

Annual Statement of the Financial Condition of the Massachusetts Teachers' Retirement System

To the Public Employee Retirement Administration Commission for the year ended June 30, 2023



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To the Public Employee Retirement Administration Commission for the fiscal year ended June 30, 2023

DATE OF FILING: DECEMBER 31, 2023

THE MASSACHUSETTS TEACHERS' RETIREMENT BOARD

Dr. Ventura Rodriguez

Chair

Designee of the Commissioner of Elementary and Secondary Education

Deborah B. Goldberg

State Treasurer

Chair, Pension Reserves Investment Management (PRIM) Board

Diana DiZoglio

State Auditor

Jacqueline A. Gorrie

Elected by the membership Retired Massachusetts educator

Dennis J. Naughton

Elected by the membership MTRS appointed representative to the PRIM Board Retired Massachusetts educator

Anne Wass

Appointed by the Governor Retired Massachusetts educator

Richard L. Liston

Appointed by the Board Retired Massachusetts educator

Main Office

500 Rutherford Ave., Suite 210 Charlestown, MA 02129-1628 Phone 617-679-MTRS (6877) Fax 617-679-1661

Western Regional Office

One Monarch Place, Suite 510 Springfield, MA 01144-4028 Phone 413-784-1711 Fax 413-784-1707

Online

mass.gov/mtrs



MTRS Annual Statement

For the fiscal year ended June 30, 2023

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December 2023

To MTRS active and retired members:

I hope you and your loved ones are well. On behalf of the MTRS Board and staff, I thank you for your service to the children of the Commonwealth and applaud your resilience throughout these challenging times.

We are pleased to submit the Annual Financial Statement of the Massachusetts Teachers' Retirement System (MTRS, System) for the fiscal year ended June 30, 2023. Responsibility for both the accuracy of the financial statements contained herein and the completeness and fairness of the presentation rests with the management of the MTRS. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in accordance with the financial reporting guidelines of the Public Employee Retirement Administration Commission (PERAC).

System Overview

The Massachusetts Teachers' Retirement System is a contributory defined benefit plan established on July 1, 1914 pursuant to M.G.L. c. 15, § 16, and governed by M.G.L. c. 32. The largest of the Commonwealth's 104 public retirement systems, the MTRS maintains accounts and provides retirement, disability and survivor benefits to over 102,000 active, 35,000 inactive and 71,000 retired educators of the public schools, educational collaboratives and charter schools of the Commonwealth. The MTRS is governed by a seven-member Board, as follows:

- Commissioner of Elementary and Secondary Education, or his designee, who serves as Chair
- State Treasurer, or her designee
- State Auditor, or her designee
- Two members elected by the active and retired members of the System.²
- A retired teacher appointed by the Governor
- A seventh member chosen by the other six Board members

The Board appoints the Executive Director who, together with a staff of 98 full-time and 17 part-time professionals in the main and western regional offices, administers the System.

Benefit Payments

The primary purpose of the MTRS is to provide secure retirement and survivor benefits to Massachusetts public teachers and administrators, and their beneficiaries. Benefit payments to our 71,282 retirees and survivors totaled \$3.43 billion during the reporting period, an increase of 3.47% over the fiscal year ended June 30, 2022.

Investments

The assets of the MTRS are held in the Pension Reserves Investment Trust (PRIT) fund, established by Chapter 661 of the Acts of 1983, and managed by the Pension Reserves Investment Management (PRIM) Board. The nine-member PRIM Board, which includes one of the elected members of the MTRS Board and another teacher representative elected by the full MTRS membership, acts as trustee for the MTRS and other participating retirement systems. Its purpose is to assist the Commonwealth in reducing its unfunded pension liability by maximizing the return on investments within acceptable levels of risk through broad diversification, economies of scale, cost-effective operations, and access to high quality, innovative investments.

The PRIT fund gained 6% (5.6% net of fees) for the fiscal year ending June 30, 2023. The 3-year, 5-year and 10-year returns were 10.2%, 7.8% and 8.5% respectively, and above the 7% actuarial assumed rate of return. At the close of FY 2023, the MTRS asset balance in the PRIT Fund was \$36.792 billion.

Funding

MTRS benefits are funded from three sources: member contributions, employer contributions paid by the Commonwealth, and the investment earnings on the assets of the System. Member contributions are established pursuant to M.G.L. c. 32, § 22. Effective July 1, 2001, all new MTRS members contribute at the rate of 11% of eligible payroll. The average of all MTRS member contributions is 10.3% of total payroll. Pursuant to M.G.L. c. 32, § 22C, in addition to paying the net normal cost³ of benefits, the Commonwealth is required to make annual payments in accordance with a funding schedule, established triennially, which is designed to reduce the unfunded actuarial liability (UAL) to zero no later than June 30, 2040.

In FY2023, the Commonwealth appropriated \$3.74 billion for its pension obligations pursuant to the funding schedule, of which \$2.07 billion was allocated to the MTRS. In addition to the \$2.07 billion payment pursuant to the funding schedule, the MTRS assets in the PRIT fund were increased by \$24.6 million from excess capital gain revenues in accordance with M.G.L c. 29, §5G and \$59 million as a transfer from the General Fund revenue surplus in accordance with Chapter 126 of the Acts of 2022. FY 2023 was the third and final year of the triennial funding schedule established by the Commonwealth in January 2020. In that schedule, the Commonwealth committed to increase the pension appropriation by 9.63% per year for fiscal years 2021—2023.

¹ MTRS membership does not include the teachers and administrators of the Boston Public Schools, who are members of the City of Boston Retirement System.

² One of two elected MTRS Board members also serves on the Pension Reserves Investment Management Board.

³ The "normal cost" is the amount that must be contributed to fund the benefits earned by all members of the system in the current year. The "net normal cost" is the employer's share of the normal cost, funded by the Commonwealth.

That schedule was designed to reduce the Commonwealth's unfunded liability to zero by 2036, four years ahead of the statutory deadline in 2040.

In January 2023, the Governor and Legislature established a new triennial funding schedule that continues the 9.63% annual increases through FY2028, reduces the increase to 5.13% in FY2029, and then to 4.0% per year through FY2036. Regarding the 9.63% increases in the first five years of the schedule, the State Actuary has noted, "since the level of annual increase exceeds 6.0%, there is some risk in whether such a level of annual increase is sustainable." The MTRS Board continues to advocate for the responsible funding of System liabilities to ensure the long-term security and sustainability of member benefits. Although we are concerned about the Commonwealth's ability to pay the 9.63% increases, which will reach \$5.93 billion in year five, we were pleased to see the adoption of the more actuarially reasonable schedule of 4% annual increases in the outer years of the schedule.

Major Initiatives

Over the course of the fiscal year ending June 30, 2023, the MTRS completed several strategic operational and service objectives, as follows:

Member Services

During the FY2023 reporting period, we processed 2,500 new retirement benefits and met our service goal to provide benefit payments to members who file timely applications in their first full month of retirement. We held virtual benefits seminars attended by over 2,000 MTRS members and our staff presented at a number of webinars and in-person conferences hosted by our constituent organizations. In addition, members continued to use the myriad MTRS videos, calculators and other online resources to assist with their retirement planning.

In FY2023, MTRS staff responded to 9,225 emails and 49,137 telephone calls/voicemails from both active and retired members. This represents a nearly 40% increase over the prior year in telephone calls, which was mainly attributable to calls from members inquiring about the special RetirementPlus election pursuant to Chapter 134 of the Acts of 2022.

One of our key retiree initiatives is the biennial mailing of benefit verification forms (BVF), which were sent to 71,639 retirees and survivor benefit recipients in January 2023 with the 1099-R tax forms. In July 2023, after three BVF mailings, we began withholding payments to the recipients who did not return their form. At this time, less than one-tenth of one percent of the forms are outstanding and staff continue outreach efforts to locate and reinstate benefits for the remaining retirees.

Implementation of Chapter 134 of the Acts of 2022

After several years of working in concert with the Massachusetts Teachers' Association and American Federation of Teachers – MA to pass legislation to resolve the longstanding confusion about RetirementPlus (R+) participation among members who transfer into the MTRS from other Massachusetts public retirement systems, we were thrilled to see Chapter 134 of the Acts of 2022 become law in July 2022. This law:

- Eliminated the R+ election for future new teachers who transfer into the MTRS and whose membership service in their local retirement system began on or after July 1, 2022, treating these teachers like all other new teachers;
- Changed the R+ election to an elect-out instead of the current elect-in for those teachers who transfer into the MTRS and whose membership in the local retirement system began before July 1, 2022. This protects the best interests of those members as they will default into the program, and thus, they will receive the enhanced R+ benefit, or if they do not work long enough to benefit from the enhanced formula, they will receive a refund of the difference between 11% and their prior contribution rate; and
- Provided a special, one-time, 180-day special R+ election window from January to June of 2023 for members who transferred into the MTRS between July 1, 2001 and July 1,2022, and who failed to respond to their previous R+ election materials.

In the fall of 2022, the MTRS began a comprehensive member and employer education campaign to ensure that all the 7,920 members who were eligible for the special R+ election, and their employers, were aware of the election window. We mailed letters announcing the special election to all eligible members and sent multiple emails to both the members and their employers leading up to the election window.

During the election window, we mailed paper election forms to every eligible member in January and April, and emailed election forms to members who had not yet responded in June. We held three educational webinars for the members eligible for the election and two webinars for their employers. In addition, we posted a special R+ election resource page on our website that provide both video and written materials to help members determine their costs and benefits of participation in R+. Our dedicated staff fielded thousands of calls, right up until midnight on the June 30^{th} deadline.

Of the 7,920 eligible members, 5,264 (66.4%) submitted elections with 4,005 choosing to participate in R+ and 1,259 opting out.

Cyber Security

The protection of our members' personally identifiable information (PII) is of utmost importance to the MTRS. In FY2023, we continued to enhance our cyber security infrastructure and tools, and conducted regular staff training sessions and

⁴ See Commonwealth Actuarial Valuation Report, January 1, 2023, p. 10.

phishing simulations to promote cyber threat detection and prevention. We also continue to perform regular audits to validate user access to our network, line of business application, and employer self-service application. In addition, we conduct regular network vulnerability assessments and penetration tests. Finally, we procured a cyber insurance policy to provide necessary response coverage in the event of a cyber-attack.

Legislation

Pursuant to the provisions of Section 33 of Chapter 30 of the General Laws, the Massachusetts Teachers' Retirement Board filed the following recommendations for consideration during the 2023-2024 legislative session.

Creditable Service Study

The purpose of this study would be to evaluate and study the costs and benefits attributable to all service purchases allowed under Chapter 32, to review the associated actuarial liabilities, to recommend appropriate cost-sharing between employee and employer, to explore whether the types of allowable service purchases can be expanded, and recommend any other changes deemed necessary to improve the long-term sustainability of the MTRS and other Massachusetts contributory retirement systems.

Pension Forfeiture

This legislation would make substantive and technical changes to the retirement statutes regarding the forfeiture of a Massachusetts public employee retirement benefit. The legislation would: re-define the phrase "criminal offense involving violation of the laws applicable to his office or position" in the case of a member whose primary job responsibilities involve contact with children or any member of the Massachusetts Teachers' Retirement System or a teacher who is a member of the Boston Retirement System to include possession of child pornography under G.L. c. 272, § 29C, as well as other sex offenses involving children; restrict forfeitures to felony convictions; allow for an "innocent beneficiary" named as an Option C beneficiary to collect the Option C survivor benefit notwithstanding the member's forfeited benefit; continue to allow total forfeiture, but also allow retirement boards the option of a tiered reduction in pension benefits depending on the severity of the crime; and other technical changes.

Non-public School Service Purchases

This legislation would clarify ambiguities in the retirement statute regarding the types of service rendered in publicly funded non-public schools that are eligible for purchase. The current language allows the purchase of service when the member was "engaged in teaching pupils" rather than service as a "teacher" as defined in c. 32, § 1. Amending this language to service "as a teacher as defined in section 1" will align the types of non-public school service for which members can purchase credit with those that qualify for MTRS membership when rendered in a public school. In addition, this legislation would address a statutory flaw in the cost calculation introduced in 1973, making the cost of non-public school services consistent with all other service purchases.

Interest on Refund Buybacks

This technical change would correct a loophole in the statute. Before 1983, members who returned to service within two years after taking a refund were required to pay back their refund immediately upon re-employment, and therefore were charged interest through their date of re-employment. In 1983, that requirement was lifted, making the repayment of the refund optional. However, the statutory language regarding interest being charged only through the date of re-employment for those members who returned within two years was not updated. This legislation would eliminate the inconsistency caused by this oversight and calculate the interest on all refund buybacks through the date of repayment.

Purchase of Service in all U.S. Territories

This legislation would extend the opportunity to purchase up to five years of teaching service, which is presently limited to teaching in the public schools of Puerto Rico, to include the public schools of all Territories of the United States.

Definition of Wages for Retirement Calculations

This legislation would allow supplemental pay while on workers compensation benefits to be defined as wages for retirement calculations.

Parental and Family Equity for Public Retirement System Members

This legislation would extend membership rights to any member who is on an authorized leave of absence without pay for more than one year if such leave is permitted under the family and medical leave laws pertaining to his position.

Acknowledgments

The preparation of this report is through the combined efforts of MTRS professional staff, and represents our commitment to the MTRS mission: To ensure that members of the Massachusetts Teachers' Retirement System achieve and maintain a successful and secure retirement through responsible benefits administration, financial integrity and the provision of outstanding services.

Respectfully submitted,

Erika M. Glaster Executive Director

Public Pension Coordinating Council Award



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2023

Presented to

Massachusetts Teachers' Retirement System

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)

National Conference on Public Employee Retirement Systems (NCPERS)

National Council on Teacher Retirement (NCTR)

Alan H. Winkle Program Administrator

Members of the Board



Dr. Ventura Rodriguez Chair

Designee of the Commissioner of Department of Elementary and Secondary Education



Jacqueline A. Gorrie Elected by the membership

Retired Massachusetts educator



Deborah B. Goldberg State Treasurer

Chair, Pension Reserves Investment Management (PRIM) Board



Dennis J. Naughton Elected by the membership

Retired Massachusetts educator; MTRS appointed representative to the PRIM Board



Diana DiZoglioState Auditor



Anne Wass Appointed by the Governor

Retired Massachusetts educator



Richard L. Liston Appointed by the Board

Retired Massachusetts educator

Annual Statement Balance Tests

For the year ended June 30, 2023

	Fiscal 2023
ASSET BALANCE	
Assets Previous Year	\$ 35,384,861,786
Income Current Year	5,581,850,131
Disbursements Current Year	3,942,983,271
Assets Current Year	\$ 37,023,728,646
ASSET DIFFERENCE	
Assets Current Year	\$ 37,023,728,646
Assets Previous Year	35,384,861,786
Difference	\$ 1,638,866,860
INCOME DIFFERENCE	
Income Current Year	\$ 5,581,850,131
Disbursements Current Year	3,942,983,271
Difference	\$ 1,638,866,860
FUND CHANGE DIFFERENCE	
Total Fund Change Credits Current Year	\$ 6,556,265,395
Total Fund Change Debits Current Year	4,917,398,535
Difference	\$ 1,638,866,860

Annual Statement Balance Tests

Continued

Three-Year Comparison

	Fiscal 2021	Fiscal 2022	Fiscal 2023
ASSET BALANCE			
Assets Previous Year	\$ 29,317,995,786	\$ 37,088,123,585	\$ 35,384,861,786
Income Current Year	11,454,051,355	2,114,216,653	5,581,850,131
Disbursements Current Year	3,683,923,556	3,817,478,452	3,942,983,271
Assets Current Year	\$ 37,088,123,585	\$ 35,384,861,786	\$ 37,023,728,646
ASSET DIFFERENCE			
Assets Current Year	\$ 37,088,123,585	\$ 35,384,861,786	\$ 37,023,728,646
Assets Previous Year	29,317,995,786	37,088,123,585	35,384,861,786
Difference	\$ 7,770,127,799	\$ (1,703,261,799)	\$ 1,638,866,860
INCOME DIFFERENC	E \$ 11,454,051,355	\$ 2,114,216,653	\$ 5,581,850,131
Disbursements Current Year	3,683,923,556	3,817,478,452	3,942,983,271
Difference	\$ 7,770,127,799	\$ (1,703,261,799)	\$ 1,638,866,860
FUND CHANGE DIFF	ERENCE		
Total Fund Change Credits Current Year	\$ 12,622,251,963	\$ 3,188,506,949	\$ 6,556,265,395
Total Fund Change Debits Current Year	4,852,124,164	4,891,768,748	4,917,398,535
Difference	\$ 7,770,127,799	\$ (1,703,261,799)	\$ 1,638,866,860

Assets and Liabilities

			Fiscal 2021	Fiscal 2022	Fiscal 2023
1100	Cash	\$	91,445,639	\$ 171,270,702	\$ 112,849,765
1198	PRIT Cash Account		63,552,048	43,944,550	28,560,126
1199	PRIT Capital Fund		36,859,684,069	35,077,019,277	36,763,455,369
1398	Accounts Receivable		97,703,915	120,133,883	152,102,722
1400	Prepaid Postage		166,187	153,413	119,597
1350	Prepaid Contracts		177,627	322,623	247,699
1900	Intangible Software Cost	:s1	_	_	_
2020	Accounts Payable		(22,968,949)	(25,838,566)	(31,493,810)
2097	Deferred Revenue ¹¹		(1,636,951)	(2,144,096)	(2,122,822)
	Total	\$	37,088,123,585	\$ 35,384,861,786	\$ 37,023,728,646
3293	Annuity Savings Fund	\$	9,262,023,526	\$ 9,759,464,884	\$ 10,312,047,215
3294	Annuity Reserve Fund		1,481,185,801	1,230,045,667	947,999,527
3295	Military Service Fund		332,498	343,847	338,875
3296	Pension Fund		_	_	_
3298	Expense Fund		_	_	_
3297	Pension Reserve Fund		26,344,581,760	24,395,007,388	25,763,343,029
	Total	\$	37,088,123,585	\$ 35,384,861,786	\$ 37,023,728,646

Statement of Funds Flow

Total All Funds	\$35,384,861,786	\$5,581,850,131	\$ 0	\$ 3,942,983,272	\$ 37,023,728,646
Pension Reserve Fund	24,395,007,388	1,951,732,2941	(583,396,652)	_	25,763,343,029
Expense Fund	_	261,691,715	_	261,691,715	_
Military Service Fund	343,847	16,015	(20,988)	_	338,875
Pension Fund	_	2,334,348,560	583,318,182	2,917,666,742	_
Annuity Reserve Fund	1,230,045,667	35,648,463	391,097,082	708,791,685	947,999,527
Annuity Savings Fund	\$ 9,759,464,884	\$ 998,413,084	\$(390,997,624)	\$ 548,133,129	\$ 10,312,047,215
	July 1 2022 Balance	Receipts	Inter-Fund Transfers	Disbursements	June 30 2023 Balance

INTER-FUND TRANSFERS

Description	Annuity Savings Fund	Annuity Reserve	Pension Fund	Military Service Fund	Expense Fund	Pension Reserve Fund	Total
New retirees	\$(391,076,094)	\$ 391,076,094	0	0	0	0	\$0
Repay pension and annuity and unretirement	78,470	0	0	0	0	(78,470)	0
New retirees	0	20,988	0	(20,988)	0	0	0
Funding pension benefits	0	0	583,318,182	0	0	(583,318,182)	0
	\$(390,997,624)	\$ 391,097,082	583,318,182	\$(20,988)	\$0	\$ (583,396,652)	\$0

Recei	pts				
			Fiscal	Fiscal	Fiscal
			2021	2022	2023
Annuit	ty Savings Fund				
4891	Members' Deductions	\$	833,235,543	\$ 892,124,206	\$ 943,929,106
4892	Transfers from Other Systems		8,763,684	14,737,964	24,406,588
4893	Member Make-Up Payments and	d Redeposits	9,087,938	8,551,548	10,292,729
4900	Member Payments from Rollove	rs	8,409,931	6,841,634	10,470,277
4820	Investment Income		8,393,926	8,828,066	9,314,385
	Sub	ototal \$	867,891,022	\$ 931,083,416	\$ 998,413,084
Annuit	ty Reserve Fund				
4820	Investment Income		51,663,885	43,506,195	35,648,463
	Sub	total \$	51,663,885	\$ 43,506,195	\$ 35,648,463
Pensio	n Fund				
4898	3(8)(c) Reimbursements from Ot	her Systems ²	57,751,633	58,852,060	67,344,478
4899	Received from Commonwealth f	,	301,972,317	316,914,962	348,046,545
4894	Pension Fund Appropriation ³		1,578,153,565	1,749,814,795	1,918,886,413
4840	Workers' Compensation Settlement ⁴		63,252	24,000	38,000
4841	Recovery of 91A and 91(b) Over		. 0	1,671	33,123
4825	Miscellaneous	3	0	2,037	0
	Sub	total \$	1,937,940,767	\$ 2,125,609,526	\$ 2,334,348,560
Militar	y Service Fund				
4890	Contributions Received for Milita	ary Service	8,705	17,584	15,686
4820	Investment Income	•	332	335	330
	Sub	ototal \$	9,037	\$ 17,919	\$ 16,015
Expen	se Fund				
4896	Expense Fund Appropriation		241,455,942	272,326,301	261,691,715
		total \$	241,455,942	\$ 272,326,301	\$ 261,691,715
Pensio	n Reserve Fund				
4897	Federal Grant Reimbursement		3,161,685	3,492,868	4,519,306
4822	Interest Not Refunded ⁶		110,5448	252,512	201,155
4820	Excess Investment Income		8,315,804,544	(1,484,182,021)	1,863,373,143
4825	Miscellaneous ⁷		35	0	393
4895	Additional Commonwealth Funding	g ¹²	0	147,579,333	59,032,709
4889	Capital Gain Revenue, G.L. Ch29	9, 5G ¹³	36,013,894	74,530,603	24,605,588
	Sub	total \$	8,355,090,702	\$ (1,258,326,705)	\$ 1,951,732,294
TOTAL	. RECEIPTS	\$	11,454,051,355	\$ 2,114,216,653	\$ 5,581,850,131

Disbursements

				Fiscal		Fiscal		Fiscal
				2021		2022		2023
Annuit	ty Savings Fund							
5757	Refunds to Members		\$	35,402,501	\$	39,040,411	\$	41,815,614
5757.1	Section 11 Active Death Re	efunds		2,522,719		1,729,841		1,629,637
5756	Transfers to Other Systems	5		17,870,407		9,891,856		11,387,877
		Subtotal	\$	55,795,627	\$	50,662,108	\$	54,833,129
Annuit	ty Reserve Fund							
5750	Annuities Paid			649,169,765		676,465,370		706,782,103
5759	Option B Refunds ⁸			2,159,652		1,230,156		2,009,582
		Subtotal	\$	651,329,417	\$	677,695,526	\$	708,791,685
Pensio	n Fund							
5751	Pensions Paid (Regular Pen	sion Payments)		2,264,728,862		2,314,500,702		2,367,085,551
5755	3(8)(c) Reimbursements to	Other Systems ²		5,664,121		6,010,192		5,701,687
5755.1				162,976,424		179,368,662		196,832,959
5753	QEBA ⁹			845		_		_
5752	COLAs Paid			301,972,317		316,914,962		348,046,545
		Subtotal	\$	2,735,342,569	\$	2,816,794,518	\$	2,917,666,742
Militar	y Service Fund							
4890	Return to Municipality for							
	Who Withdrew their Funds	Subtotal	\$		\$		\$	
-		Jubtotui	Ψ		Ψ		Ψ	
-	se Fund			0.006.350		10 410 440		11 /12 0/7
5119	Salaries			9,986,359		10,410,440		11,612,857
5304	Management Fees			161,921,837		194,278,193		173,014,972
5308 5310	Legal Expenses Insurance			10,086 83,278		3,837 60,836		10,881 60,224
5311	Service Contracts			6,411,756		3,669,171		3,316,255
5312	Rent Paid			1,003,355		1,018,959		1,056,818
5320	Education and Training			6,778		9,277		44,886
5589	Administrative Expenses			461,603		381,328		569,178
5599	Furniture and Equipment			169,828		113,219		80,297
5719	Travel			806		5,612		30,464
5897	Federal Grants Distributed			3,161,685		3,492,868		4,519,306
5900	3(8)(c) Reimbursement to	General Fund ²		57,751,633		58,852,060		67,344,478
				42,516		30,500		31,100
	Professional Expense							,
5315 5829	Professional Expense Amortization Expense			444,422		0		0
5315	•	Subtotal	\$	444,422 241,455,942	\$	272,326,301	\$	0 261,691,715
5315 5829	•	Subtotal	\$		\$		\$	
5315 5829	Amortization Expense	Subtotal Subtotal	\$		\$		\$	

Investment Income

		Fiscal 2021	Fiscal 2022		Fiscal 2023
INVE	STMENT INCOME				
Investr	ment Income received from:				
	Cash	\$ 136,969	\$ 298,261	\$	1,036,925
	Pooled or Mutual Funds	779,936,280	916,487,805		945,401,432
Total I	Investment Income	\$ 780,073,249	\$ 916,786,066	\$	946,438,357
4884	Realized Gains	2,515,036,240	1,615,469,637		214,870,194
4886	Unrealized Gains	5,915,825,815	2,271,239,434		5,625,827,271
		\$ 8,430,862,055	\$ 3,886,709,071	\$	5,840,697,464
4887	Less Unrealized Losses	(593,616,673)	(5,963,016,262)	(4	1,617,107,786)
4885	Realized loss	_	_		_
Net In	vestment Income (loss)	\$ 8,617,318,630	\$ (1,159,521,124)	\$	2,170,028,035
INCO	OME REQUIRED				
3293	Annuity Savings Fund	8,393,926	8,828,066		9,314,385
3294	Annuity Reserve Fund	51,663,885	43,506,195		35,648,463
3295	Military Service Fund	332	335		330
3298	Expense Fund	241,455,942	272,326,301		261,691,715
Total I	Income Required	\$ 301,514,086	\$ 324,660,897	\$	306,654,892
Net In	vestment Income	\$ 8,617,318,630	\$ (1,159,521,124)	\$	2,170,028,035
Less Ir	ncome Required	301,514,086	324,660,897		306,654,892
Excess	Income (Loss) to Pension Reserve Fund	\$ 8,315,804,544	\$ (1,484,182,021)	\$	1,863,373,143

Membership Information

Minimum Pension Retirements

RetirementPlus Retirements

Pop-Up Retirements
Early Retirements

Active Members

Previous Year Ending June 30, 2022	95,059
Net Change During Report Year 2023	7,451
Active Membership Current Year Ending June 30, 2023	102,510
Inactive Members	
Previous Year Ending June 30, 2022	32,636
Net Change During Report Year 2023	3,126
Inactive Membership Current Year Ending June 30, 2023	35,762
Retired Members, Beneficiaries and Survivors	
Previous Year Ending June 30, 2022	70,306
Net Change During Report Year 2023	976
Retired, Beneficiary and Survivor Membership Current Year Ending June 30, 2023	71,282
Superannuation 38,019	•

Survivors-Active 1,986 Survivors-Retiree 2,250 Accidental Death Retirements 11 **Ordinary Disability** 350 Accidental Disability 289 Termination 181 Guardian 23 Minimum Pension-Survivor 10 209,554 Total Membership, June 30, 2023

92

1,284

26,274

513

Significant Accounting Policies and Fund Descriptions

The accounting records of the System for June 30, 2023 are maintained on a fiscal year basis in accordance with the standards and procedures established by the Executive Director of the Public Employee Retirement Administration Commission. All investments are stated at market value at the end of the year.

Annuity Savings Fund

The Annuity Savings Fund is the fund to which all members' contributions are deposited. Members withdrawing from the System receive a refund of their total accumulated contributions and a required amount of interest. Refunds to members for the report year 2023 were \$41,815,614, refunds to beneficiaries of deceased active members were \$1,629,537 and transfers to other systems were \$11,387,877. The value of the Annuity Savings Fund was \$10.312 billion as of June 30, 2023. In 2023, interest is accrued at a rate of 0.1%.

Annuity Reserve Fund

The Annuity Reserve Fund is the fund to which a member's account is transferred upon retirement from the Annuity Savings Fund and the Special Fund for Military Service credit. The annuity portion of the retirement allowance is paid from this fund. Interest is credited monthly to this fund at the rate of 3% annually on the previous month's balance. In 2023, an amount of \$391.097 million was transferred to the Annuity Reserve Fund. The value of the Annuity Reserve Fund was \$947.9 billion as of June 30, 2023.

■ Military Service Fund

The Military Service Fund contains contributions and interest for members who receive creditable service while on a military leave. The balance in the Military Service Fund on June 30, 2023 was \$388,875. Contributions and interest income credited to the Military Service Fund were \$15,686 and \$330 respectively. In 2023, an amount of \$20,988 was transferred to the Annuity Reserve Fund.

Pension Fund

The Pension Fund contains the amounts appropriated by the Commonwealth of Massachusetts and investment funds liquidated from the Pension Reserve Investment Trust designated to pay the pension portion of each retirement allowance. The fund is fully funded by the Pension Reserve Fund.

Expense Fund

The Expense Fund is fully funded from amounts transferred from investment income for the purpose of administering the Teachers' Retirement System.

Management Fees are amounts paid by the Pension Reserve Investment Trust for managing investments. PERAC requires these costs be accounted for in the expense fund.

3(8)(c) Reimbursements to the General Fund are \$67,344,478 for 3(8)(c) payments received from other retirement systems, which are deposited into the MTRS account at Bank of America and then swept by Treasury and posted to the Commonwealth's General Fund. MTRS does not have spending authority on these funds.

Federal Grants Distributed equal fringe assessments collected in the amount of \$4,519,306. Federal grant fringe payments are a pass-through from school districts to MTRS to the Commonwealth's General Fund; MTRS role is administrative in that we collect, deposit and record federal grant fringe amounts to the Commonwealth's General Fund with no spending authority.

Pension Reserve Fund

The Pension Reserve Fund is administered by the Pension Reserves Investment Management Board (PRIM Board). The Fund contains amounts appropriated by the Commonwealth of Massachusetts for the purpose of funding future retirement benefits. Any investment income in excess of the amount required to credit the Annuity Savings Fund, Annuity Reserve Fund, Expense Fund and the Special Military Service fund is credited to the Pension Reserve Fund. In 1996, Massachusetts State Teachers' and Employees' Retirement Systems Trust (MASTERS) was merged into the Pension Reserves Investment Trust (PRIT) Fund to form a consolidated pension fund under the management of the Pension Reserves Investment Management Board. Inactive member account balances must be transferred to the Pension Reserve Fund after a period of ten years of inactivity.

Notes on the Financial Statements

1. Intangible Software Costs: New Line of Business Solution/MyTRS Capital Asset Activity

Computer hardware and software are recorded at cost and were amortized on a straightline basis over a useful life of 3 years and 7 years respectively.

	July 1, 2022	Increase	Dec	rease	Jun	e 30, 2023
Assets Being Amortized:	-					
Infrastructure	\$ 936,319	\$ 	\$		\$	936,319
Computer Hardware	163,171					163,171
Computer Software	27,582,698					27,582,698
Total	\$ 28,682,188	\$ 	\$		\$	28,682,188
Less: Accumulated Amortization						
Computer Hardware	\$ 163,171	\$ 	\$	_	\$	163,171
Computer Infrastructure	936,319					936,319
Computer Software	27,582,699			_		27,502,699
	\$ 28,682,188	\$ 			\$	28,682,188
Net Book Value	\$ 	\$ _	\$	_	\$	_

2. 3(8)(c)

Pursuant to G.L. c. 32, § 3(8)(c), these are pension benefit reimbursements received from other Massachusetts public retirement systems for the portion of the benefit attributable to the creditable service rendered in the other system. The total 3(8)(c) reimbursements received in 2023 for calendar year 2022 were credited to the Commonwealth General Fund. The Teachers' Retirement System's 3(8)(c) reimbursements from other systems during report year 2023 were \$67,344,478. The amount the Teachers' Retirement System paid to other systems was \$5,701,687.

3. Commonwealth Pension Funding

The Commonwealth appropriated \$2,266,932,958 for State and Boston Teachers for fiscal 2023.

Pension Funding Schedule

Boston Teachers Appropriation	\$ 196,832,959
State Teachers Appropriation	1,722,053,454
COLA	348,046,545

Total

\$ 2,266,932,958

4. Workers' Compensation

Pursuant to G.L. c. 32 § 14, members who receive disability retirement benefits and also receive workers' compensation benefits are subject to an offset. If the member settles their workers' compensation claim and receives a lump-sum payment therefrom, the MTRS is paid the portion of the lump-sum representing future lost wages to account for the offset that would otherwise have been taken from the member's monthly disability retirement payments. In fiscal 2023, the MTRS received a total of \$38,000 from the workers' compensation settlements of eight disability retirement recipients.

5. Recovery of 91A and 91(b) Overearnings

Members who exceed the earnings limits are required to remit payments to MTRS. For fiscal 2023, \$33,123 in revenue was received through a check and overpayments were paid by a reduction of benefits. For fiscal 2022 and 2021, \$1,671 and \$0 were received by check.

6. Interest Not Refunded

Interest not refunded is interest forfeited by members due to criminal convictions or upon withdrawal from the system. Members hired on or after January 1, 1984, who leave service and take a refund are only eligible to receive the interest that was credited to their account for up to two years immediately following their date of separation from service. The 2023 Interest Not Refunded of \$201,155 is recorded as revenue in the Pension Reserve Fund.

7. Miscellaneous Income

Miscellaneous Income, such as witness fees, for fiscal 2023 is \$393 and fiscal year 2022 and 2021 were \$2,037 and \$0 respectively.

8. Option B Refunds

Upon the death of retirees electing Option B, refund payments are made to their beneficiary(ies) for the remaining balance in their annuity savings account.

9. Qualified Excess Benefit Arrangement (QEBA)

To comply with Section 415(b) of the Internal Revenue Code which imposes limits on retirement benefits, the MTRS has funded a QEBA account. The QEBA account will provide benefits that cannot be provided under a qualified plan due to the limits of Section 415(b). The balance is accounted for in cash.

The Activity in the Account:	Beginning Balance	\$60,795
,	Revenue	
	Less Payments	_
	Balance 6/30/23	\$ 60,795

10. Estate Accounts Receivable and Payable

When a benefit recipient dies, depending on the timing of the death notification relative to the monthly benefit warrant, this event may create a receivable or payable between the retirement system and the estate. At June 30, 2023 the amount due to be received from estates from 2020 to present is \$454,802 and the amount payable to estates including the deceased members' remaining annuity balance is \$1,792,357.

11. Installment Accounts Receivable and Deferred Revenue

Members may purchase creditable service on an installment basis. There are approximately 322 members with \$3,938,310 in potential receivables due for service purchases. Of that total, \$1,825,488 is due to be collected within one year. The remaining \$2,112,822, due to be collected after one year, is reported as a deferred revenue.

12. Additional Commonwealth Funding

Pursuant to Chapter 126 of the Acts of 2022, Section 182, the MTRS received a total of \$59,032,709 of a \$100,000,000 total transfer from the General Fund to the Commonwealth's Pension Liability Fund.

13. Capital Gains Revenue from the Commonwealth

In accordance with M.G.L. Chapter 29 Section 5G, the Commonwealth transferred to MTRS \$24,605,588 in fiscal 2023, \$74,530,603 in fiscal 2022 and \$36,013,894 in fiscal 2021 to pay down pension debt from excess capital gain revenue.

Appendix A

Detail of Accounts Receivable and Accounts Payable

		2023
		Amount
ACCO	UNTS RECEIVABLE	
4893	Estate Accounts Receivable 10	\$ 454,802
4893	Allowance for Doubtful Accounts	(205,847)
	Net, Estate Accounts Receivable	\$ 248,955
1395	3(8)(c) Accounts Receivable	\$ 28,889,526
1395.1	Allowance for Doubtful Accounts	(1,299,789)
	Net, 3(8)(c) Accounts Receivable	\$ 27,589,737
4893	Installment Accounts Receivable 11	3,938,310
4891	Member Deductions	120,308,360
1396.2	Overpayment Receivable	17,359
	Total Accounts Receivable	\$ 152,102,721
ACCO	UNTS PAYABLE	
2021	Accrued Payroll	\$ 0
5311	Service Contracts	310,747
5589	Administrative Expense	12,771
5757	Estate Accounts Payable ¹⁰	1,792,357
2022	Escrow Assets Held in Trust for Members	158,587
2020	Rent	2,520
2020.1	3(8)(c) Payable	258,787
5900	3(8)(c) Due to General Fund	27,589,737
5599	Furniture & Expenses	9,190
2020.4	V10 Upgrade Service Retainage	225,000
1401	Prepaid Hardware/Software Ap	90,317
1404	Education and Training prepaid	4,800
5719	Travel	3,832
2020.2	Annuity Accounts Payable	1,035,165
	Total Accounts Payable	\$ 31,493,810

Appendix B

Massachusetts Pension Reserves Investment Trust Statements

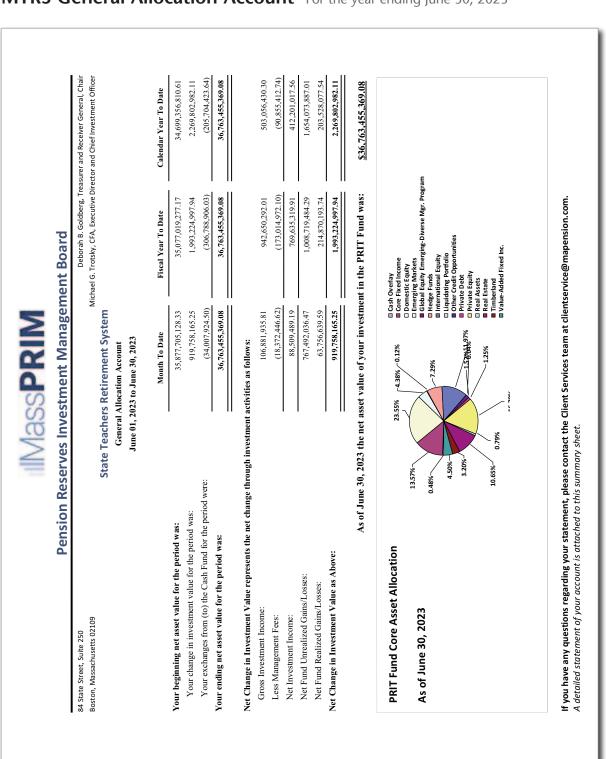
MTRS Cash Fund For the year ending June 30, 2023

State Teachers Retirement System Michael G. Trockky, CFA, Executive Director and Chief Investment Office Cash Investment June 01, 2023 to June 30, 2023 Month To Date Fiscal Year To Date Calendar Year To Date Your beginning net asset value for the period was: Your total contributions for the period were: Page 2,751,140.26 Calendar Year To Date Your total redemptions for the period were: Your total exchanges for the period were: 93,236,922.03 1,097,164,222.38 517,435,548.41 Your total exchanges for the period were: Your state appropriations for the period were: 0.00 0.00 0.00 Your reading net asset value for the period was: 28,560,125,65 28,560,125
State Teachers Retirement System Cash Investment June 01, 2023 to June 30, 2023 Month To Date Month To Date reriod was: 16,384,667,37 period were: 93,236,922.03 od were: 34,007,924,50 period were: 0.00 period were: 0.00 period was: 28,560,125,65
the period was: Month To Date Fiscal Year To Date Calendar A 3,944,550.34 period was: 16,384,667.37 43,944,550.34 Calendar A 3,944,550.34 period was: 28,868.69 2,751,140.26 Calendar A 3,944,550.34 riod were: 93,236,922.03 1,097,164,222.38 Calendar A 3,940,022.38 od were: 34,007,924.50 306,788,906.03 Calendar A 3,940,03 period were: 0.000 0.000 Calendar A 3,560,125.65
the period was: Month To Date Fiscal Year To Date Calendar Value period was: 16,384,667.37 43,944,550.34 Calendar Value period was: 288,868.69 2,751,140.26 Calendar Value riod were: 93,236,920.33 1,097,164,222.38 Calendar Value od were: 34,007,924.50 306,788,906.03 Calendar Value period were: 0.000 0.000 Calendar Value period was: 28,560,125,65 28,560,125,65 Calendar Value
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period were: 0.00 0.00 0.00 period was: 28,560,125,65 28,560,125,65 28,560,12
period was: 28,560,125.65 28,560,125.65

Appendix B

Massachusetts Pension Reserves Investment Trust Statements

MTRS General Allocation Account For the year ending June 30, 2023



Supplementary Schedules

Members' Balances in the Annuity Savings Account

For the fiscal year ending June 30, 2023

Balance Current Year	\$ 10,312,047,215
Transfer from Pension Reserve Fund	0
Transfer to Military Service Fund	0
Transfer to Annuity Reserves	(390,997,624)
Reductions	(54,833,129)
Total Interest Current Year	9,314,385
Total Additions Current Year	989,098,699
Previous Balance	\$ 9,759,464,884

Supplementary Schedules

Schedule 1: Cash Account Activity During the Year

For the fiscal year ending June 30, 2023

Type of Account Account Number Interest Rate	er,	Book value at the End of the Previous Year		Total Deposits this Year	Rei Rec	ncome nvested/ leposited Account	Withdrawals During the Year	E	Total Book Value 6/30 this Year	Paid t Not R	o S ein	come ystem vested osited	due acci	
Bank of America	\$	0	\$	48,261,457	\$	0	\$ 48,261,457	\$	0	\$		0	\$	0
Mellon		365,463		967,242,485		0	966,446,329		1,161,619			0		0
M&T Bank Advance		0		330,319		0	330,319		0			0		0
M&T Bank Escrow		267,264		15,348		0	124,025		158,587			0		0
MMDT	\$	825,200	\$	1,036,925	\$	0	\$ 0	\$	1,862,125	\$		0	\$	0
Bank Cash	\$	1,457,927	\$1	,016,886,534	\$	0	\$ 1,015,162,130	\$	3,182,331	\$		0	\$	0
Cash Available on MMARS	1	69,812,774	3	,821,368,096		0	3,881,513,436	1	09,667,434			0		0
Total Cash	\$1	71,270,701	\$4	,838,254,630	\$	0	\$ 4,896,675,566	\$ 1	12,849,765	\$		0	\$	0
PRIT Cash Fund	\$	43,944,551	\$1	,463,472,631	\$	0	\$ 1,478,857,056	\$	28,560,126	\$		0	\$	0

Supplementary Schedules

Schedule 5: Schedule of PRIT Funds

For the year ending June 30, 2023

	PE	RAC Ledger Number 1199
		PRIT Capital Fund
Market Value, End of Previous Year	\$	35,077,019,277
Total Purchases this Year at Cost/Member Deductions		
Reinvested Investment Income		942,650,292
Realized Gains		214,870,194
Realized Losses		
Unrealized Gains		5,625,827,271
Unrealized Losses		(4,617,107,786)
Total Sales/Redemptions this Year: Amount Received		
Cash Exchanged with Cash Fund		(306,788,907)
Fees Paid		(173,014,972)
Market Value at the End of this Year	\$	36,763,455,369

Supplementary Schedules

Schedule 6: Summary of Investments Owned

For the year ending June 30, 2023

PERAC Ledger Number								
		1100		1198		1199		
		Cash		PRIT Cash		PRIT Fund		Total
Current Market Value	\$	112,849,765	\$ 2	28,560,126	\$	36,763,455,369	\$ 3	86,904,865,260
Commissions Paid During Current Year	\$	_	\$	_	\$	173,014,972	\$	173,014,972
Investment Income Received During Year	\$	1,036,925	\$	2,751,140	\$	942,650,292	\$	946,438,357

Appendix D

Prior Years' Statements of Funds Flow

For the year ended June 30, 2022

Total All Funds	\$ 37,088,123,585	\$ 2,114,216,653	\$ 0	\$ 3,817,478,452	\$ 35,384,861,786
Pension Reserve Fund	26,344,581,760	(1,258,326,705)	(691,247,669)	_	24,395,007,388
Expense Fund	_	272,326,301	_	272,326,301	_
Military Service Fund	332,498	17,919	(6,570)	_	343,847
Pension Fund	_	2,125,609,526	691,184,992	2,816,794,518	
Annuity Reserve Fund	1,481,185,801	43,506,195	383,049,196	677,695,526	1,230,045,667
Annuity Savings Fund	\$ 9,262,023,526	\$ 931,083,416	\$ (382,979,949)	\$ 50,662,108	\$ 9,759,464,884
	2021 Balance	Receipts	Inter-Fund Transfers	Disbursements	2022 Balance

INTER-FUND TRANSFERS

Description	Annuity Savings Fund	Annuity Reserve	Pension Fund	Military Service Fund	Expense Fund	Pension Reserve Fund	Total
New retirees	\$(383,042,626)	\$ 383,042,626	0	0	0	0	\$0
Repay pension and annuity and unretirement	62,677	0	0	0	0	(62,677)	0
New retirees	0	6,570	0	(6,570)	0	0	0
Funding pension benefits	0	0	691,184,922	0	0	(691,184,992)	0
	\$(382,979,949)	\$ 383,049,196	691,184,992	\$ (6,570)	\$0	\$ (691,247,669)	\$0

Appendix D

Prior Years' Statements of Funds Flow (continued)

For the year ended June 30, 2021

	2020 Balance	Receipts	Inter-Fund Transfers	Disbursements	2021 Balance
Annuity Savings Fund	\$ 8,820,631,103	\$ 867,891,022	\$ (370,702,972)	\$ 55,795,627	\$ 9,262,023,526
Annuity Reserve Fund	1,715,842,892	51,663,885	365,008,441	651,329,417	1,481,185,801
Pension Fund	_	1,937,940,767	797,401,802	2,735,342,569	_
Military Service Fund	314,119	9,037	9,343	_	332,498
Expense Fund	_	241,455,942	<u> </u>	241,455,942	_
Pension Reserve Fund	18,781,207,672	8,355,090,702	(791,716,614)	_	26,344,581,760
Total All Funds	\$ 29,317,995,786	\$11,454,051,355	\$ —	\$ 3,683,923,556	\$ 37,088,123,585

INTER-FUND TRANSFERS

Description	Annuity Savings Fund	Annuity Reserve	Pension Fund	Military Service Fund	Expense Fund	Pension Reserve Fund	Total
New retirees	\$(370,798,801)	\$ 370,798,801	0	0	0	0	\$0
Repay pension and annuity and unretirement	105,172	0	0	0	0	(105,172)	0
New retirees	(9,343)	0	0	9,343	0	0	0
Funding pension benefits	0	0	797,401,802	0	0	(797,401,802)	0
Prior year interest correction	0	(5,790,360)	0	0	0	5,790,360	0
	\$(370,702,972)	\$ 365,008,441	797,401,802	\$ 9,343	\$0	\$ (791,716,614)	\$0

Appendix E

Actuarial Valuation and Assumptions

(Dollars in thousands)

The most recent actuarial valuation of the System was prepared by PERAC as of January 1, 2023.

The Total Normal Cost	\$ 1,223,637*	
Expected Employee Contributions	862,148	10.30% of payroll
Net Normal Cost for the Employer	361,489	4.32% of payroll
The Actuarial Liability for Active Members	\$ 27,484,650	
The Actuarial Liability for Retired & Inactive Members	34,801,549	
Total Actuarial Accrued Liability	62,286,199	
System Assets as of that Date	36,536,834	
Unfunded Actuarial Accrued Liability	25,749,365	

The principal actuarial assumptions used in the valuation are as follows:

Investment Return 7.00% per annum **Rate of Salary Increase** 4.0 – 7.5% based on years of service

Funding Progress

Actuarial Valuation Date	J.	anuary 1, 2023
Actuarial Value of Assets (a)	\$	36,536,834
Actuarial Accrued Liability (AAL) (b)		62,286,199
Unfunded AAL (UAAL) (b-a)		25,749,365
Funded Ratio (a/b)		58.7%
Covered Payroll (c)		8,371,450
UAAL as a % of Covered Payroll ((b-a)/c)		307.59%

^{*}The Total Normal Cost does not include amortization of the Unfunded Actuarial Liability