

Live Mutual

2017 Annual and Corporate Responsibility Report





We live in divided times.

But when we look around us, it's easy to see people who **Live Mutual**,
and do extraordinary things for each other.

Proving a concept at the core of the MassMutual brand:

That interdependence is more powerful than
independence. Because together, we can do
more good than any of us can alone.

We see this every day in unsung heroes who reach out to make a difference
in each other's lives. These uplifting stories fuel our passion to do more – for
policyowners, for our fellow employees, and for the communities we call home.

In this year's report, we spotlight the MassMutual people who are raising the bar
for interdependence. Mentoring colleagues, educating our youth, reaching out
to the underserved, and demonstrating the power of **Live Mutual**.

Dear Fellow Policyowners and Customers,

From the time we issued our first policy in 1851, MassMutual's work has been grounded in a promise: *You can count on us at the most important moments of your life.*



That's what mutuality is all about. It's not only how we run our business – operating for the benefit of our members and policyowners – it's also a way of living in which we can depend on each other. We recognize that we can achieve so much more together than alone.

Given the events of last year, it's a principle that remains especially relevant. Yes, the markets performed strongly, reflecting an improving and optimistic global economy. Yet it was a tumultuous year, marked by political instability at home and abroad, the growing threat of terrorism and war, and, sadly, horrible acts of hatred and intolerance that have no place in this world.

In these times of division and uncertainty, people value moments of mutuality more than ever. Because when we [Live Mutual](#), we rely on each other, find strength in each other, and ultimately, build a better future together.

Helping Our Customers Live Mutual

In that spirit, we're proud of the progress we made in 2017 with helping more people plan for life's most important moments.

As always, our biggest priority is helping a greater number of people. Last year, we once again posted record sales of life insurance, outpacing the industry and increasing the amount of coverage we provide to nearly \$670 billion. We served more than half a million new customers in our Workplace and Institutional

businesses, helping to grow their retirement savings, deliver their pension payments, and provide protection for their families. We earned their trust and confidence by strengthening our excellent financial foundation, as we ended 2017 with \$17.4 billion in total adjusted capital, the most in our history, and maintained among the highest ratings of any company in any industry.¹

It's that long-standing financial strength which also enabled us to announce our 150th consecutive dividend payout in 2018 to all eligible participating policyowners.² This historic estimated \$1.6 billion payout is backed by our strong fundamentals and longtime competitive advantage of our diverse portfolio of domestic and international insurance, Workplace and Institutional businesses, as well as our global asset management firms, OppenheimerFunds Inc. and Barings. Together, our combined businesses managed more than \$770 billion in assets last year, a new record.

To maintain that foundation so many depend on, we continued to evolve so we can capitalize on new opportunities and create even more value for our policyowners. For instance, last year we announced our plan to sell our Hong Kong-based subsidiary, MassMutual Asia, to Yunfeng Financial Group and several Asia-based investors. Once closed, this transaction will provide an outstanding immediate return, long-term value through an ongoing ownership interest in the new combined entity, and innovative opportunities both at home and abroad.

All of these efforts support our ability to deliver on our commitments to you. In fact, last year, we delivered more than \$5 billion in benefits, with each dollar helping our policyowners and customers live a better life.

Still, with the progress we've made, there is much more to do given the vast number of financially underprepared in our country. For too many, financial security is becoming increasingly out of reach, and our strategy is built around developing a lasting solution to this enduring problem.

In these times of division and uncertainty, people value moments of mutuality more than ever. Because when we [Live Mutual](#), we rely on each other, find strength in each other, and ultimately, build a better future together.

First, it starts with our people. We spent every day of 2017 helping our customers at all stages of life, whether it was an advisor counseling a business owner on a succession plan, a retirement education specialist showing a worker how to save more each month, or a customer

Benefits to our customers



Total adjusted capital



Consecutive dividend payout in 2018



service representative ensuring a disability income check got to a claimant on time. While each situation is different, the experience is the same: a personal connection you can rely on to help navigate your biggest financial challenges.

At the same time, we know that in today's world, many of our daily interactions are digital in nature. So whether you want to work with us in person, on your tablet, or both, our goal is to make the experience simple and seamless. That's why we also spent 2017 enhancing and expanding the ways we serve you – anytime, anywhere – so we can best meet your needs on your terms.

We refreshed our brand, celebrating interdependence and reflecting the values that have long guided us, while also launching a new massmutual.com, where you can find an advisor near you, buy life insurance directly, or actively manage your portfolio. We also continued to use data to drive better outcomes – from expanding our use of algorithms to provide protection in a fraction of the time, to giving workers the ability to track and improve their retirement readiness right from their phones.

At the heart of these solutions is our dedicated and talented team of colleagues. Their innovative spirit and tireless efforts continue to earn us recognition across a broad range of areas, including operational excellence from the Shingo Institute, diversity and inclusion from the Human Rights Campaign, and ethics and integrity from the Ethisphere Institute.

And finally, our passion for making life better for our customers extends to our communities. In its first full year in 2017, the MassMutual Foundation broadened economic opportunities for youths and their families, including the expansion of our FutureSmart digital curriculum, which has provided financial and life lessons to nearly a million students. In addition, last year marked the 15th anniversary of our LifeBridge program, which has provided nearly \$700 million in free life insurance³ to thousands of families across the country.

Depending On Each Other

Like so much of what we do, all of these initiatives are centered on the notion that we're always stronger

when we recognize our responsibilities to each other – and work to improve the lives of those around us. That's exactly what we've done for the past century and a half, as we've helped generations of people secure their future and protect the ones they love.

I'm proud of that purpose, proud of our accomplishments in 2017, and most of all, proud to be part of the MassMutual community with each of you. Together, we can build a future that brings us closer. That shows us we don't have to go it alone. That makes life better for all of us.

That's what it means to [Live Mutual](#). We look forward to working with you this year – and every year – to make that vision a reality.

Sincerely,

Roger W. Crandall
Chairman, President & Chief Executive Officer

¹ Financial strength ratings are for Massachusetts Mutual Life Insurance Company (MassMutual) and its U.S.-domiciled life insurance subsidiaries, C.M. Life Insurance Company and MML Bay State Life Insurance Company, as follows: A.M. Best Company, A++ (Superior); Fitch Ratings, AA+ (Very Strong); Moody's Investors Service, Aa2 (Excellent); and Standard & Poor's, AA+ (Very Strong). Ratings are as of 3/1/18 and are subject to change.

² Dividends are determined annually, subject to change and not guaranteed.

³ MassMutual pays the premiums.

Performance

12th

consecutive year
of record-breaking
whole life sales

\$5.1B paid in insurance
and annuity
benefits

Performance Review

2017 was an outstanding year for MassMutual. Record sales in life insurance and Institutional sales, a highly diversified investment strategy coupled with strong market performance, and a productive distribution network helped MassMutual protect and grow the assets of the company.

Historically high sales in core businesses outperformed the industry, a reflection of the company's attractive portfolio of products and services. Highlights included:

- The twelfth consecutive year of record weighted¹ whole life sales – up 9 percent from 2016 to \$678 million
- Record sales from our Institutional businesses, topping \$10 billion in 2017 and up 47 percent over prior year
- Integration of MSI Financial Services, Inc. with MML Investors Services, LLC (MMLIS) put MMLIS among the nation's largest insurance company-owned broker-dealers

Earnings results were also impressive. Net gain from operations before policyowner dividends and taxes – the company's primary earnings measure as a mutual company – was \$1.8 billion, up 18 percent from 2016, driven by double-digit increases in all insurance business lines – life, annuities, disability and long-term care insurance.

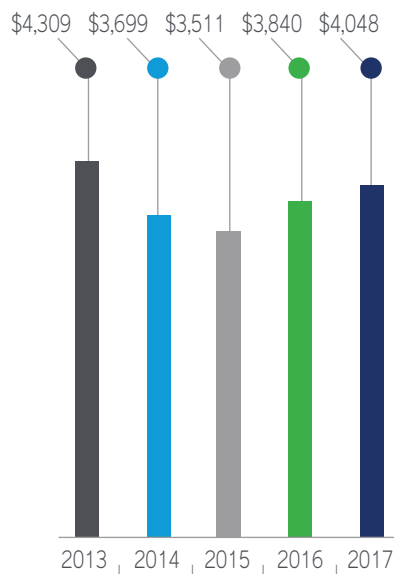
Statutory surplus and total adjusted capital – the two key measures of a company's overall financial strength – both reached record high levels. Surplus grew to \$15.7 billion while total adjusted capital increased slightly to \$17.4 billion – in spite of the negative impact from tax reform – positioning MassMutual with the financial resources and flexibility needed to manage for optimal long-term results.

MassMutual approved an estimated payout of \$1.6 billion in policyowner dividends² for 2018, upholding our commitment to operate for the benefit of eligible participating policyowners. In addition, \$5.1 billion in insurance and annuity benefits were paid in 2017, as we delivered on our purpose to help people secure their future and protect the ones they love.

¹ Weighted sales are based on annualized new premium with single premium payments weighted at 10 percent.

² Dividends are determined annually, subject to change and not guaranteed.

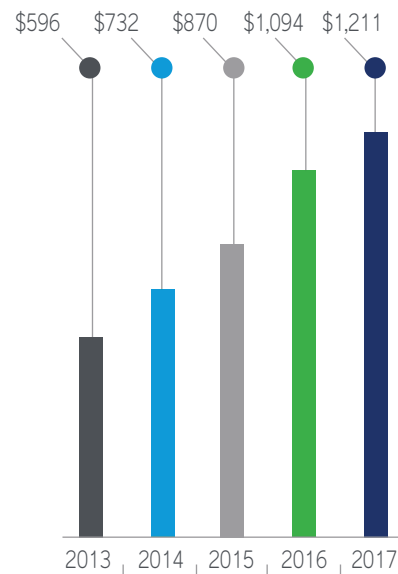
U.S. Insurance Sales (In Millions)



MassMutual insurance sales included record-breaking contributions from whole life as well as continued growth in all other products. Our product offering reflects a focus on prudent risk management and creating long-term value for our policyowners.

U.S. Insurance sales include life insurance, disability income insurance, long-term care insurance, and annuities.

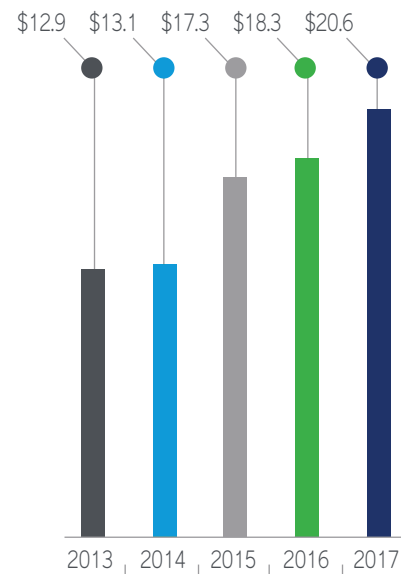
U.S. Whole Life Sales (In Millions)



MassMutual achieved a record high in whole life sales for the twelfth consecutive year. The whole life product suite is designed with flexibility to meet market needs and create long-term value for our participating policyowners.

These consolidated results of Massachusetts Mutual Life Insurance Company also include its U.S.-domiciled, wholly owned subsidiaries: MML Bay State Life Insurance Company and C.M. Life Insurance Company. Prior year results have been restated to include additional products.

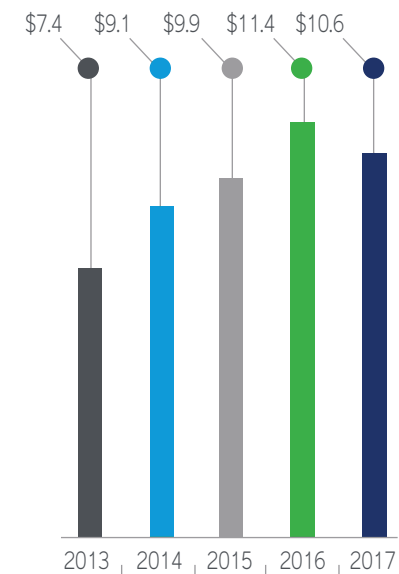
Workplace & Institutional Sales (In Billions)



Workplace and Institutional businesses continue to generate significant sales growth, with strong results across a broad product line and over \$20 billion of combined sales in 2017. Executive Benefits product sales topped \$1 billion for the fifth consecutive year.

Workplace sales include defined contribution plans in addition to disability and life insurance products sold at the workplace. Institutional sales include defined benefit plans, bank-owned life insurance, investment-only and pension buyout solutions, and funding agreements.

Retirement Plan Sales (In Billions)



Retirement Plan sales remain strong, averaging \$10 billion in sales annually in recent years. MassMutual currently serves roughly 2.6 million participants in over 30,000 plans.

Forward-Looking Risk Management

MassMutual's strong risk management process provides a disciplined and forward-looking enterprise-wide approach, ensuring risk views are included in key strategic and operational decisions. We take a broad and multifaceted approach to identifying risk by analyzing trends in the business environment, evaluating key risk metrics, and assessing the capabilities and risks of key competitors. This allows us to identify possible risk events, prioritize them, and proactively prepare and manage for their possible occurrence – all to help protect the financial interests of our policyowners.

\$10B

Record sales from Institutional businesses

Performance Summary

Capitalizing on strong operating fundamentals, prudent risk management and a disciplined investment strategy, MassMutual's 2017 results reflect continued growth in assets and capital.

Summary of Financial Position

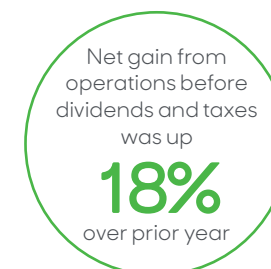
(Consolidated statutory basis, in millions)

As of December 31:	2017	2016
Short-term investments and cash	\$ 3,939	\$ 3,950
Bonds	94,870	88,208
Other invested assets	70,366	67,965
Total invested assets	\$ 169,175	\$ 160,123
Other assets	7,095	6,681
Separate account assets	75,505	68,234
Total assets	\$ 251,775	\$ 235,038
Policyowners' reserves	\$ 133,547	\$ 128,425
Policyowners' dividends	1,601	1,609
Other liabilities	22,109	18,092
Asset valuation reserve	3,308	3,264
Separate account liabilities	75,505	68,225
Total liabilities	\$ 236,070	\$ 219,615
Surplus	15,705	15,423
Total liabilities and surplus	\$ 251,775	\$ 235,038

Summary of Operations

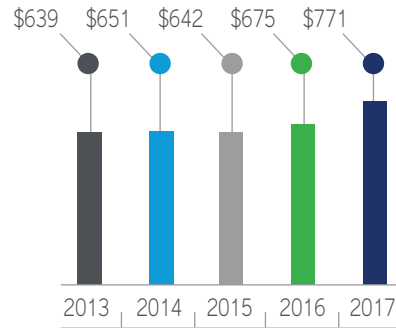
(Consolidated statutory basis, in millions)

As of December 31:	2017	2016
Premium income	\$ 17,762	\$ 21,246
Net investment income	6,866	6,660
Fees and other income	1,485	1,654
Total revenue	\$ 26,113	\$ 29,560
Policyowners' benefits	\$ 20,646	\$ 19,118
Change in policyowners' reserves	(337)	5,335
Commissions and other expenses	3,957	3,536
Total benefits and expenses	\$ 24,266	\$ 27,989
Net gain from operations before dividends and taxes	\$ 1,847	\$ 1,571
Dividends to policyowners	1,569	1,566
Net gain from operations before taxes	\$ 278	\$ 5
Federal income tax expense (benefit)	(290)	(277)
Net gain from operations	\$ 568	\$ 282
Net realized capital gains	(431)	(212)
Net income	\$ 137	\$ 70



Enterprise Measures

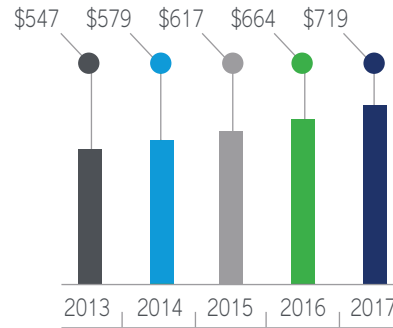
Assets Under Management¹ (In Billions)



The financial assets managed by MassMutual and its subsidiaries grew to a record \$771 billion in 2017, reflecting significant growth in assets under management across MassMutual's domestic and international life company businesses, as well as its asset management subsidiaries.

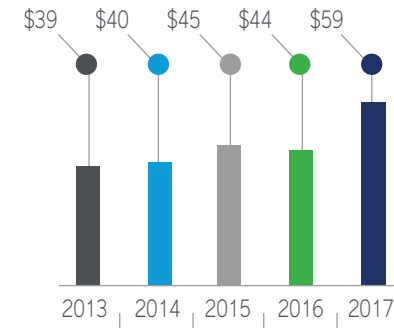
¹ Assets under management include assets and certain external investment funds managed by MassMutual subsidiaries including OppenheimerFunds, Inc. and Barings.

Worldwide Insurance in Force (In Billions)



Worldwide insurance in force, or the amount of protection the company has issued and outstanding, grew by over 8%. Growth was driven by strong sales, particularly of whole life in the U.S., and is indicative of an attractive product portfolio.

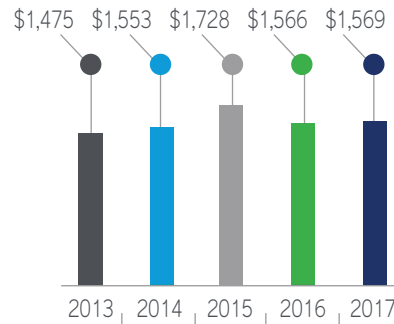
Premium & Other Deposits (In Billions)



Results in 2017 were driven by growth across our varied businesses, including domestic life insurance, our Institutional offerings, and the asset management companies, partially offset by lower year-over-year volumes in retirement plans.

Consolidated Statutory Results²

Dividends to Policyowners³ (In Millions)



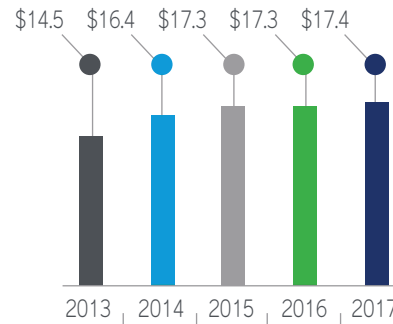
Our 2017 dividends to policyowners exceeded \$1.5 billion for the fourth year in a row, affirming MassMutual's dedication to paying one of the highest dividends in the industry while maintaining financial strength.

² These are consolidated statutory results of Massachusetts Mutual Life Insurance Company and its U.S.-domiciled life insurance subsidiaries: C.M. Life Insurance Company and MML Bay State Life Insurance Company.

³ Dividends are determined annually, subject to change and not guaranteed.

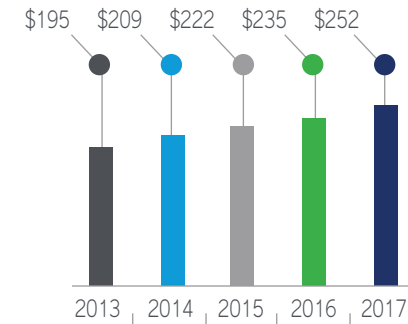
For more information, visit MassMutual.com/Financials.

Total Adjusted Capital (In Billions)



Total adjusted capital remained exceptionally strong, growing to a record \$17.4 billion, reflecting strong operating results and prudent capital management. This level of capital strengthens our financial foundation, providing flexibility and the ability to manage for optimal long-term results.

Life Company Assets (In Billions)



Life company assets reached an all-time high of \$252 billion, reflecting annual growth of 7%. Steady growth in recent years is an indication of our policyowners and customers recognizing the value of doing business with a mutual company.

Investment

Philosophy and Strategy

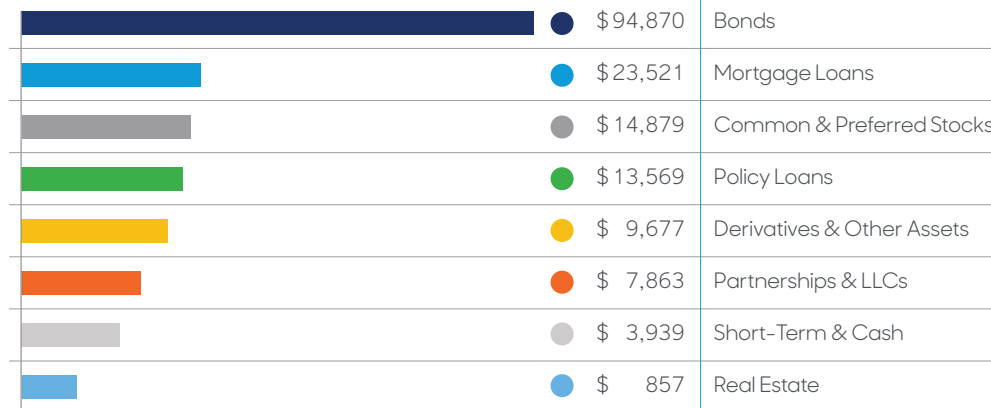
We believe that the best way to help ensure that we'll be there for policyowners and their loved ones is through the consistent application of a long-standing investment philosophy. Our goal is to generate competitive long-term results for policyowners, while preserving the ability to withstand downturns in financial markets. We extend this approach through the way we manage

our General Investment Account (GIA), which comprises the assets we use to meet our obligations to our policyowners. Our focus on long-term, risk-adjusted returns and the consistent application of our investment strategy has resulted in a portfolio that has performed well in the past and is positioned to do so in the future.

Total Invested Assets

December 31, 2017 (In Millions)

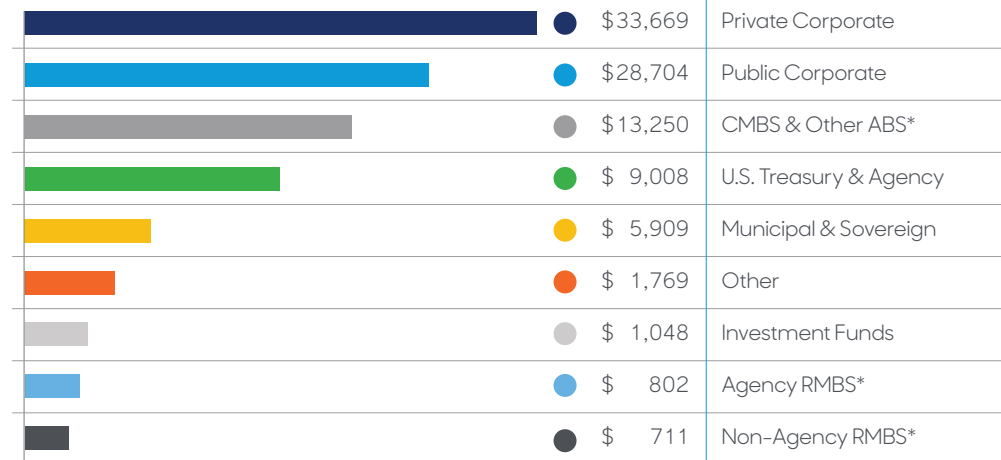
\$169,175



Bonds

December 31, 2017 (In Millions)

\$94,870



Policy loans are loans taken by policyowners against the cash surrender value of their policies and, as such, are secured by the cash surrender value of those policies.

**Residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), and asset-backed securities (ABS)*

Diversification

We diversify the composition of the GIA by investing in a variety of asset classes in order to reduce the impact of negative events on our portfolio. MassMutual further diversifies by investing in strategic operating businesses, such as Oppenheimer Funds, Inc.; Barings; and MassMutual International LLC.

Prudent Security Selection

Our investment professionals conduct regular, thorough reviews of both current and potential holdings to ensure that they meet our criteria for inclusion in the GIA.

Relative Value

A relative value assessment of risk versus return informs our decision-making process as we consider various opportunities and their prospective impacts on GIA performance.

Why MassMutual

Policyowners & Retirement Plans

Policyowners pay insurance premiums that MassMutual uses to:

- Cover the expenses of providing protection
- Meet current benefit obligations
- Invest to pay future benefits and generate future value

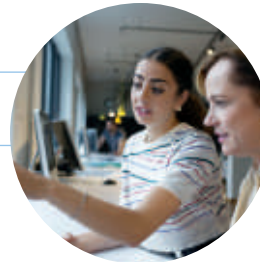
Retirement plan contributions are invested through MassMutual to help secure future retirements.



Diversified Investment Strategy

Through a disciplined investment process that supports long-term investment performance and prudent risk diversification, MassMutual invests in:

- A variety of asset classes to help meet policyowner commitments
- Strategic operating businesses that capitalize on core capabilities while generating complementary returns



Financial Strength & Dividends

Our earnings help:

- Pay dividends to eligible participating policyowners
- Contribute to capital and surplus
- Support business reinvestment
(Dividends are not guaranteed.)



The Result

A framework focused on delivering:

- Competitive risk-adjusted returns
- Diversified product offerings
- Among the industry leaders in financial strength
- High dividends
- Quality service



- Mutual form of ownership
- Portfolio of protection and retirement products
- Strategic operating businesses
- Strong network of skilled financial professionals
- Diversified investment strategy
- Disciplined enterprise risk management

About MassMutual

MassMutual is a leading mutual life insurance company that is run for the benefit of its members and participating policyowners. MassMutual offers a wide range of financial products and services, including life insurance, disability income insurance, long-term care insurance, annuities, retirement plans and other employee benefits. For more information, visit www.massmutual.com.

Asset Management Affiliates



BARINGS

Policyowners



A Legacy of Helping Others

Detroit, February 1933. It was the height of the Great Depression and banks were shut. That month, temperatures dropped to 13 below and people ran out of coal to heat schools, hospitals, orphanages, and homes. A MassMutual customer, who was a coal dealer, visited the MassMutual agency to ask for a loan to release a shipment of coal from the railroads, borrowing against his life insurance policy. The agency

The agency didn't have enough cash on hand, but called the MassMutual home office, three central banks, and a local branch to get the policyowner the money he needed to keep people warm.



didn't have enough cash on hand, but called the MassMutual home office, three central banks, and a local branch to get the policyowner the money he needed to keep people warm. Today, our financial professionals remain a trusted resource in the face of life's challenges, from processing a claim when a loved one passes away to making plans for retirement.

Policyowners

2017 Customer Initiatives

When we expand our services, we become better able to help people protect the ones they love. MassMutual is investing in new tools powered by data to help us better know – and better serve – our policyowners.



LifeBridge has issued more than
\$695 million
in free coverage

Deepening Our Understanding of Americans Everywhere

Understanding policyowners' needs and priorities allows us to better help them reach their goals. MassMutual commissioned the College Planning & Saving Study to learn how families think about budgeting for college. The study surveyed parents and guardians and examined how people from different ethnic groups think and act when it comes to financial planning. With this information, our advisors can better connect with families from all backgrounds and help them achieve their financial and educational dreams.

The College Planning & Saving Study adds to MassMutual's growing picture of American attitudes about money matters, including recent research into the particular financial experiences and challenges of African Americans, Latinos, Chinese Americans, Korean Americans, Asian Indians, and Caucasians.

Helping Parents Protect Children's Educational Futures

Parents should be able to fulfill the dream of providing a quality education for their children – even if they can't be there to see it happen. That's the goal of MassMutual's LifeBridge Free Life Insurance Program. The program pays all premiums for a \$50,000 term life insurance policy that is issued to a trust that pays for children's educational expenses in the event that a parent or guardian dies.

Money can be used to pay for tuition, fees, books, campus room and board, and other educational expenses at preschools, private schools, trade schools, or colleges and universities. The only program of its kind, LifeBridge has issued more than 13,900 policies representing more than \$695 million in free coverage to income eligible families – with an ultimate goal to issue coverage worth \$1 billion.



Enhancing the Customer Experience Through Data

Because we're for technology that helps us serve one another better, MassMutual is investing in digital, big data, and analytics to help us provide a superior experience for our policyowners. That includes LifeScore360, an exciting new initiative that uses data science to create the first individual mortality risk scoring system of its kind for the life insurance industry. We took our commitment global in 2017 by opening a new data science operation in Hong Kong through MassMutual subsidiary MassMutual International LLC. Our work in this data-rich marketplace will focus on creating algorithms and predictive models that use hundreds of millions of data points to help us better understand health and behavior.

Measuring the Health of Employers' Pension Plans

MassMutual has more than 70 years of experience in the pension plan market. Now, we're sharing the wisdom we've gained over those years with the new PensionSmart Analysis tool. The tool provides insights into the health of an employer's pension, detailing a plan's current status, funding level or health, service structure, and a comparison to pension plans

sponsored by other employers in the same industry. With the results of the analysis, plan sponsors can work with MassMutual pension experts to get input about achieving their goals, from continuing their commitments to terminating a plan. At a time when experienced support for pension plans is becoming harder to obtain, MassMutual is offering resources to help employers manage complex financial issues and meet their obligations.



70
years

of experience in the
pension plan market

Employees

\$1.1M

2017 Mutual Impact Grants
21 Nonprofits



Mutual Impact Unlocks a World of Words

Kids who don't read at their grade level by the time they reach fourth grade are four times more likely to drop out of high school. In the Pioneer Valley in Massachusetts, near MassMutual's headquarters, a majority of third graders have reading skills that fall short. That's why our Springfield employees chose three nonprofits that promote early-grade reading proficiency to receive Mutual Impact grants in 2017.

Mutual Impact remains as much about the donation of time, talent, and passion as it is about dollars. Beyond making MassMutual Foundation-matched donations to support nonprofits in their communities, employees volunteer with grantees through traditional event-based and skills-based projects – including helping kids build reading skills to prepare them for lifelong success.



Mutual Impact Focus Areas

- Child Hunger
- Early-Grade Reading Proficiency
- Education
- Family Economic Self-Sufficiency
- Food Insecurity
- Returning Veterans
- Successful Advancement in School
- Violence Prevention & Safety

Employees

2017 People Initiatives

Living Mutual starts within our own walls. MassMutual goes the distance to create the strongest, healthiest, and most inclusive workforce possible – a team our people are proud to belong to.



10,466

visits to Wellness Services

Promoting Diversity and Inclusion Companywide

Diversity and inclusion help fuel our growth and help us achieve our purpose. We seek and value diverse perspectives that reflect the markets we serve, and remain committed to advocating for fairness, equality, and inclusion. In 2017, we were proud to increase the diversity of our workforce, as well as the percentage of employees who self-identify as LGBT, a veteran, or as having a disability. To create greater transparency and awareness of our diversity progress, we shared the demographics of our workforce internally for the first time.

Our focus on continuing education is helping create a culture where employees feel that they belong and are encouraged to bring their whole selves to work. MassMutual's eight employee-led Business Resource Groups have focused on professional development, mentoring, and providing business value. Through their collaboration, they have promoted understanding and inclusion at every level of the company.

Speaking Up About Issues That Matter

We know that we're more powerful when we join together with others. By supporting national movements working for social change, we gain strength in numbers and inspire others to speak up for what's right. In 2017, MassMutual became one of more than 180 corporate partners of the National LGBT Chamber of Commerce (NGLCC) who are dedicated to supporting LGBT entrepreneurs and sourcing from NGLCC's certified LGBT Business Enterprises.

Our CEO, Roger Crandall, also signed the CEO Action for Diversity & Inclusion pledge, committing to building an open-minded workplace and sharing successes and challenges with other companies. Finally, we signed on to the Paradigm for Parity action plan, which defines bold actions to help women advance in the workplace and in positions of leadership.

Using Technology to Help Employees Get Moving

Technology can play an important role in the shift to healthier behavior. To that end, MassMutual has negotiated discounts for employees purchasing Fitbit activity trackers. So far, employees have purchased more than 3,000 devices and many are participating in online fitness challenges. Physical activity logged with users' Fitbits can count toward our Live Healthy, Live Well incentive program, through which employees and their partners can earn financial rewards for completing activities that can improve their health.





2017 subsidy for healthy nutrition options

≈ \$540K

≈ 2,500

flu shots given

Making It Easy to Make Healthy Choices

MassMutual upholds a culture that values employee well-being by making everyday healthy choices affordable and convenient. The company subsidizes healthy food options in the cafeteria, like salad, soups, and fruit selections on certain days each week. We encourage routine medical care by offering free on-site flu shots to all employees. At our larger campuses, the Wellness Center provides onsite occupational health, minor injury and illness care, preventive screenings, and convenient medical services staffed by doctors, physician assistants, and registered nurses.

Fighting Hunger Through a Volunteer Garden

Among the organizations supported by the Mutual Impact program are food banks and shelters in Northern Connecticut and Western Massachusetts. MassMutual helps support these groups by tending to employee volunteer gardens in Enfield and Springfield, which have yielded a combined 17,000 pounds of vegetables since 2012. Approximately 20 employees work to keep these gardens productive and healthy.

Earning LEED Gold

In 2017, our Springfield headquarters was recertified for a Leadership in Energy and Environmental Design (LEED) Gold rating from the U.S. Green Building Council. This distinction reflects our ongoing commitment to lessen our environmental impact now and in the future. Since the Springfield campus's initial LEED certification in 2011, we have continued our green initiatives by adding electric vehicle charging stations; eliminating Styrofoam from our cafeteria; maintaining photovoltaic and thermal solar panels that supply 50 percent of our hot water and 3 percent of our power; and improving waste handling and energy and water efficiency.



2017 External Recognition

100% Rating

Human Rights Campaign Corporate Equality Index

Top Company for Executive Women

National Association for Female Executives

Best Place to Work for Disability Inclusion

Disability Equality Index

Military Friendly Employer

Well-Being Award

Cigna

Workplace Health Achievement Index

American Heart Association

Silver Medallion Award The Shingo Institute

World's only insurance company awarded

Gold Standard Employer

CEO Roundtable on Cancer

Students



67%

average increase in financial
knowledge after completing
FutureSmart course



2M

We aspire to reach
2 million students
and families by 2020

Learning Life Skills

“At first, I didn’t think much about saving,” says Ruth Viegas, a high school student in San Antonio, Texas, who attends a school where more than a third of students live below the poverty line. Then she took part in the MassMutual Foundation’s FutureSmart digital course. Based on the belief that financial education is key to economic opportunity, FutureSmart offers free digital financial

education to middle- and high-schoolers, covering topics such as budgeting, investing, and paying for college. Now, Ruth is thinking about financial issues both short- and long-term. “I’m already thinking about retirement,” she says. For Ruth and hundreds of thousands of other students who are now FutureSmart, this knowledge is power that will aid them throughout life.

Students

2017 Education Initiatives

MassMutual shows young people that they're not alone when it comes to preparing for their financial futures. At the same time, students help us chart courses in emerging disciplines.



\$500,000

to fund data science initiatives
at University of Vermont

Expanding the FutureSmart Platform

One of the keys to success of the FutureSmart program is its practice of engaging with students in ways that resonate with them, whether through an interactive course or a live event in an NBA arena. With this approach in mind, we extended the platform to the devices with which teens spend a significant amount of time: their smartphones. The new FutureSmart mobile app is available for free to anyone – students do not have to be enrolled in the FutureSmart digital course in order to play. Each level of the app introduces players to a new life stage and the financial decisions that accompany it, from budgeting for a back-to-school shopping trip to saving for retirement. The app is available for iPhone or Android in both English and Spanish.

Growing Our Expertise in Data Science

Collaborations with universities are a critical way MassMutual is building capabilities in data science. This year, we launched a partnership with the University of Vermont (UVM) to fund an innovative pilot program within the university's Vermont Complex Systems Center. The partnership will fund a four-year fellowship for a Ph.D. student working in data science and complex systems; support exploratory questions related to wellness, human behavior, and networks with a team of interdisciplinary faculty. This also enables UVM to hire a Visual Data Artist-in-Residence, who will partner with Complex Systems Center students and faculty and with MassMutual's data science team to create visualizations that allow people to easily understand and interact with complex data. We are specifically interested in how environmental characteristics such as air pollution affect mortality and longevity over time. The initiative represents the largest single corporate collaboration with the Center since its inception in 2009.

23

Springfield Public Schools served by City Connects in 2017-2018



Bridging the Gap Between College and Careers

Which is better for a budding data scientist: academic training or real-world experience? Our answer is both, which is why we launched the Data Science Development Program, a three-year program that recruits recent college graduates and sponsors their graduate-level coursework while putting them to work on some of MassMutual's toughest data challenges and projects. Participants enroll in graduate courses at the University of Massachusetts Amherst and other institutions, with coursework supplemented by workshops led by local faculty and in-house training from industry experts. At the same time, program members contribute to multiple MassMutual data projects under the direction of a senior data scientist. Participants also build communication and leadership skills through stakeholder presentations and opportunities to direct independent research efforts.

Giving Students Resources They Need to Thrive

With 58 schools, the Springfield Public School district is the second-largest school district in Massachusetts. But three in four students in the district experience poverty, which can be a major obstacle to success. Thanks to a grant from the MassMutual Foundation, the City Connects program will help students stay in school and become career-ready. City Connects coordinates both in- and out-of-school support for students, designed to address the impacts of poverty on a child's ability to develop, learn, and thrive. Based on successes in other school districts, City Connects estimates that the intervention will boost students' math and literacy scores, lower absenteeism and drop-out rates, and increase the likelihood that students will progress to the next grade.

5,000

students impacted



Neighbors

Helping Puerto Rico Rebuild

When John Vaccaro, head of MassMutual Financial Advisors, flew to Puerto Rico to deliver medical supplies after Hurricane Irma, he witnessed devastation before even stepping off the plane. “What I thought were blue roofs I soon realized were not roofs at all, but tarps distributed by FEMA for homes that had been destroyed,” Vaccaro says. The tour of destruction continued from there as the MassMutual team visited a responder staging area and met with our San Juan advisors.

Beyond the team’s delivery of 2,000 pounds of supplies, the MassMutual Foundation approved a \$250,000 grant to the Massachusetts United for Puerto Rico Fund to support relief efforts. “For me, the trip was a reminder that we are a great company focused on helping people,” Vaccaro says. “In a world full of challenges, great companies will continue to serve others.”



\$250,000

MassMutual Foundation donation to the Massachusetts United for Puerto Rico Fund

11

Full bins of winter clothes donated, in collaboration with ALMMA

230+

Families helped through donations and assistance programs in 2017

2017 Community Initiatives

Everyone needs a helping hand now and then. MassMutual is committed to giving back to those in need and showing support for the causes that matter to our employees.

Using Data for Good in Our Hometown

The Pioneer Valley Planning Commission (PVPC) is responsible for increasing communication, cooperation, and coordination among government, business, and civic organizations in central Massachusetts, where MassMutual is headquartered. We aligned with PVPC during our Data Days for Good initiative, where we dedicate our team's time and skillsets to fill capacity or expertise gaps for MassMutual partner organizations that advance social good. In support of a recently established collaboration between MassMutual Foundation, Community Foundation of Western Massachusetts, and the Davis Foundation, PVPC leveraged our data scientists to develop an interactive map-based tool for users to explore the progress and trends related to key social indicators of a thriving community within the Pioneer Valley. The tool will allow for informed discussion and decision-making related to a variety of issues in the region. Ultimately, the collaboration will expand to other community partners with the goal of promoting data-driven decision-making for nonprofits and funders alike.

22 grants totaling \$225,000 to local nonprofits in 2017

Multiplying Our Financial Professionals' Impact

We're stronger when we come together as a community. MassMutual's Community Service Awards recognize our financial professionals who embody this spirit by supporting nonprofits in their own neighborhoods. In the awards program's 21st year, MassMutual presented grants to nonprofit organizations with which our financial professionals volunteer, based on the demonstrated value of the individual's involvement over the past 12 months, the nature of their impact, and a holistic view of the organization's mission and impact in the areas they serve. The two \$25,000 grants made in 2017 went to the Boys & Girls Club of Grand Rapids and For Love of Children, a D.C.-based education nonprofit.



Three Drivers of Small Business Growth:

1. Access to capital
2. Business and management education
3. Access to business networks and contracting opportunities

Initiative for a Competitive Inner City targets all three drivers.

Helping Inner-City Businesses Grow

Initiative for a Competitive Inner City is a national nonprofit research and advisory organization and the leading authority on U.S. inner-city economies and the businesses that thrive there. Among its programs is Inner City Capital Connections (ICCC), which meets the unique needs of inner-city entrepreneurs. ICCC provides capacity-building executive education, coaching, mentoring, and access to capital, contracting opportunities, and business networks. A MassMutual Foundation grant brought ICCC to Springfield, supporting 75 local businesses with a full-day seminar featuring experienced practitioners and professors from top institutions. The program will help participating companies raise capital, grow revenue, and create jobs – which in turn will promote economic development in the Springfield area.



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