

1. Search Description

The Board Members of the Plymouth County Retirement Association (hereinafter “Board”) are seeking proposals from managers of an Insurance-Linked Securities fixed income strategy.

The Board intends to invest approximately \$10 million to an Insurance-Linked Securities strategy. Only proposals for experienced managers of Insurance-Linked Securities strategies will be considered. The objective of this Request for Proposal shall be to identify that manager whose expertise will best meet the Board's goals and needs. The Board reserves the right to reject any and all proposals at its discretion.

The selected manager(s) must have familiarity with, and agree to comply with Massachusetts General Laws, Chapter 32 and Chapter 176, the regulations of the Massachusetts Division of Public Employee Retirement Administration Commission, 840 CMR, and the PERAC Placement Agent Policy. Please see <http://www.mass.gov/perac/> for details. All materials submitted in connection with this search may be subject to disclosure consistent with Massachusetts Public Record Open Meeting laws.

All bidders are hereby advised that any proposal selected shall be subject to (1) approval of the Board, (2) a written contract and (3) approval of the engagement by the Massachusetts Public Employee Retirement Administration Commission (PERAC).

Due date deadline: November 23, 2022 at 12:00pm EST

Any questions pertaining to this Request for Proposal are to be in writing (no phone calls, please) and directed to:

Zachary Driscoll or Greg Price
Meketa Investment Group
80 University Ave.
Westwood, MA 02090
zdriscoll@meketa.com or gprice@meketa.com



2. Instructions

1. Proposals must be received by the Board prior to 12:00 PM Eastern Standard Time on November 23, 2022.

Proposals or unsolicited amendments will not be accepted after the closing date and time.

2. Bidders materials should allow adequate time to assure timely arrival. Bidders may correct, modify, or withdraw their proposals prior to the deadline only. Correction or modification must be in writing and must be admitted and received in the same manner as the original proposal. Requests to withdraw proposals must be in writing.
3. Separate price and technical proposals must be submitted (they may be separate files in the same email).
4. Please forward via e-mail one electronic copy of your firm's Proposal to:

Peter Manning
Investment Officer
Plymouth County Retirement Association
PManning@pcr-ma.org

5. Additionally, please send via e-mail an electronic copy (not to exceed 10 mb) of the completed RFP to Meketa Investment Group using the information below:

E-mail: rfpresponse@meketa.com
E-mail Subject: 2022 ILS PCRA

6. If deemed necessary by the Board, bidders may be selected for interview. Each bidder selected for an interview will be allotted sufficient time to orally present its proposal and to answer any questions that may be posed by the person(s) appointed by the Board to interview bidders. The bidders would be evaluated on the basis of the criteria set forth in this request for proposal.
7. The Board reserves the right to make an award without interviews of the bidders. Therefore, the proposals should be submitted initially on the most favorable terms of both price and technical approach that the bidder can propose to the Board. The Board also reserves the right to reject at its sole discretion any and all proposals received, whether prior to or after the bidders' interviews. The Board shall have sole discretion in deciding which bidders, if any, will be considered and/or interviewed.
8. All bidders are hereby advised that any proposal selected shall be subject to (1) approval of the Board, (2) a written contract and (3) approval of the engagement by the Massachusetts Public Employee Retirement Administration Commission (PERAC). Failure to agree on mutually acceptable contract language will void the award of the proposed engagement to the selected bidder.
9. The Board shall have sole discretion in determining whether the parties are unable to reach agreement on the language of the written contract. Note that the Board may require that the contract contain mandatory contractual terms and language (see Exhibit A).
10. The bidder's proposal must be responsive to the criteria specified in the Technical Criteria attached as in Section 7. Bidders are advised that substantial consideration will be given to the evaluation of technical proposals, as well as price, in the award of the contract hereunder.
11. The proposal shall be signed by an official with the power to bind the bidder, and it shall contain a statement to the effect that the proposal is firm for one year.



12. The Board reserves the right to waive certain requirements or other protections in the event that the Board deems it to be in its best interest.
13. The proposal shall contain a certification that the proposal has been submitted in good faith and without collusion or fraud with any other person; additionally, it shall contain a statement disclosing any outside marketing or other relationships that the firm may have. Additionally, four PERAC documents are required, the New Vendor Disclosures, New Vendor Contact Information form, Vendor Certification form, and the Placement Agent Statement. These may be obtained from the PERAC website: <http://www.mass.gov/perac/compliance-investments/compliance-forms/>. Bidders must submit three copies of the PERAC forms.
14. The Board reserves the right to waive any minor informalities.
15. With respect to the RFP, all answers should be in specific reference to the subject product.
16. All questions **and** all blank space must be completed in precise detail. Blank or incomplete responses to applicable questions may preclude the proposal from consideration.
17. Please answer as N/A, should any question not be applicable.

4. SEARCH EVALUATION CRITERIA

Manager selection is a nuanced process and requires extensive due diligence. All managers will be evaluated within the context of the Retirement System's overall investment policy.

Managers will be evaluated in the following areas:

- Organization
- Investment Team
 - Key Personnel
- Investment Strategy/Philosophy
 - Philosophy and Style
 - Competitive Advantage
- Investment Process
 - Credit Evaluation Skill
 - Transaction Structuring
 - Portfolio Construction
 - Risk Controls
- Investment Performance
 - Absolute and risk-adjusted results
 - Historical correlation relative to the System's other investments.
- Fees
 - Fund Structure and Terms
 - Existing and/or Potential Conflicts

Respondents are also required to include the following with their submission:

- Fund Offering Documents
- Proof of Liability Insurance (including without limitation, errors and omissions insurance)



5. Minimum Criteria Certification

If you do not satisfy all of the minimum criteria, please do not respond to this RFP

Bidders must meet all of the following minimum criteria. Failure to satisfy any of the minimum criteria will result in the disqualification of the bidder. Please respond to each of the following by initialing the "YES" response to certify that you do meet the minimum criteria.

1. The bidder and each key individual is a registered investment advisor pursuant to the Investment Advisors Act of 1940, or is exempt from registration (with the nature of the exemption provided).
_____ Yes
2. The bidder has a minimum three-year performance history in the subject product/strategy as of 9/30/22 (experience at prior organizations related to the subject product is applicable).
_____ Yes
3. The bidder has experience managing investments for tax-exempt or state, municipal, or other governmental defined benefit plans.
_____ Yes
4. The firm has been in operation for at least three years as of 9/30/22 as an investment management organization as determined by the firm's SEC 1940 registration.
_____ Yes
5. The bidder is able to manage this portfolio in accordance with South Africa free and Northern Ireland free restrictions.
_____ Yes
7. The firm has managed assets in a manner that satisfies Massachusetts Laws Chapter 32, including the regulations of the Public Employee Retirement Administration Commission, 840 CMR.
_____ Yes
8. The firm has filled out and attached the required PERAC forms. (See <http://www.mass.gov/perac/compliance-investments/compliance-forms/>)
_____ Yes
9. If selected, the Firm is willing and able to include the mandatory contractual terms and conditions into the contract, as required under Massachusetts General Laws Chapter 32, as amended by Chapter 176 of the Acts of 2011. (See Exhibit A.)
_____ Yes

Certified and Initialized by:

Name

Title

Date



6. Warranties

Candidate agrees to the incorporation of the following warranties in a proposed contract:

1. Candidate warrants that it maintains, or will obtain at its expense prior to funding, and will maintain throughout the term of the contract, an errors and omissions insurance policy providing a prudent amount of coverage for negligent acts or omissions and that such coverage is applicable to Manager's actions under the contract.
2. Candidate warrants that, if requested, it will obtain at its own expense (prior to entering into a contract with the Board) independent verification and authentication of all historical performance data presented this proposal.
3. Candidate warrants that all information and statements in this RFP are complete and true. Any statement or claim found to be incomplete, misleading, or false will be grounds for immediate disqualification or dismissal and may be subject to legal action.
4. Candidate warrants that it will disclose any third party marketing or sales fees chargeable to the account of the Board in the procurement.
5. Candidate warrants that it will not delegate its fiduciary responsibilities assumed under the contract.
6. Candidate warrants that it has completed, obtained, and performed all registration, filings, approvals, authorizations, consents, or examinations required by a government or governmental authority for acts contemplated by the contract.
7. Candidate warrants that it has reviewed the mandatory contractual terms and conditions as required under Massachusetts General Laws Chapter 32, as amended by Chapter 176 of the Acts of 2011 (as shown in the Exhibits).
8. Candidate warrants that it is not "doing business with Burma (Myanmar)" within the meaning of Chapter 130 of the laws of 1996 of the Commonwealth of Massachusetts.
9. Candidate warrants that it meets all of the minimum criteria applicable to the firm under this RFP.

Name of person signing Proposal (print or type)

Company

Authorized signature of person signing Proposal

Date

Title



I. GENERAL INFORMATION

Firm Name			
Addresses			
City	State	Zip	
Contact Name	Phone		
Title	Fax		
E-mail	RFP Due Date		
Legal Name of Fund under Consideration			
Notes			

II. FIRM INFORMATION

1. Please provide a history of the firm, include predecessors, wholly owned entities or other pertinent information.
2. Where is the firm located (include headquarters and satellite offices)? Please describe the function of each office (i.e. marketing, investment, administrative) as necessary.
3. What is the firm's ownership structure? Please note any recent (within the last five years) or pending ownership changes.
4. Does the firm have any relationships with third-party marketing organizations? If yes, please describe the nature of the relationship(s). How do the terms of a client's investments obtained through third-party marketing relationships differ from your standard terms? Do any receive more favorable terms (e.g., access to closed products, lower account minimums, or lower fees)? Indicate whether the fees paid for such services are charged to client portfolio assets.
5. Please provide a brief description of any past or pending regulatory action, litigation, or other legal proceedings involving the firm or any registered employees and/or principals.
6. Who is the firm's external legal counsel? Please provide a reference that we can contact to confirm the arrangement. Has the firm changed legal counsel in the past five years? If so, please explain.



Request for Proposal

PCRA – Insurance-Linked Securities strategies

7. Who is the firm's current auditor? Please provide a reference that we can contact to confirm the arrangement. Has the firm changed auditors in the past five years? If so, please explain.

8. What types of liability insurance (e.g. Errors and Omissions) and other forms of coverage does your firm carry to protect your clients? Please provide dollar amounts and proof of coverage.

9. Provide details on the financial condition of your firm. What would you estimate your AUM to be in order to achieve an operating break-even point?

10. Please provide a list of all the investment strategies offered by the firm, the total amount of assets managed under each strategy, and whether the strategy is open or closed.

11. Please list any products the firm has completely liquidated or merged with an existing product. Include the reason(s) why the product was liquidated or merged.

12. What percentage of the firm's assets under management are separate accounts? Commingled funds?

13. Please complete the following table:

	As of 09/30/2022	As of 09/30/2021	As of 09/30/2020	As of 09/30/2019	As of 09/30/2018	As of 09/30/2017
Total Firm Assets						
Total No. of Clients						

14. Please provide a breakdown of total Firm Assets as of the latest possible quarter based on the following categories: Public Pension, Private Pension, Endowment & Foundations, Sovereign Wealth Funds, Private Wealth (HNW and Family Offices), Hedge Fund of Funds, and Other.

15. What are the firm's plans for future growth? Please comment on adding additional resources, as appropriate.

16. Please provide your firm's Diversity and Inclusion representation.

Employee Composition by Race / Ethnicity / Other Minority Groups.

Title/Function	White (%)	Veteran (%)	African American (Black) (%)	Latino (%)	Asian (%)	Other Minority (%)	Disabled Person (%)	Not Disclose d (%)
Total Firm								
Board of Directors								



Sr Organization
Mgmt

Portfolio Managers

Investment Team

Operations

Administrative

Equity Ownership

Employee Composition by Gender.

Title/Function	Male (%)	Female (%)	Not Disclosed (%)
Total Firm			
Board of Directors			
Senior Organization Management			
Portfolio Managers			
Investment Team			
Operations			
Administrative			
Equity Ownership			

III. INVESTMENT RESOURCES

1. Please list the individuals involved in management and research for this strategy. For each individual, please provide the following information:

- a. Tenure at company
- b. Tenure with this strategy
- c. Industry experience
- d. Education & credentials
- e. Area(s) of specialization

2. In addition to the proposed strategy, what other portfolio management responsibilities do the portfolio managers/research analysts have? What other products have they managed in the past? Please state product names and assets under management.

3. Please list additions and departures to the management and research team(s) responsible for strategy in the last five years, including their responsibilities. Provide a brief explanation for each departure and list any replacement for these vacancies.

4. Describe the compensation structure for your investment professionals.

5. Please list the team members responsible for this product who invest their own assets in this product. What percentage of their assets does each invest in this product? What percentage does each invest in the firm's other products?

6. Discuss any key man provisions.

7. How does the firm address staff turnover?

8. How does the firm utilize third party consultants (meteorologists / climate scientists, etc) in its research function?



IV. PRODUCT INFORMATION

1. Please provide an organization chart with all investment professionals involved in the strategy being considered.

2. Where is the individual/team that runs this strategy located?

3. What is the inception date of this product?

4. Please complete the following table:

	As of 09/30/2022	As of 09/30/2021	As of 09/30/2020	As of 09/30/2019	As of 09/30/2018	As of 09/30/2017
Assets Managed in all strategies						
No. of Clients in all strategies						
Assets Managed in proposed strategies						
No. of Clients in proposed strategies						

5. Please provide the number of strategy clients gained or lost during the past five years, as well as their portfolio value. For clients lost, please state the reason.

6. For your three largest client relationships in this product, please provide the size of the mandate and the inception date for the relationship.

7. Does the firm have a policy limiting assets under management for this strategy? If so, what is the stated level? If not, what do you think is the product's capacity?

8. How does the firm view its AUM in conjunction with its ability to be selective and nimble to new opportunities in the relevant investment opportunity set?

9. Have you closed any strategies in the past? If so, please provide a description of the strategy, total asset level at time of closure, and date of closure.

10. Please list other products that overlap with this strategy. How much in AUM do you manage in each of these products, and what percentages of the portfolios overlap?

11. Please provide two client references for your product. Include name and phone number of a contact person, the type and size of the account, and the inception date of the account.

12. Please provide the names of the client service personnel who will be assigned to this account.

13. Do you offer separately managed accounts?

V. INVESTMENT STRATEGY

1. Please provide a one paragraph “elevator pitch” for the proposed strategy.

2. Describe your approach to allocating assets. How do you optimize the funds weightings within your portfolio? Do you have strategic targets?

3. Please describe the transaction types that the strategy will pursue. Include the targeted mix to the deal types including, but not limited to: reinsurance, sidecar debt and equity, quota shares, direct insurance, industry loss warranties, retro, insurance equities, etc (please specify).

4. How tactical is your strategy? That is, how often do you adjust your target positions? It can be helpful to provide quarterly exposures (by expected loss as % of limit) to major regions and perils

5. Do you employ leverage? If so, what is the average leverage of the strategy, and what is the maximum leverage you would tolerate? What are your sources of leverage?

6. Does the firm take a top-down or bottom-up approach to security selection? If it's a hybrid, how are both methods reconciled into investment positions? Is the strategy primarily qualitative or quantitative?

7. What is the policy regarding position size of individual holdings?

8. Please explain *in no more than one page* what your competitive advantage is and why your firm should be hired for this mandate.

VI. INVESTMENT PROCESS

1. Who is the decision-making body that has final authority for the strategy? Does it take the form of an investment policy committee, a team of portfolio managers and/or research analysts, or some other form? Who comprises this group?

2. What are the responsibilities of the decision-making body and of individual portfolio managers? What latitude do portfolio managers have to override investment committee and/or research recommendations?

3. What happens if this individual or one of these individuals leaves the firm?

4. What is the firm's deal flow like? Describe the sources the strategy gets its opportunities from.

5. Describe your research process. Please include information regarding the process for underwriting deals. What is distinctive about your research process relative to other investment managers?

6. Are there differences between underwriting process for deals from different brokers or channels?

7. Describe the risk modeling process. Which vendor models does the firm utilize?

8. Describe additional modeling done in conjunction with any standalone third-party vendor models.

9. Describe the firm and strategy's brokerage channels and access to insurance balance sheets?

10. Please describe the process by which the team arrives at pricing for its deals.

11. What is the firm's stress-testing and scenario analysis process?

12. What is the firm's hedging activity?

13. Please describe the process of execution of buying/selling securities

14. During major catastrophes or portfolio events, how does the firm monitor the portfolio?

VII. PERFORMANCE

- Please provide monthly performance history since inception for the strategy. Include a discussion of the performance calculation methodology and whether it is GIPS compliant.

If possible, please provide information both gross and net of fees. **This information should be in an Excel spreadsheet, formatted as shown in each of the below questions:**

	A	B	C
1		Fund (gross of fees)	Fund (net of fees)
2	Jan-89	0.00130	0.00120
3	Feb-89	0.01250	0.01150
4	Mar-89	0.0365	0.03548
5	Apr-89	-0.020	-0.02211
6	May-89	0.070	0.00523

- Please provide expected loss as a percentage of NAV and contribution by instrument:

	A	B	C
1	Instrument	EL (%) of NAV	EL Contribution (%)
2	Reinsurance		
3	ILW		
4	Cat Bonds		
5	Retro		
6	Quota Shares		
7	Sidecars		
8	Direct Insurance		
9	Other (please specify)		

- Please provide expected loss as a percentage of NAV and contribution to all peril. Perils listed are examples, please provide those specific to your portfolio:

	A	B	C
1	Regional Peril	EL (%) of NAV	EL Contribution
2	Worldwide All Peril	12.0%	100%
3	US Southeast Wind (non-FL)	3.20%	20%
4	Florida Wind	3.20%	30%
5	US Northeast Wind	1.60%	14%

6	California Earthquake	1.20%	12%
7	New Madrid Earthquake	0.90%	6%
8	US Other Peril	0.20%	2%
9	Europe Wind	0.20%	2%
10	Europe Earthquake	0.00%	0%
11	Japan Wind	0.50%	4%
12	Japan Earthquake	0.20%	2%
13	Australia All	0.10%	2%
14	NZ All	0.10%	2%
15	Other (please specify)	0.60%	4%

4. Please provide hypothetical return of the portfolio as of most recent month-end (please specify date) given events listed below. Returns should be net of fees, net of hedging, and net of estimates of risk such as Litigation, climate change, financial inflation, etc:

	A	B	C
1	Event	Peril Type	Return (%)
2	2005 Events (Katrina, Irma, Wilma)	North America Wind	
3	1994 Northridge LA	North America Earthquake	
4	1990 Events (Daria)	European Wind	
5	1992 Andrew	North America Wind	
6	2011 Japan (Tohoku-Chiho Taiheiyo-Oki)	JP EQ	
7	1928 (Great Okeechobee FL)	North America Wind	
8	1707 Hoei	JP EQ	

5. Please list the 5 largest drawdowns that the fund has experienced and what caused the drawdown. Did this influence any changes in the strategy ex-post?
6. What are your targets for the following measures:

Annual Return	
Annual Standard Deviation	
95% VaR (1/20 event)	
99% VaR (1/100 event)	

VIII. CLIENT SERVICE

1. Discuss in detail your policy on subscriptions and redemptions for your fund. What special provisions (i.e. lock-ups, reserves, in-kind payments, exit fees, delayed payments, queues, etc.), if any, exist?



2. Describe the transparency you provide investors. Please provide rationale for limits or full transparency? Do you require a Non-Disclosure Agreement?

3. Describe the performance measurement information you are able to provide to your investors on an ongoing basis. Provide copies of any materials of this type that you offer your clients.

4. Does the firm produce monthly or quarterly communications for investors? If so please provide the most recent communication.

5. Are month end estimates provided by the firm reliable? How often are these estimates revised?

6. Does the strategy offer an ERISA compliant vehicle (>25% of assets can be ERISA) and if not, does the strategy offer any ERISA capacity (up to 25%)?

7. Is the Fund permitted to generate unrelated business taxable income ("UBTI") as described in Section 512 of the Internal Revenue Code of 1986, as amended? If so, indicate how much UBTI has been generated in each of the last five (5) fiscal years of the Fund.

IX. Fees & Expenses

1. Please provide details on the firm's share class fee schedules. Please include all share classes for both onshore and offshore products. Please detail the following items; management fees, performance fees, hurdle rate, high water mark, liquidity (for investments and redemptions), lock ups, gates and redemption fees.

2. What types of fees are charged back to the fund and what is an annual estimate of those costs? Please provide an estimate for these ongoing costs as well as the largest charge the fund has paid over its operational history.

3. Do all clients pay the same fee? Please explain any discrepancies. Do you have any "Most Favored Nations" clauses in place with existing clients in this product?

4. What is the minimum investment for the fund and separate account/fund of one?

5. Please provide a copy of the onshore and offshore PPM/OM and subscription documents?

X. OPERATIONAL RESOURCES AND PROCESSES

1. Please provide an excel sheet with a list the individuals involved in back office management and the noted information (a through e) below:

- a. Tenure at company
- b. Tenure with this strategy
- c. Industry experience
- d. Education & credentials
- e. Area(s) of specialization

2. Please provide a description for the firm's policies and procedures for the following items:

- a. Trade execution and capture
- b. Reconciliation of positions
- c. Net Asset Value (NAV) calculation procedure. Please include time frame (2 days, 5 days, 20 days) from month end when investors receive estimate, final and administrator values in offshore accounts.
- d. Cash Movement

3. Please discuss the firm's process in hiring and ongoing evaluation of service providers. Please include a discussion of the following types of providers:
- a. Prime Brokers
 - b. Administrator
 - c. Auditor
 - d. Legal Counsel
 - e. Counterparties
 - f. Outsourced research solutions (3rd party research and or expert networks).
 - g. Custodian
 - h. Other service providers whose service is charged back to the fund

4. Please provide names and contacts for each of the funds service providers. Please include the following types of providers and other relevant parties as you deem appropriate. Please indicate where applicable if you do not utilize one of the below providers.
- a. Prime Broker
 - b. Administrator
 - c. Auditor
 - d. Legal Counsel
 - e. Counterparties
 - f. Outsourced research solutions (3rd party research and or expert networks).
 - g. Custodian
 - h. Other service providers whose service is charged back to the fund

Appendix 1: Operations, Legal & Compliance

Operations:

1) Staffing & Resources:

- a. Please describe the staffing and resources dedicated to the following operational functions (as applicable): back-office/trade processing, middle-office, corporate actions, treasury, valuations, etc.
- b. Please describe the staffing and resources dedicated to the following finance & accounting functions (as applicable): fund accounting, tax, management company accounting, etc.

2) Trade Processing:

- a. Please describe the types of instruments/securities traded.
- b. Who is authorized to trade on behalf of the funds?
- c. Please describe the number of executing brokers, prime brokers, and derivative counterparties used by the fund.
- d. Please describe the trade capture process from the point of trade execution to the point of communication of trades to third parties, such as the fund administrator. Please include the names of all trading and back-office applications/system platforms utilized.
- e. Please describe the process for trade and cash reconciliation, including frequency and systems utilized.

3) Treasury & Cash Management:

- a. Please list where the fund maintains bank and other cash accounts.
- b. Please describe the process for cash transfers/wire movements from the fund.
- c. Please list the authorized signatories permitted to move cash on behalf of the fund? Please describe the method of wire approval (i.e., signing a physical wire instruction document, via a third-party treasury system, prime broker portal, etc.).

4) Fund Accounting:

- a. Please describe the fund accounting process as it relates to striking the monthly fund NAV. Do you perform a “shadow” process over your fund administrator?
- b. What systems/general ledger software do you utilize (if any)?

5) Pricing & Valuations:

- a. Do you have a valuation policy (see Document Request List in the appendix)?
- b. Do you have a valuation committee? If so, please list the members and function of the committee.
- c. Do you adhere to U.S. GAAP accounting standards for the purposes of valuing securities?

- d. Please describe the general process and procedures for pricing and valuing fund portfolio investments (including pricing sources utilized).
- e. Do you use the services of third-party valuation agents? If so, please list the name of the valuation agent(s) and the scope of service they provide.

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Legal:

- 1) Please describe the staffing and resources dedicated to legal and compliance matters (e.g., General Counsel, CCO, internal legal/compliance team, outside counsel, compliance consultants, etc).
- 2) Within the past ten years, has the manager, the general partner, or any of their respective affiliates (including, but not limited to, any partner, member, officer or principal thereof) (each, an “Affiliate”) been involved in any litigation, regulatory or other legal proceedings, or government investigation or inquiry? If so, please describe in detail.
- 3) Please provide a detailed list and description of any pending or threatened litigation, regulatory or other legal proceeding, or government investigation or inquiries involving the manager, the general partner, or any Affiliate.
- 4) Please provide a detailed list and description of any consent decree, judgment, injunction, other decree, order, settlement agreement, arbitration finding to which the manager, the general partner, or any Affiliate is subject or bound.
- 5) Please list the types of insurance policies maintained by the firm (e.g., D&O/E&O, general liability, crime, etc).

Compliance:

- 1) Is the firm a Registered Investment Advisor with the U.S. SEC? If so, please provide your registration/CRD number.
- 2) Does the firm maintain registrations with any other regulatory authority (both U.S. and foreign)? If yes, please provide the regulatory authority, firm/entity name used for registration, and registration number.
- 3) Is the firm a Qualified Professional Asset Manager (QPAM) as defined by the U.S. Department of Labor?
- 4) Do you have any broker/dealer affiliations?
- 5) If you operate separately managed accounts, fund-of-ones or other entities that run parallel to the main fund, please describe your allocation and conflicts of interest policy.
- 6) Please describe your ESG policies as it relates to the firm (excluding investments). Do you have an ESG policy? Is the firm a signatory to the UN PRI (Principles for Responsible Investment)?
- 7) Describe the firm's policy toward DEI (Diversity, Equity & Inclusion).

Technology/Cybersecurity:

- 1) Please describe the staffing and resources dedicated to technology and cybersecurity? Do you outsource any support services?
- 2) If the firm utilizes the services of a third-party IT consultant, please provide the name and services provided.
- 3) Please list the different software and system applications utilized by the firm (excluding those that may have been listed in the previous responses in support of operations, accounting, etc).
- 4) Do you have a cybersecurity policy?



- 5) Please provide of summary of your business continuity/disaster recovery plan.
- 6) Has the firm ever been the target of a cyber-attack (e.g., phishing, ransom ware, denial of service, etc.)? If yes, please explain in detail.
- 7) Do you maintain a cybersecurity insurance policy? If so, please describe coverage details.

Service Providers:

- 1) Please describe the process and procedures for selecting new service providers or vendors. Who is responsible for the process?
- 2) Do you have a vendor management policy?
- 3) What ongoing monitoring procedures do you perform after selecting a service provider or vendor?

Appendix 2: Document Request List

- 1) Manager and Fund Due Diligence Questionnaires (as applicable)
- 2) Marketing Presentation Decks/Pitch Books
- 3) Fund Private Placement Memorandum/Offering Memorandum
- 4) Subscription Documents
- 5) Limited Partnership Agreement
- 6) Investment Management Agreement
- 7) Fund Articles of Incorporation
- 8) Management Company and Fund Legal Structures
- 9) Fund Audited Financial Statements (last 2 years)
- 10) Quarterly and Annual Investor Letters (last 2 quarterly letters and most recent annual letter)
- 11) Organizational Chart and Bios for Key Staff and Management
- 12) Management Company Ownership Chart
- 13) Trade Flow & Systems Diagram
- 14) List of Authorized Signatories to Move Cash
- 15) Compliance Manual and Code of Ethics (to include the following):
 - a. Trade Allocation Policy
 - b. Conflicts of Interest Policy
 - c. Code of Ethics
- 16) Form ADV Part 2A and 2B if a U.S. SEC Registered Investment Advisor
- 17) Valuation Policy
- 18) List of Service Providers
 - a. Primary service providers contact information (fund administrator, custodians, auditor, valuation consultants, legal counsel, etc.)
 - b. Fund Administrator Fund Transparency Report (latest version, if applicable)
- 19) Cybersecurity and Information/Data Protection Policy
- 20) Business Continuity Plan
- 21) ESG/DEI Policies



Exhibits

Exhibit A

Mandatory Contractual Terms and Conditions

Mandatory Contractual Terms and Conditions

Mandatory contractual terms and conditions to be incorporated into the contract including provisions:

- a) stating that the contractor is a fiduciary with respect to the funds which the contractor invests on behalf of the retirement board:
- b) stating that the contractor shall not be indemnified by the retirement board:
- c) requiring the contractor to annually inform the commission and the board of any arrangements in oral or in writing, for compensation or other benefit received or expected to be received by the contractor or a related person from others in connection with the contractors services to the retirement board or any other client;
- d) requiring the contractor to annually disclose to the commission and the retirement board compensation, in whatever form, paid or expected to be paid, directly or indirectly, by the contractor or a related person to others in relation to the contractors services to the retirement board or any other client; and
- e) requiring the contractor to annually disclose to the commission and the retirement board in writing any conflict of interest the contractor may have that could reasonably be expected to impair the contractor's ability to render unbiased and objective services to the retirement board.
- f) Other mandatory contractual terms and conditions shall address investment objectives, brokerage practices, proxy voting and tender offer exercise procedures, terms of employment and termination provisions.

Exhibit B

Chapter 32

Massachusetts General Laws

Chapter 32 of the Massachusetts General Laws

GENERAL LAWS OF MASSACHUSETTS

PART I. ADMINISTRATION OF THE GOVERNMENT.

TITLE IV. CIVIL SERVICE, RETIREMENTS AND PENSIONS.

CHAPTER 32. RETIREMENT SYSTEMS AND PENSIONS.

Chapter 32: Section 22. Methods of financing.

Section 22. All the assets of each system as they exist at the commencement of business on January first, nineteen hundred and forty-six, and all the assets of each system received, acquired or held on or after such date shall, subject to the provisions of sections one to twenty-eight, inclusive, be credited according to the purposes for which they are received, acquired or held to one of the seven following funds in the system: the Annuity Savings Fund, the Annuity Reserve Fund, the Pension Fund, the Special Fund for Military Service Credit, the Expense Fund, the Pension Reserve Fund, and the Commonwealth's Pension Liability Fund. As provided in subdivision (8), all of the assets of the state employees' and teachers' retirement systems and of any other participating system shall be held in the PRIT Fund, as well as such assets of purchasing systems as shall be transferred to the PRIT Fund upon the purchase of shares therein.

(1) Annuity Savings Fund. (a) The annuity savings fund of each system shall be the fund provided for the accumulation of the regular deductions and additional deductions of the members of the system and into which such deductions shall be paid as they are made and to which regular interest shall be transferred to be credited to the accounts of such members as provided for in subdivision (6) of this section.

(b) The treasurer or other disbursing officer in charge of payroll in any governmental unit to which a system pertains, and the treasurer or other disbursing officer in charge of payrolls in any free public library the employees of which are eligible for membership in a system, shall, upon written notice from the board, withhold on each pay day five per cent of the regular compensation of each employee who is a member in service of the system, which is received on such day by such member on account of service rendered to him on or after January first, nineteen hundred and forty-six, and not later than the date of his attaining the maximum age for his group, in the case of

an employee who entered the service of the commonwealth or a political subdivision thereof prior to January first, nineteen hundred and seventy-five; withhold on each pay day seven per cent of the regular compensation of each employee who is a member in service of the system, which is received on such day by such member on account of service rendered by him on or after January first, nineteen hundred and seventy-five, and not later than the date of his attaining the maximum age for his group in the case of an employee who entered the service of the commonwealth or a political subdivision thereof on or after January first, nineteen hundred and seventy-five but prior to January first, nineteen hundred and eighty-four; and withhold on each pay day eight per cent of the regular compensation of each employee who is a member in service of the system, which is received on such day by such member on account of service rendered by him on or after January first, nineteen hundred and eighty-four, and not later than the date of his attaining the maximum age for his group in the case of an employee who entered the service of the commonwealth or a political subdivision thereof on or after January first, nineteen hundred and eighty-four but before July first, nineteen hundred and ninety-six; and withhold on each pay day nine percent of the regular compensation of each employee who is a member in service of the system, which is received on such day by such member on account of service rendered by him on or after July first, nineteen hundred and ninety-six, and not later than the date of his attaining the maximum age for his group in the case of an employee who entered the service of the commonwealth or a political subdivision thereof on or after July first, nineteen hundred and ninety-six; and withhold on each pay day twelve percent of the regular compensation of each employee who is a member of the state police appointed pursuant to section ten of chapter twenty-two C, and is a member in service of the system, which is received on such day by such member on account of service rendered by him on or after July first, nineteen hundred and ninety-six, and not later than the date of his attaining the maximum age for his group in the case of such employee who entered the service of said state police on or after July first, nineteen hundred and ninety-six; provided, that in the case of any teacher such withholding shall be made upon written notice from the school committee, board of trustees or other employing authority, to the treasurer or other disbursing officer of the political subdivision by which such teacher is employed.

The provisions of section fifty of chapter three hundred and sixty-seven of the acts of nineteen hundred and seventy-eight shall not apply to any member of the state employees' and state teachers' retirement system, or systems electing to accept the provisions of this paragraph. Any system may accept the provisions of this paragraph by majority vote of the board of each such system, subject to the approval of the legislative body. For purposes of this paragraph "legislative body" shall mean a town meeting in a town, the city council in a city, the county retirement board advisory council in a county, and the district members in a district. Acceptance shall be deemed to have occurred upon the filing of a certification of such votes with the commission. Any system electing to accept the provisions of this paragraph shall be required to annually appropriate to the Pension Reserve Fund, in addition to such other amount as might be required by this chapter, an amount equal to the employer's normal cost of removing the restriction provided by said section fifty of said chapter three hundred and sixty-seven, plus such amount as is required to amortize over thirty years the liability created by such removal for such of those employees who entered

service on or after January first, nineteen hundred and seventy-nine and prior to January first, nineteen hundred and eighty-eight. For any member of any system accepting the provisions of this paragraph who entered the service of the commonwealth or a political subdivision thereof on or after January first, nineteen hundred and seventy-nine, the treasurer or other disbursing officer in charge of payroll in any governmental unit to which a system pertains, shall withhold on each pay day, in addition to the amounts withheld pursuant to paragraph (b) an additional two per cent of such member's regular compensation over thirty thousand dollars. In any system filing a certificate of acceptance with the commission on or before July first, nineteen hundred and eighty-eight, the treasurer or other disbursing officer in charge of payroll in any governmental unit to which a system pertains shall withhold, from the regular compensation of such member subject to the additional amounts provided for by this paragraph, in such installments as the retirement board shall direct, an amount equal to the additional amount which would have been withheld from such member's regular compensation pursuant to this paragraph between January first, nineteen hundred and eighty-eight and the date the certificate of acceptance is filed. In any system filing a certification of acceptance with the commission after July first, nineteen hundred and eighty-eight, the additional deduction shall start as of the date of filing said application and no deductions shall be made from any regular compensation received between January first, nineteen hundred and eighty-eight and the date said certification is filed; provided, however, that the liability created by removing the restriction provided by said section fifty for the payroll period from January first, nineteen hundred and eighty-eight and the date said certification is filed shall be added to the amount to be amortized over thirty years through the annual appropriation as required by this paragraph; and provided, further, that all service in such system after January first, nineteen hundred and eighty-eight shall be credited as non-section fifty restricted service. Notwithstanding any other provision of this chapter, the calculation of the retirement allowance of any member who entered service after January first, nineteen hundred and seventy-nine where such member has both section fifty restricted service and non-section fifty restricted service, shall be calculated based upon the years of creditable service subject to the restriction and the years of non-section fifty service, as the actuary shall determine. In the state employees' retirement system and the state teachers' system, and in any other system accepting the provisions of this paragraph, the allowance payable to any member, or eligible beneficiary thereof, who entered the service of the commonwealth or a political subdivision thereof on or after January first, nineteen hundred and seventy-nine and who retired from said system prior to the date on which such system accepted this paragraph, shall be recalculated as of the date of such acceptance, and as of said date the provisions of said section fifty of said chapter three hundred and sixty-seven shall not apply to such allowance; provided, however, that the provisions of this sentence shall not be deemed to require any additional contributions to be made by any such member or eligible beneficiary thereof. The state employees' and state teachers' retirement systems shall be deemed to have accepted the provisions of this paragraph as of January first, nineteen hundred and eighty-eight.

(c) Any such treasurer or other disbursing officer in charge of payrolls, for the purpose of determining the regular compensation and regular deductions of any member in service who is receiving a non-cash maintenance allowance in the form of full or partial boarding and housing,

shall add to the amount of the cash payment for the regular services of such member an amount at a rate which shall be determined by the personnel administrator if such member is a member of the state employee's retirement system or of the teachers' retirement system, by the county personnel board if such member is a member of any county system, and by the retirement board if such member is a member of a city or town system. The sum of such amount and the amount of such cash payment shall be the regular compensation upon which regular deductions shall be made on and after January first, nineteen hundred and forty-six. The regular compensation of any such member for any period, for purposes of computing retirement allowances, shall include not only the amount of the cash payment for his regular services but also the amount of any non-cash maintenance allowance at the rate in effect for him for such period under the provisions of this paragraph or under corresponding provisions of earlier laws.

(d) Any member in service of any system, whose regular deductions during any period of his employment were made at a lower rate, or on the basis of a lower maximum limit, than that in effect during such period for a majority of the members of such system, may, before the date any retirement allowance becomes effective for him, pay into the annuity savings fund of the system in one sum, or in installments over a period not exceeding five years, upon such terms and conditions as the board may prescribe, an amount equal to the difference between the aggregate of the regular deductions which would have been credited to his account in such annuity savings fund had they been made at the rate, and subject to the maximum limit, in effect for a majority of the members of such system during such period and the aggregate of the regular deductions actually credited to his account therein. In addition to the payment of such sum or installments thereof, such member shall also pay into the annuity savings fund an amount of interest such that at the date of completion of such payments the total value of his regular deductions actually made, including such payments, together with regular interest on all such deductions and payments to such date, shall be equal to the value of what his regular deductions would have been, together with regular interest thereon to such date, had they been made at the rate, and subject to the maximum limit, in effect for a majority of the members of such system throughout the whole period of his employment.

(e) In addition to the regular deductions referred to in paragraphs (b) and (c) of this subdivision, any such treasurer or other disbursing officer in charge of payrolls shall, upon written notice to him by the board, deduct from the regular compensation of any member in service such sums as the board shall designate and upon such terms and conditions as it shall prescribe, as may be required for the purpose of carrying out the provisions of paragraph (d) of this subdivision, or the provisions of subdivision (3), (4), (5), (6) or (8) of section three or of paragraph (2) (c) of section four, or other corresponding applicable provisions of sections one to twenty-eight inclusive. The board may permit a reduction, suspension or termination of any such deductions being made under the provisions of this paragraph if such member shall so request in writing and if it finds that he is unable to continue them without undue hardship, but no withdrawal of the same shall be made except in the manner provided for the withdrawal of other accumulated regular deductions.

(f) The deductions provided for under this subdivision shall be made notwithstanding that the minimum compensation provided by law for any member may be reduced thereby. Each member shall be deemed to consent and agree to the deductions provided for in this subdivision and shall receipt for his full salary or compensation. The payment of his full salary or compensation less such deductions shall be considered a full and complete discharge and acquittal of all claims and demands whatsoever for the services rendered by him during the period covered by such payment, except as to any benefits in the nature of an annuity, pension, retirement allowance or return of accumulated total deductions as provided for in sections one to twenty-eight inclusive.

(g) Any member in service or any member inactive on authorized leave of absence, may, before the date any retirement allowance becomes effective for him, pay into the annuity savings fund of the system in one sum, or in installments over a period of years, for the purpose of providing an additional annuity, such amount as he shall designate, subject to the limitation hereinafter specified in this paragraph and subject to such terms and conditions as the board may prescribe. Any such member may authorize the board in writing to instruct the treasurer or other disbursing officer in charge of payrolls to withhold for such purpose on each pay day from the regular compensation of such member such amount as he shall designate, subject to such limitation and subject to such terms and conditions as the board may prescribe. All amounts so paid or so withheld shall be considered as additional deductions as defined in section one. The total additional deductions for any such member as of any date shall be so limited that such total, together with regular interest on such additional deductions to such date, shall not exceed the portion of his accumulated regular deductions on such date which is derived from that part of his annual regular compensation not in excess of thirty-six hundred dollars in any year. Such accumulated additional deductions shall be used upon his retirement to provide an additional annuity for him in accordance with the provisions of subdivision (2) of section twelve, or shall be paid as provided for in section eleven upon his prior death or withdrawal from the system. The board shall permit a reduction, suspension, or termination of such additional deductions if such member shall so request in writing.

(h) The various amounts withheld under the provisions of this subdivision for deposit in the Annuity Savings Fund of any system shall, subject to the provisions of paragraphs (i), (j) and (k), be transferred forthwith to such system by the treasurer or other disbursing officer in charge of payrolls, accompanied on a prescribed form by a statement or voucher for such deductions. Such amounts shall be credited by the board to the accounts of the respective members for whom such deductions have been made, and shall be paid into and become a part of the Annuity Savings Fund of such system.

(i) In the case of teachers who are members of the teachers' retirement system, the various amounts withheld for any month for deposit in the annuity savings fund of such system shall, together with proper vouchers therefore, be transmitted by the disbursing authorities to the secretary of the teachers' retirement board on or before the tenth day of the next succeeding month. The secretary shall thereupon credit the accounts of such members with their respective deductions and pay all such sums received to the state treasurer for deposit in the annuity savings fund of such system.

(j) In the case of each member of any county system whose regular compensation is paid by the commonwealth, the state treasurer shall make the withholdings for any month required by the provisions of this subdivision and shall transmit them, together with proper vouchers therefore, on or before the tenth day of the next succeeding month to the county treasurer for deposit in the annuity savings fund of such system to the credit of the respective accounts of each such member.

(k) The treasurer or other disbursing officer in charge of payrolls in any free public library the employees of which are eligible for membership in a system, shall transmit forthwith to the city or town treasurer of the city or town in which such library is located, the amounts which he has withheld from the members as provided for in this subdivision, together with proper vouchers therefore. Such city or town treasurer shall thereupon transfer such amounts for deposit in the annuity savings fund of such system to the credit of the respective accounts of such members as provided for in paragraph (h) of this subdivision in the case of other members thereof.

The amount of the accumulated total deductions of any member paid or withdrawn under the provisions of sections one to twenty-eight inclusive shall be paid from the annuity savings fund of the system and charged to his account therein. Upon the retirement of any member, the amount of his accumulated total deductions shall be transferred from his account in the annuity savings fund of the system to the annuity reserve fund thereof. Amounts shall be transferred to the annuity savings fund from the annuity reserve fund as provided for in paragraph (2) (b) of this section and from the annuity savings fund to the pension fund as provided for in paragraph (6) (d) of this section.

(2) Annuity Reserve Fund (a) The annuity reserve fund of each system shall be the fund to which the accumulated total deductions of a member shall be transferred from his account in the annuity savings fund of the system when a retirement allowance becomes effective for him, and to which also shall be transferred at such time from the special fund for military service credit any amounts then standing to the credit of his account therein. The total amounts so transferred on account of any member shall thereby establish the initial annuity reserve for the annuity provided for him under the provisions of subdivision (2) of section twelve. Interest at the annual rate set forth in the definition of actuarial equivalent appearing in section one shall be transferred to the annuity reserve fund as provided for in subdivision (6) of this section. All annuities and all benefits for which such initial annuity reserve was established shall be paid from the annuity reserve fund.

(b) If any member who has been retired for disability is later restored upon recovery to active service before attaining the age sixty-five as provided for in paragraph (b) of subdivision (2) of section eight, an amount equal to the annuity reserve at the date of his restoration with respect to his annuity shall be transferred from the Annuity Reserve Fund of the system to the credit of his account in the Annuity Savings Fund thereof.

(c) If the balance remaining in the annuity reserve fund of any system at the close of business on December thirty-first of any year after the transfer of interest thereto as provided for in clause (ii) of paragraph (a) of subdivision (6), is in excess of the total amount of the annuity reserve determined for such system as of such date in accordance with the provisions of paragraph (b) of

subdivision (3) of section twenty-one, the amount of such excess shall be transferred as of the next following September thirtieth from the Annuity Reserve Fund to the Pension Reserve or Commonwealth's Pension Liability Fund of such system. If such balance is less than the total amount of such annuity reserve, an amount equal to such deficiency shall, to the extent not included in any deficiency being made up under the provisions of this paragraph, be similarly transferred as of such next following September thirtieth from the Pension Fund to the Annuity Reserve Fund.

(3) Pension Fund (a) The Pension Fund of each system shall be the fund to which shall be credited all amounts appropriated by the governmental unit or transferred from the Pension Reserve Fund or Commonwealth's Pension Liability Fund pursuant to a funding schedule established pursuant to section twenty-two C or twenty-two D for the purpose of providing for the cost of operation of the system exclusive of the expenses of administration, except such amounts as may be appropriated for the special fund for military service credit under the provisions of subdivision (4). Any balance remaining in the investment income account of the system at the close of business on December thirty-first of any year shall be transferred to the Pension Reserve Fund or the Commonwealth's Pension Liability Fund, and any deficit in such account at such time shall be made up by transfer from the pension fund to such account of an amount equal to such deficit as provided for in clause (iii) of paragraph (a) of subdivision (6).

(b) All pensions to members or to beneficiaries and all pensions paid under the provisions of paragraph (c) of subdivision (8) of section three or paragraph (b) of subdivision (4) of section seven shall be paid from the pension fund of the system, and all amounts received under said provisions shall be credited to such fund. Amounts shall be transferred between the Pension Fund or the Commonwealth's Pension Liability Fund, as applicable, and the annuity reserve fund as provided for in paragraph (c) of subdivision (2) and shall be transferred to the Pension Fund or the Commonwealth's Pension Liability Fund, as applicable, from the annuity savings fund as provided for in paragraph (d) of subdivision (6) and from the special fund for military service credit as provided for in paragraph (c) of subdivision (4). Amounts shall also be paid from the Pension Fund or the Commonwealth's Pension Liability Fund, as applicable, of one system and transferred to the special fund for military service credit of a second system as provided for in paragraph (d) of said subdivision (4). The board shall, with the approval of the actuary, make any other transfer between the Pension Fund or the Commonwealth's Pension Liability Fund, as applicable, and any other fund of the system which may be necessary to effectuate the purposes of sections one to twenty-eight, inclusive; provided, however, that no such transfers shall be made from the Commonwealth's Pension Liability Fund except pursuant to schedules submitted in advance by the commissioner of administration to the house and senate committees on ways and means.

(c) Any profit realized on the sale or maturity of any investment of any system, due to the amount received therefore being in excess of its book value on the date of its sale or maturity, shall be credited to the Pension Reserve Fund of the system or recognized over a period of years as prescribed by the commissioner of public employee retirement. Any loss sustained on the sale or maturity of any investment, due to the amount received therefore being less than its book value on

the date of its sale or maturity, shall be charged to said Pension Reserve Fund or amortized over a period of years as prescribed by said commissioner. Any investment which is required to be valued at its market value under the provisions of paragraph (b) of subdivision (1) of section twenty-one, shall be included in the assets of the system on the date of any valuation thereof at its market value on such date as determined in accordance with said provisions. Any excess of such market value over the value at which such investment was included in the assets of the system on the date of the last previous valuation thereof, shall be credited forthwith to said Pension Reserve Fund or recognized over a period of years as prescribed by said commissioner, and any amount by which such market value is less than the value at which such investment was included in such assets, shall be charged forthwith to such fund or amortized over a period of years as prescribed by said commissioner.

In prescribing the period of years for amortization of gains and losses the public employee retirement administration commission shall act in a manner consistent with the periods prescribed by the government accounting standards board or allowed by the Employee Retirement Income Security Act.

Notwithstanding the foregoing provisions or any other general or special law to the contrary, the commonwealth shall assume the cost to any retirement system participating in the Pension Reserves Investment Trust Fund for the charge to the pension fund of such system for the amortization of any loss sustained on the transfer of such system's assets to the Pension Reserves Investment Trust Fund due to the value of the units in said fund upon such transfer being less than the book value of the system assets transferred to said fund on the date of transfer; provided, however, that the commonwealth shall assume only the cost of such system for a loss in an amount equal to or less than twenty per cent of the book value of the system's total portfolio on said date of transfer; provided, further, that the commonwealth shall assume only the costs for such losses to participating systems transferring their assets to the Pension Reserves Investment Trust Fund on or before July first, nineteen hundred and eighty-six; and provided further, that such assumable losses shall not be included in the determination of required appropriations set forth in subparagraph (iii) of paragraph (d). Such losses incurred by participating systems upon the transfer of their assets to the Pension Reserves Investment Fund shall be amortized over the average time to maturity of the entering system's fixed income securities transferred or ten years, whichever is less.

(d) The amount to be appropriated for any fiscal year for the pension fund of any system, as provided for in subdivision (7) of this section, shall be equal to the excess of the sum of the charges in clauses (i) to (iv) inclusive of this paragraph over the sum of the credits in clauses (v) to (vii), inclusive:

Charges (i) The total amount, as estimated by the actuary from data furnished by the board, of the pension payments to be paid from the pension fund of the system during the fiscal year for which such appropriation is being made;

(ii) The amount of that part of the deficiency, if any, in the annuity reserve fund of the system as of January first, nineteen hundred and forty-six, to be made up during such fiscal year under the provisions of paragraph (2) (c) of this section;

(iii) The amount of the deficiency, if any, in the pension fund at the close of business on the September thirtieth immediately preceding such fiscal year, after the transfers provided for in paragraph (2) (d) of this section have been made as of such date and after the credits and charges to such fund have been made as of such date following the valuation provided for in paragraph (c) of this subdivision; and

(iv) The amount, if any, by which the total yearly amount of the pensions payable from the system with respect to all retired members and beneficiaries who are receiving pensions there from at the close of business on the September thirtieth immediately preceding such fiscal year, exceed any balance in the pension fund remaining at the close of business on such date after the transfers, credits and charges referred to in clause (iii) of this paragraph applicable for such fiscal year have been made; provided, that the amount of the charge to be made under the provision of this clause shall not be greater than twenty per cent of such total.

Credits (v) The sum of the amounts, if any, received and credited to the pension fund under the provisions of paragraph (8) (c) of section three and paragraph (4) (b) of section seven during the twelve-month period ending on the September thirtieth immediately preceding such fiscal year, and the amounts, if any, transferred from the special fund for military service credit to the pension fund under the provisions of paragraph (4) (c) of this section during such period; provided, that the amount of the credit to be allowed under the provisions of this clause shall not be greater than the amount by which any balance in the pension fund remaining at the close of business on such date after the transfers, credits and charges referred to in clause (iii) of this paragraph applicable for such fiscal year have been made, exceeds five per cent of the ledger assets of the system as of such date after the valuation referred to in said clause (iii) has been made, nor greater than the amount by which such balance exceeds the total yearly amount of the pensions payable from the system with respect to all retired members and beneficiaries who are receiving pensions therefrom at the close of business on such date; and

(vi) The amount, if any, by which the charge determined under the provisions of clause (i) of this paragraph applicable for such fiscal year, exceeds the largest of the corresponding charges included in such appropriations for the system for the first three full fiscal years of its operation after December thirty-first, nineteen hundred and forty-five; provided, that the amount of the credit to be allowed under the provisions of this clause shall not be greater than twenty per cent of such charge for such fiscal year, nor greater than the amount by which any balance in the pension fund remaining at the close of business on the September thirtieth immediately preceding such fiscal year after the transfers, credits and charges referred to in clause (iii) of this paragraph applicable for such fiscal year have been made, exceeds the sum of the amount of any credits allowed under the provisions of clause (v) of this paragraph applicable for such fiscal year and five per cent of the ledger assets of the system as of such date after the valuation referred to in said clause (iii) has

been made, nor greater than the amount by which such balance exceeds the sum of the amount of any credits allowed under the provisions of clause (v) of this paragraph applicable for such fiscal year and the total yearly amount of the pensions payable from the system with respect to all retired members and beneficiaries who are receiving pensions therefrom at the close of business on such date.

(vii) The amount, if any, transferred to such pension fund from the pension reserve fund of the system pursuant to subdivision (6A).

(4) Special Fund for Military Service Credit (a) The special fund for military service credit shall be the fund provided in each system under the provisions of sections nine and nine A of chapter seven hundred and eight of the acts of nineteen hundred and forty-one, as amended by chapter four hundred and nineteen of the acts of nineteen hundred and forty-three and as may be further amended, to which shall be credited the amount appropriated for any fiscal year, as provided for in subdivision (7) of this section, for the purpose of establishing the amounts which would have been paid into such system as regular deductions by members thereof on military leave of absence from the governmental unit by which they were employed had such members remained in the active service of such governmental unit. Regular interest shall be transferred to the special fund for military service credit as provided for in subdivision (6) of this section.

If a city or town notifies the teachers' retirement board that all teachers referred to in section one of chapter seven hundred and eight of the acts of nineteen hundred and forty-one, as amended, have either returned to the public school service of Massachusetts, or that the period has expired during which they were permitted to return and have military assessments credited to their accounts, and that there are no other members who were formerly employed by the city or town who will be entitled to have military assessments credited to their accounts, the said board shall, during the month of January following the receipt of such notice, refund to the city or town any amount standing to its credit in the special fund for military service credit provided for in this section.

(b) In the event of the retirement of any member, or in the event a member-survivor benefit under the provisions of option (d) of subdivision (2) of section twelve becomes effective on account of any member whose last discharge or release from military service as set forth in said chapter seven hundred and eight of the acts of nineteen hundred and forty-one, as amended, and as may be further amended, was under honorable conditions as defined in defense department regulations, for whom a liability has been established in the special fund for military service credit, an amount equal to the value of the regular deductions credited to his account under the provisions of sections nine and nine A of said chapter seven hundred and eight for the period of his military leave of absence, together with regular interest thereon to the date his retirement allowance becomes effective, shall be transferred from his account in such fund to the annuity reserve fund of such system and shall be added to and merged with the amount of his accumulated regular deductions being transferred as of such date from the annuity savings fund of such system to the annuity reserve fund thereof. The total of such amounts transferred on his account shall be used in

determining the amount of the regular annuity provided for him under the provisions of subdivision (2) of section twelve, and the aggregate of his regular deductions, including the amount thereof transferred from the special fund for military service credit, shall be used in determining the normal yearly amount of his retirement allowance to the extent such allowance is dependent upon the amount of his regular deductions.

(c) In the event of the withdrawal from the system of any member, whose last discharge or release from military service as set forth in said chapter seven hundred and eight, as amended, and as may be further amended, was under honorable conditions as defined in defense department regulations, for whom a liability has been established in the special fund for military service credit, or in the event of his death before any retirement allowance becomes effective for him, and without a member-survivor benefit under the provisions of option (d) of subdivision (2) of section twelve or payment of allowances under the provisions of section twelve B becoming effective on account of the death of such member, any amount being held to the credit of his account in the special fund for military service credit shall be released and shall be used to reduce the amount of the next appropriation for the pension fund of the governmental unit or units which paid to establish the military service credit for him, in the proportions originally paid by each unit for that purpose; provided, that if such member shall later be reinstated in the system or become a member of another retirement system, and shall deposit in full the amount he withdrew with accumulated interest, said governmental unit or units shall add the amount of such reduction, with regular interest, to the amount of its or their next appropriation for the special fund for military service credit; and further provided, that if the person is a member of the teachers' retirement system, the whole or portion of the said amount, as the case may be, which was paid by a city or town shall be returned to the city or town with accumulated interest, and the portion, if any, of the said amount which was paid by the commonwealth shall be transferred to the pension fund of said system. If a former member of said system, on whose account such an adjustment has been made, is later reinstated a member of said system, and returns in full the amount he withdrew with accumulated interest, the city or town which received the refund as provided above shall be notified, and it shall pay to the special fund for military service credit of said system the amount it received from said fund, with accumulated interest at three per cent to the date of payment to said fund, and the portion, if any, which was transferred to the pension fund of said system shall be transferred from said pension fund with three per cent accumulated interest to the said special fund for military service credit, and these amounts shall again be held for the credit of the member, to be used only for retirement purposes.

(d) If any member, whose last discharge or release from military service as set forth in said chapter seven hundred and eight, as amended, and as may be further amended, was under honorable conditions as defined in defense department regulations, for whom a liability had previously been established in the special fund for military service credit of one system for any period of his military leave of absence while a member of such system, is retired while a member of a second system, or in the event a member survivor benefit under the provisions of option (d) of subdivision (2) of section twelve, or payment of allowances under the provisions of section twelve B

becomes effective on account of his death while a member of a second system, an amount equal to the value of the regular deductions with which he was credited under the provisions of sections nine and nine A of said chapter seven hundred and eight for such period of his military leave of absence, together with regular interest thereon to the date his retirement allowance, member survivor benefit, or allowances provided for under the provisions of section twelve B becomes effective, shall be paid from the pension fund of the first system at the date on which said retirement, member survivor benefit, or allowances under the provisions of section twelve B becomes effective and transferred to the special fund for military service credit of the second system to be credited to his account therein, and thereafter such account shall be handled in the manner set forth in paragraph (b) of this subdivision; provided, that such transfer shall be made and credit for such period of his military leave of absence allowed only if he has transferred his membership from the first system to the second system as provided for in paragraph (8) (a) of section three, or only if and only to the extent he has re-established credit for his former membership by paying into the annuity savings fund of the second system the make-up payments provided for in paragraph (8) (b) of such section.

(5) **Expense Fund** The expense fund of each system shall be the fund to which shall be credited the amount appropriated for any fiscal year, as provided for in subdivision (7) of this section, for the purpose of providing for the payment of all expenses of administration of the system for such year, and from which all such expenses shall be paid; provided, however, that each retirement board shall adopt an annual budget and supplemental budgets as deemed necessary by said board. Said budgets shall be funded solely from the investment income account of each system and without any further appropriation from the municipality, county or other governmental unit the current or former employees of which are served by said board. Notwithstanding the foregoing, at least thirty days prior to the adoption of said budgets, the boards shall file said budgets with the appropriate legislative body of the governmental unit the current or former employees of which are served by said board. Said governmental unit at its option may, but shall not be required to, appropriate additional monies for use by the retirement board in carrying out the purposes of section five B.

(6) **Investment Income Account and Regular Interest** (a) All income in each system derived from the interest and dividends earned on the invested funds of the system during any calendar year shall be credited to an investment income account. Upon the payment or transfer of funds from any member's account during any year, the amount of any regular interest to be credited for such year to his account in the annuity savings fund of the system upon his withdrawal, death or retirement, and the amount of any regular interest to be credited for such year to his account, if any, in the special fund for military service credit upon his retirement, shall be transferred to such accounts from such investment income account. Any balance remaining in such investment income account at the close of business on December thirty-first of such year shall be transferred to the several funds of the system as follows:

(i) Amounts equal to the amounts of regular interest to be credited for such year to the accounts in the annuity savings fund and in the special fund for military service credit of all members for whom

accounts exist therein as of the end of such year, shall be transferred to such funds and credited to the accounts of such members;

(ii) An amount of interest computed at the annual rate set forth in the definition of actuarial equivalent appearing in section one shall be determined on the basis of the average of the balances outstanding in the annuity reserve fund on the first day of each month during such year and shall be transferred to such fund; and

(iii) Any balance remaining in the investment income account after the transfers heretofore provided for in this paragraph have been made, shall be transferred to the Pension Reserve Fund, and any amount by which such balance is insufficient to carry out the preceding provisions of this paragraph shall be charged to the pension fund and credited to the investment income account for the purpose of making up the deficit.

(iv) Prior to making the transfers provided for in clause (iii) the state employees' retirement system shall transfer from its investment income account to the General Fund an amount equal to the amount set forth in the state budget for the administration of said system and the state teachers' retirement system shall transfer from its investment income account to the General Fund an amount equal to the amount set forth in the state budget for the administration of said system.

(v) Prior to making the transfers provided for in clause (iii) the state employees' retirement system shall transfer to the General Fund an amount equal to the estimated amount, as certified to the secretary of administration and finance by the office of the treasurer, for those retirement-related costs incurred by the office of the treasurer on behalf of the state employees' retirement system; and the state teachers' retirement system shall transfer to the General Fund an amount equal to the estimated amount, as certified to the secretary of administration and finance by the office of the treasurer, for those retirement-related costs incurred by the office of the treasurer on behalf of the state teachers' retirement system.

(b) The phrase "regular interest" as used in sections one to twenty-eight, inclusive, shall mean the interest credited to any member's account in the Annuity Savings Fund of any system during the period of his membership therein or to his account in the special fund for military service credit during such period. As applied to such interest for any period prior to January first, nineteen hundred and forty-six, "regular interest" shall mean interest at the rate in effect and allowed in such system from time to time during such period. As applied to such interest on balances outstanding in any such accounts as of the commencement of business on January first, nineteen hundred and forty-six, or as applied to such interest credited on regular deductions made on or after such date in the nature of make-up payments, or otherwise, on account of service rendered by any member prior to such date, "regular interest" shall mean interest credited at the rate of three per cent per annum. As applied to such interest credited on all other regular deductions and on all additional deductions made on or after January first, nineteen hundred and forty-six, and on all amounts thereafter transferred from any member's account in the Annuity Savings Fund or from his account in the special fund for military service credit in any contributory retirement system established under the provisions of a special law to his account in the corresponding fund

of a system maintained under the provisions of sections one to twenty-eight, inclusive, "regular interest" for the calendar years nineteen hundred and forty-six and nineteen hundred and forty-seven shall mean interest credited at the rate of three per cent per annum. For any calendar year subsequent to nineteen hundred and forty-seven and prior to nineteen hundred and eighty-four, "regular interest" shall mean interest credited at the average earned rate which shall be determined by the actuary from the investment earnings of all systems maintained under the provisions of said sections and which shall be calculated on the basis of data contained in the annual statements of such latter systems filed in the office of the commissioner of insurance for the second calendar year preceding that for which such rate is to be applied. Such average earned rate shall be taken to the nearest tenth of one per cent and shall be obtained from the ratio which the total income derived from the interest and dividends earned on the invested funds of all such systems during the calendar year covered by such annual statements bears to the mean of the total ledger assets of all such systems at the beginning and end of such year. For any calendar year beginning subsequent to December thirty-first, nineteen hundred and eighty-three, "regular interest" shall mean interest credited at a rate established by the commission, in consultation with the commissioner of banks. The rate established by the commission shall be taken to the nearest tenth of one per cent and shall be obtained from the average rates paid on individual savings accounts by a representative sample of financial institutions; provided, that said commission shall sample no less than ten such financial institutions.

(c) Regular interest credited on or after January first, nineteen hundred and forty-six, shall be compounded annually on December thirty-first of each year, and subject to the provisions of paragraph (d) of this subdivision shall be allowed upon the balance outstanding in each member's account as of the immediately preceding December thirty-first. No interest shall be allowed on regular deductions or on additional deductions for the year in which they are made; except, that in the case of any make-up payment of regular deductions paid in full in one sum for deposit in any member's account in the annuity savings fund of any system, or in the case of any amount transferred from his account in the annuity savings fund or in the special fund for military service credit of one system for deposit in his account in the corresponding fund of another system, regular interest shall be allowed upon such sum or amount from the date of deposit if such date is the first day of a month, otherwise regular interest shall be allowed from the first day of the month immediately following such date of deposit. Upon the payment or transfer during any year of funds from any member's account in the annuity savings fund of any system, or upon the transfer during any year of funds from his account in the special fund for military service credit, regular interest shall, subject to the provisions of paragraph (d) of this subdivision, be allowed upon the balance outstanding in his account as of the immediately preceding December thirty-first, and also upon any deposit made for him during any year under the provisions set forth in the exception appearing in the preceding sentence of this paragraph, for the number of completed months which have elapsed between such December thirty-first or the date of such deposit, as the case may be, and the date of the payment or transfer of the funds from his account.

(d) Anything in this subdivision to the contrary notwithstanding, regular interest in the case of any member inactive whose service was terminated prior to January first, nineteen hundred and forty-six, shall be allowed upon any balance outstanding in his account on such date only in accordance with and to the extent permitted under the provisions of the law applicable to him and in effect on the date of his termination of service. In the case of any member whose service is terminated on or after January first, nineteen hundred and forty-six, regular interest shall continue to accrue on any balance in his account, but no regular interest shall be included in the amount of any accumulated total deductions which are to be paid to the member under the provisions of subdivision (1) of section eleven for any period after the expiration of two years from the end of the month immediately preceding the date of his termination of service. Upon the payment to the member of the amount of his accumulated total deductions, any regular interest already credited to his account which is not to be included in such amount under the provisions of this paragraph, shall thereupon be transferred from his account in the annuity savings fund of the system to the pension fund thereof.

(6A) Pension Reserve Fund (a) The Pension Reserve Fund of each system shall be credited all amounts set aside by a system for the purpose of establishing a reserve to meet future pension liabilities, including such amounts as may be set aside pursuant to a funding schedule established in accordance with section twenty-two C or twenty-two D. Such amounts shall include without limitation the annual balance in the investment income account as provided for in clause (iii) of paragraph (a) of subdivision (6) the undistributed accumulated total deductions as provided for in section eleven and all monies recovered for the cost of fringe benefits from federal grants. From time to time, a system may credit to the Pension Reserve Fund other amounts appropriated to it or otherwise made available by the governmental unit. The Pension Reserve Fund for the state employees' and teachers' retirement systems shall be the Commonwealth's Pension Liability Fund.

(b) Amounts may be transferred to the Pension Fund for the purpose of meeting present pension liabilities in accordance with a schedule developed by the board of each system and approved by the actuary to amortize unfunded pension liabilities. Such schedule of payments shall be designed to maintain a funding schedule which pays the normal cost of benefits for the system and amortizes any unfunded actuarial liability either as a fixed ratio of payroll or in accordance with the funding schedules provided for in section twenty-two C or twenty-two D, as applicable; provided, however, that any such amounts transferred from the Pension Reserve Funds of the state employees' and state teachers' systems shall be detailed by the commissioner of administration in a written report submitted in advance to the house and senate committees on ways and means. Such schedule shall be adjusted in accordance with any state contributions provided from the PRIT Fund to meet the unfunded pension liability of the system.

(7) Appropriations In order to effectuate the provisions of sections one to twenty-eight, inclusive, and to provide for each system the amounts required for the Commonwealth's Pension Liability Fund, the Pension Fund, the special fund for military service credit and the expense fund described in subdivisions (3), (4), (5), and (8), respectively, of this section, the following provisions are hereby made:

(a) Expense Funds of the State Employees' Retirement System and the Teachers' Retirement System - The state board of retirement and the teachers' retirement board shall each adopt annual budgets and supplemental budgets as deemed necessary by the boards. Said budgets shall include all salaries for personnel employed by the state board of retirement and the teachers' retirement board and said budgets shall be funded from the investment income of each system without further appropriation. Said budgets shall not exceed 103 per cent of the prior year operating expenditures; provided, however, that for fiscal year 1998 said budgets shall not exceed 134 per cent of the fiscal year 1997 operating expenditures. In the event that said boards determine that said 103 per cent is not sufficient to fund said operations, said boards shall submit spending plans detailing all expenditures to the house and senate committees on ways and means for review 45 days prior to adopting a budget in excess of 103 per cent of the prior year expenditure. At least thirty days prior to the adoption of said budgets the boards shall file said budgets with the house and senate committees on ways and means and the joint committee on public service.

(b) Pension funds of the state employees' retirement system and the teachers' retirement system. The state board of retirement and the teachers' retirement board, on or before October fifteenth in each year, shall furnish the actuary with such information as he may require to enable him to determine the amount to be distributed from the Commonwealth's Pension Liability Fund to the pension funds of said systems, for the fiscal year commencing on the next following July first. The actuary shall, on or before December fifteenth immediately preceding such fiscal year, determine such amount and specify in a written notice to said boards the amounts so required. Upon the receipt of such notice, said board shall certify forthwith to the PRIM board the amounts necessary to be distributed and paid for such fiscal year for the Pension Fund and the special fund for military service credit of the respective system. The amounts necessary to be appropriated and paid for such fiscal year by the commonwealth for said Commonwealth's Pension Liability Fund shall be determined in accordance with the funding schedule adopted by the commissioner of administration pursuant to section twenty-two C, and items of appropriation for such amounts shall be included in the appropriations for such fiscal year for the PRIM board or such department as the commissioner of administration shall determine to be allocated to the Commonwealth's Pension Liability Fund.

Clause (i) of paragraph (c) of subdivision (7) as amended by 1991, 138, Sec. 366 and 1996, 450, Sec. 88. Governor's purported disapproval of 1991, 138, Sec. 366 was invalid. See Opinion of the Justices, 411 Mass. 1201 (1991)

(c) Systems for Counties, Cities and Towns (i) The retirement board of each county, city or town contributory retirement system maintained under the provisions of sections one to twenty-eight inclusive, shall, on or before October fifteenth in each year, furnish the actuary with such information as he may require to enable him to determine the amount to be paid for the pension fund thereof for the fiscal year commencing on the next following July first. The actuary shall, on or before the December fifteenth immediately preceding such fiscal year, determine such amount and specify in a written notice to said board the amount so required to be paid; provided, however,

that any community which has a valid and current actuarial report shall only appropriate the amount specified in their actuarial report and the actuary shall not require a larger amount to be appropriated. The amounts to be paid for the three aforesaid funds of any such system for any such fiscal year, shall be allocated to each governmental unit the employees of which are members of any such system, in the proportion that the aggregate of the annual rates of regular compensation of all members in service of such system who are employees of any such government unit at the close of business on the September thirtieth immediately preceding such fiscal year, bears to the total of such aggregates for all members in service of such system on such date.

(ii) The board of each such county contributory retirement system shall, on or before the January first next following the receipt of such notice from the actuary, certify to the county commissioners of any such county the amounts necessary to be paid for such fiscal year for the three aforesaid funds of any such system by each governmental unit the employees of which are members thereof. Items of appropriation providing for any such amounts allocated to such county shall be included in the appropriations for such fiscal year for such county for the several funds of such system. Any such amounts allocated to any hospital district the employees of which are members of such system, shall be assessed by such county commissioners in the following May, with the assessments for maintenance of such hospital district made in accordance with section eighty-five of chapter one hundred and eleven, and shall be collected in the same manner as therein provided and paid to the treasurer-custodian of such system to be credited to the several funds thereof. Such county commissioners shall, upon the receipt of such certification from such county retirement board, certify forthwith to the board of selectmen of each town and to the treasurer or other disbursing officer of each district the employees of which in either case are members of such system, the amounts which have been allocated to such town or district and the amounts so certified shall be appropriated and paid thereby to the treasurer-custodian of such system to be credited to the several funds thereof. Payments by towns and districts hereunder shall be made one half on the first day of July next following and the remainder on the first day of the following January.

(iii) The board of each such city or town contributory retirement system shall, on or before the January first next following the receipt of such notice from the actuary, certify to the mayor in a city or to the board of selectmen in a town, as the case may be, and to the treasurer or other disbursing officer of each district the employees of which are members of any such system, the amounts necessary to be paid for such fiscal year for the three aforesaid funds of such system which have been allocated to such city, town or district, and the amounts so certified shall be appropriated and paid thereby to the treasurer-custodian of such system to be credited to the several funds thereof. Such amounts as the actuary deems necessary to cover the requirements of any such system for the period prior to the date when the first regular annual appropriation is due from any governmental unit the employees of which become eligible for membership in such system, shall be paid into the several funds thereof by special appropriations of such governmental unit.

(iv) If any governmental unit fails to include any amounts so certified in its appropriations for such fiscal year, the assessors or other taxing authorities shall nevertheless include such amounts in the next tax levy. All amounts so certified shall be a legal obligation of any such governmental unit and may be recovered in an action of contract by the retirement board of any such contributory retirement system.

(d) Such amounts as are necessary to cover the requirements or meet any deficiencies of any fund of any system prior to the date when an appropriation or assessment is available, shall be paid from any available funds in the treasury of the governmental unit obligated by law to support such system and charged against the next regular appropriation or assessment, as the case may be.

(e) Massachusetts Turnpike Authority Employees' Retirement System The retirement board of the Massachusetts Turnpike Authority employees' retirement system shall, on or before October fifteenth in each year, furnish the actuary with such information as he may require to enable him to determine the amount to be paid for the pension fund of such system by the authority for the fiscal year commencing on the next following January first. The actuary shall, on or before the December fifteenth immediately preceding such fiscal year, determine such amount and specify in a written notice to said board the amount so required to be paid. The board shall, at least ten days before the January first next following the receipt of such notice from the actuary, certify to the authority the amounts necessary to be paid for such fiscal year for the three aforesaid funds of such system and the amounts so certified shall be included by appropriate items in the authority's budgets for such fiscal year and shall be paid by the authority to the treasurer-custodian of such system to be credited to the several funds thereof. Such amounts as the actuary deems necessary to cover the requirements of the retirement system for the period prior to the date when the first regular annual payment is due from the authority shall be paid into the several funds thereof by special payments of the authority.

(f) Massachusetts Bay Transportation Authority Police Retirement System The retirement board of the Massachusetts Bay Transportation Authority police retirement system shall on or before October fifteenth in each year, furnish the actuary with such information as he may require to enable him to determine the amount to be paid for the pension fund of such system by the authority for the fiscal year commencing on the next following January first. The actuary shall, on or before the December fifteenth immediately preceding such fiscal year, determine such amount and specify in a written notice to said board the amount so required to be paid. The board shall, at least ten days before the January first next following the receipt of such notice from the actuary, certify to the authority the amounts necessary to be paid for such fiscal year for the three aforesaid funds of such system and the amounts so certified shall be included by appropriate terms in the authority's budget for such fiscal year and shall be paid by the authority to the treasurer-custodian of such system to be credited to the several funds thereof. Such amounts as the actuary deems necessary to cover the requirements of the retirement system for the period prior to the date when the first regular annual payment is due from the authority shall be paid into the several funds thereof by special payments of the authority.

(g) Massachusetts Housing Finance Agency Employees' Retirement System The retirement board of the Massachusetts Housing Finance Agency employees' retirement system shall, on or before October fifteenth in each year, furnish the actuary with such information as he may require to enable him to determine the amount to be paid for the pension fund of such system by the agency for the fiscal year commencing on the next following January first. The actuary shall, on or before the December fifteenth immediately preceding such fiscal year, determine such amount and specify in a written notice to said board the amount so required to be paid. The board shall, at least ten days before the January first next following the receipt of such notice from the actuary, certify to the agency the amounts necessary to be paid for such fiscal year for the three aforesaid funds of such system and the amounts so certified shall be included by appropriate items in the agency's budgets for such fiscal year and shall be paid by the agency to the treasurer-custodian of such system to be credited to the several funds thereof. Such amounts as the actuary deems necessary to cover the requirements of the retirement system for the period prior to the date when the first regular annual payment is due from the agency shall be paid into the several funds thereof by special payments of the agency.

(h) The retirement board of the Massachusetts Port Authority employees' retirement system shall, on or before October fifteenth in each year, furnish the actuary with such information as he may require to enable him to determine the amount to be paid for the pension fund of said system by the Authority for the fiscal year commencing on the next following July first. The actuary shall, on or before the December fifteenth immediately preceding such fiscal year, determine such amount and specify in a written notice to said board the amount so required to be paid. The board shall, at least ten days before the January first next following the receipt of such notice from the actuary, certify to the Authority the amount necessary to be paid for such fiscal year for the three aforesaid funds of said system and the amount so certified shall be included by appropriate items in the Authority's budgets for such fiscal year and shall be paid by the Authority to the treasurer-custodian of said system in twelve equal monthly installments to be credited to the several funds thereof. Such amounts as the actuary deems necessary to cover the requirements of the retirement system for the fiscal year prior to the beginning of the next fiscal year after this section shall become effective shall be paid into the several funds thereof in equal monthly installments by special payments of the Authority.

(i) The retirement board of the Greater Lawrence Sanitary District employees' retirement system shall, on or before October fifteenth in each year, furnish the actuary with such information as he may require to enable him to determine the amount to be paid for the pension fund of said system by the Greater Lawrence Sanitary District for the fiscal year commencing on the next following January first. The actuary shall, on or before the December fifteenth immediately preceding such fiscal year, determine such amount and specify in a written notice to said board the amount so required to be paid. The board shall, at least ten days before the January first next following the receipt of such notice from the actuary, certify to the district the amount necessary to be paid for such fiscal year for the three aforesaid funds of said system and the amount so certified shall be included by appropriate items in the district budgets for such fiscal year and shall be paid by the

district to the treasurer-custodian of said system in twelve equal monthly installments to be credited to the several funds thereof. Such amounts as the actuary deems necessary to cover the requirements of the retirement system for the fiscal year prior to the beginning of the next fiscal year after this section shall become effective shall be paid into the several funds thereof in equal monthly installments by special payments of the Authority.

(j) The Blue Hills Regional Vocational School employees' retirement system. The retirement board of the Blue Hills Regional Vocational School employees' retirement system shall, on or before October fifteenth in each year, furnish the actuary with such information as he may require to enable him to determine the amount to be paid for the pension fund of such system by the Authority for the fiscal year commencing on the next following July first. The actuary shall, on or before the December fifteenth immediately preceding such fiscal year, determine such amount and specify in a written notice to said board the amount so required to be paid. The Board shall, at least ten days before the January first next following the receipt of such notice from the actuary, certify to the Authority the amount necessary to be paid for such fiscal year for the three aforesaid funds of such System and the amount so specified shall be included by appropriate items in the Authority's budgets for such fiscal year and shall be paid by the school system to the treasurer-custodian of such system in twelve equal monthly installments to be credited to the several funds thereof. Such amounts as the actuary deems necessary to cover the requirements of the retirement system for the fiscal year prior to the beginning of the next fiscal year after this section shall become effective shall be paid into the several funds thereof in equal monthly installments by special payments of the school system.

(k) The retirement board of the Minuteman Regional Vocational Technical School District employees' retirement system shall, on or before October fifteenth in each year, furnish the actuary with such information as he may require to enable him to determine the amount to be paid for the pension fund of said system by the school district for the fiscal year commencing on the next following July first. The actuary shall, on or before the December fifteenth immediately preceding such fiscal year, determine such amount and specify in a written notice to said board the amount so required to be paid. The board shall, at least ten days before the January first next following the receipt of such notice from the actuary, certify to the school district the amount necessary to be paid for such fiscal year for the three aforesaid funds of said system and the amount so certified shall be included by appropriate items in the school district's budgets for such fiscal year and shall be paid by the school district to the treasurer-custodian of said system in twelve equal monthly installments to be credited to the several funds thereof. Such amounts as the actuary deems necessary to cover the requirements of the retirement system for the fiscal year prior to the beginning of the next fiscal year after this section shall become effective shall be paid into the several funds thereof in equal monthly installments by special payments of the school district.

(8) PRIT Fund (a) There shall be a Pension Reserves Investment Trust Fund administered by the PRIM board established in section twenty-three for the purpose of depositing, investing and

disbursing amounts set aside to meet further liabilities of the various systems. The assets of the state employees' and teachers' retirement systems shall be held in the PRIT Fund.

(b) All amounts which the state may appropriate each year subsequent to January first, nineteen hundred and eighty-four pursuant to section twenty-two B to meet unfunded pension liabilities shall be deposited in the PRIT Fund and credited to the account of the state employees' retirement system, the teachers' retirement system and other participating systems as follows: the amount determined for each system shall be proportionate to the amount of assets of each system participating in the PRIT Fund as of July first for each fiscal year beginning on such date; provided, however, that for the purposes of this paragraph the amount of the combined assets of the state employees' and teachers' retirement systems shall be deemed not to exceed eighty percent of the total amount of the assets in the PRIT Fund as of June thirtieth, nineteen hundred and eighty-seven; and provided further, that a system electing to participate in the PRIT Fund after January first, nineteen hundred and eighty-eight shall receive the greater of either the system's share of the state appropriation pursuant to section twenty-two B or the amount the system would receive in an annual pension funding grant pursuant to section twenty-two D. Systems which elected to participate in the PRIT Fund on or before January first, nineteen hundred and eighty-eight and which are eligible to receive an annual pension funding grant from the commonwealth pursuant to section twenty-two D shall receive an amount equal to such system's share of the state appropriation pursuant to section twenty-two B in addition to the amount such system would receive in an annual pension funding grant pursuant to section twenty-two D. The amounts so determined for each participating system and an amount equal to the regular interest on assets in the PRIT Fund shall be credited to the several retirement systems.

(c) Upon notification by the chief executive officer and legislative body of a governmental unit of a decision to participate, systems shall transfer ownership and control of all the assets of the system to the PRIM board. The PRIM board shall hold such assets in trust for the participating systems. The PRIM board shall credit assets and earnings on such assets to the individual systems. The PRIM board shall calculate regular interest as defined in subdivision (6) to allocate earnings among the various funds of each system. The board of each system shall continue to administer the system in accordance with sections one to twenty-eight, inclusive, including the maintenance of accounts in accordance with the funds provided for in this section. The PRIM board shall transfer monies to the various funds of the participating systems to allow them to carry out their duties under this chapter. The board of each participating system shall notify the PRIM board of the amounts needed for the various funds for the next fiscal year no later than ninety days before the start of the next fiscal year. The PRIM board shall develop a schedule of transfers to be made to said systems during the next fiscal year and notify the systems of that schedule no later than thirty days prior to the start of the next fiscal year. The PRIM board shall transfer such amounts in accordance with said schedule during the course of said fiscal year. From time to time such boards may make supplemental requests of the PRIM board if the initial request is found to be insufficient. Within thirty days of such request, the PRIM board shall approve or deny such request. Any denial of such a request must be accompanied by a written statement of the reasons therefore.

The procedure for determining participation shall occur as follows: on or before January first of each year, the PRIM board shall notify each system in writing of their option to participate in the PRIT Fund. A financial report and a description of the rights and duties of the PRIM board shall accompany such notice if a system elects to participate. The decision to participate shall be made by the board of each system, subject to the approval of the legislative body and the chief executive officer of each governmental unit. The decision of the board shall be deemed to have been approved unless the legislative body and the chief executive officer act to disapprove such decision by July first of the year in which the decision of such board is made. The board of each system shall notify the PRIM board and the appropriate legislative body and chief executive officer by May first of each year of its decision.

For any system which is receiving an annual pension funding grant from the commonwealth pursuant to the provisions of section twenty-two D in which the annualized time-weighted-rate of return is less than the assumption for investment rate of return approved by the actuary in the most recent actuarial valuation for the system, over any five year cycle, and said time-weighted-rate of return is less than the annualized time-weighted-rate of return for the pension reserve investment trust fund, over any five year cycle, the commission shall notify the PRIM board and the appropriate legislative body, chief executive officer, and the board of said system shall be deemed to have voted to participate.

After the decision of a board of a system to participate has been approved, the decision to participate may not be revoked for five years. Such revocation shall become effective six months after the PRIM board receives notification of such decision by such board. For purposes of this section, "legislative body" shall mean a town meeting in a town, the city council in a city, the county advisory board in a county, the district members in a district, and the members of an authority in an authority. For purposes of this section, "chief executive officer" shall mean the board of selectmen in a town, the mayor in a city, except in a city with plan D or plan E form of government it shall mean the city manager, municipality with a council form of government, the town manager and the county commissioners in a county. In a district or in an authority, "chief executive officer" shall mean the members of such district or authority. A system may purchase offerings of the PRIT Fund in accordance with paragraph (b) of subdivision (2) of section twenty-three without becoming a participating system for purposes of this section.

(d) The amounts in the PRIT Fund shall be invested and managed in accordance with the authority of the PRIM board as created in section twenty-three. Amounts in the PRIT Fund shall be transferred back to each system for withdrawal or payment to members as otherwise provided by sections one to twenty-eight, inclusive.

All other amounts shall be distributed to each system during such calendar years as the actuary shall determine pursuant to subdivision (6A). Such distributions shall be transferred to the pension fund of each system for such year. On March first, nineteen hundred and eighty-four and each subsequent calendar year, the public employee retirement administration commission shall publish a report of the projected schedule of distribution of amounts from the PRIT Fund, as developed by

the actuary, and file such report with each system, with the commissioner of administration, and with the house and senate committees on ways and means.

(e) There shall be a Commonwealth's Pension Liability Fund which shall be within the PRIT Fund and to which shall be credited all assets of the state employees' and teachers' retirement systems, other than assets credited to the systems' Annuity Savings Funds, Annuity Reserve Funds, and expense funds. Except for transfers to and from the Annuity Savings Funds, Annuity Reserve Funds and expense funds of such systems in accordance with the provisions of sections one to twenty-eight, inclusive, all transfers of funds to or from such systems shall be made to or from the Commonwealth's Pension Liability Fund as provided herein. All amounts required by the pension funds, and special funds for military service credit of such systems shall be provided by distribution of such amounts from the Commonwealth's Pension Liability Fund; provided, however, that any such distribution shall be detailed in a written report by the commissioner of administration and filed in advance with the house and senate committees on ways and means. Except as otherwise provided in this subdivision, and subject to the provisions of the operating trust agreement adopted by the PRIM board pursuant to subdivision (2A) of section twenty-three, any such distribution shall be made pursuant to the provisions of sections one to twenty-eight, inclusive.

Amounts in the Commonwealth's Pension Liability Fund shall include, but not be limited to, the following:

- (i) all amounts appropriated by the commonwealth to meet its pension liabilities, including amounts appropriated pursuant to clause (a) of the third paragraph of section twenty-one of chapter one hundred and thirty-eight, the state share of amounts appropriated pursuant to section twenty-two B and amounts appropriated pursuant to section twenty-two C; provided, however, that the state treasurer may act as agent of the PRIM board to disburse benefit payments pursuant to any such appropriation;
- (ii) all monies recovered for the cost of pension fringe benefits from federal grant funds pursuant to section six B of chapter twenty-nine;
- (iii) all monies recovered from federal grant funds pursuant to section five D of chapter forty for the cost of teachers' pension benefits;
- (iv) all monies transferred from the Annuity Reserve Funds of the state employees' and teachers' retirement systems pursuant to paragraph (d) of subdivision (2) or from the investment accounts of such systems pursuant to clause (iii) of paragraph (a) of subdivision (6);
- (v) all undistributed accumulated total deductions for the state employees' and teachers' retirement systems transferred pursuant to subdivision (3) of section eleven; and
- (vi) all assets of the state employees' and teachers' retirement systems except assets credited to such systems' expense funds, Annuity Savings Funds and Annuity Reserve Funds.

(9) In order to offset the anticipated costs for funding a county contributory retirement system, any governmental unit participating in the system may appropriate in any year an amount not exceeding five per cent of the amount raised in the preceding year by assessment under clause (i) of paragraph (c) of subdivision (7). Any interest shall be added to and become part of such special fund.

Such special fund shall be separate and distinct from any pension financing requirements of this chapter and all sums in such special fund shall be appropriated and used only for the purpose of offsetting the anticipated future cost of funding the contributory retirement system.

The treasurer of the governmental unit making the appropriation shall be the custodian of all funds deposited pursuant to this subdivision. Such funds may be invested in the same manner as retirement system funds pursuant to subdivision (2) of section twenty-three.

Such funds may be utilized in accordance with the provisions of subdivision (6A), or, subject to the approval of the actuary, in accordance with the provisions of paragraph (c) of subdivision (7), or subdivision (3) of section twenty-two D.

(10) Each governmental unit to which a system pertains and any free public library the employees of which are eligible for membership in a system, pursuant to the provisions of section four hundred and fourteen (h) (2) of the United States Internal Revenue Code, shall assume and pay the contributions which would be payable by the employees as members under paragraph (b) of subdivision (1). Such contributions, although designated as employee contributions, will be paid by the applicable governmental unit or free public library employing the employee in lieu of contributions by the employee. No employee will have the option of choosing to receive such contributed amounts directly instead of having them paid by the employing governmental unit or free public library to the applicable system. The contributions so assumed shall be treated as employer contributions in determining tax treatment under the United States Internal Revenue Code. The contributions so assumed shall be treated and identified, without limitation, as member contributions for all purposes of the retirement system, except as specifically provided to the contrary in this subdivision, and for all purposes of chapter sixty-two.

Employee contributions assumed pursuant to this subdivision shall be paid from the same source of funds used for the payment of compensation to an employee. A deduction shall be made from an employee's compensation equal to the amounts of the employee's contributions assumed by the employer. This deduction, however, shall not reduce the employee's compensation for purposes of computing benefits under the retirement system pursuant to this chapter or for purposes of determining any other employee benefits. Assumed contributions shall be transferred to the retirement system of which the employee is a member in accordance with the provisions of paragraph (h) of subdivision (1) and shall be credited to a separate fund within the employee's account in the Annuity Savings Fund of such system in order that the amounts contributed prior to the effective date for the assumption of employee contributions may be distinguished from the amounts contributed on or after the date on which the governmental employer is required by law to assume the employee's contributions.