

Named Executive Officer and Director Compensation Disclosures for 2019

The following tables and related footnotes are intended to provide information to the members of Massachusetts Mutual Life Insurance Company (the "Company") regarding the compensation provided in fiscal year 2019 to the Company's chief executive officer, principal financial officer, its three other most highly compensated executive officers (collectively "named executive officers"), and its directors, in a clear, concise and understandable manner consistent with Section 19X of Chapter 175 of the Massachusetts General Laws (the "Disclosure Statute").

The Board of Directors (the "Board") determines and approves the executive officer compensation opportunities after reviewing market and other relevant practices in addition to actual performance against pre-determined objectives. The Board retains an external compensation consulting firm, Semler Brossy Consulting, to advise in these determinations.

The Technology & Governance Committee of the Board determines the director compensation after reviewing market and other relevant practices. The Technology & Governance Committee retains Semler Brossy Consulting to advise in these determinations.

Compensation for Named Executive Officers									
Name & Principal Position	Year ¹	Salary (\$) ²	Bonus (\$) ³	Restricted Share Awards (\$) ⁴	SAR Awards (\$) ⁴	Non-Equity Incentive Plan Compensation (\$) ⁵	Change in Pension Value & NQ Deferred Compensation Earnings (\$) ⁶	All Other Compensation (\$) ⁷	Total (\$) ⁸
Crandall, Roger Chairman, President & CEO	2019	1,158,462	4,316,400	6,000,000	6,000,000	0	384,968	265,307	18,125,137
	2018	1,000,000	4,000,000	5,000,000	5,000,000	0	465,321	246,129	15,711,450
	2017	1,000,000	3,195,500	5,000,000	5,000,000	0	754,465	244,674	15,194,639
Chicares, Elizabeth Chief Financial Officer	2019	715,000	1,400,000	2,175,000	2,175,000	0	189,451	78,590	6,733,041
	2018	710,673	1,600,000	1,450,000	1,450,000	0	156,436	32,374	5,399,483
	2017	700,000	1,200,000	1,100,000	1,100,000	0	144,911	15,455	4,260,366
Fanning, Michael Head of MassMutual U.S.	2019	730,000	1,800,000	1,675,000	1,675,000	0	225,597	114,730	6,220,327
	2018	730,000	2,000,000	1,675,000	1,675,000	0	179,215	189,706	6,448,921
	2017	730,000	1,400,000	1,375,000	1,375,000	0	169,988	97,455	5,147,443
Corbett, M. Timothy Chief Investment Officer	2019	650,000	1,400,000	1,912,500	1,912,500	0	172,207	90,464	6,137,671
	2018	635,577	1,600,000	1,275,000	1,275,000	0	127,726	144,422	5,057,725
	2017	600,000	1,000,000	1,150,000	1,150,000	0	111,929	46,927	4,058,856
Ross, Gareth Head of Enterprise Technology & Experience	2019	622,923	1,200,000	850,000	850,000	0	130,488	81,246	3,734,657
	2018	610,673	1,250,000	687,500	687,500	0	91,268	62,549	3,389,490
	2017	542,308	700,000	1,650,000	1,650,000	0	50,200	35,097	4,627,605

Compensation for Directors			
Name	Retainers Earned or Paid in Cash (\$) ^{8,9}	All Other Compensation (\$) ¹⁰	Total (\$)
Karen Bechtel	280,000	2,851	282,851
Mark Bertolini	290,000	2,358	292,358
Kathleen Corbet	276,435	1,349	277,785
James DeGraffenreidt	268,565	2,079	270,644
Isabella Goren	312,500	1,869	314,369
Jeffrey Leiden	288,935	2,358	291,294
Marc Racicot	139,052	3,000	142,052
Laura Sen	268,935	1,887	270,822
William Spitz	298,565	3,459	302,024
H. Todd Stitzer	342,500	2,905	345,405

See accompanying footnotes for additional information related to above compensation.

Column Descriptions/Footnotes to Compensation Disclosures:

- (1) Year: Year in which the compensation was earned.
- (2) Salary: Actual base salary earned (inclusive of salary deferrals).
- (3) Bonus: Actual bonus earned (for the reported year, paid the following year). The amount paid is subject to a clawback provision (see (4) below).
- (4) Restricted Share/SAR Awards: Represents the estimated grant date value of hypothetical equity awards granted in the reported year as further described below.

Each of the named executive officers participates in the Company's long-term incentive compensation plan (LTIP) comprised of hypothetical share appreciation rights (SAR) and hypothetical restricted shares (RS). Awards under the LTIP are typically granted annually. These awards do not convey any Company ownership interests to the participants. SAR generally fully vest three years after the grant date, followed by a two-year exercise period for the 2017 grant and a three-year exercise period for the 2018 and 2019 grants. RS generally vest in one-third increments following three, four and five years from the grant date. The share price is determined quarterly and is based on a multiple of earnings. Participants realize the cash value of awards upon vesting (RS) or exercise (SAR). RS are 'full value' awards, meaning the participant receives the full cash value of the number of shares vesting multiplied by the share price at the time of vesting. SAR recipients realize only the cash value of the number of SAR exercised multiplied by the appreciation (if any) in the share price from the grant date to the exercise date. Further deferrals of gains from both types of awards are not permitted under the LTIP. Awards are also subject to: caps (as determined by the Board) to limit upside potential and corresponding liability; compliance with non-solicitation agreements following termination of employment; and a clawback provision in the event of material financial restatement due to fraud or willful misconduct.

Grant values reflect competitive market practices and assume a certain compounded growth rate in earnings and holding period prior to value realization. Participants may realize an amount higher than grant value if growth rates or holding period exceed the assumptions, or lower than grant value if growth rates or holding period fall short of assumptions.

In 2019, Ms. Chicares, and Messrs. Crandall and Corbett received special awards in addition to their long-term incentive awards, totaling \$1,450,000, \$2,000,000, \$1,275,000 respectively. These awards

were split 50% SAR vesting three years from the grant date followed by a three-year exercise period, and 50% RS vesting in one-third increments following three, four and five years from the grant date.

LTIP awards are intended to incentivize behavior to increase earnings and policyholder value over the long term.

- (5) Non-Equity Incentive Plan Compensation: Reflects amounts paid from deferred or other performance-based cash incentive awards. LTIP Awards (footnote 4) are treated as equity for disclosure purposes.
- (6) Change in Pension Value & NQ Deferred Compensation Earnings: Includes changes to the participant's lump sum benefit under the Company's cash balance defined benefit and non-qualified pension plans as well as any above-market earnings in unfunded, non-qualified deferred compensation plans. The pension plans currently provide for company contributions of either 6% (age plus service credit greater than or equal to 50) or 4.5% (age plus service credit less than 50) of base salary and annual bonus. Balances also receive interest credit (4.46% at year-end 2019). There were no above-market earnings credited during 2019 in the deferred compensation plans. Mr. Crandall participates in the former "final average pay" formula, for which the annuity benefit is frozen as of 12/31/2009. He also is accruing a current benefit under the cash balance formula.
- (7) All Other Compensation: Includes savings plan company matching contributions (401(k) and non-qualified defined contribution plans), relocation assistance and the value of perquisites including financial planning, life insurance premiums, annual physical examinations, company-provided wellness incentive credits to a health savings account and in the case of Mr. Crandall only, limited board-approved personal travel on company aircraft.
- (8) Board retainers include non-qualified deferred compensation plan deferrals (if elected). Director compensation is paid in arrears.
- (9) Board members receive annual Board and Committee retainers (paid quarterly) and annual Chairperson retainer fees (paid quarterly, if applicable) according to the following schedule:

Annual Board Retainer: \$240,000

Annual Lead Director Retainer: \$50,000

Committee	Committee Retainer Fee* (\$)	Chairperson Retainer Fee (\$)
<i>Audit</i>	<i>20,000</i>	<i>40,000</i>
<i>Human Resources</i>	<i>12,500</i>	<i>25,000</i>
<i>Technology & Governance</i>	<i>12,500</i>	<i>20,000</i>
<i>Executive</i>	<i>12,500</i>	<i>-</i>
<i>Investment</i>	<i>20,000</i>	<i>30,000</i>

** Except where member is a Committee Chairperson*

- (10) Includes imputed income on company-paid premiums for Director Split Dollar Life Insurance policies.