bolton
Receive follow up information regarding valuation match questions	Week 7	Prior actuary
Finalize valuation match and review discrepancies, if any, with the Agency	Week 8	Bolton
Recommend any revisions to methods, assumptions, or valuation procedures for 2023 valuation	Week 9	Bolton

Delays on the part of the Agency or its prior actuary in providing requested data and documentation within the timeframe indicated in our transition timeline may impair our ability to meet the due dates indicated for Bolton to complete the valuation match and prepare for the 2023 valuation. Where delays occur, we will endeavor to make up as much time as possible on our end and we will keep the Agency apprised of our progress and any potential delay in the scheduled delivery dates for our services.

Experience Study

While an experience study could be considered as a separate consulting project, we believe that experience studies are integral to maintaining experience-derived assumptions critical to assuring that the valuations accurately reflect the plans’ future liabilities for each of the pension plans. An experience study contains multiple steps.

The following steps outline the entire process we use to develop an experience study:

- **Compile data for the study period:** This involves creating a master data file that includes all the years in the study period to measure the demographic movement of the population in the study period. We will identify the field or fields in the prior years’ data that correspond to the current year’s data and ensure that the resulting data is in a consistent format for all years in the study period.
- **Review data for consistency:** After compiling the new data, the next step will be to identify outliers, missing data, and data inconsistent between all the years of data. This will first be done by looking only at the current year’s data and comparing it to the prior years’ data. An analysis considering the current year’s data must be followed by comparing the data to past data.

- **Check data to ensure it captures demographic movement:** After the data is compiled and reviewed for accuracy and consistency, we check the data against prior data reconciliations to ensure the data accurately reflects demographic movement like terminations, retirements, deaths, etc.
- **Determine actual results:** We determine the actual movement of participants each year from the data set, including the number of people that terminate, become disabled, retire, and die each year at each age and/or service. We divide the activity movement for each year by the number of actives at the beginning of each period for every age and/or service. This result gives us the actual experience ratio. For salary increases, we divide the individual compensation for each participant by the prior year's compensation for the same participant.
- **Determine expected results:** We also determine the expected number of movements each year by age and/or service by multiplying our assumption at each age and/or service by the number of participants at the beginning of each period for that age and/or service so we can compare the expected movement to the actual movement in our summary charts. The expected ratio is equal to the assumption we show in our actuarial reports.
- **Compare actual and expected ratios:** After we determine actual and expected movements, we compare the actual numbers to expected numbers and the actual ratios to the expected ratios. We show the actual and expected movements by numbers and ratios in our charts and graph the actual and expected ratios to visually demonstrate how the current assumption compares to actual experience.
- **Prepare summary tables:** We will prepare summary tables to allow for easy comparisons to prior experience studies, and to our recommendations.
- **Make recommendations:** Based on the experience study we will make recommendations for revisions to the assumptions, as well as the expected impact on annual contributions and funding levels. We will review prior experience studies so that we do not overemphasize the actual experience in the current experience study. We graph the actual, expected, and recommended ratios to easily see the rationale of the recommendations.
- **Determine if change is necessary:** In recommending assumption changes the first question is whether to recommend a change or not. The following factors need to be considered:
 - Is the most recent experience consistent with the assumptions – are the differences credible?
 - Is experience from prior experience studies significantly different than the current experience?
 - What factors, if any, were unusual during the period in question?
 - Has the recent environment changed the experience, and can these changes be expected to continue?
- **Make predictions:** What factors do we anticipate changing in the future? There are several factors to be considered, including but not limited to:
 - Mortality improvement
 - Recent bargaining agreements
 - Impact of changing benefits due to changing proportion of employees in different tiers
 - New compensation policies

- New overtime policies
- Changes in how disability programs are administered
- **Determine impact:** Bolton will use its established valuation models for each group of employees to determine the impact of each recommendation on the system's funded status and contribution requirements.

We have also performed actuarial experience studies for most of our larger government clients and other federal government plans. A sample of the other plans for which we have performed experience studies is summarized in the following table.

Name	Actuarial Accrued Liability	Number of Participants	Most Recent Experience Study
Anne Arundel County (MD)	\$2.5 billion	8,000	2022
Baltimore County (MD)	\$4.4 billion	18,500	2018
Charles County (MD) Sheriffs	\$311 million	730	2016
Frederick County (MD)	\$618 million	3,385	2019
Howard County (MD)	\$1.1 billion	4,130	2022
District of Columbia	\$9.5 billion	21,700	2022
US Department of Treasury	\$8.9 billion	16,480	2014

Investment Return Forecasting

Bolton's Investment Consulting practice provides capital market forecasting support to our actuarial teams that illustrates the range of outcomes for an investment portfolio using Monte Carlo (stochastic) modelling techniques. Bolton's capital market assumptions are developed based off the annual Survey of Capital Market Assumptions developed by Horizon Actuarial Services supplemented by the annual Long-Term Capital Market Assumptions report from JP Morgan, which allows us to capture a more refined array of investment categories in our modelling.

Please see the **Appendix** for a sample of the output from our capital market forecasts. We will include selected displays from our forecast results in our investment modelling report, along with commentary on key drivers of change since the prior year's analysis, related to both the investment return for the portfolio allocation as of June 30th and the annual rate of inflation.

Qualification and Experience Desirable 2: Please provide at least three references. Please provide the contact information for the pension plan name, a contact person, their address, telephone number, and email. [4.3.1.2]

West Virginia Municipal Pensions Oversight Board

Contact Name: Blair Taylor, Executive Director

Telephone Number: (304) 356-2422

E-mail Address: Blair.M.Taylor@wv.gov

Mailing Address: 301 Eagle Mountain Road, Suite 251, Charleston, West Virginia 25311

Description of Services: Bolton provides annual actuarial funding reports to each of the 53 municipal police and fire plans that are part of the West Virginia MPOB. As part of our work, we also complete separate reports for compliance with GASB standards 67 and 68. West Virginia allows for the plans to make use of several funding methods and Bolton has worked closely with each plan to evaluate which method will most closely align with the goals of the plan and the resources available. In addition, we have assisted several plans with evaluating the costs and the relative pros and cons of implementing a DROP feature in their plans as well as different design alternatives that would impact the plan costs. We recently completed an experience study for the group as a whole, covering all the different decrements affecting the plans.

D.C. Retirement Board

Primary Contact: Daniel Hernandez, Director of Special Projects and Interim Chief Benefits Officer

Address: 900 7th Street NW, Washington DC 20001

Telephone Number: (202) 343-3225

Email Address: daniel.hernandez@dc.gov

Description of Work: Bolton provides valuation and consulting services to the Teachers and the Police & Fire pension plans of the District of Columbia. Valuation results include funding under the DC pension ordinances as well as required actuarial certifications to the City. We also provide GASB 67 and 68 information and reports for the plan and the City. Additional services in the engagement include benefit statements, consulting on the transfer of service cases, study of benefit changes, and assumption changes. An actuarial experience study is performed for the plans every four years.

Frederick County Government (MD)

Company Contact: Lori Depies

Title: Chief Financial Officer

Address: 12 E. Church Street, Frederick, MD 21701

Telephone Number: (301) 600-1743

Email Address: Ldepies@FrederickCountyMD.gov

Description of Work: We prepare annual valuations for the Frederick County Employees Pension Plan covering general employees as well as firefighters and police officers; annual contribution and funding projections reflecting potential future contributions and funding levels under several contribution and investment return assumptions; and annual statements for each employee providing information regarding their pension benefit. We also prepare an annual valuation for the LOSAP and prepare annual OPEB valuation reports for the funded post-retirement benefits plan. We provide other actuarial consulting services as requested by the Agency. We also provide health and welfare consulting services including a Medicare Part D attestation and annual review of the medical costs and alternatives for maintaining benefits and reducing costs.

Qualification and Experience Desirable 3: Please provide a proposed staffing plan for this project, including the biographies of all staff identified for this project. [4.3.1.3]

Our proposed staffing plan for this project is depicted in the table below.

Name	Contact Information	Role
Jim Ritchie, ASA, FCA, EA, MAAA President of Bolton Retirement	jritchie@boltonusa.com (443) 573-3924	Relationship Manager and Consulting Actuary
Tom Vicente, FSA, FCA, EA, MAAA Senior Consulting Actuary	tvicente@boltonusa.com (443) 573-3918	Lead Actuary
Jordan McClane, FSA, EA, FCA, MAAA Consulting Actuary	jmcclane@boltonusa.com (667) 216-6935	Project Manager
Alan Torroella, ASA Senior Actuarial Analyst	atorroella@boltonusa.com (443) 573-3911	Project Manager
Ellen L. Kleinstuber, FSA, FCA, FSPA, EA, MAAA Chief Actuary	ekleinstuber@boltonusa.com (443) 573-3912	Peer Reviewer
Janice Twardowicz Actuarial Consultant	jtwardowicz@boltonusa.com (443) 573-3925	Senior Analyst
Denise Marando Actuarial Consultant	dmarando@boltonusa.com (410) 500-5762	Senior Analyst
Tyler Wharton Senior Actuarial Analyst	twharton@boltonusa.com (301) 876-8344	Senior Analyst
Zach Pasquinelli Actuarial Analyst	zpasquinelli@boltonusa.com (410) 500-5767	Analyst
Wayna Fordyce Actuarial Analyst	wfordyce@boltonusa.com (410) 500-5760	Analyst

Key Personnel

Jim Ritchie, ASA, FCA, EA, MAAA

President of Bolton Retirement

Jim Ritchie has over 30 years of actuarial experience working with plan sponsors in both the public and private sectors. Jim joined Bolton in June 2018, following his previous service with two large actuarial consulting firms. Jim is involved in several of our ongoing engagements with city and county governments in Maryland. He has been involved in five actuarial audit projects, leading the pension and OPEB audit for the California State Auditor for the last four years, leading the Texas ERS audit, a level 2 audit for the Maine Public Employee Retirement System, a level 3 audit for the City of Austin, and a full replication audit for the City of Cocoa, Florida. Jim is the actuary for one of our largest state agency clients for whom Bolton is the valuation actuary for 53 municipal police and fire pension plans. Jim also supports new business

development initiatives. His many years of experience working with a wide variety of plan sponsors allow Jim to be a general resource for our staff and a mentor to some of our younger consultants.

Jim is an Associate in the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, an Enrolled Actuary, and a member of the Academy of Actuaries.

Jim has extensive experience on a variety of special projects including public plan audits, compliance and benefit calculation audits, benefit calculation reviews, retiree medical design alternatives, early retirement windows, plan redesign (including cash balance), plan mergers, spin-offs, and plan terminations. He also provides proactive strategic consulting such as DROPs, service repurchase, funding strategies, pension de-risking opportunities, examining the use of debt to fund pension liabilities, projections, and evaluation of client's funding, financial, benefit and investment policies.

Prior to joining Bolton, Jim worked for Mercer and Aon. While at Mercer, Jim worked with two large employer pension and retiree medical programs. Each program had over \$1 billion in liabilities. Jim also led an audit review of an \$8 billion pension program. While at Aon, Jim worked on several complex large accounts including a high-profile sports league, the Department of Energy, which involved the oversight of over 70 contractor pension and retiree medical plans totaling more than \$45 billion in liabilities, and a pension program over \$1 billion in liabilities. Jim also served as the Local Practice Leader for the retirement practice in Baltimore.

Jim has experience with public sector plans, including:

- Accounting for Public Sector Plan OPEB Plans and GASB 45 and 74/75
- Accounting for Public Sector Pension Plans under GASB 25 and 67/78.
- Pension and OPEB actuarial audits.
- Plan design analysis.
- DROP plan design and costing.
- Supervising and performing pension plan valuations
- Conducting experience analysis studies
- Presentation of annual valuation and experience analysis results to trustees
- Consulting on complex plan administration issues
- Responding to auditors' questions on individual plan participants and plan issues

Jim has been a speaker at Enrolled Actuaries meetings on a variety of retirement plan topics. Jim has also been frequently quoted by news media including the Wall Street Journal and Plan Sponsor magazine.

Jim graduated from the University of Texas at Austin in 1989 with a Bachelor of Business Administration in Actuarial Science.

Tom Vicente, FSA, FCA, EA, MAAA

Senior Consulting Actuary

Tom Vicente is a Senior Consulting Actuary with Bolton and the leader of Bolton's public sector pension practice. He is a Fellow in the Society of Actuaries, a Fellow in the Conference of Consulting Actuaries, an Enrolled Actuary, and a member of the American Academy of Actuaries. He is also the chair of the SOA's Social Insurance and Public Finance Section and the Academy's Public Pension Plans Committee.

Some sample clients Tom has worked on include the City of Rockville, Washington County (MD), Cecil County (MD), the State of Maryland (department of legislative affairs) and the District of Columbia Retirement Plans. OPEB valuation clients include Baltimore County, the City of Rockville, and Montgomery County. In addition, Tom has been the OPEB actuary for the State of New York and the Commonwealth of Massachusetts.

Tom has over 30 years of experience in actuarial, pension, and retiree medical consulting services, as well as the administration and communication of retirement programs. He also has significant experience with design, benchmarking, and retirement adequacy studies for retirement programs, determining cost factors for union-negotiated programs, as well as with hybrid pension plans such as Cash Balance and Retirement Equity programs.

Tom has provided retirement consulting and actuarial services to many governmental clients, including:

- State-level plans
- Traditional local level governments, such as counties and cities
- Agency- and authority-sponsored plans, such as housing authorities
- Public utilities
- Public universities

Work has covered a wide range of programs, including those for public safety groups, teachers and educators, as well as general employees.

Tom's focus is on providing high value to clients through innovative solutions, strong communication, and high-quality, timely results. He has been a speaker for different groups, including the American Academy of Actuaries, and the Society of Actuaries, as well as local groups, such as the Georgia GFOA where he spoke about the types and benefits of actuarial audits for pension and OPEB plans. He also spoke at an SOA-sponsored webcast on the impact of COVID-19 on public sector pension plans. Tom has published a whitepaper on service purchase rules for governmental pension plans as well as a paper on the impact of accounting rules affecting governmental employers offering post-employment benefit programs and ways in which those employers could mitigate those costs.

Tom received his B.S. in mathematics from Drexel University. He is a member of the Public Plans Committee for the American Academy of Actuaries, the past chairperson of the Social Insurance and Public Finance Section of the Society of Actuaries, and a member of the Conference of Consulting Actuaries Public Plans Community.

Jordan McClane, FSA, EA, FCA, MAAA

Consulting Actuary

Jordan McClane is an actuary with ten years of experience. Since joining Bolton in 2017, Jordan has completed a variety of projects for a broad spectrum of public sector clients from small counties to very large cities and states. He is a signing actuary and project manager for several Maryland counties and for all 53 municipal police and fire public pension plans under the oversight of the Municipal Pension Oversight Board of West Virginia. As a valuation actuary, Jordan helps clients understand the current health of their pension plans and assists them in achieving their pension plan goals.

Jordan's experience as a valuation actuary includes:

- Performing actuarial funding valuations and calculating actuarially determined contributions
- Producing actuarial exhibits for GASB 67/68
- Conducting experience studies to align assumptions with future expectations
- Estimating the impact on retirement systems from proposed changes to plan provisions and assumptions
- Designing projection models to estimate future funding levels
- Evaluating the cost of Deferred Retirement Option Programs (DROPs) through prospective and retrospective analyses
- Examining various risks to which pension plans are exposed

Furthermore, during this uncertain time of increased pressures on budgets and depressed state and local revenues resulting from the COVID-19 pandemic, Jordan has advised clients on strategies to minimize volatility of calculated contributions through the implementation of a level cost allocation model.

Beyond his valuation work, Jordan has been engaged in numerous other actuarial assignments, such as:

- Projecting the fiscal impact that proposed bills would have on the Maryland State Retirement and Pension System for the Maryland Department of Legislative
- Completing a full replication audit for the five New York City Retirement Systems and the Maryland State Retirement and Pension System, and
- Performing level two actuarial audit services for (1) five CalPERS plans for the California State Auditor's Office and (2) the City of Austin.

Jordan is also a signing actuary for some single employer pension plans. He has designed and implemented lump sum windows, developed plan termination feasibility studies, and performed pension asset-liability studies for both private and public sector employers.

Jordan's prior employment includes pension actuarial experience at Aon in Baltimore and Towers Watson (now Willis Towers Watson) in New York City.

He is a Fellow of the Society of Actuaries, an Enrolled Actuary, a Fellow of the Conference of Consulting Actuaries, and a member of the American Academy of Actuaries. Jordan holds a B.S. in Actuarial Science from the Smeal College of Business at the Pennsylvania State University.

Alan Torroella, ASA

Actuary

Alan Torroella is an actuary who has been with Bolton since 2016. Alan currently works with 11 clients, including the Municipal Pensions Oversight Board of West Virginia, for whom he creates funding and accounting reports for each of their 53 municipalities. Alan strives for efficiency and quality in the valuation process for each of his clients.

Alan has also worked under several contracts with the Pension Benefit Guarantee Corporation (PBGC). His work under PBGC involved calculating benefits, determining benefit entitlement, programming and testing their internal actuarial valuation system, and interpreting plan documents and amendments.

Alan's experience includes:

- Proficient use of VBA, Excel, SQL, RStudio, MatLab, and Java
- Creating and executing pension valuations using the actuarial programming tool, ProVal
- Prospective and retrospective DROP analysis
- Data clean up and consolidation
- Performing cost impact studies on proposed plan changes
- Recreating and automating test lives

Alan holds a B.S. in Applied Mathematics and Statistics with a concentration in Optimization and Operations Research from Johns Hopkins University.

Ellen L. Kleinstuber, FSA, FCA, FSPA, EA, MAAA

Chief Actuary

Ellen Kleinstuber is the Chief Actuary at Bolton with over 30 years of actuarial consulting experience. She is a nationally recognized expert in ERISA and Internal Revenue Code compliance, defined benefit plan funding, accounting and administration issues, retirement plan design and communications, nondiscrimination testing, and defined benefit plan terminations. Ellen has worked with a wide variety of plan sponsors, ranging in size from 50 to 30,000 participants, including governmental entities, publicly traded and privately held companies, multinational corporations, and not-for-profit organizations, to deliver comprehensive employee benefit plan consulting, actuarial, and plan administration services. Prior to joining Bolton, Ellen was Senior Vice President and Director of DB Plan Compliance with CBIZ for 8 years and Vice President at Aon, where she worked for 17 years.

Ellen's current responsibilities include consulting with plan sponsors, developing practice standards for quality control and peer review of actuarial, consulting and defined benefit administration services, and

preparing external client communications on recent regulatory developments and emerging trends in actuarial practice. As a Principal of Bolton, Ellen is a member of the firm's Executive Leadership Council.

She is an active volunteer within the actuarial profession and has held several significant positions, including her current role as Immediate Past President of the Conference of Consulting Actuaries. Other significant volunteer roles include:

- Chairperson of the Pension Committee of the American Academy of Actuaries and a member of the Academy's Pension Practice Council (2011- 2018)
- Member of the Board of Directors and Vice President of Continuing Education for the Conference of Consulting Actuaries (2012 – 2018)
- Chairperson of the Joint Program Committee for the annual Enrolled Actuaries Meeting (2019)
- Chairperson of the Conference of Consulting Actuaries' Professionalism Committee
- Member of the Conference of Consulting Actuaries Diversity, Equity, and Inclusion (DE&I) Committee
- Member of the Society of Actuaries Retirement Section Council (2009 – 2012)

Ellen also serves as a member of the Board of Actuaries for the Civil Service Retirement System and Federal Employees Retirement System, which is responsible for selecting the key actuarial assumptions used for the annual valuation of those programs based on experience studies prepared by the actuaries at the Office of Personnel Management.

Ellen has been quoted by the New York Times, Reuters, CNBC, AARP, and Pensions & Investments on a wide range of topics related to defined benefit plan management and administration, and is a frequent speaker on pension-related topics; some recent and upcoming presentations include:

- Actuarial Audits of Pension and OPEB Plans – October 2021 (Georgia GFOA Annual Meeting)
- Stay in Your Lane: How Not to (Inadvertently) Become a Fiduciary – October 2020 (CCA Annual Meeting)
- Late Breaking Developments – October 2019 (CCA Annual Meeting)
- Actuarial Reports 101: Helping Non-Actuaries Understand Actuarial Reports – April 2019
- Evolving Our Practice: Addressing Actuarial Professionalism Issues – April 2018 (Enrolled Actuaries Meeting)
- Ethics – December 2016 (CCA webcast)
- Pension Risk Transfer from Different Perspectives – April 2016 (Enrolled Actuaries Meeting)
- Advanced Benefit Administration – April 2015 (Enrolled Actuaries Meeting)
- Increasing Longevity: Impact on Pension Plan Sponsors and Participants – March 2014 (National Conference of Insurance Legislators)

In her role as Chief Actuary, Ellen serves as a general resource to all of Bolton's actuarial valuation and audit engagement teams, generally dealing with complex, non-routine issues or issues involving significant

exercise of professional judgment. Ellen has been a part of the actuarial team assigned to our audit engagements for the Denver City/County Auditor and Cherokee County, GA.

Ellen was recognized in 2012 as an outstanding volunteer by the Society of Actuaries for her role as the former chairperson of the Pension Section's Continuing Education Committee, by the American Academy of Actuaries in 2015 for her work on pension risk transfer issues, when she represented the Academy testifying before the National Conference of Insurance Legislators and the ERISA Advisory Council, and in 2019 by the Conference of Consulting Actuaries for her leadership as a member of the Board of Directors and chair of the Annual Enrolled Actuaries Meeting.

Ellen graduated from Elizabethtown College with a B.S. in mathematics (magna cum laude) in 1992. She is a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, a Fellow of the American Society of Enrolled Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA.

Janice Twardowicz

Actuarial Consultant

Janice Twardowicz is an Actuarial Consultant with over 30 years of consulting experience on defined benefit pension plans and retiree medical plans for both public sector and private sector sponsors. She has extensive experience with preparing pension valuations and studies on a wide variety of issues.

Examples of Janice's responsibilities and recent projects include:

- Preparation of actuarial valuations for public sector and private sector single-employer plans
- Preparation of annual financial reporting valuations for both pension and retiree medical plans; including fiscal year-end disclosures, determination of annual expense, and supplemental disclosures
- Calculation of benefits for plan participants
- Preparation of participant benefit statements
- Annual review of asset and demographic data
- Preparation of regulatory filings, certifications, and notices
- Preparation of experience study cost results
- Preparation of union negotiation liabilities and cost changes
- Training staff members preparing pension plan-related actuarial work mentioned above

Janice also provides extensive support for our engagements with litigation work.

Janice worked with Aon and Mercer prior to joining Bolton in 2018 and has been working on our PBGC engagement since joining Bolton.

Janice has a B.S. in mathematics from the University of Maryland.

Denise Marando

Actuarial Consultant

Denise Marando is an Actuarial Consultant with over 20 years of consulting experience on defined benefit pension plans and retiree medical plans for private-sector sponsors. She has extensive experience with preparing annual pension valuations on a wide variety of plan designs.

Examples of Denise's responsibilities and recent projects include:

- Preparation of actuarial valuations for public sector and private sector single employers, with plans ranging in size from under 100 to over 30,000 lives
- Preparation of annual financial reporting valuations for both pension and retiree medical plans, including fiscal year-end disclosures and determination of annual expense
- Preparation of regulatory filings, certifications, and notices
- Calculation of benefits for plan participants
- Preparation of participant benefit statements
- Annual review of asset and demographic data
- Preparation of experience study results
- Preparation of union negotiation liabilities and cost changes
- Reviewing analyst work and ensuring accuracy; assigning and tracking client projects to maintain workflow
- Reviewing and updating templates and procedures for efficiency and changes in law

Denise worked with Aon prior to joining Bolton in 2022 and has been working on our public sector and private sector sponsored plans since joining Bolton. She has a B.S. degree in Actuarial Science from the Pennsylvania State University.

Tyler Wharton

Actuarial Analyst

Tyler Wharton has over 10 years of actuarial experience working with plan sponsors in both the public and private sectors. He has experience in a variety of areas, including but not limited to:

- Accounting for Public Sector Plan OPEB Plans and GASB 45 and 74/75
- Accounting for Public Sector Pension Plans under GASB 25 and 67/78
- Implementation and consulting OPEB plan changes and analysis
- Benefit calculations
- ASC 715/ASC 960 disclosure and expense reporting

- Performing pension plan and OPEB valuations
- Completing government form filings for Form 5500/SB, Form 8955-SSA, and PBGC filings
- Plan document implementation and research on complex individual situations
- Responding to auditors' questions on individual plan participants and plan issues

Tyler has experience with a wide array of plans, including OPEB plans, public and private pension plans, church plans, single and multi-employer plans, and cash balance pension plans. Tyler graduated from Towson University in 2012 with a degree in Actuarial Science and Risk Management.

Zachary Pasquinelli

Actuarial Analyst

Zachary (Zack) Pasquinelli is an actuarial analyst with Bolton. Zack joined Bolton in February of 2021 after graduating from Penn State University in 2020.

Zack works on the public sector and multiemployer pension teams performing data reconciliation, actuarial software programming, plan document review, actuarial valuations, and drafting of valuation reports. Zack provides analytical support in various valuations and works to ensure efficiency and accuracy with all clients work he completes.

Zack's experience includes:

- Performing pension plan valuations
- Completing pension plan accounting and financial reports
- Studying the cost impact of proposed changes in plan benefits
- Preparing various exhibits for annual statements
- Benefit calculations

Zack holds a B.S. in Actuarial Science from Penn State University. Zack is currently working toward earning the Associate of the Society of Actuaries (ASA) designation.

Wayna Fordyce

Actuarial Analyst

Wayna Fordyce is an actuarial analyst with Bolton. Wayna joined Bolton in June 2021 after working with Lepton Actuarial & Consulting as an actuarial analyst.

Wayna works on the OPEB team performing data reconciliation, plan document reviews, actuarial valuations, and drafting of valuation reports. Wayna provides analytical, organizational, documentation, and reporting support towards each valuation.

Wayna's experience includes:

- Preparing benefit and liability calculations
- Performing OPEB plan valuations
- Studying the cost impact of proposed changes in plan benefits
- Preparing various exhibits for annual statements
- Actuarial analyses

Wayna holds a B.S. in mathematics with a concentration in Actuarial Science & Risk Management and an M.S. in Actuarial Science and Predictive Analytics both from Towson University in 2019 and 2020, respectively. Wayna is currently working toward earning the Associate of the Society of Actuaries (ASA) designation.

II. MANDATORY QUALIFICATION/ EXPERIENCE REQUIREMENTS

The following mandatory qualification/experience requirements must be met by the Vendor as a part of its submitted proposal. Vendor should describe how it meets the mandatory requirements and include any areas where it exceeds the mandatory requirements. Failure to comply with mandatory requirements will lead to disqualification, but areas where the mandatory requirements are exceeded will be included in technical scores where appropriate. The mandatory qualifications/experience requirements are listed below.

The firm must have provided actuarial services to governmental defined benefit pension plans for the past five years or more.

Bolton has provided actuarial valuations and special studies of pension and post-retirement medical benefits for government entities for over 40 years and has been providing our clients with GASB-related valuation services since the applicable standards for pension and OPEB plans became effective.

We will draw on all our resources as we work with the Agency to provide accurate, efficient annual actuarial services combined with value-added consulting and actuarial analysis.

The firm must have sufficient depth regarding Qualified Actuaries and Lead Consultants to ensure Goals are met in a timely manner and to provide adequate resources for the consulting team.

We believe that the size and expertise of the team, including two senior consulting actuaries who each have more than 30 years of experience, is more than sufficient to meet the needs and timing of the Board.

We have assigned President of Bolton Retirement, **Jim Ritchie, ASA, EA, FCA, MAAA**, as the Relationship Manager responsible for the delivery of timely, high-quality actuarial services for the Agency. **Tom Vicente, FSA, EA, FCA, MAAA**, our public sector practice leader, will be the Lead Actuary. **Jordan McClane, FSA, EA, MAAA** (Consulting Actuary), and **Alan Torroella, ASA** (Actuary) will support Jim and Tom for the annual pension services. Jim, Tom, and Jordan will have ultimate responsibility for ensuring we deliver the proposed services on time and at the highest quality. They will have primary responsibility for the preparation of our reports and formal presentation of the audit/valuation findings to the Agency.

Should Jim or Tom become unavailable, we would add Ann Sturner, FSA, EA, FCA, MAAA to the team to replace one of them. Like Jim and Tom, Ann has over 30 years of actuarial consulting experience and extensive experience working with larger public sector retirement systems. Should Jordan or Alan become unavailable, we have several other credentialed actuaries on staff that meet the requirements for Qualified Actuaries who would be able to replace them.

Chief Actuary, **Ellen Kleinstuber, FSA, FCA, EA, MAAA**, will serve as peer reviewer for our actuarial deliverables.

In addition to these key staff members, there will be a group of more junior consultants, programmers, and analysts who will assist with these actuarial services under the direction of the senior group.

III. APPENDICES

Appendix A: Capital Market Forecasts Sample

Appendix B: Addendum Acknowledgement Form

Appendix C: Designated Contact

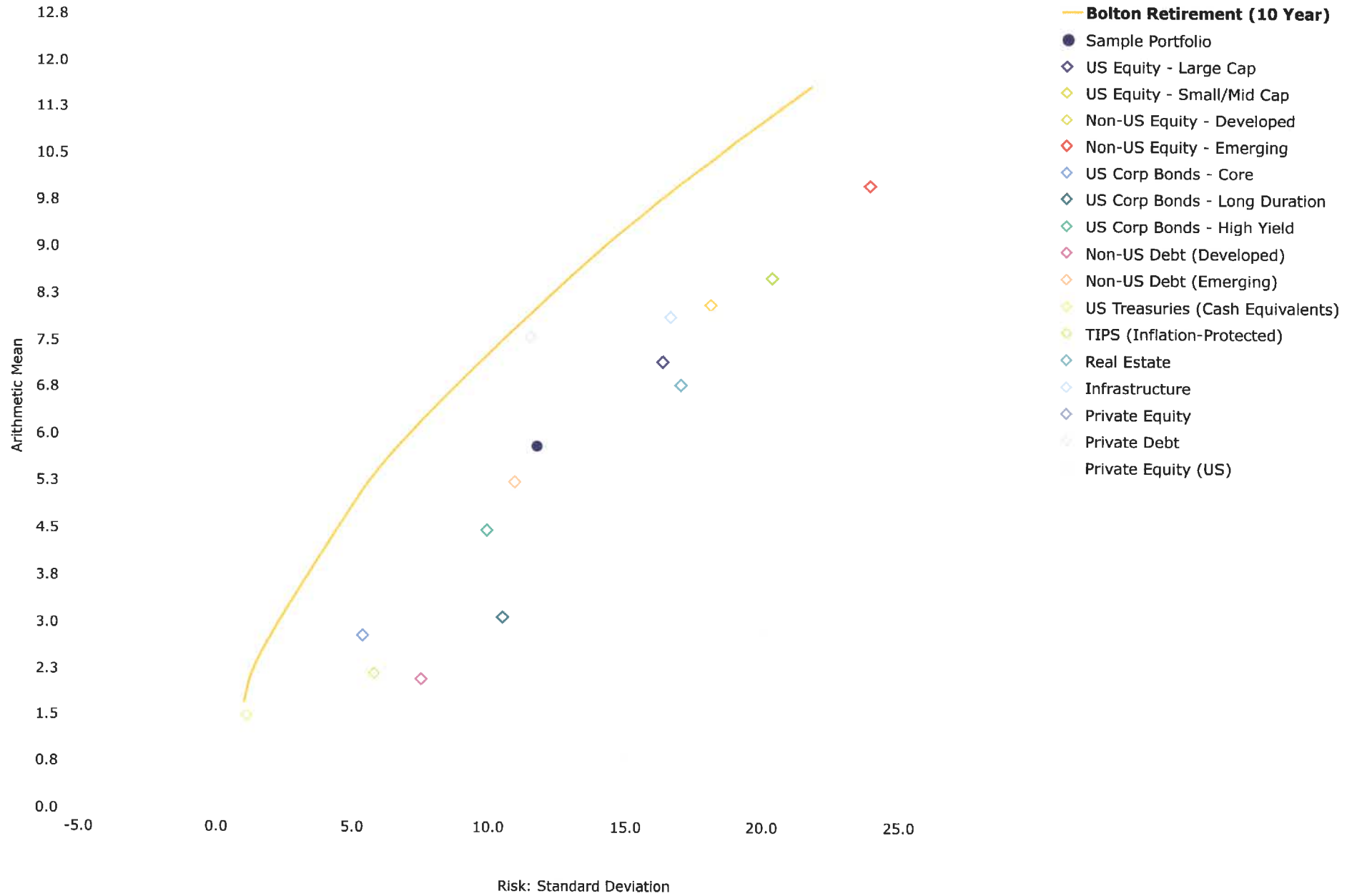
Appendix D: Request for Proposal Form

APPENDIX A

Capital Market Forecasts Sample

Asset Allocation Analysis

Efficient Frontier

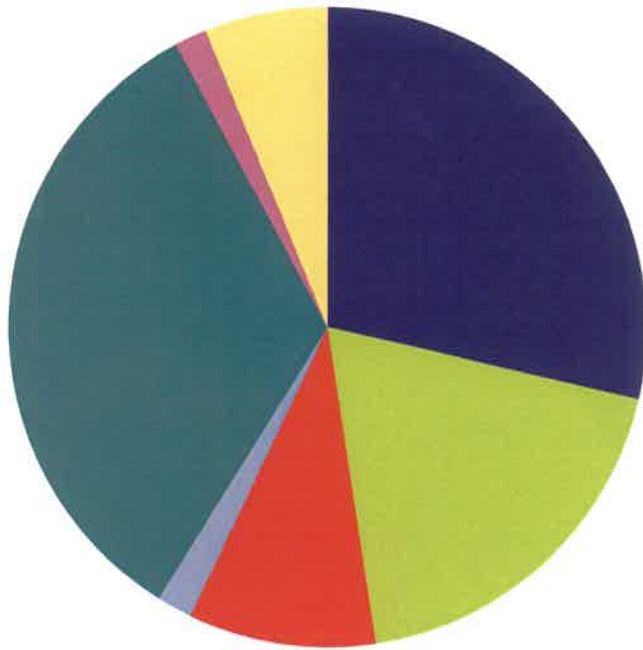


Source: Morningstar Direct

Asset Allocation Analysis

Portfolio Allocations

Sample Portfolio



- US Equity - Large Cap
- US Equity - Small/Mid Cap
- ▲ Non-US Equity - Developed
- ▼ Non-US Equity - Emerging
- ◀ US Corp Bonds - Core
- ▶ US Corp Bonds - Long Duration
- ◆ US Corp Bonds - High Yield
- ◇ Non-US Debt (Developed)
- ◇ Non-US Debt (Emerging)
- ◇ US Treasuries (Cash Equivalents)
- ◇ TIPS (Inflation-Protected)
- ◇ Real Estate
- ◇ Infrastructure
- ◇ Private Equity
- ◇ Private Debt
- ◇ Private Equity (US)

	US Equity - Large Cap	US Equity - Small/Mid Cap	Non-US Equity - Developed	Non-US Equity - Emerging	US Corp Bonds - Core	US Corp Bonds - Long Duration	US Corp Bonds - High Yield	Non-US Debt (Developed)	Non-US Debt (Emerging)	US Treasuries (Cash Equivalents)	TIPS (Inflation-Protected)	Real Estate	Infrastructure	Private Equity	Private Debt	Private Equity (US)
Sample Portfolio	28.52%	19.01%	0.00%	9.51%	1.79%	33.27%	0.00%	1.64%	0.00%	6.20%	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%

Source: Morningstar Direct

Stacked Bar Chart

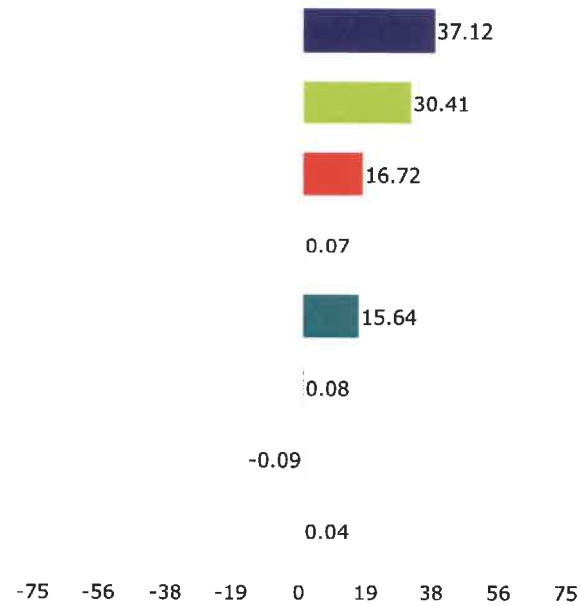


- ◇ US Equity - Large Cap
- ◇ US Equity - Small/Mid Cap
- ◇ Non-US Equity - Developed
- ◇ Non-US Equity - Emerging
- ◇ US Corp Bonds - Core
- ◇ US Corp Bonds - Long Duration
- ◇ US Corp Bonds - High Yield
- ◇ Non-US Debt (Developed)
- ◇ Non-US Debt (Emerging)
- ◇ US Treasuries (Cash Equivalents)
- ◇ TIPS (Inflation-Protected)
- ◇ Real Estate
- ◇ Infrastructure
- ◇ Private Equity (US)
- ◇ Private Debt
- ◇ Private Equity

Source: Morningstar Direct

Total Risk

Sample Portfolio



- ◆ US Equity - Large Cap
- ◆ US Corp Bonds - Core
- ◆ Non-US Debt (Emerging)
- ◆ Infrastructure
- ◆ US Equity - Small/Mid Cap
- ◆ US Corp Bonds - Long Duration
- ◆ US Treasuries (Cash Equivalentents)
- ◆ Private Equity
- ◆ Non-US Equity - Developed
- ◆ US Corp Bonds - High Yield
- ◆ TIPS (Inflation-Protected)
- ◆ Private Debt
- ◆ Non-US Equity - Emerging
- ◆ Non-US Debt (Developed)
- ◆ Real Estate
- ◆ Private Equity (US)

Portfolio Statistics

Time Period: 10/31/2017 to 10/31/2022

	Sample Portfolio
Arithmetic Mean	5.82
Standard Deviation	11.73
Sharpe Ratio	0.50
Geometric Mean (Simulated)	5.12

Source: Morningstar Direct

Asset Allocation Analysis

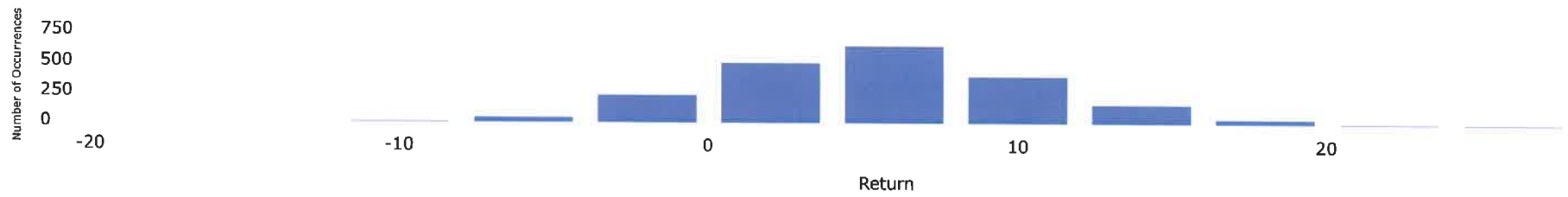
Risk Decomposition

Asset Mix, Asset Class	Asset Mix Weight	Contribution to Asset Mix SD	Percentage Contribution to Asset Mix SD	Asset Mix Return	Percentage Contribution to Asset Mix Return
Sample Portfolio	100.00	11.73	100.00	5.82	100.00
US Equity - Large Cap	28.52	4.36	37.12	7.17	35.15
US Equity - Small/Mid Cap	19.01	3.57	30.41	8.51	27.81
Non-US Equity - Developed	0.00	0.00	0.00	8.08	0.00
Non-US Equity - Emerging	9.51	1.96	16.72	9.99	16.33
US Corp Bonds - Core	1.79	0.01	0.07	2.78	0.86
US Corp Bonds - Long Duration	33.27	1.83	15.64	3.08	17.61
US Corp Bonds - High Yield	0.00	0.00	0.00	4.47	0.00
Non-US Debt (Developed)	1.64	0.01	0.08	2.08	0.59
Non-US Debt (Emerging)	0.00	0.00	0.00	5.24	0.00
US Treasuries (Cash Equivalents)	6.20	-0.01	-0.09	1.49	1.59
TIPS (Inflation-Protected)	0.00	0.00	0.00	2.17	0.00
Real Estate	0.00	0.00	0.00	6.80	0.00
Infrastructure	0.00	0.00	0.00	7.89	0.00
Private Equity	0.00	0.00	0.00	11.60	0.00
Private Debt	0.06	0.01	0.04	7.56	0.08
Private Equity (US)	0.00	0.00	0.00	11.60	0.00

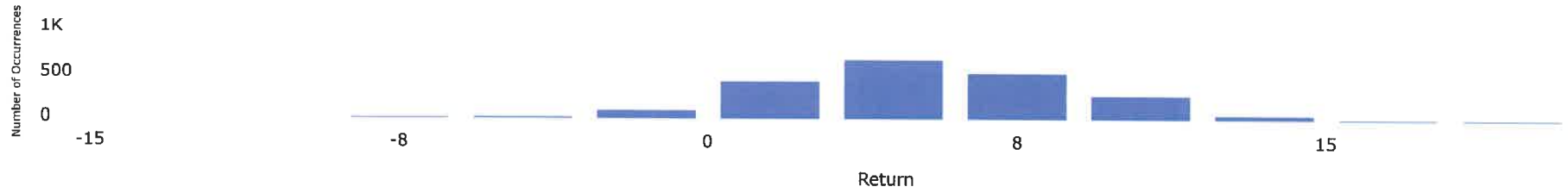
Source: Morningstar Direct

Return Histogram

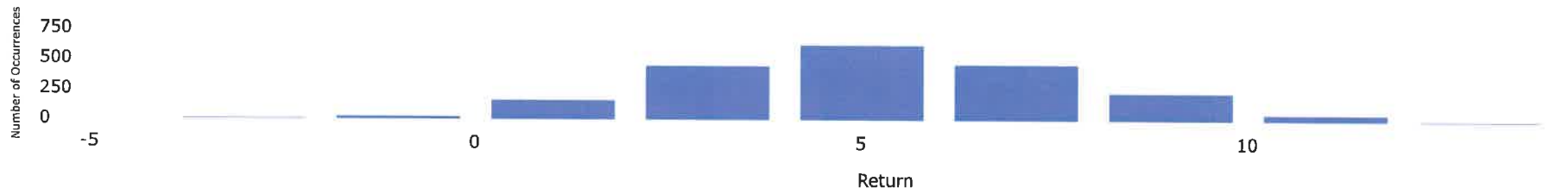
Sample Portfolio - 5 Year



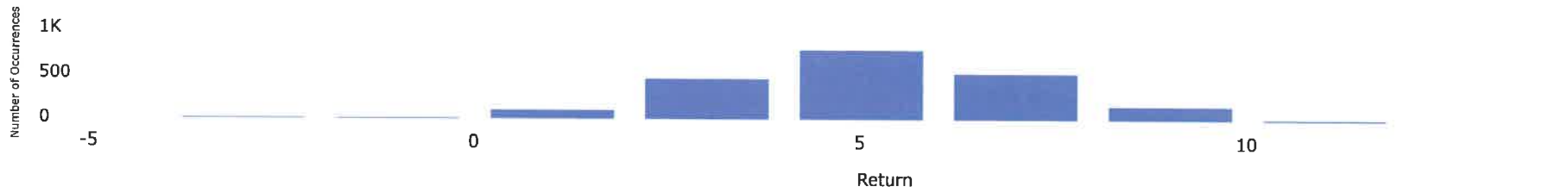
Sample Portfolio - 10 Year



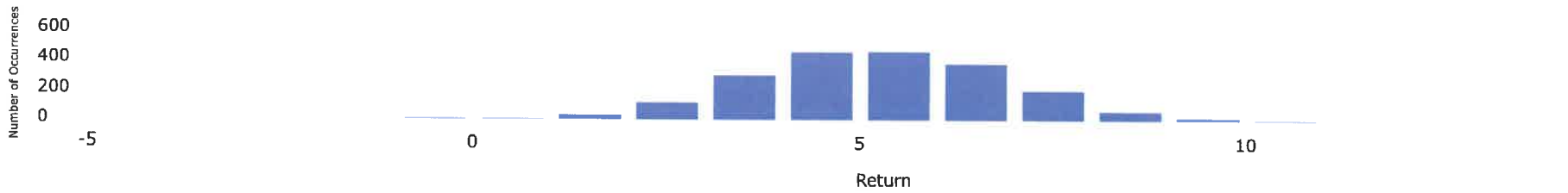
Sample Portfolio - 20 Year



Sample Portfolio - 30 Year



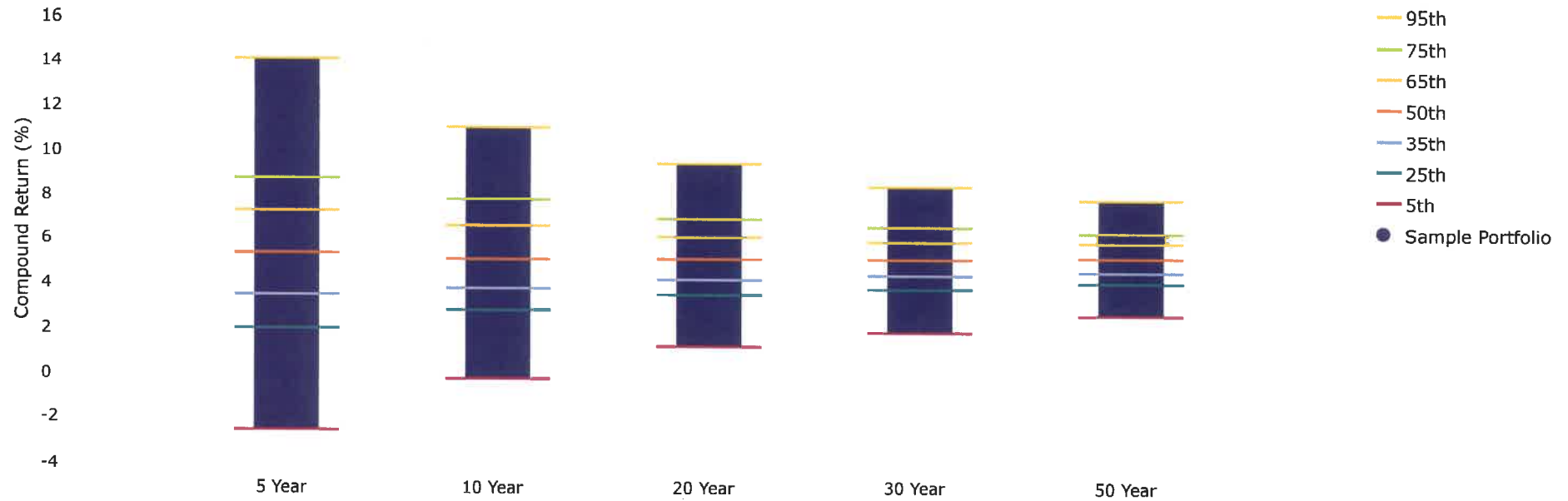
Sample Portfolio - 50 Year



Source: Morningstar Direct

Asset Allocation Analysis

Monte Carlo Simulation: Return Forecast



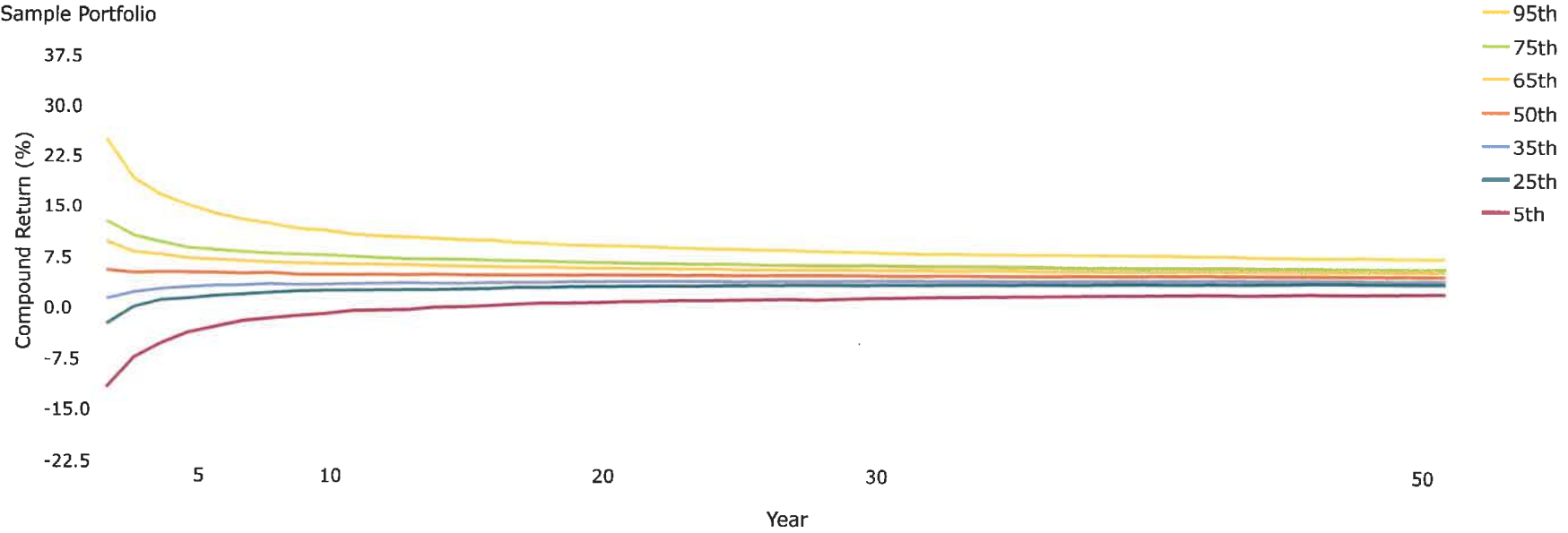
	Percentile						
	95th	75th	65th	50th	35th	25th	5th
5 Year							
Sample Portfolio	14.17%	8.79%	7.32%	5.42%	3.55%	2.04%	-2.52%
10 Year							
Sample Portfolio	11.10%	7.82%	6.64%	5.15%	3.83%	2.87%	-0.21%
20 Year							
Sample Portfolio	9.46%	6.96%	6.15%	5.17%	4.25%	3.56%	1.26%
30 Year							
Sample Portfolio	8.46%	6.59%	5.94%	5.16%	4.44%	3.82%	1.89%
50 Year							
Sample Portfolio	7.85%	6.34%	5.90%	5.24%	4.60%	4.11%	2.68%

Source: Morningstar Direct

Asset Allocation Analysis

Monte Carlo Simulation: Return Forecast

Sample Portfolio



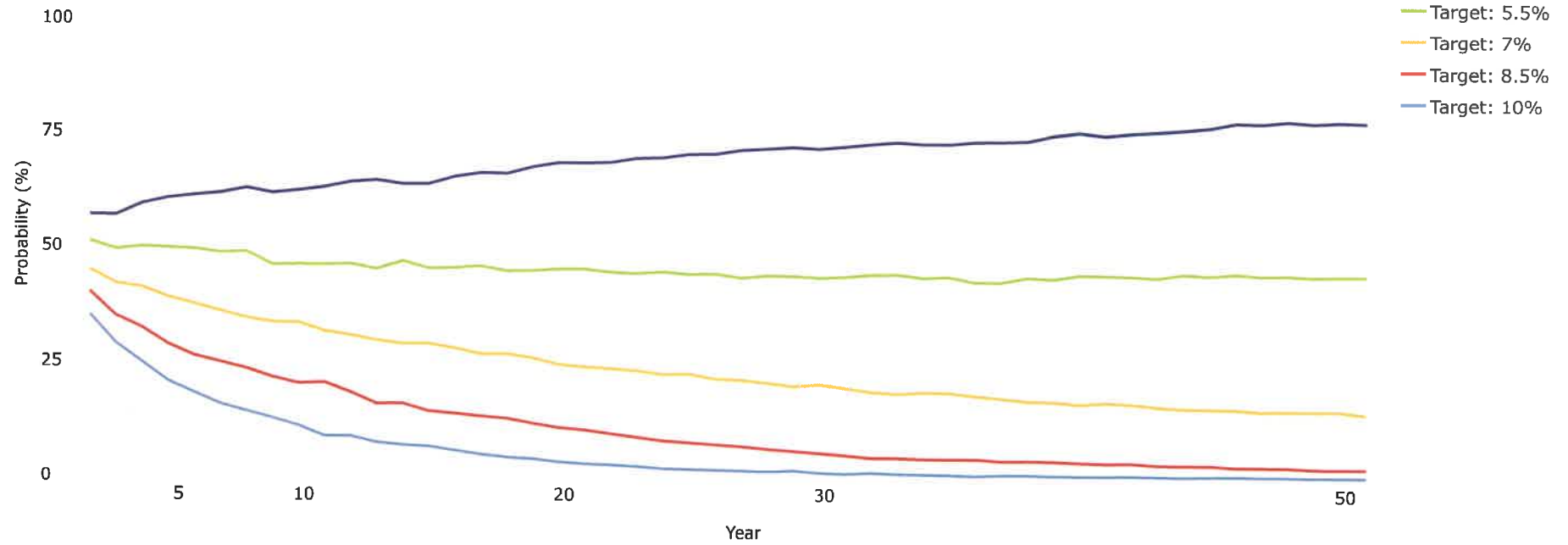
	Percentile						
	95th	75th	65th	50th	35th	25th	5th
5 Year							
Sample Portfolio	14.17%	8.79%	7.32%	5.42%	3.55%	2.04%	-2.52%
10 Year							
Sample Portfolio	11.10%	7.82%	6.64%	5.15%	3.83%	2.87%	-0.21%
20 Year							
Sample Portfolio	9.46%	6.96%	6.15%	5.17%	4.25%	3.56%	1.26%
30 Year							
Sample Portfolio	8.46%	6.59%	5.94%	5.16%	4.44%	3.82%	1.89%
50 Year							
Sample Portfolio	7.85%	6.34%	5.90%	5.24%	4.60%	4.11%	2.68%

Source: Morningstar Direct

Asset Allocation Analysis

Monte Carlo Simulation: Probability of Achieving Target Annual Return

Sample Portfolio



Sample Portfolio	Target Return				
	4%	5.5%	7%	8.5%	10%
5 Year	61.15%	49.40%	37.50%	26.35%	18.30%
10 Year	62.90%	46.00%	31.60%	20.50%	8.85%
20 Year	68.35%	45.10%	24.00%	10.25%	2.85%
30 Year	72.15%	43.55%	19.55%	4.85%	0.75%
50 Year	77.50%	43.85%	14.00%	2.05%	0.15%

Asset Allocation Analysis

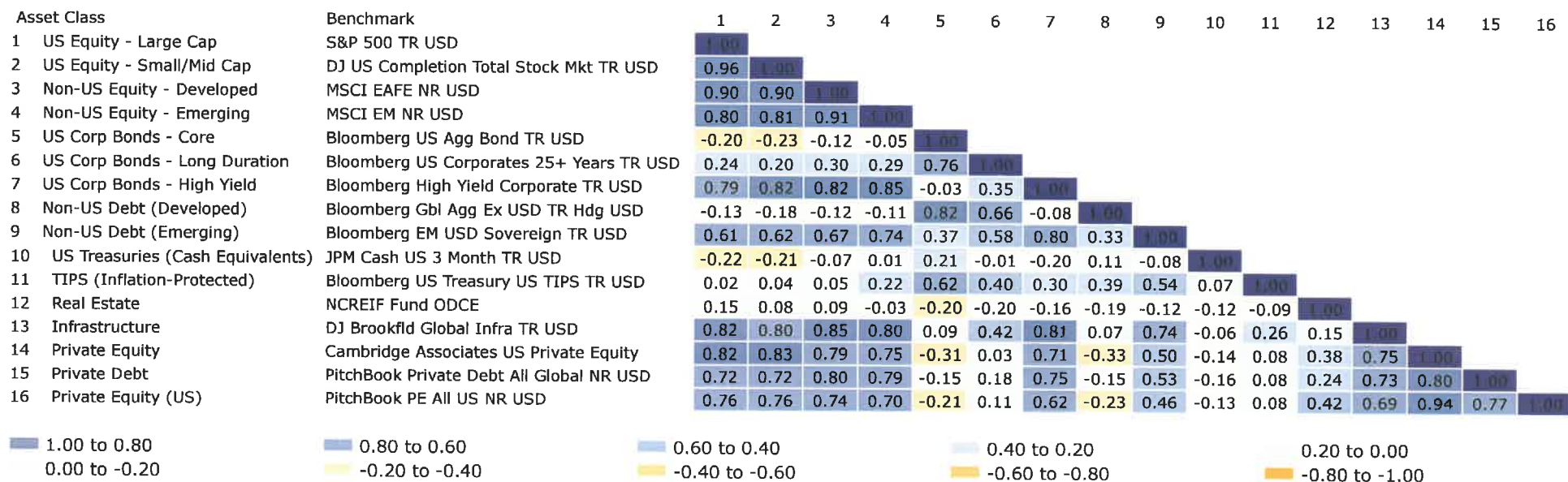
Capital Market Assumptions

Time Period: 10/31/2007 to 10/31/2022

	Arithmetic Mean (Historical)	Arithmetic Mean	Standard Deviation
US Equity - Large Cap	12.24	7.17	16.33
US Equity - Small/Mid Cap	12.37	8.51	20.34
Non-US Equity - Developed	5.53	8.08	18.09
Non-US Equity - Emerging	8.78	9.99	23.92
US Corp Bonds - Core	4.14	2.78	5.36
US Corp Bonds - Long Duration	7.69	3.08	10.48
US Corp Bonds - High Yield	8.30	4.47	9.90
Non-US Debt (Developed)	4.01	2.08	7.51
Non-US Debt (Emerging)	6.42	5.24	10.92
US Treasuries (Cash Equivalents)	1.57	1.49	1.12
TIPS (Inflation-Protected)	4.86	2.17	5.79
Real Estate	7.62	6.80	17.00
Infrastructure	10.02	7.89	16.63
Private Equity (US)	16.04	11.60	22.13
Private Debt	9.01	7.56	11.49

Asset Class Correlations

Time Period: 3/31/2006 to 9/30/2020



Source: Morningstar Direct

APPENDIX B

Addendum Acknowledgement Form

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CPR2300000002

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

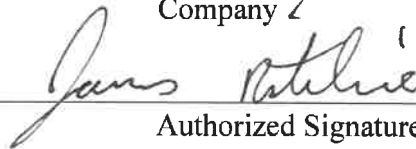
(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Bolton Partners, Inc.

Company <



Authorized Signature

2/27/2023

Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

APPENDIX C

Designated Contact

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Jim Ritchie

(Address) 36 S Charles St. Suite 1000 Baltimore, MD 21201

(Phone Number) / (Fax Number) (443) 573-3924

(Email address) jritchie@boltonusa.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Bolton Partners, Inc. _____

(Company) 

(Signature of Authorized Representative) _____

Jim Ritchie, President of Bolton Retirement, 2/22/2023

(Printed Name and Title of Authorized Representative) (Date) _____

Phone Number: (443) 573-3924, Fax Number: (410) 685-1924

(Phone Number) (Fax Number) _____

jritchie@boltonusa.com

(Email Address) _____

APPENDIX D

Request for Proposal Form

REQUEST FOR PROPOSAL

(Agency Name and RFP #)

6.8. Availability of Information: Proposal submissions become public and are available for review immediately after opening pursuant to West Virginia Code §5A-3-11(h). All other information associated with the RFP, including but not limited to, technical scores and reasons for disqualification, will not be available until after the contract has been awarded pursuant to West Virginia Code of State Rules §148-1-6.3.d.

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Bolton Partners, Inc.

(Company)

Jim Ritchie, President of Bolton Retirement

(Representative Name, Title)

Phone Number: (443) 573-3924, Fax Number: (410) 685-1924

(Contact Phone/Fax Number)

2/22/2023

(Date)

