### Fact Sheet As of 03/31/2022

# MM Russell 2000® Small Cap Index Fund

... MassMutual **Funds** 

Northern Trust Investments, Inc.

I:MCJZX R5:MCJIX A:MCJAX R4:MCJFX SVC:MCJSX ADM:MCJYX R3:MCJTX

Average Appropriate Detro

#### Fund Objective:

The Fund seeks to provide investment results approximating (before fees and expenses) the aggregate price and dividend performance of the securities included in the Russell 2000® Index+.

Morningstar Category: Small Cap Blend Fund Net Assets: \$225M Fund Inception Date: 07/26/2012

#### Trailing Returns:\*

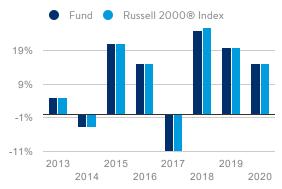
			Aver	age Ann	uai iotai	Return
	QTD	YTD	1Y	3Y	5Y	Since Inception
MM Russell 2000® Small Cap Index I	-7.60	-7.60	-5.96	11.59	9.62	12.18
Russell 2000® Index	-7.53	-7.53	-5.79	11.74	9.74	12.14
Category Average Return	-	-	1.13	12.35	9.45	-
Category Rank <sup>1</sup>	-	-	94	67	53	-
# Funds in Category <sup>1</sup>	-	-	632	600	541	-

#### Growth of \$10,000:\*



Performance shown is for class I shares. Max Sales charge for I is 0%.

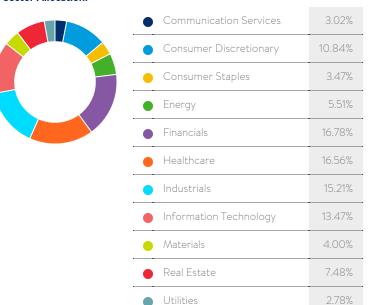
#### Calendar Year Returns:\*



# Asset Allocation:

Cash	2.54 %
US Equity	96.31 %
Non-US Equity	1.15 %
Bond/Other	0.00 %
# of Stock Holdings	2,021

#### Sector Allocation:



Performance shown is past performance. Past performance does not quarantee future results. The investment return and the principal value of an investment will fluctuate; so an investor's shares, when redeemed, may be worth more or less than their original cost. For more current information, including a list of the fund's holdings and month-end performance, please call 1-**866-444-2601.** You cannot invest directly in an index.

Performance Returns - reflect performance of the investment without adjusting for sales charges or the effects of taxation, but is adjusted to reflect all actual ongoing investment expenses and assumes reinvestment of dividends and capital gains (if applicable). If adjusted, sales charges would reduce the performance quoted. In addition, due to market volatility, performance may vary greatly over short periods of time. The investment's performance is generally compared with that of an index. The index is an unmanaged portfolio of specified securities and does not reflect any initial or ongoing expenses nor can it be invested in directly. An investment's portfolio may differ significantly from the securities in the index. The Index may not be the same as the comparative index noted in the investment's prospectus (if applicable).

The Growth of \$10,000 - graph shows an investment's performance based on how \$10,000 invested in the investment would have grown over time. The growth of \$10,000 begins at the investment's inception date or the first year listed on the graph, whichever is appropriate.

†The Fund is not promoted, sponsored, or endorsed by, nor in any way affiliated with Russell Investment Group ("Russell"). Russell is not responsible for and has not reviewed the Fund nor any associated literature or publications and Russell makes no representation or warranty, express or implied, as to their accuracy, or completeness, or otherwise. The Russell 2000® Index and Russell® are trademarks of the Frank Russell Company.

<sup>\*</sup>Performance shown is for class I shares. Current performance may be higher or lower. Max Sales charge for I is 0%.

## MM Russell 2000® Small Cap Index Fund

#### **Top 10 Equity Holdings:**

Ovintiv Inc	0.49%
AMC Entertainment Holdings Inc Class A	0.44%
Avis Budget Group Inc	0.38%
BJ's Wholesale Club Holdings Inc	0.32%
Chesapeake Energy Corp Ordinary Shares - New	0.32%
Tenet Healthcare Corp	0.32%
Tetra Tech Inc	0.31%
Antero Resources Corp	0.30%
Lattice Semiconductor Corp	0.29%
Eastgroup Properties Inc.	0.29%

### **Expense Ratios:**

	Inception Date	Gross Expense	Net Expense
	07/26/2012	0.22%	0.22%
R5	07/26/2012	0.32%	0.32%
Svc	07/26/2012	0.47%	0.47%
Admin	07/26/2012	0.57%	0.57%
А	07/26/2012	0.82%	0.82%
R4	04/01/2014	0.72%	0.72%
R3	04/01/2014	0.97%	0.97%

#### Risk/Return Statistics:\*\*

	Fund	Benchmark
Standard Deviation	21.18	21.18
Information Ratio	-1.06	-
Alpha	-0.11	-
Beta	1.00	1.00
R2	1.00	1.00
Tracking Error	0.12	-
Sharpe Ratio	0.49	0.49
Upside Capture	99.72	100.00
Downside Capture	100.13	100.00
Batting Average	35.00	-

#### Fund Rankings:1

runa Kankings.	MorningStar Rating	Funds in Category
Overall Rating	***	600
3 Year	***	600
5 Year	***	541
10 Year		358

#### Portfolio Managers:

	Since
Brent D. Reeder Northern Trust	Jul. 2012

\*\*Risk statistics are calculated over a five year period, computed monthly.

¹Morningstar Rating™ - Category-Small Cap Blend. For each investment with at least a three-year history, Morningstar calculates a Morningstar Rating™ based on how an investment ranks on a Morningstar Risk-Adjusted Return measure against other investments in the category. This measure takes into account variations in an investment's monthly performance after adjusting for sales loads (except for load-waived A shares), redemption fees, and the risk-free rate, placing more emphasis on downward variations and rewarding consistent performance. The top 10% of investments in each category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars and the bottom 10% receive 1 star. The Overall Morningstar Rating for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the ratings for an investment is derived from a weighted average of the rating for an investment is derived from a weighted average of the rating for an investment is derived from a weighted average of the rating for an investment is derived from a weighted average of the rating for an investment is derived from a weighted average of the rating for an investment is derived from a weighted average of the rating for an investment is derived from a weighted average of the ra the three-, five- and ten-year (if applicable) time periods. The Morningstar percentile ranking is based on the fund's total-return percentile rank relative the till the till tell the till the til

The Fund's **Principal Risks** include - Equity Securities Risk, Small and Mid-Cap Company Risk, Derivatives Risk, Indexing Risk, Industry Concentration Risk, Cash Position Risk, Management Risk, Waluation Risk.

Risk, Cash Position Risk, Management Risk, Market Risk, Valuation Risk.

Risk Statistics- Standard Deviation is a statistical measurement, which for a mutual fund depicts how widely the returns varied over a certain period of time. When a fund has a high standard deviation, performance is wide, implying greater volatility. Information Ratio measures the performance of an investment compared to a benchmark index, after adjusting for its additional risk. Alpha is a measure of the difference between a fund's actual returns and its expected performance, given its level of risk as measured by beta. A positive alpha figure indicates the fund has performed better than its beta would predict. In contrast, a negative alpha indicates the fund's underperformance, given the expectations established by the fund's beta. Beta is a measure of sensitivity to market movements. The beta of the market is 1.00. A beta of 1.10 shows that the fund's excess return is expected to be 10% better than the market's excess return in an up market or 10% worse in a down market. A beta of .85 indicates that the fund's excess return is expected to perform 15% less than the market's excess return during up markets and 15% greater during down markets. R-squared (R2) measures the degree of relationship between the performance of the fund and that of the index. The higher the R-squared, the more related the fund's performance is to its index. Tracking Error is also known as active risk and is the degree to which the strategy differed from its index or benchmark. The higher the Tracking Error, the more the fund deviated from its index. Sharpe Ratio measures risk adjusted performance; it is calculated as the real total return of the fund (total return-risk free rate) divided by the risk of the fund (standard deviation). Upside/downside capture shows whether a given fund has outperformed--gained more or lost less than-a broad market benchmark during periods of market strength and weakness, and if so, by how much. An upside capture ratio over 100 indic

Russell 2000® Index measures the performance of the small-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 Index and includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

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Investors should consider an investment option's objectives, risks, fees, and expenses carefully before investing. This and other information can be found in the applicable prospectuses or summary prospectuses, which are available from MassMutual by calling 1-866-444-2601. Please read them carefully before investing. RS-48797-00 RS9093a