MWRA (Mass. Water Resources

Two Griffin Way Chelsea, MA 02150 Phone 617-305-5595 Fax 617-371-1616

Board Members

ACTUARIAL

Average AgeAverage Service

Andrew Pappastergion, Thomas Durkin, Kevin McKenna, James Fleming*, Frank Zecha *indicates Chairperson

Board Administrator Carolyn Russo

10:00 am

51

18 years

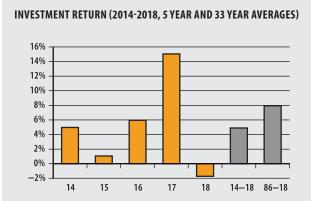
69

NA

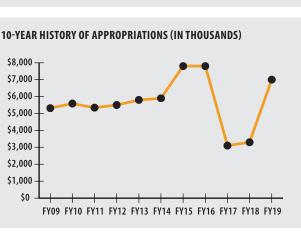
Board MeetingGenerally the last Thursday of the month at



▶ Funded Ratio 95.0% ▶ Date of Last Valuation 1/1/18 ▶ Actuary Segal 7.50% ▶ Assumed Rate of Return ▶ Funding Schedule 4.5% Total Increasing ▶ Year Fully Funded 2026 ▶ Unfunded Liability \$27.7 M ► Total Pension Appropriation (Fiscal 2019) \$7.0 M **ACTIVE RETIRED** 1,100 ▶ Number of Members 582 \$93.0 M \$20.2 M ▶ Total Payroll/Benefit \$84,500 \$34,800 ► Average Salary/Benefit



ASSET ALLOCATION (12/31/18)



CAS	H/OVERLAY 1.1%
ASSET ALLOC./	EMERGING MKT EQUITY 4.7%
HEDGE FUNDS 5.2%	DOMESTIC EQUITY 21.6%
PRIVATE EQUITY 8.0%	INT'L EQUITY 14.9%
FIXED INCOME 21.6%	

ESTMENT RETURN	HISTORY	
33 years 2018	<u>32 years 2017</u>	31 years 2016
7.95%	8.27%	8.06%
<u>10 years 2018</u>	<u>10 years 2017</u>	<u>10 years 2016</u>
9.07%	6.54%	5.92%
<u>5 years 2018</u>	<u>5 years 2017</u>	<u>5 years 2016</u>
4.91%	8.60%	8.36%

EARNED INCOME OF DISABILITY RETIREES (2017)

► Number of Disability Retirees	68
Number Who Reported Earnings	16
Number of Excess Earners	0
► Total Amount of Refund Due	\$0.00

▶ 2018 Return	-1.73%
▶ 2018 Market Value	\$508.8 M
▶ 2014-2018 (Annualized)	4.91%
▶ 1986-2018 (Annualized)	7.95%*

^{*} Based on 33-year return