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MassMutual IRA

Monthly Performance as of 11/30/2020

Class A maximum sales charge = 5.50%. This fee is generally waived for qualified retirement accounts. Sales charges are not applicable to Class R5 and Class R4.

	At Net Asset Value Average Annual Total Returns			With Sales Charge Average Annual Total Returns						
Fund Name	Year to Date	1 year	5 year	10 year or Since Inception	Year to Date	1 year	5 year	10 year or Since Inception	Gross Expense Ratio	Inception Date
Money Market & Fixed Income										
MassMutual Premier US Government Money Market R5	0.24%	0.34%	0.74%	0.37%	N/A	N/A	N/A	N/A	0.52%	10/3/1994
MassMutual Premier Short-Duration Bond A	1.11%	1.33%	2.05%	1.81%	-1.42%	-1.21%	1.53%	1.55%	0.95%	01/01/1998
MassMutual Premier Inflation Protected and Income A	9.44%	9.48%	4.31%	3.07%	4.78%	4.83%	3.41%	2.62%	1.81%	12/31/2003
MassMutual Premier Core Bond A	7.40%	7.36%	4.13%	3.56%	2.84%	2.79%	3.23%	3.11%	0.97%	01/01/1998
MassMutual Premier Diversified Bond A	6.93%	7.00%	4.49%	3.98%	2.39%	2.46%	3.58%	3.53%	1.06%	05/03/1999
MassMutual Select Strategic Bond A	7.31%	7.87%	4.98%	4.33%	2.75%	3.28%	4.07%	3.87%	1.05%	12/31/2004
MassMutual Premier High Yield A	1.83%	3.52%	5.99%	6.61%	-3.77%	-2.18%	4.80%	6.01%	1.09%	11/01/2004
MassMutual Select Total Return Bond R4	8.22%	3.02%	5.60%	3.61%	N/A	N/A	N/A	N/A	0.81%	07/06/2010
Asset Allocation/Lifestyle										
Asset Anocation/Lifestyle MassMutual Premier Balanced A	8.21%	10.36%	8.41%	8.36%	2.25%	4.29%	7.19%	7.75%	1.25%	01/01/1998
MassMutual RetireSMART by JPMorgan In Retirement A	6.83%	8.17%	5.63%	5.02%	0.96%	2.22%	4.44%	4.43%	1.31%	12/31/2003
MassMutual RetireSMART by JPMorgan 2020 A	6.99%	8.53%	6.92%	6.97%	1.11%	2.22 %	4.44 <i>%</i> 5.72%	6.37%	1.10%	12/31/2003
MassMutual RetireSMART by JPMorgan 2025 A	7.53%	9.53%	7.90%	7.75%	1.61%	3.50%	6.69%	7.15%	1.16%	04/01/2010
MassMutual RetireSMART by JPMorgan 2020 A	7.53%	9.83%	8.40%	8.10%	1.62%	3.79%	7.18%	7.49%	1.11%	12/31/2003
MassMutual RetireSMART by JPMorgan 2035 A	7.65%	10.27%	8.64%	8.35%	1.73%	4.21%	7.42%	7.73%	1.19%	04/01/2010
MassMutual RetireSMART by JPMorgan 2040 A	7.47%	10.31%	8.76%	8.41%	1.56%	4.25%	7.53%	7.80%	1.15%	12/31/2003
MassMutual RetireSMART by JPMorgan 2045 A	7.36%	10.47%	8.89%	8.73%	1.46%	4.40%	7.66%	8.12%	1.28%	04/01/2010
MassMutual RetireSMART by JPMorgan 2050 A	7.34%	10.32%	9.14%	8.84%	1.43%	4.25%	7.91%	8.23%	1.23%	12/17/2007
MassMutual Select BlackRock Global Allocation A	14.49%	17.15%	7.44%	6.10%	8.19%	10.70%	6.23%	5.50%	1.55%	12/01/2009
Large Cap Equity										
MassMutual Select Diversified Value A	-4.92%	-2.67%	7.22%	10.28%	-10.15%	-8.02%	6.02%	9.65%	1.13%	10/15/2004

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	At Net Asset Value Average Annual Total Returns				With Sales Charge Average Annual Total Returns					
Fund Name	Year to Date	1 year	5 year	10 year or Since Inception	Year to Date	1 year	5 year	10 year or Since Inception	Gross Expense Ratio	Inception Date
MassMutual Select Fundamental Growth A	27.10%	30.33%	16.86%	15.20%	20.11%	23.16%	15.54%	14.55%	1.39%	05/01/2000
MassMutual Select Fundamental Value A	-2.85%	-0.39%	5.97%	8.89%	-8.19%	-5.87%	4.78%	8.28%	1.19%	12/31/2001
MassMutual Premier Disciplined Value A	-4.92%	-2.63%	5.93%	9.23%	-10.15%	-7.98%	4.74%	8.62%	1.12%	11/01/2004
MM S&P 500® Index R4	16.85%	19.61%	12.50%	13.30%	N/A	N/A	N/A	N/A	0.62%	03/01/1998
MassMutual Premier Main Street A	10.58%	13.96%	11.13%	12.12%	4.50%	7.69%	9.88%	11.48%	1.26%	12/31/2004
MassMutual Select Blue Chip Growth A	29.45%	32.67%	17.99%	17.08%	22.33%	25.38%	16.66%	16.42%	1.20%	06/01/2001
MassMutual Select Growth Opportunities A	48.52%	52.20%	18.87%	17.08%	40.35%	43.83%	17.54%	16.42%	1.29%	05/01/2000
MassMutual Premier Disciplined Growth A	26.76%	30.96%	16.65%	15.58%	19.78%	23.76%	15.34%	14.93%	1.08%	11/01/2004
MassMutual Select Equity Opportunities A	5.33%	8.23%	12.48%	12.63%	-0.46%	2.28%	11.22%	11.99%	1.29%	05/01/2000
Mid Cap Equity										
MassMutual Select Mid Cap Growth A	19.94%	22.60%	14.25%	14.19%	13.34%	15.86%	12.97%	13.55%	1.27%	06/01/2000
MassMutual Select Mid-Cap Value A	-2.44%	0.01%	6.98%	8.94%	-7.80%	-5.49%	5.78%	8.32%	1.48%	08/29/2006
Small Cap Equity										
MassMutual Premier Small Cap Opportnities A	11.28%	14.29%	9.70%	11.63%	5.16%	8.00%	8.46%	11.00%	1.25%	07/20/1998
MassMutual Select Small Cap Growth Equity A	28.72%	30.50%	16.16%	13.93%	21.64%	23.32%	14.85%	13.29%	1.41%	05/03/1999
MassMutual Select Small Cap Value Equity A	-2.01%	2.03%	6.08%	9.56%	-7.40%	-3.58%	4.89%	8.95%	1.41%	03/31/2006
MassMutual Select Small Company Value A	-3.95%	-1.09%	5.01%	7.48%	-9.24%	-6.53%	3.83%	6.88%	1.50%	12/31/2001
International/Global Equity										
MassMutual Premier International Equity A	8.17%	11.92%	5.77%	6.91%	2.22%	5.76%	4.58%	6.31%	1.52%	01/01/1998
MassMutual Premier Global A	21.65%	24.56%	12.79%		14.96%	17.71%	11.52%		1.41%	12/31/2004
MassMutual Select Overseas A	2.41%	5.98%	6.23%	5.77%	-3.22%	0.15%	5.03%		1.48%	05/01/2001
Emerging Market Equity										
MassMutual Premier Strategic Emerging Markets A	9.47%	15.57%	10.56%	1.96%	3.45%	9.21%	9.32%	1.38%	1.83%	11/03/2008

The performance data given represents past performance and should not be considered indicative of future results. Current performance may be lower or higher than return data quoted herein. For more current information, including most recent month-end and quarter-end performance, please click here or visit www.massmutual.com/funds and click on the MassMutual IRA product or <u>click here.</u>

MassMutual IRA

Monthly Performance as of 11/30/2020

Principal value and investment return will fluctuate, so an investor's shares/units when redeemed may be worth more or less than the original investment. Investment portfolio statistics change over time and there are no assurances investment objectives will be achieved. Investments are not FDIC-insured, nor are they deposits of or guaranteed by a bank or any other entity, so they may lose value.

Investors should carefully consider investment objectives, risks, charges and expenses. This and other important information is contained in the fund prospectuses and summary prospectuses, which can be obtained by calling 1-888-309-3539 and should be read carefully before investing.

Investment results assume all investment distributions are reinvested and reflect applicable fees and expenses. When applicable, investment results reflect fee waivers and/or expense reimbursements, without which the results would have been lower.

Money Market Fund - You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Target Date Funds - Generally target retirement date (lifecycle) investment options are designed to be held beyond the presumed retirement date to offer a continuing investment option for the investor in retirement. The year in the investment option name refers to the approximate year an investor in the option would plan to retire and likely would stop making new contributions to the investment option. However, investors may choose a date other than their presumed retirement date to be more conservative or aggressive depending on their own risk tolerance.

Target retirement date (lifecycle) investment options are designed for participants who plan to withdraw the value of their accounts gradually after retirement. Each of these options follows its own asset allocation path ("glide path") to progressively reduce its equity exposure and become more conservative allocation in their target date year. Investors should consider their own personal risk tolerance, circumstances and financial situation.

These options should not be selected solely on a single factor such as age or retirement date. Please consult the prospectus (if applicable) pertaining to the options to determine if their glide path is consistent with your long-term financial plan. Target retirement date investment options' stated asset allocation may be subject to change. **Investments in these options are not guaranteed and you** may experience losses, including losses near, at, or after the target date. Additionally, there is no guarantee that the options will provide adequate income at and through retirement.

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