METROPOLITAN LIBRARY COMMISSION OF OKLAHOMA COUNTY

LIBRARY RETIREMENT PENSION BOARD AGENDA

Members:

Fran Cory, Chair
Judy Smith, Vice-Chair
Nancy Anthony, Disbursing Agent
Donna Morris, Executive Director
Jim Welch, Deputy Executive Director/Technology
Lloyd Lovely, Deputy Executive Director/ Finance & Support

Monday, November 14, 2011 3:30 p.m.

Downtown Library 300 Park Avenue Oklahoma City, OK 73102

- I. Call to Order and Establishment of Quorum Fran Cory, Chair
- II. Approval of Minutes of April 6, 2011 meeting
- III. Discussion, Consideration and Possible Action: Defined Contribution Plan Report ~ Mark Thompson, Mass Mutual Financial Group
- IV. Discussion, Consideration and Possible Action: Review of Investments and Money Manager Performance ~ Karen Foust, Asset Services Company
- V. Discussion, Consideration and Possible Action: Annual Valuation as of July 1, 2011 ~ Ken Culver, President, Pension Solutions, Inc.
- VI. Discussion, Consideration and Possible Action: Recommendation for the Metropolitan Library System's Contribution to the Pension Fund for FY 2011-2012
- VII. Discussion, Consideration and Possible Action: Recommendation for consolidating and re-bidding third-party administrative services

Prepared by: MLC Secretary

Page 1 of 2

METROPOLITAN LIBRARY COMMISSION OF OKLAHOMA COUNTY

LIBRARY RETIREMENT PENSION BOARD

MINUTES

DATE: Wednesday, April 6, 2011 TIME: 3:30 PM MEETING PLACE: Downtown Library 300 Park Avenue Oklahoma City, OK 73102 (405) 231-8650

Written public notice of the time, date, and place of this meeting was given to the County Clerk of Oklahoma County, March 28, 2011. Notice of the time, date, place, and agenda for this meeting was posted by the Secretary of the Commission in prominent public view at the Downtown Library, 300 Park Avenue, Oklahoma City, on April 4, 2011 in conformity with the Oklahoma Open Meeting Act § 311.

COMMITTEE MEMBERS PRESENT:

Fran Cory, Chair David Greenwell Lloyd Lovely Donna Morris Judy Smith Jim Welch

COMMITTEE MEMBERS EXCUSED:

NONE

OTHER COMMISSION MEMBERS PRESENT:

NONE

ESTIMATE OF OTHERS PRESENT: 3

Prepared by: MLC Secretary

Page 2 of 2

- **I.** The meeting was called to order at 3:29 p.m. by Mrs. Fran Cory, Chair. Roll was called to establish a quorum. Present: Greenwell, Lovely, Morris, Smith, Welch, Cory.
- II. Mrs. Cory referred to Agenda Item II ~ Approval of Minutes of November 30, 2010.

Mr. Jim Welch moved to approve the minutes of the November 30, 2010 meeting. Mrs. Donna Morris seconded. No further discussion; motion passed unanimously.

III. Mrs. Cory referred to Agenda Item III ~ Discussion, Consideration and Possible Action: Report on Changes to Defined Contribution Plan ~ Mass Mutual Financial Group

Mr. Mark Thompson, Mass Mutual, referred to the documents included in the packets which detailed the recent changes made to the Defined Contribution Plan. Mr. Thompson continued, as authorized by the board at the last meeting, the board did apply for and receive Mass Mutual's Fiduciary Warranty. As part of the process of securing the warranty all current investment options under the plan were evaluated and some funds originally selected at the adoption of the plan were replaced in order to meet the specific requirements of the Fiduciary Warranty. Moving forward, with the warranty in place, all funds are evaluated and have ongoing due diligence performed quarterly. Any concerns with any of the funds performance will be reported to the Pension Board. Questions and Discussion followed.

IV. Mrs. Cory referred to Agenda Item IV ~ Discussion, Consideration and Possible Action: Defined Benefit Plan ~ Pension Solutions, Inc.

Mr. Ken Culver, President, Pension Solutions, Inc., stated the IRS is now requiring pension plans to be re-written every five years complete with all amendments that have taken place in the interim. Crowe and Dunlevy provided the work to update the documents at a discounted fee. It was suggested the next time the plan needs to be re-written the library system should locate an attorney or firm who specializes in Government Pension Plans. Questions and discussion followed.

The documents to be approved today are: 1. Amended and Restated Metropolitan Library System Pension Plan, 2. Amendment for Code Section 415 Regulations, 3. Amendment for Pension Protection Act of 2006, and 4. Resolution for Approval of the Amendments. Upon approval from the pension board and commission the changes will bring the Pension Plan into compliance.

Mr. David Greenwell moved to accept the proposed changes to the Defined Benefit Plan and refer them to the Metropolitan Library Commission for approval. Mr. Lloyd Lovely seconded. No further discussion; motion passed unanimously.

V.	There being no	further business,	the meeting was	adjourned	at 3:55	p.m.

Donna Morris, Executive Director

Library Retirement Pension Board Metropolitan Library System Oklahoma City, OK

At the close of business on November 7, 2011, the assets of the Metropolitan Library System Defined Contribution Plan totaled \$8,842,083.53, an increase of \$449,106.93 over the March 25, 2011, total of \$8,392,976.

Effective February 1st, 2011, as authorized by this committee, three investment options previously available under the plan were replaced with other options deemed to be better performing than their predecessors. Two new investment options were also added. Attached documentation illustrates that these new funds have performed as anticipated and reinforces the fact that this committee's fiduciary responsibility to monitor investment performance is being met. I will continue to investigate new fiduciary services from Mass Mutual as they become available to the plan.

There is only one of the plan investment options on the "Watch List" and it is on the list for expanding from a focus only on small cap value to small *and* mid-cap value. The fact that the fund has changed its investment focus automatically puts it on the watch list. Total

percentage of plan assets in this particular fund was 3.34% at the end of the third quarter.

As previously mentioned, I have attached extensive supporting documentation for fund performance and participant activity. I am happy to respond to any questions or concerns that may arise from your study of these documents.

Respectfully Submitted,

Mark S. Thompson

Strategic Plan Review and Action Plan

Metropolitan Library System

October 01, 2010 through September 30, 2011



Our heritage

Mutually owned protection, accumulation and income company

- Focused on using our resources to address our customers' needs.
- 160 Years
- Fortune 100 company*
- \$448 billion in assets under management as of 12/31/2010**
- "Most Admired Companies in America" in our industry for eight years running***

Major affiliates include

- OppenheimerFunds, Inc.
- Babson Capital Management, LLC
- Baring Asset Management, LLC
- Cornerstone Real Estate Advisers, LLC
- The First Mercantile Trust Company

Rating Agency	Rating
A.M. Best	A++ Superior (top category of 15)
Fitch Ratings	AA+ Very strong (second category of 21)
Moody's Investor Service	Aa2 Excellent (third category of 21)
Standard & Poor's	AA+ Very Strong (second category of 21)

Ratings are for Massachusetts Mutual Life Insurance Company and its subsidiaries: C.M. Life Insurance Company and MML Bay State Life Insurance Company. Ratings as of 11-2011. Ratings are subject to change.

^{*}Fortune Magazine, May 4, 2010.

**Assets under management include assets and certain external investment funds managed by MassMutual's subsidiaries

***Fortune Magazine, March 2011

MassMutual Retirement Services*

- Over \$50 billion in assets under management**
- Extensive retirement plan experience
- More than 1,000 employees strong
- 60+ years serving retirement plans
- Over 7,600 retirement clients**
- High level of employee and client retention

Offering Total Retirement Solutions

- ✓ Defined Contribution
- ✓ Defined Benefit
- ✓ Non-Qualified
- ✓ Taft Hartley
- ✓ Professional Employer Organizations
- √ 403(b)

Our Value Proposition

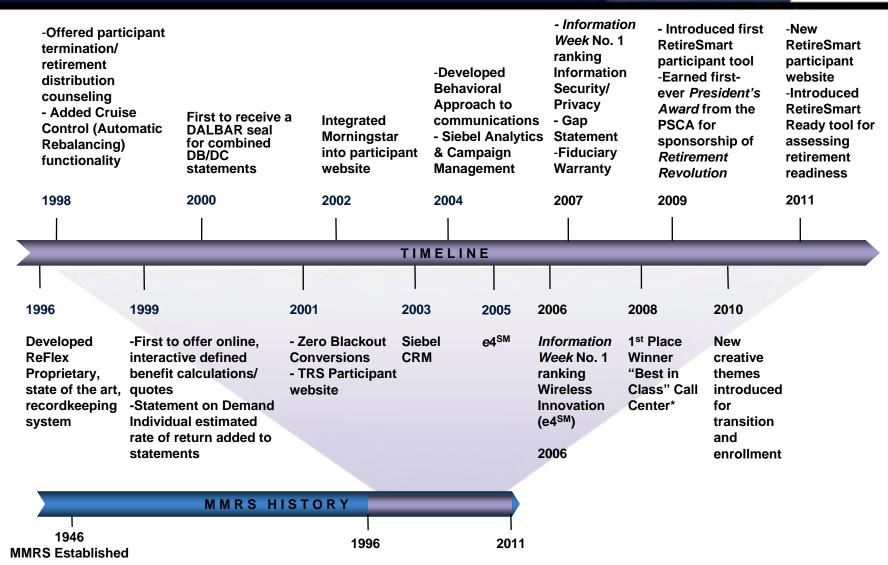
MassMutual is a leading innovator with a passion for service and the power to maximize retirement success.

We're the difference between just thinking about retirement success...and helping make it happen.

^{*}MassMutual Retirement Services is a division of Massachusetts Mutual Life Insurance Company (MassMutual)

^{**}As of 12/31/10

Thought leadership and industry recognition



*2008 Annual Call Center Excellence -award sponsored by the International Quality & Productivity Center. The award recognizes superior thinking, creativity, and execution across the full spectrum of call center functions for staffing of less than 500.

Executive Summary

Plan Statistics

	9/30/2010	9/30/2011	Plan Trend		
Total Plan Assets	\$7,233,827	\$8,004,878	▲ 11%		
Participant Contributions					
Participant	\$356,580	\$394,639	▲ 11%		
Rollover	\$0	\$144,110	▲ 100%		
Employer Contributions					
Profit Sharing	\$649,822	\$717,151	▲ 10%		
Distributions					
Terminations	(\$130,434)	(\$327,911)	▲ 151%		
Expenses*	(\$480)	(\$360)	▼ 25%		
Investment Income	\$571,736	(\$136,728)	▼ 124%		

^{*}The expenses shown reflect expenses deducted from plan assets. Expenses billed directly to the plan sponsor or expenses related to the expense ratio of investments under the plan are not reflected. The Contribution data displays the combined dollar value of Contributions & Loan Repayments, if applicable.

Executive Summary

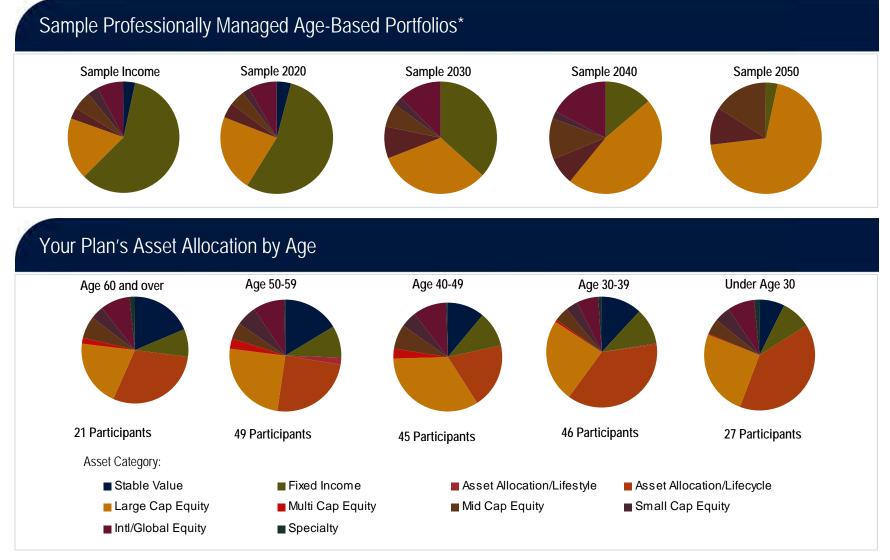
Participant Activity

	9/30/2010	9/30/2011	Plan Trend
Total Participants	180	188	▲ 4%
Participation Rates: Average Percentage	95%	95%	◄ ▶ 0%
Average Account Balance	\$40,188	\$42,579	▲ 6%
Average Number of Investments	11.5	12.0	▲ 4%
Total Calls to FLASH(sm)	49	43	▼ 12%
Total Visits to The Journey(sm)	2,369	2,401	▲ 1%

Participant Information Helping to prepare your employees for retirement

RS-08365-04

Diversification by Age as of September 30, 2011



^{*}Sample allocations provided by Morningstar Associates, LLC, a registered investment advisor and a subsidiary of Morningstar Inc. Morningstar Associates is not itself a FINRA member firm.

Plan Balances by Investment

Asset Allocation

			Plan Activity October 01, 2010 through September 30, 2011							
Investment Options	Balances as of 9/30/2010	Percentage*	Contributions	Transferred Assets	Transfers	Distributions	Expenses**	Other Activity	Balances as of 9/30/2011	Percentage*
RM 2005 Class Year	\$1,300,200	17.97%	\$144,089	\$0	(\$36,501)	(\$196,831)	(\$120)	\$19,114	\$1,229,951	15.37%
Premier Core Bond (Babson)	\$72,017	1.00%	\$35,068	\$0	\$9,864	(\$442)	(\$8)	\$3,715	\$120,214	1.50%
Select Strategic Bond (Western)	\$507,974	7.02%	\$82,596	\$0	\$3,913	(\$422)	(\$8)	\$26,149	\$620,202	7.75%
Balanced (American)	\$56,801	0.79%	\$3,630	\$0	\$645	\$0	\$0	\$523	\$61,599	0.77%
RetireSMART 2010	\$332,158	4.59%	\$14,994	\$0	\$40,105	\$0	\$0	(\$4,510)	\$382,747	4.78%
RetireSMART 2020	\$762,180	10.54%	\$97,443	\$0	\$0	\$0	\$0	(\$27,756)	\$831,867	10.39%
RetireSMART 2030	\$380,262	5.26%	\$71,314	\$0	(\$2,572)	\$0	\$0	(\$21,047)	\$427,957	5.35%
RetireSMART 2040	\$368,502	5.09%	\$90,800	\$0	\$25,902	(\$39,269)	(\$40)	(\$25,096)	\$420,799	5.26%
RetireSMART 2050	\$0	0.00%	\$7,742	\$0	\$67,253	\$0	\$0	(\$12,378)	\$62,617	0.78%
RetireSMART In Retirement	\$14,589	0.20%	\$6,131	\$0	\$0	\$0	\$0	(\$78)	\$20,642	0.26%
Sel Dvrsfd Val (Lms Syls/Brdywn)	\$207,190	2.86%	\$13,479	\$0	(\$255,352)	(\$15)	(\$2)	\$34,700	\$0	0.00%
Select Large Cap Value (Davis)	\$395,747	5.47%	\$81,215	\$0	(\$120,614)	(\$9,127)	(\$13)	(\$11,417)	\$335,791	4.19%
Value (MFS)	\$0	0.00%	\$42,645	\$0	\$357,408	(\$7,773)	(\$10)	(\$56,488)	\$335,782	4.19%
Equity Growth (American Century)	\$609,109	8.42%	\$149,789	\$0	(\$21,057)	(\$19,489)	(\$49)	\$3,543	\$721,846	9.02%
Equity Portfolio (Calvert)	\$0	0.00%	\$44,890	\$0	\$351,318	(\$10,398)	(\$13)	(\$46,274)	\$339,523	4.24%
Premier Capital Appreciation (OFI)	\$259,247	3.58%	\$15,701	\$0	(\$310,600)	(\$16)	(\$2)	\$35,670	\$0	0.00%
Sel Gr Opportnts (Sands/Delaware)	\$261,906	3.62%	\$46,978	\$0	(\$38,118)	(\$10,935)	(\$15)	\$17,296	\$277,112	3.46%
Select Focused Value (Harris)	\$178,053	2.46%	\$28,515	\$0	(\$10,505)	(\$2,805)	(\$3)	(\$7,824)	\$185,431	2.32%

^{*}Due to rounding, percentages may not total 100 percent.

^{**}The expenses shown reflect expenses deducted from plan assets. Does not include expenses billed directly to the plan sponsor or expenses related to the expense ratio of investments under the plan.

Plan Balances by Investment

Asset Allocation

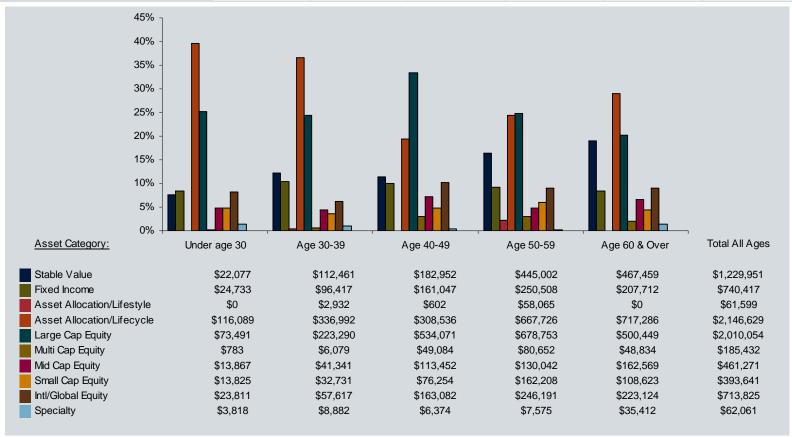
				Plan Activity October 01, 2010 through September 30, 2011						
Investment Options	Balances as of 9/30/2010	Percentage*	Contributions	Transferred Assets	Transfers	Distributions	Expenses**	Other Activity	Balances as of 9/30/2011	Percentage*
Lev eraged Co Stck(Fidelity Advisor)	\$230,094	3.18%	\$12,937	\$0	(\$297,343)	(\$32)	(\$3)	\$54,347	\$0	0.00%
Mid Cap Core Equity (Invesco)	\$0	0.00%	\$28,473	\$0	\$213,222	(\$3,976)	(\$10)	(\$37,141)	\$200,568	2.51%
Select Mid Cap Gr II (TRP/Frontier)	\$180,871	2.50%	\$36,147	\$0	\$63,749	(\$4,822)	(\$7)	(\$15,236)	\$260,702	3.26%
Sel SmCoVal (Fed Clov/TRP/ERNST)	\$117,374	1.62%	\$22,438	\$0	(\$3,197)	(\$2,666)	(\$5)	(\$8,263)	\$125,681	1.57%
Main St. Small & Mid Cap (OFI)	\$246,012	3.40%	\$44,852	\$0	(\$1,822)	(\$4,678)	(\$15)	(\$16,994)	\$267,355	3.34%
Growth (Baron)	\$0	0.00%	\$634	\$0	\$0	\$0	\$0	(\$28)	\$606	0.01%
International Value (Thornburg)	\$0	0.00%	\$4,185	\$0	\$2,894	\$0	\$0	(\$720)	\$6,359	0.08%
Premier Global (OFI)	\$293,949	4.06%	\$72,576	\$0	\$71,606	(\$6,807)	(\$26)	(\$46,210)	\$385,088	4.81%
Int'l New Discovery (MFS)	\$412,644	5.70%	\$44,969	\$0	(\$114,425)	(\$7,139)	(\$7)	(\$13,664)	\$322,378	4.03%
Real Estate (OFI)	\$46,948	0.65%	\$11,671	\$0	\$4,227	(\$267)	(\$5)	(\$513)	\$62,061	0.78%
Total	\$7,233,827	100%	\$1,255,901	\$0		(\$327,909)	(\$361)	(\$156,580)	\$8,004,878	100%

^{*}Due to rounding, percentages may not total 100 percent.

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Balances by Age as of September 30, 2011

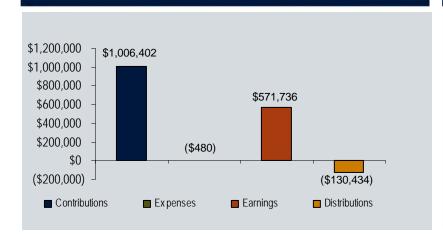
Age	Under age 30	Age 30-39	Age 40-49	Age 50-59	Age 60 and Over	Total
Number of Participants	27	46	45	49	21	188
Group Balance	\$292,492	\$918,742	\$1,595,453	\$2,726,721	\$2,471,468	\$8,004,876
Average Account Balance	\$10,833	\$19,973	\$35,455	\$55,647	\$117,689	\$42,579
MassMutual Average Account Balance*	\$6,032	\$19,029	\$35,962	\$52,364	\$67,795	\$30,158



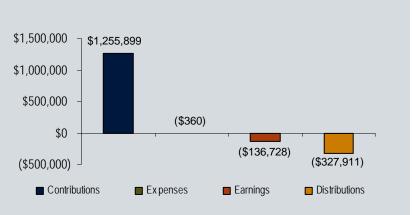
^{*}Source: Hewitt Associates 2011 Universe Benchmarks Report

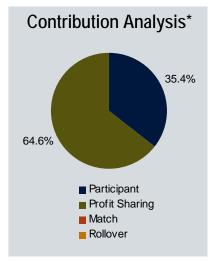
Cash Flow Analysis

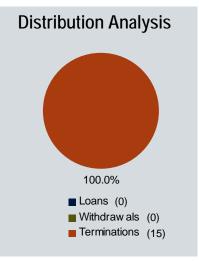


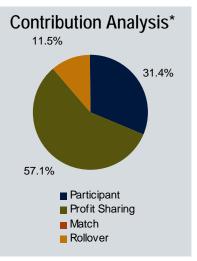


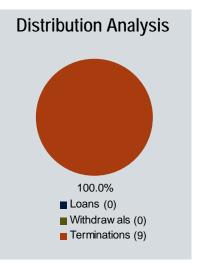
Current Period 10/1/2010 - 9/30/2011











^{*}The Contribution Analysis Pie Charts display the percentage of the combined dollar value of the Contributions & Loan Repayments

Total Investment Balance as of September 30, 2011

Participant Demographics

		F	PARTICIPANTS					
Investment Options	Active	Beneficiary	Retired	Terminated	QDRO	Participants in Option as of 9/30/2010	Participants in Option as of 9/30/2011	Investment Selection Percentage*
RM 2005 Class Year	\$1,085,923	\$0	\$45,307	\$98,721	\$0	93	93	10.6%
Premier Core Bond (Babson)	\$116,035	\$0	\$0	\$4,179	\$0	43	47	2.2%
Select Strategic Bond (Western)	\$536,549	\$0	\$50,831	\$32,822	\$0	84	87	6.0%
Balanced (American)	\$60,198	\$0	\$0	\$1,401	\$0	7	7	0.3%
RetireSMART 2010	\$382,747	\$0	\$0	\$0	\$0	3	4	1.7%
RetireSMART 2020	\$814,679	\$0	\$0	\$17,187	\$0	17	17	8.7%
RetireSMART 2030	\$427,957	\$0	\$0	\$0	\$0	10	11	6.2%
RetireSMART 2040	\$417,338	\$0	\$0	\$3,461	\$0	20	19	9.6%
RetireSMART 2050	\$62,617	\$0	\$0	\$0	\$0	0	2	1.1%
RetireSMART In Retirement	\$19,025	\$0	\$0	\$1,617	\$0	2	2	0.6%
Select Large Cap Value (Davis)	\$310,778	\$0	\$3,069	\$21,944	\$0	113	122	4.3%
Value (MFS)	\$313,344	\$0	\$2,827	\$19,610	\$0	0	118	3.7%
Equity Growth (American Century)	\$665,625	\$0	\$6,617	\$49,604	\$0	113	123	13.4%
Equity Portfolio (Calvert)	\$311,023	\$0	\$4,264	\$24,236	\$0	0	118	4.0%
Sel Gr Opportnts (Sands/Delaw are)	\$246,576	\$0	\$3,677	\$26,858	\$0	105	115	3.5%

Total Participants 188: 177 Active, 0 Beneficiary, 1 Retired, 10 Terminated, 0 QDRO

^{*}The investment selection percentages reflect participants with an active status. Due to rounding the percentages may not total 100%.

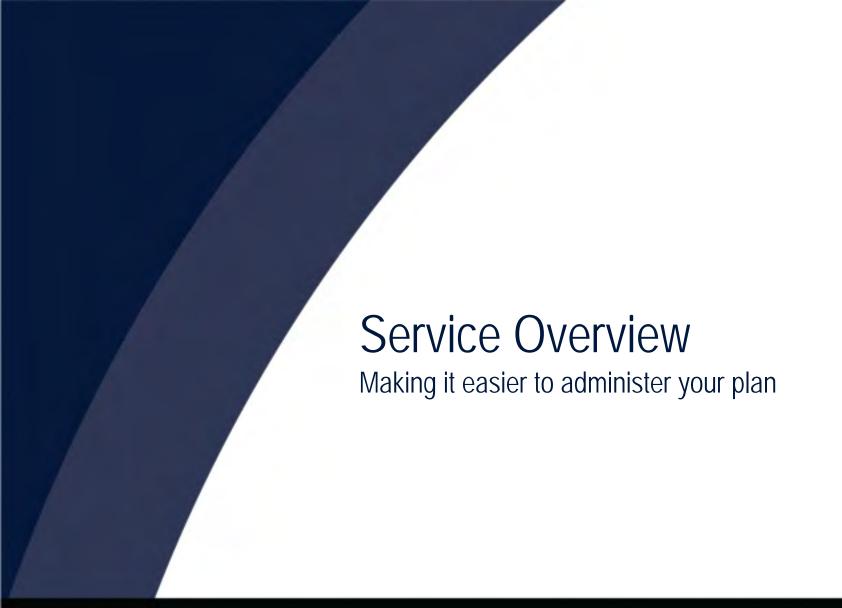
Total Investment Balance as of September 30, 2011

Participant Demographics

			PARTICIPANTS					
Investment Options	Active	Beneficiary	Retired	Terminated	QDRO	Participants in Option as of 9/30/2010	Participants in Option as of 9/30/2011	Investment Selection Percentage*
Select Focused Value (Harris)	\$175,991	\$0	\$1,285	\$8,155	\$0	67	67	1.7%
Mid Cap Core Equity (Invesco)	\$190,187	\$0	\$1,249	\$9,133	\$0	0	122	3.6%
Select Mid Cap Gr II (TRP/Frontier)	\$242,567	\$0	\$2,722	\$15,413	\$0	111	122	2.2%
Sel SmCoVal (Fed Clov/TRP/ERNST)	\$116,504	\$0	\$1,169	\$8,007	\$0	109	119	1.5%
Main St. Small & Mid Cap (OFI)	\$254,965	\$0	\$1,133	\$11,257	\$0	110	121	3.9%
Growth (Baron)	\$606	\$0	\$0	\$0	\$0	0	15	0.2%
International Value (Thornburg)	\$6,359	\$0	\$0	\$0	\$0	0	15	1.3%
Premier Global (OFI)	\$368,137	\$0	\$2,270	\$14,681	\$0	112	122	5.9%
Int'l New Discovery (MFS)	\$296,922	\$0	\$4,069	\$21,387	\$0	79	77	2.6%
Real Estate (OFI)	\$58,136	\$0	\$0	\$3,924	\$0	41	56	1.3%
Total	\$7,480,789	\$0	\$130,489	\$393,599	\$0			100%

Total Participants 188: 177 Active, 0 Beneficiary, 1 Retired, 10 Terminated, 0 QDRO

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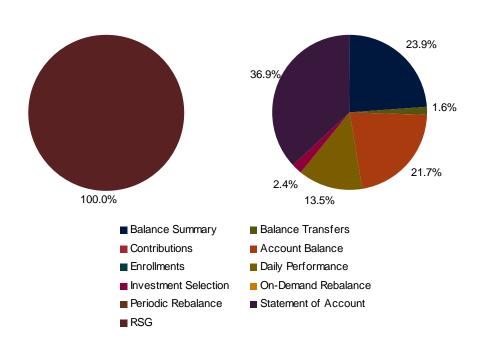


Participant Interactions October 01, 2010 through September 30, 2011

	Total Visits	Total Distinct Visits
FLASH sm	43	39
Call Center	88	28
The Journey sm	2,401	348

FLASHsm

The Journeysm (My Account)



Highlights - The Journeysm

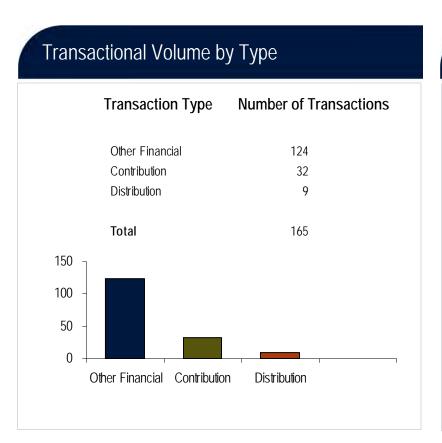
My Account	779
Research	5
Will I Have Enough to Retire	40

Highlights - Retirement Services Call Center

Participant Indicative	14
PIN	13
Transaction Performed	11
RSG-Retirement Options	8
Journey-FLASH	4

Transaction Summary October 01, 2010 through September 30, 2011

Percentage of Not in Good Order Transactions 3.03%



Top Drivers of Not in Good Order Transactions Percentage of Not in Good **Transaction Type Order Transactions** Contribution 80.00% Other Financial 20.00% 0.00% Distribution 100% 80% 60% 40% 20% 0% Other Financial Contribution Distribution

Automate Your Plan

Automatic retirement plan features are designed to put your employee on the path to a more secure retirement while helping them make smart decisions about their retirement savings - automatically.

Automatic Enrollment	Automatic Asset Allocation	Automatic Deferral Increase	Automatic Rebalancing				
 A percentage of employee's compensation is automatically contributed into the plan. Employees must "optout" within set period of time. Plan establishes a target maturity series of investment options as the default upon enrollment. 		 Increases to the default deferral percentage occur automatically on a periodic basis. Participants can "opt-out" of deferral increase at any time. 	• Participants who have established their own investment allocations from options in the plan can elect automatic rebalancing quarterly or on-demand.				
Benefits to employee:							
Starts employee on their journey to a more secure retirement.	Helps participants stay on course with an asset allocation more appropriate to their target retirement date.	Helps advance participant savings and accumulation.	Helps participants stay true to their desired investment strategy.				



Third Quarter 2011 Market Commentary

Market Performance as of 9/30/11*									
Index	3Q11	One Year	Five Years	Ten Years					
			(annualized)	(annualized)					
Barclays Capital U.S. Aggregate Bond Index	+3.82%	+5.26%	+6.53%	+5.66%					
Dow Jones Industrial Average	-12.09%	+1.16%	-1.35%	+2.12%					
S&P 500 Index	-13.87%	+1.14%	-1.18%	+2.82%					
NASDAQ Composite Index	-12.91%	+1.97%	+1.35%	+4.89%					
Russell 2000 Index	-21.87%	-3.53%	-1.02%	+6.27%					
MSCI EAFE Index	-19.01%	-9.36%	-3.46%	+5.03%					
MSCI Emerging Markets Index	-22.56%	-16.15%	+4.87%	+16.07%					

^{*}Source: Morningstar Direct

Q3 2011: Sputtering economy, U.S. credit downgrade, and Greek debt crisis spark sell-off

The U.S. stock market had a challenging third quarter, with most widely followed market indexes finishing the three-month period with double-digit losses. Worsening economic news in the United States and abroad, a downgrade of the U.S. sovereign credit rating and Greece's seemingly inexorable slide toward a default on its loans were key factors undermining investor sentiment.

During the third quarter, the blue-chip Dow Jones Industrial AverageSM recorded a -12.09% return, compared with -13.87% for the large-cap stock S&P 500[®] Index. Technology stocks also struggled, as reflected in the -12.91% mark of the tech-heavy NASDAQ Composite[®] Index. Small-cap stocks suffered from a flight to quality and sent the Russell 2000[®] Index down 21.87% for the quarter. The S&P 500 and the NASDAQ Composite Indexes had their worst quarterly showing since the fourth quarter of 2008.

Most of the damage to share prices occurred in late July and early August. On August 1, following weeks of partisan wrangling, the U.S. Congress finally reached agreement on raising the U.S. debt ceiling and approving some deficit-reduction measures. The action on the debt ceiling narrowly avoided missing an August 2 deadline that would have forced the nation to default. Shortly thereafter, citing "political brinksmanship" as a major factor in its decision, Standard & Poor's lowered its credit rating on the United States from AAA to AA+, which triggered a significant wave of selling in the stock market.

Another factor hampering stocks was a large downward revision in first-quarter gross domestic product ("GDP"), from 1.9% to 0.4%. Although the final estimate for second-quarter economic growth came in higher, at 1.3%, both figures were a far cry from the roughly 3% growth considered necessary to make a meaningful dent in unemployment, and even some Federal Reserve officials publicly wondered if the economy was on the verge of stalling completely.

In September, the Federal Reserve (the "Fed") pledged to keep short-term interest rates low at least until mid-2013. The central bank also announced plans to implement "Operation Twist," a \$400 billion program scheduled to begin in October and aimed at boosting economic growth by lowering long-term interest rates. The plan involves shifting some of the central bank's purchases from shorter-maturity Treasuries to those with longer maturities.

Third Quarter 2011 Market Commentary

As for Greece, despite ongoing belt-tightening and assurances by its political leadership that the nation will do whatever it takes to meet its financial obligations, the yield on one-year Greek government bonds soared to more than 100%, reflecting the market's judgment that default on the country's sovereign debt was a virtual certainty.

Foreign stocks in developed markets were weighed down by Europe's weak showing during the quarter, resulting in a 19.01% decline for the MSCI[®] EAFE[®] Index. Currency fluctuations added to the headwinds for foreign stocks quoted in U.S. dollars, and the greenback rallied sharply in September. The MSCI Emerging Markets Index fell 22.56%, reflecting investors' retreat from risk during the quarter.

In the risk-averse environment, large-cap stocks outperformed mid- and small-cap stocks. A secondary theme during the quarter was value outpacing growth, although that pattern was reversed in the large-cap arena, where weak financials dragged down the Russell 1000® Value Index, which declined 16.20%. The Russell 1000® Growth Index managed a considerably better -13.14% result. Moving down the market-capitalization spectrum, the Russell Midcap® Value Index finished at -18.46%, compared with -19.33% for the Russell Midcap® Growth Index. Meanwhile, the Russell 2000® Value Index, a small-cap value benchmark, settled for a -21.47% showing, versus -22.25% for the Russell 2000® Growth Index.

Among the S&P 500's sectors, materials was the quarter's weakest performer and lost about 25%, with financials not far behind. Conversely, utilities – traditionally a defensive sector – managed a marginal gain, while consumer staples limited its loss to roughly 5%.

In the bond market, strong demand for Treasuries sharply depressed yields and boosted prices, as increasingly anxious investors sought safe havens for their money. The yield of the bellwether 10-year Treasury note went from 3.18% on June 30 to 1.92% by September 30. Longer-maturity Treasuries were the big winners in this environment.

During the quarter, the Barclays Capital U.S. Aggregate Bond Index, which holds Treasuries and other investment-grade securities, returned 3.82% for the quarter. Amid heightened concern about the credit quality of lower-quality bonds, the Barclays Capital U.S. Corporate High-Yield Bond Index finished down 6.06%. For comparison purposes, the Barclays Capital U.S. 1-3 Year Government Bond Index rose 0.47%, while 13-week Treasury Bills gained 0.01%.

Recession alert?

Among the multitude of voices commenting on the U.S. economy, one interesting point of view comes from the Economic Cycle Research Institute ("ECRI"). The organization has been studying business cycles for decades and has an admirable track record for the quality of its analysis. On the final day of the quarter, the ECRI stated unequivocally that, based on a variety leading indicators of economic activity, the United States was headed into a recession.

Second Quarter 2011 Market Commentary

Echoing this point of view is economist and money manager John Hussman, Ph.D., who references a group of indicators he has dubbed his "Recession Warning Composite," which has also had success with regard to identifying specific market and economic conditions that are typically present when recessions loom. Hussman's recession indicators include widening credit spreads, falling stock prices, a weak Institute for Supply Management ("ISM") Purchasing Managers Index, and a moderate or flat yield curve (see following chart). At the end of the third quarter, these indicators were jointly signaling that a recession was likely.



22

Third Quarter 2011 Market Commentary

This chart illustrates the movement of the ISM Purchasing Managers Index, which recovered nicely in 2009, but has lately been falling again. For this index, 50 is neutral; a reading greater than 50 means that industrial production is expanding; less than 50 indicates a contraction.



Of course, there were recession concerns during the summer of 2010, when the stock market was down considerably from its highs in April of that year. In that case, Fed Chairman Ben Bernanke averted further trouble – at least, for a while – when he suggested near the end of August 2010 that the Fed would return to quantitative easing (QE2) to help the struggling U.S. economy.

Interestingly, although the economy hit a soft patch in 2010, neither ECRI nor Hussman's Recession Warning Composite flashed a recession warning at that time. That they have both done so now suggests the economy may be in a more vulnerable state than it was then. Moreover, at least for now, rescue in the form of a new round of quantitative easing (or QE3) appears unlikely. Of course, only time will tell if these latest recession calls are accurate.

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Third Quarter 2011 Market Commentary

Outlook

With the market down considerably in the third quarter and recession concerns abundant, one intriguing question is whether stock prices have already discounted most of the bad news on the economy and Greece's potential debt default. That said, for investors who already have an investment plan in place, this question is little more than an academic exercise. That's because a well-thought-out investment plan anticipates occasional periods of increased downside volatility. Of course, even the best plan can't entirely sidestep losses, but through diversification, losses in one asset class, such as stocks, can be tempered by holdings in less-volatile asset classes, such as bonds and cash. If you work with a financial professional, now may be a good time to schedule a meeting and review your overall plan to make sure you are on track to meet your long-term goals.

The information provided is the opinion of MassMutual Retirement Services Investment Services as of 7/1/11 and is subject to change without notice. It is not to be construed as tax, legal or investment advice. Of course, past performance does not guarantee future results.

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Asset Category Leaders and Laggards

			1007													
_	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
	R1000	R1000	R1000	R1000	R2000	R2000	R2000	LB	R2000	R2000	MSCI	MSCI	R1000	BC	R1000	R2000
Leader	Value 38.36%	Growth 23.12%	Value 35.18%	Growth 38.71%	Growth 43.09%	Value 22.83%	Value 14.02%	Agg. 10.26%	Growth 48.55%	Value 22.25%	EAFE 13.54%	EAFE 26.36%	Growth 11.81%	Agg. 5.24%	Growth 37.21%	Growth 29.09%
	Russell	Russell	Russell	Russell	R1000	LB	LB	R2000	Russell	MSCI	R1000	R2000	MSCI	R2000	R2000	Russell
	1000	1000	1000	1000	Growth	Agg.	Agg.	Value	2000	EAFE	Value	Value	EAFE	Value	Growth	2000
	37.77%	22.45%	32.85%	27.02%	33.16%	11.63%	8.44%	-11.42%	47.26%	20.25%	7.05%	23.48%	11.17%	-28.93%	34.47%	26.85%
	R1000	R1000	R2000	MSCI	MSCI	R1000	Russell	R1000	R2000	Russell	Russell	R1000	R2000	Russell	MSCI	R2000
	Growth	Value	Value	EAFE	EAFE	Value	2000	Value	Value	2000	1000	Value	Growth	2000	EAFE	Value
	37.18%	21.64%	31.78%	20.00%	26.96%	7.01%	2.49%	-15.52%	46.03%	18.33%	6.27%	22.21%	7.06%	-33.80%	31.78%	24.51%
	R2000	R2000	R1000	R1000	Russell	Russell	R1000	MSCI	MSCI	R1000	R1000	Russell	LB	R1000	Russell	R1000
	Growth	Value	Growth	Value	2000	2000	Value	EAFE	EAFE	Value	Growth	2000	Agg.	Value	1000	Growth
	31.04%	21.37%	30.49%	15.63%	21.26%	-3.02%	-5.59%	-15.94%	38.59%	16.50%	5.26%	18.35%	6.97%	-36.85%	28.43%	16.71%
	Russell	Russell	Russell	LB	Russell	Russell	R2000	Russell	R1000	R2000	R2000	Russell	Russell	Russell	Russell	Russell
	2000	2000	2000	Agg.	1000	1000	Growth	2000	Value	Growth	Value	1000	1000	1000	2000	1000
	28.44%	16.53%	22.36%	8.70%	20.91%	-7.79%	-9.23%	-20.49%	30.03%	14.30%	4.71%	15.46%	5.77%	-37.60%	27.17%	16.10%
	R2000	R2000	R2000	R2000	R1000	MSCI	Russell	Russell	Russell	Russell	Russell	R2000	R1000	R1000	R2000	R1000
	Value	Growth	Growth	Growth	Value	EAFE	1000	1000	1000	1000	2000	Growth	Value	Growth	Value	Value
	25.75%	11.26%	12.95%	1.23%	7.35%	-14.17%	-12.45%	-21.65%	29.89%	11.40%	4.55%	13.35%	-0.17%	-38.43%	20.58%	15.51%
	LB	MSCI	LB	Russell	LB	R1000	R1000	R1000	R1000	R1000	R2000	R1000	Russell	R2000	R1000	MSCI
	Agg.	EAFE	Agg.	2000	Agg.	Growth	Growth	Growth	Growth	Growth	Growth	Growth	2000	Growth	Value	EAFE
	18.46%	6.05%	9.64%	-2.55%	-0.82%	-22.42%	-20.42%	-27.89%	29.75%	6.30%	4.15%	9.09%	-1.56%	-38.53%	19.69%	7.75%
Laggard	MSCI	LB	MSCI	R2000	R2000	R2000	MSCI	R2000	LB	LB	LB	LB	R2000	MSCI	BC	BC
	EAFE	Agg.	EAFE	Value	Value	Growth	EAFE	Growth	Agg.	Agg.	Agg.	Agg.	Value	EAFE	Agg.	Agg.
	11.21%	3.64%	1.78%	-6.45%	-1.49%	-22.43%	-21.44%	-30.26%	4.11%	4.34%	2.43%	4.33%	-9.78%	-43.39%	5.93%	6.54%

Past performance does not guarantee future results. Sources: S&P Micropal 1994 – 2007, Morningstar® EnCorr 2008, Morningstar Direct 2009-2010



Asset Category Leaders and Laggards

Asset Category Leaders and Laggards Key Indexes

Intermediate Bond

As measured by the Barclays Capital U.S. Aggregate Bond Index ("BC Agg.") (prior to November 2008, this index was called the Lehman Brothers® U.S. Aggregate Bond Index ("LB Agg.")), an unmanaged index of fixed-rate investment-grade securities with at least one year to maturity, combining the Barclays Capital U.S. Treasury Bond Index, the Barclays Capital U.S. Government-Related Bond Index, the Barclays Capital U.S. Corporate Bond Index, and the Barclays Capital U.S. Securitized Bond Index.

| Small Cap Blend

As measured by the Russell 2000® Index ("Russell 2000"), a widely recognized, unmanaged index representative of common stocks of smaller capitalized U.S. companies.

Small Cap Value

As measured by the Russell 2000 Value Index ("R2000 Value"), a widely recognized, unmanaged index that measures the performance of those Russell 2000 Index companies (representing small-capitalization U.S. common stocks) with lower price-to-book ratios and lower forecasted growth rates than securities in the growth universe.

Small Cap Growth

As measured by the Russell 2000 Growth Index ("R2000 Growth"), a widely recognized, unmanaged index that measures the performance of those Russell 2000 Index companies (representing small-capitalization U.S. common stocks) with higher price-to-book ratios and higher forecasted growth rates than securities in the value universe.

Large Cap Blend

As measured by the Russell 1000® Index ("Russell 1000"), a widely recognized, unmanaged index representing the performance of common stocks of larger capitalized U.S. companies.

Large Cap Value

As measured by the Russell 1000 Value Index ("R1000 Value"), an unmanaged index consisting of those Russell 1000 securities (representing the 1,000 largest U.S. companies, based on market capitalization) with greater-than-average value orientation that tend to exhibit lower price-to-book ratios and lower forecasted growth rates than securities in the growth universe.

Large Cap Growth

As measured by the Russell 1000 Growth Index ("R1000 Growth"), an unmanaged index consisting of those Russell 1000 securities (representing the 1,000 largest U.S. companies, based on market capitalization) with greater-than- average growth orientation that tend to exhibit higher price-to-book ratios and higher forecasted growth rates than securities in the value universe.

International Equity

As measured by the Morgan Stanley Capital International Europe, Australasia, Far East Index ("MSCI® EAFE®"), a widely recognized, unmanaged index representative of equity securities in developed markets, excluding the U.S. and Canada.

Indexes are unmanaged, do not incur fees or expenses, do not reflect any deduction for taxes and cannot be purchased directly by investors.

Investments in companies with small or mid market capitalization ("small caps" or "mid caps") may be subject to special risks given their characteristic narrow markets, limited financial resources, and less liquid stocks, all of which may cause price volatility.

Value investing may include special risks, as value stocks may remain undervalued for extended periods of time, and the market may not recognize the intrinsic value of the securities.

International/global investing can involve special risks, such as political changes and currency fluctuations. These risks are heightened in emerging markets.

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Explanatory Notes

The net expense ratio includes any investment expense waiver arrangements documented in the investment's prospectus and may be lower than the gross expense ratio due to the indicated expense waivers, which may be subject to expiration. Additional information regarding investment expense waivers specific to each investment is included in this document, if available, including whether the waiver is contractual or voluntary and its date of expiration. All available information about investment expense waivers is current and complete as of the date of this report. If information regarding the waivers is incomplete, it is because our third-party data provider was unable to make the information available. For more information, please see the investment profile or the prospectus that corresponds to the investment, which are both available from MassMutual. Contact your MassMutual Retirement Services professional or call 1-877-474-5496.

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Performance shown is historical and does not guarantee future results. Current performance may be lower or higher than that shown. Performance for other time periods, including since inception performance, is available in the investment profile pertaining to the investment or by calling 1-866-444-2601. Investment return and principal values fluctuate. There are no assurances investment objectives will be achieved. Values at distribution may be more or less than the amount invested.

Average total annual returns show the change in the value of an investment expressed as a percentage on an annual basis and include reinvestment of all dividends and capital gains distributions. Performance is shown net of investment expenses.

Specific details about the performance, and Morningstar RatingsTM for each investment option are provided below under the appropriate asset category. Each investment option includes a reference to a benchmark index. Details on the indices and how Morningstar RatingsTM are calculated are provided at the end of the attached Peer Analysis report notes.

Investors should consider an investment's objectives, risks, fees and expenses carefully before investing. This and other information can be found in the investment profile or prospectus, available by clicking on the investment name. Read it carefully before investing.

3 Year Risk is the annualized standard deviation of the last 36 monthly returns. Risk measures the volatility of performance. Generally a higher standard deviation (or percentage shown) means greater risk or volatility.

For additional important information, see the Peer Analysis report attached to this presentation.

Investment Style Analysis as of September 30, 2011

Your Plan Investment Options: 25

Industry Average Investment Options: 16.0*

Investment Style Analysis

	Value	Core	Growth
Large Cap	Sel Large Cap Value (Davis) Value (MFS)	Eqty Grth (Am Century)	Equity Portfolio (Calvert) Sel Gr Opprts (Sands/Delaware)
Multi Cap	Sel Focused Value (Harris)		
Mid Cap		Mid Cap Core Equity (Invesco)	Sel Md Cp Gr II (TRP/Frontier)
Small Cap	Sel SmCoVI(Fed Clov/TRP/ERNST)	Main St. Small & Mid Cap (OFI)	Growth (Baron)

See subsequent slides for important risks disclosures about plan investment options.

^{*}Source: PSCA's 54th Annual Survey of PS and 401(k) Plans

Investment Style Analysis as of September 30, 2011

Your Plan Investment Options: 25

Industry Average Investment Options: 16.0*

Investment Style Analysis

Money Market/Stable Value	Fixed Income	Asset Allocation**
Guaranteed	Prm Core Bond (Babson)	Balanced (American)
	Select Strategic Bnd (Western)	RetireSMART 2010
		RetireSMART 2020
		RetireSMART 2030
		RetireSMART 2040
		RetireSMART 2050
International/Global	Specialty	RetireSMART In Retirement
Int'l New Discovery (MFS)	Real Estate (OFI)	
Intl Value (Thornburg)		
Premier Global (OFI)		

See subsequent slides for important risks disclosures about plan investment options.

^{*}Source: PSCA's 54th Annual Survey of PS and 401(k) Plans

Investment Performance as of September 30, 2011

		Morningstar	Expense			Average	Annual Re	turns (net c	of expense ra	atio)
Name	Manager	Rating	Ratio	1 Quarter	YTD	1 Year	3 Year	5 Year	10 Year	3 YR Risk
Stable Value										
Premier Money Market (Babson)	Babson Capital Management LLC		0.95	0.00	0.00	0.00	0.14	1.50	1.51	0.12
91-Day Treasury Bills			N/A	0.01	0.07	0.11	0.21	1.62	1.92	0.08
Intermediate Term Bond										
Prm Core Bond (Babson)	Babson Capital Management LLC	***	1.15	2.79	5.84	4.30	8.59	6.29	5.24	4.39
Select Strategic Bnd (Western)	Western Asset Management	***	1.11	2.13	4.80	4.95	10.08	5.61	N/A	6.97
Morningstar Intermediate-term Bond			0.98	1.55	4.45	3.53	8.56	5.63	5.10	5.41
BC US Aggregate Bd Idx			N/A	3.83	6.67	5.28	7.98	6.53	5.67	4.05
Asset Allocation/Lifestyle										
Balanced (American)	American Funds	***	1.40	-8.71	-4.34	1.77	3.25	0.95	4.07	14.60
Morningstar Moderate Allocation			1.40	-10.43	-6.48	-0.42	3.44	1.00	3.91	15.16
Lipper Balanced Index			N/A	-9.41	-5.19	0.53	4.02	1.58	4.15	14.59
S&P 500® Index			N/A	-13.86	-8.67	1.14	1.22	-1.18	2.81	21.25
Asset Allocation/Lifecycle										
RetireSMART In Retirement	Multi Managed	***	1.16	-5.39	-1.82	1.07	5.54	2.94	N/A	10.13
RetireSMART 2010	Multi Managed	**	1.24	-8.32	-4.48	0.01	4.60	1.54	N/A	14.18
RetireSMART 2020	Multi Managed	**	1.29	-13.33	-9.13	-2.17	3.18	-0.19	N/A	19.14
RetireSMART 2030	Multi Managed	**	1.33	-15.62	-11.37	-3.42	1.75	-1.40	N/A	21.86
RetireSMART 2040	Multi Managed	**	1.35	-16.22	-12.01	-3.71	1.22	-1.64	N/A	22.68
RetireSMART 2050	Multi Managed	***	1.57	-17.29	-12.99	-4.42	1.17	N/A	N/A	23.06
Morningstar Retirement Income			1.12	-5.48	-2.24	1.08	4.64	2.70	3.71	11.23
-										

		Morningstar	Expense			Average	Annual Ref	turns (net c	of expense r	atio)
Name	Manager	Rating	Ratio	1 Quarter	YTD	1 Year	3 Year	5 Year	10 Year	3 YR Risk
Morningstar Target-Date 2000-2010			1.35	-6.91	-3.36	0.75	4.25	1.97	3.91	13.46
Morningstar Target-Date 2016-2020			1.41	-9.57	-5.78	-0.40	3.30	0.50	3.54	16.60
Morningstar Target-Date 2026-2030			1.47	-12.77	-8.80	-1.94	2.05	-0.84	3.61	19.76
Morningstar Target-Date 2036-2040			1.63	-14.69	-10.64	-3.02	1.39	-1.47	3.41	21.37
Morningstar Target-Date 2050+			1.63	-15.60	-11.51	-3.57	1.21	-2.18	3.37	22.08
Custom RetireSMART® In Ret			N/A	-3.37	0.15	2.98	6.02	3.85	4.81	8.22
Custom RetireSMART® 2010 ldx			N/A	-6.15	-2.23	2.30	5.44	2.71	4.49	12.15
Custom RetireSMART® 2020 Idx			N/A	-11.16	-6.67	0.54	3.80	0.90	3.94	17.25
Custom RetireSMART® 2030 Idx			N/A	-13.43	-8.76	-0.54	2.36	-0.40	3.74	20.00
Custom RetireSMART® 2040 Idx			N/A	-14.17	-9.50	-1.03	1.79	-0.71	3.87	21.01
Custom RetireSMART® 2050 Idx			N/A	-15.19	-10.51	-1.82	1.49	N/A	N/A	21.40
Large Cap Value										
Sel Large Cap Value (Davis)	Davis Selected Advisers	***	1.26	-16.33	-14.42	-5.21	-1.93	-3.29	2.64	23.64
Value (MFS)	MFS Investment Management®	***	1.23	-15.43	-10.84	-2.54	-1.32	-1.63	3.83	20.79
Morningstar Large Value			1.28	-16.16	-11.39	-2.41	-0.67	-2.90	2.98	22.12
Morningstar Large Blend			1.34	-15.84	-11.24	-1.79	0.29	-1.81	2.56	22.11
Russell 1000® Value Idx			N/A	-16.21	-11.25	-1.90	-1.52	-3.53	3.35	23.01
S&P 500® Index			N/A	-13.86	-8.67	1.14	1.22	-1.18	2.81	21.25
Large Cap Core										
Eqty Grth (Am Century)	American Century+SM;	***	0.70	-14.17	-7.62	2.68	-0.05	-1.66	3.29	20.77

	Morningstar	Expense			Average	Annual Re	turns (net d	of expense r	atio)
Manager	Rating	Ratio	1 Quarter	YTD	1 Year	3 Year	5 Year	10 Year	3 YR Risk
									22.11
		N/A	-13.86	-8.67	1.14	1.22	-1.18	2.81	21.25
Sands/Delaware	***	1.37	-11.82	-5.09	6.55	8.82	2.72	4.31	22.64
Calvert	****	1.23	-15.11	-8.05	1.07	2.83	1.31	4.11	21.76
		1.36	-15.64	-10.80	-0.42	2.44	0.15	2.79	21.87
		N/A	-13.14	-7.21	3.78	4.69	1.62	3.01	20.90
		N/A	-13.86	-8.67	1.14	1.22	-1.18	2.81	21.25
Harris Associates L.P.	****	1.40	-18.18	-14.18	-3.05	7.23	1.37	7.67	27.59
		1.34	-15.84	-11.24	-1.79	0.29	-1.81	2.56	22.11
		N/A	-14.68	-9.25	0.91	1.61	-0.91	3.28	21.70
INVESCO	***	1.46	-18.49	-13.57	-6.01	-0.35	1.18	5.56	20.18
		1.41	-20.41	-14.63	-3.41	1.91	-0.41	6.11	25.63
		N/A	-18.90	-12.35	-0.90	3.96	0.56	7.45	25.80
TRP/Frontier	***	1.45	-17.29	-11.43	0.76	6.22	3.25	7.40	24.27
		1.44	-19.62	-13.10	-1.15	3.59	1.34	5.21	24.40
	Sands/Delaware Calvert Harris Associates L.P.	Sands/Delaware Calvert **** Harris Associates L.P. ****	Manager Rating Ratio 1.34 N/A Sands/Delaware ★★★★ 1.37 Calvert ★★★★ 1.23 1.36 N/A N/A N/A Harris Associates L.P. ★★★★ 1.40 1.34 N/A INVESCO ★★★★ 1.46 1.41 N/A TRP/Frontier ★★★★ 1.45	Manager Rating Ratio 1 Quarter 1.34 -15.84 N/A -13.86 Sands/Delaware ★★★★ 1.37 -11.82 Calvert ★★★★ 1.23 -15.11 1.36 -15.64 N/A -13.14 N/A -13.86 Harris Associates L.P. ★★★★ 1.40 -18.18 1.34 -15.84 N/A -14.68 INVESCO ★★★★ 1.46 -18.49 1.41 -20.41 N/A -18.90 TRP/Frontier ★★★★ 1.45 -17.29	Manager Rating Ratio 1 Quarter YTD 1.34 -15.84 -11.24 N/A -13.86 -8.67 Sands/Delaware ★★★★ 1.37 -11.82 -5.09 Calvert ★★★★ 1.23 -15.11 -8.05 1.36 -15.64 -10.80 N/A -13.14 -7.21 N/A -13.86 -8.67 Harris Associates L.P. ★★★★ 1.40 -18.18 -14.18 1.34 -15.84 -11.24 N/A -14.68 -9.25 INVESCO ★★★★ 1.46 -18.49 -13.57 1.41 -20.41 -14.63 N/A -18.90 -12.35 TRP/Frontier ★★★★ 1.45 -17.29 -11.43	Manager Rating Ratio 1 Quarter YTD 1 Year 1.34 -15.84 -11.24 -1.79 N/A -13.86 -8.67 1.14 Sands/Delaware ★★★★ 1.37 -11.82 -5.09 6.55 Calvert ★★★★ 1.23 -15.11 -8.05 1.07 1.36 -15.64 -10.80 -0.42 N/A -13.14 -7.21 3.78 N/A -13.86 -8.67 1.14 Harris Associates L.P. ★★★★ 1.40 -18.18 -14.18 -3.05 1.34 -15.84 -11.24 -1.79 N/A -14.68 -9.25 0.91 INVESCO ★★★★ 1.46 -18.49 -13.57 -6.01 1.41 -20.41 -14.63 -3.41 N/A -18.90 -12.35 -0.90 TRP/Frontier ★★★★ 1.45 -17.29 -11.43 0.76	Manager Rating Ratio 1 Quarter YTD 1 Year 3 Year 1.34 -15.84 -11.24 -1.79 0.29 N/A -13.86 -8.67 1.14 1.22 Sands/Delaware ★★★★ 1.37 -11.82 -5.09 6.55 8.82 Calvert ★★★★ 1.23 -15.11 -8.05 1.07 2.83 1.36 -15.64 -10.80 -0.42 2.44 N/A -13.14 -7.21 3.78 4.69 N/A -13.86 -8.67 1.14 1.22 Harris Associates L.P. ★★★★ 1.40 -18.18 -14.18 -3.05 7.23 N/A -14.68 -9.25 0.91 1.61 INVESCO ★★★★ 1.46 -18.49 -13.57 -6.01 -0.35 1.41 -20.41 -14.63 -3.41 1.91 N/A -18.90 -12.35 -0.90 3.96 TRP/Frontier ★★★★ 1.45 -17.29 -11.43 0.76 6.22	Manager Rating Ratio 1 Quarter YTD 1 Year 3 Year 5 Year 1.34 -15.84 -11.24 -1.79 0.29 -1.81 N/A -13.86 -8.67 1.14 1.22 -1.18 Sands/Delaware ★★★★ 1.37 -11.82 -5.09 6.55 8.82 2.72 Calvert ★★★★ 1.23 -15.11 -8.05 1.07 2.83 1.31 1.36 -15.64 -10.80 -0.42 2.44 0.15 N/A -13.14 -7.21 3.78 4.69 1.62 N/A -13.86 -8.67 1.14 1.22 -1.18 Harris Associates L.P. ★★★★★ 1.40 -18.18 -14.18 -3.05 7.23 1.37 INVESCO ★★★★ 1.46 -18.49 -13.57 -6.01 -0.35 1.18 INVESCO ★★★★ 1.46 -18.49 -13.57 -6.01 -0.35 1.18 T	Manager Rating Ratio 1 Quarter YTD 1 Year 3 Year 5 Year 10 Year 1.34 -15.84 -11.24 -1.79 0.29 -1.81 2.56 N/A -13.86 -8.67 1.14 1.22 -1.18 2.81 Sands/Delaware ★★★★ 1.37 -11.82 -5.09 6.55 8.82 2.72 4.31 Calvert ★★★★ 1.23 -15.11 -8.05 1.07 2.83 1.31 4.11 1.36 -15.64 -10.80 -0.42 2.44 0.15 2.79 N/A -13.14 -7.21 3.78 4.69 1.62 3.01 N/A -13.86 -8.67 1.14 1.22 -1.18 2.81 Harris Associates L.P. ★★★★ 1.40 -18.18 -14.18 -3.05 7.23 1.37 7.67 N/A -14.68 -9.25 0.91 1.61 -0.91 3.28 INVESCO ★★★★

	Morningstar	Expense			Average	Annual Re	turns (net c	of expense ra	atio)
me Manager	Rating	Ratio	1 Quarter	YTD	1 Year	3 Year	5 Year	10 Year	3 YR Risk
ssell MidCap® Gr Idx		N/A	-19.33	-11.59	0.80	5.89	1.64	6.70	24.98
•		IV/A	-19.33	-11.59	0.80	5.89	1.04	0.70	24.98
all Cap Value	DD/CDNCT	1 (0	20.70	1/ 55	4 21	0.50	0.21	NI/A	27.24
	RP/ERNST ★★★	1.69	-20.69	-16.55	-4.31	-0.58	-0.31	N/A	27.34
rningstar Small Blend		1.48	-21.77	-16.81	-3.70	0.61	-1.12	6.18	27.93
ssell 2000® Idx		N/A	-21.86	-17.02	-3.53	-0.37	-1.01	6.12	28.23
ssell 2000® Value Idx		N/A	-21.47	-18.52	-6.00	-2.79	-3.08	6.47	29.00
all Cap Core									
n St. Small & Mid Cap (OFI) Oppenheir	erFunds, Inc. ★★★	1.31	-21.60	-15.61	-4.01	1.08	-1.29	6.58	30.58
ningstar Small Blend		1.48	-21.77	-16.81	-3.70	0.61	-1.12	6.18	27.93
ssell 2500[TM] Idx		N/A	-21.23	-14.87	-2.23	2.25	0.19	7.08	27.01
all Cap Growth									
wth (Baron) Baron Cap	ital Group ★★★★	1.32	-18.00	-9.86	4.08	3.51	1.55	7.58	23.91
ningstar Small Growth		1.56	-22.32	-15.03	-0.92	2.48	0.30	5.16	26.70
ssell 2000® Idx		N/A	-21.86	-17.02	-3.53	-0.37	-1.01	6.12	28.23
sell 2000® Grth Idx		N/A	-22.25	-15.57	-1.13	2.07	0.96	5.45	27.85
/Global Large Core									
Value (Thornburg) Thornburg	nvestments ***	1.63	-20.95	-16.76	-10.27	0.00	0.25	8.42	22.95
rningstar Foreign Large Blend		1.55	-20.90	-17.58	-11.64	-1.79	-3.65	4.42	26.47
CI® EAFE® ldx		N/A	-19.01	-14.98	-9.36	-1.13	-3.46	5.03	25.44
/Global Large Growth									
mier Global (OFI) Oppenheir	erFunds, Inc. ★★★	1.50	-20.00	-14.29	-6.73	2.35	-1.46	N/A	24.88

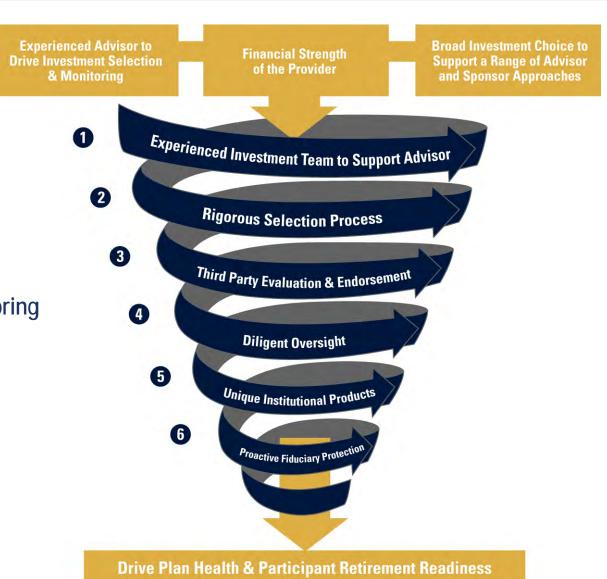
		Morningstar	Expense			Average	Annual Re	turns (net c	of expense r	atio)
Name	Manager	Rating	Ratio	1 Quarter	YTD	1 Year	3 Year	5 Year	10 Year	3 YR Risk
Morningstar World Stock			1.74	-17.70	-13.76	-6.38	1.12	-1.54	4.75	24.13
MSCI® World Idx			N/A	-16.62	-12.20	-4.35	-0.08	-2.23	3.71	23.09
Intl/Global Small/Mid Cap										
Int'l New Discovery (MFS)	MFS Investment Management®	***	1.70	-17.73	-13.73	-5.76	6.56	1.26	N/A	25.60
Morningstar Foreign Small/Mid Growt			1.70	-19.72	-16.81	-7.43	4.99	-0.56	9.78	27.35
MSCI® EAFE® Idx			N/A	-19.01	-14.98	-9.36	-1.13	-3.46	5.03	25.44
REITs										
Real Estate (OFI)	OppenheimerFunds, Inc.	***	1.88	-15.57	-6.18	0.75	-1.73	-2.50	N/A	39.77
Morningstar Specialty - Real Estate			1.50	-14.94	-6.61	-0.13	-1.34	-3.21	8.22	38.10
FTSE/NAREIT Equity REIT Index			N/A	-15.07	-6.06	0.92	-1.99	-2.43	9.18	39.82

An approach to investment selection that helps drive plan health

Experienced Advisor
 Financial Strength
 Investment Flexibility

2. Innovative Selection & Monitoring Unique Investment Offerings

3. Fiduciary Peace of Mind



How our MassMutual Funds stack up

	MassMutual Funds	Single Family of Investment Options	Open Architecture Platform
	Multi-managed sub-advised family of investment options	Typically limited to investment options managed by one company.	Typically limited to retail investment options
Ability to seek out best available managers from institutional and retail universes	Yes	No	No
Proprietary Subadviser Identification and Screening Criteria	Yes	No	No
Direct Access to Managers and Information	Yes	Yes	No
Seamless Management Firm Changes	Yes	No	No

A subadvised structure may be more or less expensive than other structures.

Selection process yields a wide array of expertise























INVESTMENT MANAGEMENT



WESTERN ASSET

Asset Management



























HARRIS ASSOCIATES L.P.

























Federated Clover

INVESTMENT ADVISORS

Eagle

Be confident in your decisions

Smart Architecturesm Methodology: Certification By Mesirow Financial

- Applies automatically to all investments in Smart Architecturesm Program
- Certifies that Smart Architecture'ssm ongoing investment identification, screening and monitoring methodology is consistent with applicable ERISA requirements
- Innovative, industry-leading approach to due diligence certification
- Reinforces MassMutual's commitment to supporting plan fiduciaries



Communication and Education A behavioral approach to preparing your employee for retirement

A participant focus for driving action









Behavioral economics



Participant statements



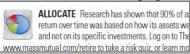
Beneficiary information



Plan Sponsor Messaging

A message to you from ABC Organization Looking to boost your retirement I.Q.? Come to a lunch & learn on August 3, 2009 from 12-1 p.m. to learn n importance of saving for your future and tips for selecting your inves

RetireSmart Messaging



Tested

Overhauled with plan participant focus group input

Targeted to affect behavior

- RetireSmartsM section and key messaging to help prompt better saving and investing decisions
- Plan sponsor messaging

Built for scanning and digging deep

- Balance, account ins and outs, and high-level gain/loss information on page 1
- Gap statement
- Beneficiaries listed by name and percentage
- Personal rate of return for overall account performance
- Multiple DC accounts on same statement
- Detailed fund performance, contribution details, transfers, etc.

Variable delivery and language

- e-delivery and regular mail
- Spanish available

New Year, NEW WEBSITE

The JourneySM takes a fresh direction – and becomes www.retiresmart.com

Powerful new tools for BETTER RETIREMENT PLANNING

MassMutual is committed to continuously enhancing your retirement planning experience. Our participant website enhancements, promise to make planning easier than ever. We invite you to log on to our new RetireSmart website where you'll find both new tools and improvements to existing features.



- **Easier site navigation** and shorter menus
- Financial learning targeted to your needs
- Quick links SAVE, ALLOCATE, CONSOLIDATE that make taking action easier than ever
- A fun video game that fast-forwards you to your own retirement reality

Do MORE.

Upcoming enhancements to the participant website will also let you:

- Elect e-delivery of your statements
- View prior statements



Multi-Touchpoint Ongoing Campaigns

Consolidate

By consolidating their assets participants simplify the management of their retirement planning and assets.





Consolidate Campaign

Make it easy for participants to consolidate their retirement assets. Campaign is mailed to homes on a 25-day cycle.

◀ Touchpoint 1:

Our roll-in Concierge Service makes it easy to transfer IRA or prior plan balances.

◆ Touchpoint 2:

Simplify your life! Take control by putting all of your retirement assets in one place.

Multi-Touchpoint Ongoing Campaigns

Allocate

Using the RetireSmart Ready tool, participants can more appropriately allocate investments to fit their goals





Allocate Campaign

Diversifying your retirement assets can make a difference. Campaign is mailed to homes on a 25-day cycle.

◀ Touchpoint 1:

Learn more about how diversification can help you survive market ups and downs.

◀ Touchpoint 2:

Log on to RetireSmart.com to use the available research, guidance, and advice tools to build your own investment strategy.

2011 RetireSMARTSM Online Seminars

1st Quarter

- February 23
 Understand what's driving the economy hosted by Dr. Jerry Webman
- March 30 Retirement goals: It's more than a number hosted by Farnoosh Torabi

2nd Quarter

- April
 Tax strategies for retirement hosted by IRS
- June 22
 Good credit may lead to more savings
 hosted by Farnoosh Torabi

3rd Quarter

- July
 Calculating your retirement savings gap hosted by MassMutual
- September
 Managing and maximizing your 401(k)
 today...and tomorrow
 hosted by Farnoosh Torabi

4th Quarter

- OctoberTo Be Determined
- November
 Finding ways to pay for college debt
 hosted by Farnoosh Torabi



We'll help you get there."

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MassMutual Smart ArchitectureSM Investment Program Quarterly Scorecard Second Quarter 2011



Retirement Strategies



We'll help you get there.



The MassMutual Smart Architecture^{s™} Investment Program Ongoing Due Diligence

The MassMutual Retirement Services Investment Team ("the Investment Team") conducts systematic due diligence on every investment option and investment manager offered through the MassMutual Smart Architecture Investment Program ("the Program"), both proprietary and non-proprietary, and uses this process to determine the status of each investment option in the **Smart Architecture Scorecard.**

Please note: References to investment options refer to those available in registered plans and group annuity contracts. In registered plans, plans will invest directly in mutual funds or other similar investments. In group annuity contracts, the plan's investments will purchase units of separate investment accounts, which in turn will purchase shares of mutual funds or other similar investments.

Our Investment Beliefs

Every new investment option and investment manager we identify for inclusion in the Program has passed our due diligence screening and receives a "meets expectations" status. Because the investment world is dynamic, some of these options may become exceptional performers among their peers from time to time. At other times, strategies may struggle somewhat due to factors such as changes within the organization managing the strategy or stylistic hurdles. When these conditions occur, the status of the option may change to "watch." Investment options can regain their "meets expectations" status on their own by scoring well in subsequent periods. If the option's difficulties persist, however, we may determine that an investment manager or option change is necessary.

Translating Our Investment Beliefs into a Scoring System

The Investment Team has designed and implemented a scoring system to evaluate the entire investment program. The scoring system is unbiased and measures qualitative factors as well as quantitative factors across meaningful time periods. The qualitative factors focus on the firm, investment management team and process consistency. The quantitative factors focus on the past performance of a management strategy against its peers and/or benchmark using standard investment metrics. In our view, this combination of factors may help us not only better understand the rationale for manager performance, but may also help us more effectively identify problems before they translate into future performance issues.

Legend

Fixed Income
Asset Allocation/Balanced
Large Cap Equity
Multi Cap Equity
Mid Cap Equity
Small Cap Equity
International/Global Equity
Specialty
Stable Value
Index
Asset Allocation/Lifestyle & Lifecycle

MassMutual Smart Architecture Investment Program — Smart Architecture Scorecard Second Quarter 2011

Most Investments (exceptions: stable value, index, lifecycle and lifestyle investments)

			Org/Firm	Personnel/	Investment		Information	Tracking	Batting		Returns Ranks			Watch
Investment Name	Benchmark	Peer	Stability	Strategy	Process	R Squared	Ratio Rank	Error Rank	Average	1 Year	3 Years	5 Years	Total Score	Status
Premier Short-Duration Bond (Babson)	BC 1-3 Yr Gov	Short-term Bond	1	1	1	0	1	1	1	1	1	1	9	-
Premier Core Bond (Babson)	BC US Aggregate Bond	Intermediate-Term Bond	1	1	1	1	1	1	1	1	1	1	10	-
Premier Diversified Bond (Babson)	BC US Aggregate Bond	Intermediate-Term Bond	1	1	1	0	1	1	1	1	1	1	9	-
Select Strategic Bond (Western)	BC US Aggregate Bond	Intermediate-Term Bond	1	1	1	0	1	0	1	1	1	1	8	-
BlackRock Total Return II	BC US Aggregate Bond	Intermediate-Term Bond	1	1	1	0	1	1	1	1	0	0	7	-
Calvert Social Investment Bond	BC US Aggregate Bond	Intermediate-Term Bond	1	1	1	0	0	1	1	1	0	0	6	-
PIMCO Total Return	BC US Aggregate Bond	Intermediate-Term Bond	1	1	1	0	1	1	1	1	1	1	9	-
Select PIMCO Total Return	BC US Aggregate Bond	Intermediate-Term Bond	1	1	1	0	1	1	1	1	1	1	9	-
MFS Government Securities	BC US Government Intermediate	Intermediate Government	1	1	1	1	1	1	1	1	1	1	10	-
Northern Institutional U.S Government Securities	BC US Government Intermediate	Intermediate Government	1	1	1	1	0	1	1	1	1	1	9	-
Delaware Extended Duration Bond	BC US Long Government/Credit	Extended Duration Bond	1	1	1	0	1	1	1	1	1	1	9	-
PIMCO Long-Term U.S. Government	BC Long-Term Government Bond	Long-Term Bond	1	1	1	1	1	1	1	1	1	1	10	-
Premier Inflation-Protected Bond (Babson)	BC US Treasury: US TIPS	Inflation-Protected Bond	1	1	1	1	1	1	1	1	1	1	10	-
Premier High Yield (Babson)	BC US Corporate High Yield	High Yield Bond	1	1	1	1	1	0	0	1	1	0	7	-
Oppenheimer Champion Income	BC US Corporate High Yield	High Yield Bond	1	1	1	0	0	0	0	1	0	0	4	Watch
PIMCO High Yield	BC US Corporate High Yield	High Yield Bond	1	1	1	1	1	1	0	1	1	1	9	-
Columbia High Yield Bond	BC US Corporate High Yield	High Yield Bond	1	1	1	1	1	1	1	1	1	1	10	-
AllianceBernstein Global Bond	Citigroup Non-USD World Government Bond Index	International Bond	1	1	1	0	1	0	1	1	1	1	8	-
Premier International Bond (Baring)	Citigroup Non-USD World Government Bond Index	International Bond	1	1	1	1	1	1	1	1	1	N/A	9	-
Oppenheimer International Bond	Citigroup Non-USD World Government Bond Index	International Bond	1	1	1	0	1	1	1	1	1	1	9	-
Templeton Global Bond	Citigroup Non-USD World Government Bond Index	International Bond	1	1	1	0	1	0	1	1	1	1	8	-
Loomis Sayles Strategic Income	BC US Aggregate Bond	Multi-Sector Bond	1	1	1	0	1	0	1	1	1	1	8	-
Franklin Strategic Income	BC US Aggregate Bond	Multi-Sector Bond	1	1	1	0	1	1	1	1	1	1	9	-
Oppenheimer Global Strategic Income	BC US Aggregate Bond	Multi-Sector Bond	1	1	1	0	1	1	1	1	1	1	9	-
Premier Balanced (Babson)	60% S&P 500/40% BC Agg	Moderate Allocation	1	1	1	1	1	1	1	1	1	1	10	-
Select Strategic Balanced (JPMorgan/Western)	60% S&P 500/40% BC Agg	Moderate Allocation	1	1	1	1	1	1	1	1	1	1	10	-
American Beacon Balanced	60% S&P 500/40% BC Agg	Moderate Allocation	1	1	1	1	1	1	0	1	1	0	8	-
American Funds American Balanced	60% S&P 500/40% BC Agg	Moderate Allocation	1	1	1	1	1	1	1	1	1	1	10	-
MFS Total Return	60% S&P 500/40% BC Agg	Moderate Allocation	1	1	1	1	0	1	0	1	1	1	8	-
Oakmark Equity & Income	60% S&P 500/40% BC Agg	Moderate Allocation	1	1	1	1	1	1	1	1	1	1	10	-
Oppenheimer Global Allocation	60% S&P 500/40% BC Agg	Moderate Allocation	1	1	1	1	1	0	1	1	1	0	8	-
Oppenheimer Quest Opportunity Value	60% S&P 500/40% BC Agg	Moderate Allocation	1	1	1	0	1	0	0	1	0	1	6	Watch
Premier Enhanced Index Value (Babson)	Russell 1000 Value	Large Cap Value	1	1	1	1	0	1	0	1	1	0	7	-
Premier Value (OFI Inst)	Russell 1000 Value	Large Cap Value	1	1	1	1	1	0	1	1	1	1	9	-
Select Diversified Value (Loomis Sayles/ Brandywine Global)	Russell 1000 Value	Large Cap Value	1	1	1	1	0	1	0	1	1	0	7	-

MassMutual Smart Architecture Investment Program — Smart Architecture Scorecard Second Quarter 2011 (continued)

Investment Name	Benchmark	Peer	Org/Firm Stability	Personnel/ Strategy	Investment Process	R Squared	Information Ratio Rank	Tracking Error Rank	Batting Average	1 Year	Returns Ranks 3 Years	5 Years	Total Score	Watch Status
Select Fundamental Value (Wellington)	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Select Large Cap Value (Davis)	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Select Value Equity (Pyramis)	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	0	9	-
Invesco Van Kampen Value Opportunities	Russell 1000 Value	Large Cap Value	1	0	0	1	1	0	0	0	1	0	4	Watch
American Beacon Large Cap Value	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
American Century Value	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
American Funds Washington Mutual	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Dreyfus Strategic Value	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Eaton Vance Large-Cap Value	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	0	0	0	1	7	-
Fidelity Equity-Income II	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	0	9	-
Franklin Mutual Beacon	Russell 1000 Value	Large Cap Value	1	1	1	1	1	0	1	0	1	1	8	Watch
Franklin Mutual Shares	Russell 1000 Value	Large Cap Value	1	1	1	1	1	0	0	0	1	1	7	-
MFS Value	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Oppenheimer Value	Russell 1000 Value	Large Cap Value	1	1	1	1	1	0	1	1	1	1	9	-
Pioneer Cullen Value	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Columbia Diversified Equity Income	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Invesco Van Kampen Comstock	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Weitz Partners Value	Russell 1000 Value	Large Cap Value	1	1	1	1	1	0	1	1	1	1	9	-
Core Value Equity(Babson/OFI/Loomis Sayles/ Brandywine Global)	Russell 1000 Value	Large Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Premier Enhanced Index Core Equity (Babson)	S&P 500	Large Cap Blend	1	1	1	1	0	1	0	1	1	1	8	-
Premier Main Street (OFI Inst)	S&P 500	Large Cap Blend	1	1	1	1	1	1	0	1	1	0	8	-
Select Core Opportunities (Victory/Boston Co.)	S&P 500	Large Cap Blend	1	1	1	1	1	1	0	1	0	1	8	-
American Century Equity Growth	S&P 500	Large Cap Blend	1	1	1	1	1	1	1	1	1	1	10	-
Fidelity Advisor Dividend Growth	S&P 500	Large Cap Blend	1	1	1	1	1	0	1	1	1	1	9	-
Fidelity Magellan	S&P 500	Large Cap Blend	1	1	1	1	1	0	0	1	0	0	6	-
Henssler Equity	S&P 500	Large Cap Blend	1	1	1	1	1	1	0	1	1	1	9	-
Legg Mason Value Trust	S&P 500	Large Cap Blend	1	1	1	1	0	0	0	0	0	0	4	Watch
MFS Union Standard Equity	S&P 500	Large Cap Blend	1	1	1	1	1	1	1	1	1	1	10	-
Neuberger Berman Socially Responsive	S&P 500	Large Cap Blend	1	1	1	1	1	0	1	1	1	1	9	-
Oppenheimer Equity	S&P 500	Large Cap Blend	1	1	1	1	1	1	1	1	0	1	9	-
Oppenheimer Rising Dividend	S&P 500	Large Cap Blend	1	1	1	1	1	1	1	1	1	1	10	-
PIMCO StocksPlus	S&P 500	Large Cap Blend	1	1	1	1	1	0	1	1	1	1	9	-
T. Rowe Price Spectrum Growth	S&P 500	Large Cap Blend	1	1	1	1	1	1	1	1	1	1	10	-
Thornburg Value	S&P 500	Large Cap Blend	1	1	1	1	1	0	1	1	1	1	9	-
Invesco Charter	S&P 500	Large Cap Blend	1	1	1	1	1	1	1	1	1	1	10	-
American Funds Fundamental Investors	S&P 500	Large Cap Blend	1	1	1	1	1	1	1	1	1	1	10	-
Nuveen Tradewinds Value Opportunities	S&P 500	Large Cap Blend	1	1	1	0	1	0	1	1	1	1	8	-
Premier Capital Appreciation (OFI)	Russell 1000 Growth	Large Cap Growth	1	1	1	1	0	1	0	1	0	0	6	Watch
Premier Enhanced Index Growth (Babson)	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	0	1	1	1	9	-
Select Growth Opportunities (Sands/Delaware)	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	0	1	1	1	1	9	-

MassMutual Smart Architecture Investment Program – Smart Architecture Scorecard Second Quarter 2011 (continued)

			Org/Firm	Personnel/	Investment		Information	Tracking	Batting		Returns Ranks			Watch
Investment Name	Benchmark	Peer	Stability	Strategy	Process	R Squared	Ratio Rank	Error Rank	Average	1 Year	3 Years	5 Years	Total Score	Status
Select Blue Chip Growth (T. Rowe Price)	Russell 1000 Growth	Large Cap Growth	11	1	1	1	1	1	11	1	1	1	10	-
Select Blue Chip Growth II (T. Rowe Price)	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	0	1	1	0	8	-
Select Large Cap Growth (Rainier)	Russell 1000 Growth	Large Cap Growth	1	1	1	1	0	1	0	1	1	0	7	-
Alger Capital Appreciation	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
Managers Cadence Capital Appreciation	Russell 1000 Growth	Large Cap Growth	1	1	1	1	0	1	0	1	0	0	6	-
American Century Growth	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
American Century Ultra	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	0	1	1	1	9	-
American Funds Growth America	Russell 1000 Growth	Large Cap Growth	1	1	1	1	0	1	0	1	1	1	8	-
Brandywine Blue	Russell 1000 Growth	Large Cap Growth	1	1	1	1	0	0	0	1	0	0	5	Watch
Calvert Large Cap Growth	Russell 1000 Growth	Large Cap Growth	1	0	1	1	0	1	0	1	0	0	5	Watch
Calvert Social Investment Equity	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
Columbia Marsico Growth	Russell 1000 Growth	Large Cap Growth	0	1	1	1	1	1	1	1	1	1	9	Watch
Eaton Vance Large-Cap Growth	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
Fidelity Contrafund	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	0	1	1	1	9	-
GE Growth Equity Premier	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
Legg Mason Growth Trust	Russell 1000 Growth	Large Cap Growth	1	1	1	1	0	0	0	1	0	0	5	Watch
MFS Growth	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
Oppenheimer Capital Appreciation	Russell 1000 Growth	Large Cap Growth	1	1	1	1	0	1	0	1	0	0	6	Watch
Rainier Large Cap Equity	Russell 1000 Growth	Large Cap Growth	1	1	1	1	0	1	0	1	0	0	6	-
T. Rowe Price Blue Chip Growth	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
Turner Core Growth	Russell 1000 Growth	Large Cap Growth	1	1	1	1	0	1	0	1	0	0	6	-
Wells Fargo Advantage Capital Growth	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	1	1	0	0	8	-
William Blair Growth	Russell 1000 Growth	Large Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
Select Focused Value (Harris)	Russell 1000	Large Cap Blend Specialty	1	1	1	1	1	0	1	1	1	1	9	-
Premier Discovery Value (OFI Inst)	Russell Midcap Value	Mid-Cap Value	1	1	1	1	0	0	0	1	0	0	5	Watch
Select Mid-Cap Value (NFJ/Systematic)	Russell Midcap Value	Mid-Cap Value	1	1	1	1	1	1	1	1	1	N/A	9	-
Columbia Mid Cap Value	Russell Midcap Value	Mid-Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
CRM Mid Cap Value	Russell Midcap Value	Mid-Cap Value	1	1	1	1	1	0	1	1	1	1	9	-
Goldman Sachs Mid Cap Value	Russell Midcap Value	Mid-Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Janus Perkins Mid Cap Value Investor	Russell Midcap Value	Mid-Cap Value	1	1	1	1	1	0	1	0	1	1	8	-
JPMorgan Mid Cap Value	Russell Midcap Value	Mid-Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Oppenheimer Small- & Mid- Cap Value	Russell Midcap Value	Mid-Cap Value	1	1	1	1	0	0	0	1	0	0	5	Watch
Columbia Mid Cap Value Opportunity	Russell Midcap Value	Mid-Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Wells Fargo Advantage Special Mid Cap Value	Russell Midcap Value	Mid-Cap Value	1	1	1	1	1	0	1	1	1	1	9	-
RidgeWorth Mid-Cap Value Equity	Russell Midcap Value	Mid-Cap Value	1	1	1	1	1	0	1	1	1	1	9	-
Invesco Mid Cap Core Equity	Russell Midcap	Mid-Cap Blend	1	1	1	1	1	1	0	0	1	1	8	-
Ariel Small/Mid Cap Value	Russell Midcap	Mid-Cap Blend	1	1	1	1	1	0	1	1	1	1	9	-
Fidelity Advisor Leveraged Company Stock	Russell Midcap	Mid-Cap Blend	1	1	1	1	1	0	1	1	0	1	8	-
Select Mid Cap Growth (Wellington/Turner)	Russell Midcap Growth	Mid-Cap Growth	1	1	1	1	0	1	0	1	1	0	7	_
Select Mid Cap Growth II (T. Rowe Price/Frontier)	<u> </u>	Mid-Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
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MassMutual Smart Architecture Investment Program — Smart Architecture Scorecard Second Quarter 2011 (continued)

		_	Org/Firm	Personnel/	Investment		Information	Tracking	Batting		Returns Ranks			Watch
Investment Name	Benchmark	Peer	Stability	Strategy	Process	R Squared	Ratio Rank	Error Rank	Average	1 Year	3 Years	5 Years	Total Score	Status
Invesco Capital Development	Russell Midcap Growth	Mid-Cap Growth	1	0	0	1	0	1	1	1	1	0	6	Watch
Nuveen Mid Cap Growth Opportunities	Russell Midcap Growth	Mid-Cap Growth	1	1	1	1	1	1	0	1	1	1	9	-
Prudential Jennison Mid Cap Growth	Russell Midcap Growth	Mid-Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
JPMorgan Diversified Mid Cap Growth	Russell Midcap Growth	Mid-Cap Growth	1	1	1	1	1	1	0	1	1	1	9	-
Thornburg Core Growth	Russell Midcap Growth	Mid-Cap Growth	11	1	1	1	0	1	1	0	0	0	6	-
Invesco Van Kampen Mid Cap Growth	Russell Midcap Growth	Mid-Cap Growth	1	0	0	1	1	1	0	1	<u> </u>	1	7	Watch
Wells Fargo Advantage Discovery	Russell Midcap Growth	Mid-Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
Select Small Cap Value Equity (Wellington/Barrow Hanley)	Russell 2000 Value	Small Cap Value	1	1	1	1	1	1	1	1	1	0	9	-
Select Small Company Value (Fed Clov/ TRP/EARNEST)	Russell 2000 Value	Small Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Allianz NFJ Small Cap Value	Russell 2000 Value	Small Cap Value	1	1	1	1	1	0	1	1	1	1	9	-
Columbia Small Cap Value II	Russell 2000 Value	Small Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Eaton Vance Small Cap Value	Russell 2000 Value	Small Cap Value	1	1	1	1	1	1	1	1	0	1	9	-
Franklin Small Cap Value	Russell 2000 Value	Small Cap Value	1	1	1	1	1	1	1	1	0	1	9	-
JPMorgan Small Cap Value	Russell 2000 Value	Small Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Royce Total Return	Russell 2000 Value	Small Cap Value	1	1	1	1	1	1	1	1	0	1	9	-
Invesco Van Kampen Small Cap Value	Russell 2000 Value	Small Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Victory Small Company Opportunity	Russell 2000 Value	Small Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Wells Fargo Advantage Intrinsic Small Cap Value	Russell 2000 Value	Small Cap Value	1	1	1	1	0	1	1	1	0	0	7	-
Northern Small Cap Value	Russell 2000 Value	Small Cap Value	1	1	1	1	1	1	1	1	1	1	10	-
Premier Main Street Small/Mid Cap (OFI Inst)	Russell 2000	Small Cap Blend	1	1	0	1	1	1	0	1	1	N/A	7	Watch
Premier Small/Mid Cap Opportunities (OFI Inst)	Russell 2000	Small Cap Blend	1	1	0	1	1	1	0	1	1	1	8	Watch
Premier Small/Mid Cap Opportunities II (OFI Inst)	Russell 2000	Small Cap Blend	1	1	0	1	1	1	0	1	1	1	8	Watch
Invesco Small Companies	Russell 2000	Small Cap Blend	1	1	1	1	1	0	1	1	1	1	9	-
Keeley Small Cap Value	Russell 2000	Small Cap Blend	1	1	1	1	1	0	0	1	0	0	6	-
Oppenheimer Main Street Small Cap	Russell 2000	Small Cap Blend	1	1	1	1	1	1	0	1	1	1	9	-
Wells Fargo Advantage Sm/Mid Cap Val	Russell 2000	Small Cap Blend	1	1	1	1	1	0	1	0	0	0	6	-
JP Morgan Small Cap Equity	Russell 2000	Small Cap Blend	1	1	1	1	1	1	1	1	1	1	10	-
Invesco Small Cap Equity	Russell 2000	Small Cap Blend	1	1	1	1	1	1	1	1	1	1	10	-
Select Small Cap Growth Equity (W&R/Wellington)	Russell 2000 Growth	Small Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
Select Small Company Growth (Boston Co/Eagle)	Russell 2000 Growth	Small Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
American Century Small Cap Growth	Russell 2000 Growth	Small Cap Growth	1	1	1	1	1	1	1	1	0	1	9	-
Baron Growth	Russell 2000 Growth	Small Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
Nuveen Small Cap Select	Russell 2000 Growth	Small Cap Growth	1	1	1	1	1	1	0	1	1	0	8	-
Oppenheimer Discovery	Russell 2000 Growth	Small Cap Growth	1	1	1	1	1	0	1	1	1	1	9	-
T. Rowe Price New Horizons	Russell 2000 Growth	Small Cap Growth	1	1	1	1	1	1	1	1	1	1	10	-
Invesco Van Kampen Small Cap Growth	Russell 2000 Growth	Small Cap Growth	1	1	1	1	1	0	1	1	0	1	8	-
William Blair Small Cap Growth	Russell 2000 Growth	Small Cap Growth	1	1	1	1	1	0	0	0	1	0	6	-
Winslow Green Growth	Russell 2000 Growth	Small Cap Growth	1	1	1	1	0	0	0	0	0	0	4	Watch
- Indian Grand Gra		Small sap drower		'	'	'							-	

MassMutual Smart Architecture Investment Program – Smart Architecture Scorecard Second Quarter 2011 (continued)

			Org/Firm	Personnel/	Investment		Information	Tracking	Batting		Returns Ranks			Watch
Investment Name	Benchmark	Peer	Stability	Strategy	Process	R Squared	Ratio Rank	Error Rank	Average	1 Year	3 Years	5 Years	Total Score	Status
Premier Global (OFI)	MSCI World	Global	1	1	1	1	1	1	1	1	1	1	10	-
American Funds Capital World Growth and Income	MSCI World	Global	1	1	1	1	1	1	1	1	1	1	10	-
Oppenheimer Global Opportunities	MSCI World	Global	1	1	1	1	1	0	1	1	1	1	9	-
Select BlackRock Global Allocation	MSCI World	Global	1	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-
Templeton Growth	MSCI World	Global	1	1	1	1	0	1	1	1	1	0	8	-
Select Diversified International (JPMorgan)	MSCI AC WORLD ex USA	Foreign Large Value	1	1	1	1	0	1	0	1	0	N/A	6	-
Allianz NFJ International Value	MSCIEAFE	Foreign Large Value	1	1	1	1	1	0	1	1	1	1	9	-
Wells Fargo Advantage International Value	MSCI EAFE	Foreign Large Value	1	1	1	1	1	1	0	1	1	0	8	-
Select Overseas (MFS/Harris/JPMorgan)	MSCIEAFE	Foreign Large Blend	1	1	1	1	1	0	1	1	1	1	9	-
MFS International Value	MSCIEAFE	Foreign Large Blend	1	1	1	1	1	1	1	1	1	1	10	-
AllianceBernstein International Growth	MSCIEAFE	Foreign Large Blend	0	1	0	1	1	0	1	1	0	1	6	Watch
American Funds EuroPacific Growth	MSCIEAFE	Foreign Large Blend	1	1	1	1	1	1	1	1	1	1	10	-
Franklin Mutual Global Discovery	MSCI EAFE	Foreign Large Blend	1	1	1	1	1	0	1	0	1	1	8	-
MainStay International Equity	MSCIEAFE	Foreign Large Blend	1	0	0	1	1	0	1	0	1	1	6	Watch
Manning & Napier World Opportunities	MSCIEAFE	Foreign Large Blend	1	1	1	1	1	0	1	1	1	1	9	-
Natixis Hansberger International	MSCIEAFE	Foreign Large Blend	1	1	1	1	1	0	1	1	1	1	9	-
Thornburg International Value	MSCIEAFE	Foreign Large Blend	1	1	1	1	1	1	1	1	1	1	10	-
Premier Focused International (Baring)	MSCIEAFE	Foreign Large Growth	1	1	1	1	1	1	1	1	1	1	10	-
Premier International Equity (OFI Inst)	MSCIEAFE	Foreign Large Growth	1	1	1	1	1	1	1	1	1	1	10	-
Artisan International	MSCIEAFE	Foreign Large Growth	1	1	1	1	1	1	1	1	1	0	9	-
Invesco International Growth	MSCIEAFE	Foreign Large Growth	1	0	0	1	1	1	1	1	1	1	8	Watch
BlackRock International Opportunities	MSCIEAFE	Foreign Small/Mid Growth	1	1	1	1	1	1	1	1	0	1	9	-
MFS International New Discovery	MSCIEAFE	Foreign Small/Mid Growth	1	1	1	1	1	1	1	1	1	1	10	-
Columbia Partners International Small Cap	MSCI EAFE	Foreign Small/Mid Growth	1	1	1	1	0	1	1	1	0	0	7	-
Premier Strategic Emerging Markets (Baring)	MSCI EM (EMERGING MARKETS)	Emerging Market Specialty	1	0	1	N/A	N/A	N/A	N/A	1	N/A	N/A	N/A	Watch
American Funds New World	MSCI EM (EMERGING MARKETS)	Emerging Market Specialty	1	1	1	1	1	0	1	1	1	1	9	-
MFS Emerging Markets Equity	MSCI EM (EMERGING MARKETS)	Emerging Market Specialty	1	1	1	1	0	1	1	1	0	0	7	-
Oppenheimer Developing Markets	MSCI EM (EMERGING MARKETS)	Emerging Market Specialty	1	1	1	1	1	1	1	1	1	1	10	-
American Century Real Estate	Nareit Equity-Reits	Real Estate Specialty	1	1	1	1	0	1	1	1	0	0	7	-
Cohen & Steers International Realty	Nareit Equity-Reits	Real Estate Specialty	1	1	1	0	1	0	1	1	0	0	6	Watch
Oppenheimer Real Estate	Nareit Equity-Reits	Real Estate Specialty	1	1	1	1	1	1	1	1	1	1	10	-
Oppenheimer Gold & Special Minerals	Dow UBS Precious Metals	Commodities - Broad Basket	1	1	1	0	1	0	1	1	1	1	8	-
Oppenheimer Commodity Strategy Total Return	GS Commodity	Natural Resources Specialty	1	1	1	1	0	1	0	1	0	0	6	-
MFS Utilities	S&P North American Utilities Sector	Specialty Utilities	1	1	1	1	1	1	1	1	1	1	10	-

Stable Value Investments

					Investment						
Investment Name	Benchmark	Peer	Org/Firm Stability	Personnel/ Strategy	Process	Investment Grade	Standard Deviation	Perform > T-Bill	Perform > BM	Total Score	Watch Status
Premier Money Market (Babson)	Citigroup 3-month T-bill	Money Market	1	1	1	1	1	1	1	7	-
Government Money Market (Babson)	Citigroup 3-month T-bill	Money Market	1	1	1	1	1	1	1	7	-
Guaranteed Interest Account	BC 1-3 Yr Government	N/A	1	1	1	1	1	1	1	7	-
SAGIC Diversified Bond	BC US Aggregate Bond	N/A	1	1	1	1	1	1	1	7	-
SAGIC Core Bond	BC US Aggregate Bond	N/A	1	1	1	1	1	1	1	7	-
Stable Return (Wells/Galliard)	BC Government Credit 1-5	N/A	1	1	1	1	1	1	1	7	-
Capital Preservation Account	BC Government Credit 1-5	N/A	1	1	1	1	N/A	N/A	N/A	N/A	-

Index Investments

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Investment Name	Benchmark	Peer	Org/Firm Stability	Personnel/ Strategy	Process	R Squared	Tracking Error	Total Score	Watch Status
SSgA Bond Market Index	BC US Aggregate Bond	N/A	1	1	1	1	1	5	-
Northern Bond Index	BC US Aggregate Bond	N/A	1	1	1	1	1	5	-
Select Indexed Equity (Northern)	S&P 500	N/A	1	1	1	1	1	5	-
SSgA Mid Cap Equity Index	S&P 400	N/A	1	1	1	1	1	5	-
Nuveen Mid Cap Index	S&P 400	N/A	1	1	1	1	1	5	-
Columbia Mid Cap Index	S&P 400	N/A	1	1	1	1	1	5	-
Northern Mid Cap Index	Russell MidCap	N/A	1	1	1	1	1	5	-
SSgA Small Cap Equity Index	Russell 2000	N/A	1	1	1	1	1	5	-
Northern Small Cap Index	Russell 2000	N/A	1	1	1	1	1	5	-
Nuveen Small Cap Index	Russell 2000	N/A	1	1	1	1	1	5	-
Columbia Small Cap Index	Russell 2000	N/A	1	1	1	1	1	5	-
SSgA International Equity Index	MSCI EAFE	N/A	1	1	1	1	1	5	-
Northern International Equity Index	MSCI EAFE	N/A	1	1	1	1	1	5	-
Select NASDAQ-100 (Northern)	NASDAQ 100	N/A	1	1	1	1	1	5	-

Lifecycle and Lifestyle Investments

Investment Name	Benchmark	Peer	Org/Firm Stability	Personnel/ Strategy	Investment Process	Risk Progression	R Squared	Risk/Return	Return Rank	Total Score	Watch Status
SSgA Dow Jones Target Series	N/A	N/A	1	1	1	1	1	1	0	6	-
Wells Fargo Dow Jones Target Series	N/A	N/A	1	1	1	1	1	1	1	7	-
RetireSMART Target Series	N/A	N/A	1	1	1	1	1	1	1	7	-
T. Rowe Price Target Series	N/A	N/A	1	1	1	1	1	1	1	7	-
Russell Lifepoints Target Series	N/A	N/A	1	1	1	1	1	1	1	7	-
RetireSMART Risk Series	N/A	N/A	1	1	1	1	1	1	1	7	-
Manning & Napier Risk Series	N/A	N/A	1	1	1	1	1	1	1	7	-
American Century LIVESTRONG Target Series	N/A	N/A	1	1	1	1	1	1	1	7	-

Methodology for Ongoing Monitoring of Investment Managers and Investment Options

Please note that the performance figures the Investment Team uses in the quantitative analysis are those representing investment option performance and/or manager performance, net of fees, using the lowest fee structure MassMutual offers for each investment option. In most cases, MassMutual offers multiple share classes or fee structures of an investment option. A client's size or servicing needs usually determine which share class or fee structure of an investment option is an appropriate choice for the plan, as investment expenses beyond management fees generate revenue to help offset the plan's recordkeeping and other expenses. We believe that by using the lowest fee structure, we are best able to isolate performance from recordkeeping and other expenses and provide for a more meaningful analysis of true performance. Most investments must have a three-year track record or they will not be rated.

The Components of the Scoring System

Each scoring criterion has a pass/fail metric. Each passing score receives one point toward the overall score. For most investments, there are ten possible points: three possible points in qualitative measures, and seven in quantitative measures.

All Investments – Qualitative

The qualitative factors in use with all investments in the Program:

- 1. Organization/Firm Stability
- 2. Personnel/Strategy
- 3. Investment Process

The three qualitative measures listed above may include an analysis of the management of the firm, its ownership, the resources available to the manager and strategy, assets under management, compliance, investment personnel changes, and the manager's consistency in applying philosophy and process.

All Investments – Quantitative

The quantitative factors MassMutual uses to gauge investments' status vary by investment type. Quantitative criteria for four different investment groups (comprising all available investments) are specified in the following sections.

Most Investments – Quantitative

The quantitative factors in use with **most investments** in the Program (exceptions: index, lifecycle/lifestyle and stable value investments):

Style

R-squared

Risk

Information Ratio
Tracking Error

Performance

Batting Average One-Year Return Three-Year Return Five-Year Return

R-squared measures the consistency in style. A score of 80% or better receives one point and provides us with confidence that the beta and alpha estimates are valid as measures for risk and risk-adjusted performance in comparison to the index.

Information ratio is the incremental return per unit of risk taken. Investments in the top three quartiles of their peer group receive one point. Investments in the bottom quartile rank of their peer group receive no score in this category.

Tracking error measures the volatility of the investment's excess returns relative to its benchmark. Investments in the bottom quartile will generally represent those strategies with the highest risk characteristics. Investments in the top three quartiles of their peer group receive one point. Investments in the bottom quartile rank of their peer group receive no score in this category.

Batting average is a measure of a manager's ability to consistently beat its benchmark over specified periods of time. Managers batting .450 or better receive a point.

One-year return: The investment's one-year return must place it in the top 90% of the peer group to score one point. The investment receives no score if it does not qualify.

Three-year return: The investment's three-year return must place it in the top 75% of the peer group to score one point. The investment receives no score if it does not qualify.

Five-year return: The investment's five-year return must place it in the top 67% of the peer group to score one point. The investment receives no score if it does not qualify or does not have a five-year return.

In our model, R-squared, Tracking Error, Information Ratio and Batting Average are scored based on three-year results receiving a 30% weighting and five-year results receiving a 70% weighting. For these measures, if an investment does not have a five-year track record, then the three-year result receives a 100% weighting. While it is important to monitor managers from quarter to quarter, we believe our managers should demonstrate a long-term focus, so we place the majority of emphasis on longer-term performance results. This belief stems from the fact that short-term performance can be influenced by market swings and other short-term conditions, while a long-term performance number often reflects the manager's ability to navigate successfully through multiple market cycles in pursuit of the investment's stated objective.

Translating the Score into an Overall Assessment of a Manager

All new managers coming into the investment program receive a "meets expectations" status. Existing options and investment managers within the program receive a total score on a quarterly basis using the factors described above. A score of 6-10 maintains the manager's "meets expectations" status. A score below six would require heightened scrutiny of the firm, investment team and process. As such, an investment's status changes to "watch." A "watch" status manager will return to "meets expectations" when the scoring exceeds five for two consecutive quarters and the fundamentals that scored the manager below expectations are improving.

Please note that because we believe that qualitative factors are the most important drivers of future performance, a manager who fails any of the three qualitative factors will automatically be placed in "watch" status regardless of the total score. That manager will remain in "watch" status until we either determine that the qualitative issues are resolved or, if not resolved, we may take action to terminate the manager or investment option from our platform.

Stable Value Investments – Quantitative

The quantitative factors in use with **stable value investments** in the Program (includes money market options):

Credit Quality

Investment Grade

Risk

Standard Deviation

Performance

Versus T-bills

Versus investment's primary fixed-income benchmark (BM) (N/A for money market options)

Investment Grade: The average credit quality of the stable value investment's portfolio must be maintained at a rating of AA–, as rated by Standard & Poor's Corp, or Aa3, as rated by Moody's Investors Service, Inc., at the end of each reporting period.

15

Standard Deviation is a measure of volatility expressed as a percentage. Each stable value investment measured must have a standard deviation percentage that is either lower than the primary fixed-income benchmark for non-money market stable value options or lower than two times that of the three-month Treasury bill ("T-bill") for money market options over the previous five-year period as of the end of each reporting period.

Performance measures each stable value investment's returns compared to both the T-bill and the investment's primary fixed-income benchmark over five-and 10-year (or since inception) periods (money market options are compared to T-bills only). Determination of pass or fail is based on five-year results receiving a 30% weighting and 10-year (or since inception) results receiving a 70% weighting. For money market options only, the T-bill performance will be net of the expenses of the investment we are measuring.

For stable value options (aside from money market options), market-to-book ratio is also evaluated. Stable value options with ratios judged to be too severely impaired can be rejected. Typically, such a market-to-book gap will result in a lower yield and performance of the investment option, so would be reflected in the performance metric.

If a stable value investment does not have a five-year track record, it will not be rated. Stable value options must pass both the Investment Grade and Standard Deviation measures and pass one of the two Performance measures to achieve an overall passing quantitative score. Money market investments must pass their single Performance measure to achieve an overall passing quantitative score.

Index Investments – Quantitative

The quantitative factors in use with **index investments** in the Program:

Style

R-squared

Risk

Tracking Error

R-squared measures the consistency in style. A score of 80% or better provides us with confidence that the beta and alpha estimates are valid as measures for risk and risk adjusted performance in comparison to the index.

Tracking error measures the volatility of the investment's returns relative to its benchmark. For index options, tracking error must be no greater than the specified amount (according to the type of index) when compared to the performance of the investment's primary benchmark. Benchmark tracking error tolerances: Barclays Capital U.S. Aggregate Bond Index, +/-0.60%; S&P 500° Index, +/-0.30%; S&P MidCap 400° Index, +/-0.40%; Russell 2000° Index, +/-0.60%; MSCI° EAFE° Index, +/-0.80%; NASDAQ-100 Index°, +/-0.80%. For greater comparative accuracy, the benchmark performance will be net of the expenses of the investment we are measuring.

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In our model, R-squared and Tracking Error are scored based on three-year results receiving a 30% weighting and five-year results receiving a 70% weighting. For these measures, if an investment does not have a five-year track record, then the three-year result receives a 100% weighting. Index options must achieve a passing score in both measures to achieve an overall passing quantitative score.

Lifecycle and Lifestyle Investments – Quantitative

The quantitative factors in use with lifecycle and lifestyle investments in the Program (both risk based and target date based – does not include balanced):

Risk

Risk Progression

Style

R-squared

Risk/Return

One-, Three-and Five-Year

Performance

One-, Three-and Five-Year Return

Risk progression of the series must represent all investments within the series showing an inward risk progression by which the level of risk declines as a participant moves closer to retirement to score one point. While this is primarily a quantitative analysis, cyclical or other factors can skew short-term quantitative results requiring a qualitative overlay. For example, we know that high-yield bonds have a higher degree of risk than investment grade bonds over long periods of time, but their risk characteristics can reverse or look similar over short periods of time, especially during periods when interest rates are volatile and/or spreads are tightening. Additionally, as investments are added to the series (for example, adding a 2050 or 2055 investment option to an existing series), the risk characteristics may look similar to the other investments immediately preceding it in the series, which are also investing with a similar level of risk given their long time horizon (for example 2040 or 2045).

R-squared measures the consistency in style for each option in the series. A score of 80% or better provides us with confidence that the beta and alpha estimates are valid as measures for risk and risk-adjusted performance in comparison to the primary benchmark index for each option in a series. All investment options in the series must attain that score to score one point.

In our model, R-squared is scored based on three-year result receiving a 30% weighting and five-year results

receiving a 70% weighting. If an investment does not have a five-year track record, then the three-year result receives a 100% weighting.

One-, Three-and Five-Year (if available) Risk/Return measures the risk/return of each investment in the series using the quadrant-based risk/return graph with each investment's primary benchmark as the crosshair (midpoint). For greater comparative accuracy, the benchmark performance will be net of the expenses of the investment we are measuring. At least 60% of the options in the series must land in the (lower-left, upper-left or upper-right quadrants) for any one of the one-, three-or five-year (if available) time periods for the overall series to score one point.

One-, Three-and Five-Year (if available) Performance: At least 60% of the investments in the series must place in the top 90% of the peer group for one year, top 75% for three years or top 67% for five years to score one point.

Each series containing five or more options must achieve a passing score of at least 60% for the full series; each series containing fewer than five options must achieve a passing score of at least 50% for the full series. Investments with less than one year of performance are not rated and do not count as part of any series' scores. Series investments are scored on both a per-option, individual basis and on a total-series, aggregate basis depending upon the specific criteria and must achieve a passing score in three of four quantitative measures to achieve an overall passing quantitative score.

Stable Value, Index, Lifecycle and Lifestyle Investments Overall Scoring Assessment

For stable value, index, lifecycle and lifestyle investments, a passing score maintains the manager's "meets expectations" status. A failing score would require heightened scrutiny of the firm, investment team and process. As such, an investment's status changes to "watch." A "watch" status manager will return to "meets expectations" when the investments pass for two consecutive quarters and the fundamentals that scored the manager below expectations are improving.

17

Deselection Process

An integral part of our due diligence process is the ongoing monitoring of investment manager and investment option performance. This process includes the possible determination that a manager or option may need to be replaced due to prolonged underperformance or failure to meet sufficient qualitative criteria. Our process incorporates a review of the criteria detailed above using a timeframe adequate to determine if the failing scores in one or more categories may be a result of particular market conditions at that time or if there is an ongoing and persistent concern with the option. If the Investment Team determines that the cause of the failure is prolonged and we do not believe that a correction is imminent, we will proceed with a change to the investment manager or option.

The following details the process we follow once an option fails to meet expectations based upon our scoring system:

- 1. If an option fails to meet expectations for four consecutive quarters (quarter four), the Investment Team will review the option and may issue a flash report covering pertinent factors specific to market conditions and the strategy's performance.
- 2. If the option continues to underperform for an additional two consecutive quarters (quarter six), the Investment Team will assess the option's prospects for continued inclusion in the Program.

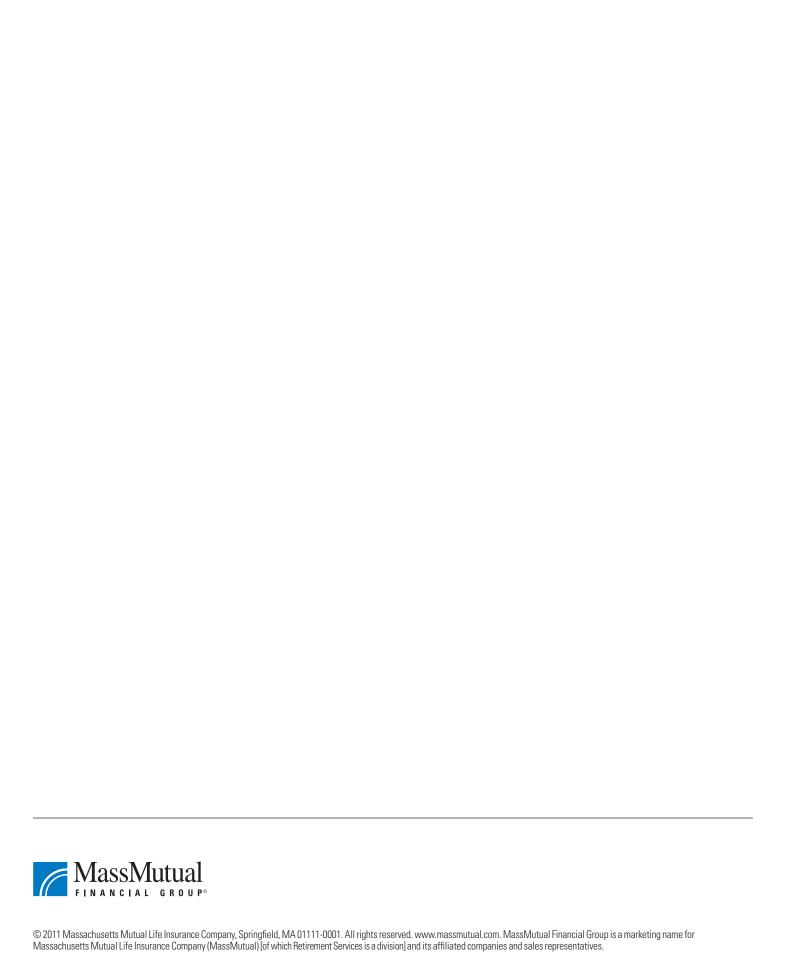
- 3. If the option continues to fail to meet expectations for an additional two consecutive quarters (quarter eight), we will either remove the option from the Program or make a change to the investment manager if it is a subadvised investment. The Investment Team may determine that the cause of underperformance of the investment option is reasonable and justified due to conditions in the marketplace. In that case, the Investment Team may override the decision to change the option or manager.
- 4. In all situations described above, the manager or option must achieve a passing score for two consecutive quarters to be taken off "watch" and returned to "meets expectations." Additionally, if the Investment Team makes a determination that an extraordinary event affecting the manager or the option renders the option unacceptable for continued inclusion in the Program presently, the Investment Team may bypass the deselection process and remove the option from the Program immediately and elect to assess its acceptability for the Program over future quarterly time periods.

The quarterly *Smart Architecture Watch List Update* (published in conjunction with this Quarterly Scorecard and available from MassMutual) lists all investment options with a "watch" status and provides narrative details about why each option is on watch.

For more information about the MassMutual Smart Architecture Investment Program, please contact your MassMutual Retirement Services professional. Investors should consider an investment option's objectives, risks, fees and expenses carefully before investing. This and other information about the investment option can be found in the applicable prospectuses or summary prospectuses (if any) or fact sheets for the investment options listed, which are available from MassMutual by calling 1-888-309-3539. Please read them carefully before investing.

For more information about the MassMutual Smart Architecture Investment Program, please email or call your MassMutual Retirement Services professional.





MassMutual Retirement Services Watch List Update

August 2011

An important aspect of the MassMutual Smart ArchitectureSM Investment Program is the due diligence we bring to bear on the managers who handle the portfolio management of each option. We evaluate the managers using a variety of qualitative and quantitative metrics contained in a "scorecard," and we provide a brief overview of any identified concerns via this watch list. In this document, we are sharing the results of our most recent evaluations and updating you about managers that have been added to or remain on our watch list.

Watch List Overview

	watch List Overv	IC VV	
	Qualitative Watch	Quantitative Watch	No. of Quarters
Columbia Marsico Growth	X		2
Invesco Capital Development	X		1
Invesco Van Kampen Mid Cap Growth	X		4+
Premier Main Street Small/Mid Cap	X		1
Premier Small/Mid Cap Opportunities	X		1
Premier Small/Mid Cap Opportunities II	X		1
AllianceBernstein International Growth	X		1
Mainstay International Equity	X		1
Invesco International Growth	X		1
Premier Strategic Emerging Markets	X		1
Oppenheimer Champion Income		X	4+
Oppenheimer Quest Opportunity Value		X	2↑
Franklin Mutual Beacon		X	2↑
Legg Mason Value Trust		X	4+
Premier Capital Appreciation		X	4+↑
Oppenheimer Capital Appreciation		X	4+↑
Brandywine Blue		X	1
Legg Mason Growth Trust		X	4+
Oppenheimer Small- & Mid- Cap Value		X	4
Premier Discovery Value		X	1
Winslow Green Growth		X	4+
Cohen & Steers International Realty		X	2↑
Calvert Large Cap Growth	X	X	1
Invesco Van Kampen Value Opportunities	X	X	4+



We'll help you get there:

Watch List Discussion

Options on watch for qualitative reasons

Marsico Growth (Columbia) - 2

This mid cap growth investment option remains on watch for a second quarter due to Marsico Capital Management LLC's financial difficulties, which resulted in the company's late-2010 restructuring of \$2.7 billion in debt, which occurred three years after entering into a highly leveraged deal to buy back the firm from Bank of America Corp. Marsico is the option's subadviser and is responsible for its day-to-day portfolio management. Marsico executives said the restructuring was necessary because of huge stock losses that mirrored equity market declines in 2008. The company also was affected by outflows from clients. Company executives believe they have put the company on a more solid footing with the financial reorganization, but credit-rating agencies Standard & Poor's and Moody's consider the restructuring a default and have negative outlooks for the company. We will continue to monitor the impact of this change.

Capital Development (Invesco) – 1

Mid Cap Growth (Invesco Van Kampen) - 4+

Capital Development was placed on watch this quarter, and Mid Cap Growth remains on watch for an eighth quarter. These mid cap growth investment options are on watch due to portfolio management changes that occurred in late March 2011 in which James Leach, formerly of Wells Fargo Funds, replaced former lead portfolio manager Paul Rasplicka, and more recent changes to both options' investment process. We will continue to monitor the impact of these changes.

<u>Premier Main Street Small/Mid Cap (OFI)</u> – 1 <u>Premier Small/Mid Cap Opportunities (OFI)</u> – 1 <u>Premier Small/Mid Cap Opportunities II (OFI)</u> – 1

These small cap core investment options with nearly identical investment approaches were placed on watch this quarter following the strategic expansion of the principal investments of Premier Main Street Small Cap and Premier Small Company Opportunities (and "II") to include both small *and* midsize companies. To reflect the expanded investment "universe," their names changed to Premier Main Street Small/Mid Cap and Premier Small/Mid Cap Opportunities (and "II"), respectively. While their composition and names changed, the investment objective – to seek capital appreciation – and the investment strategy employed in managing the investment options will be substantially similar following the change. We will continue to monitor the impact of these changes.

International Growth (AllianceBernstein) – 1

This international/global large core investment option was placed on watch this quarter due to recent organizational changes at AllianceBernstein, underperformance and a risk profile inconsistent with original expectations. Additionally, please note that MassMutual replaced AllianceBernstein with J.P. Morgan Investment Management Inc. (JPMorgan) as both co-subadviser to Select Overseas and subadviser to Select Diversified International during the second quarter of 2011. We will continue to monitor this manager. We will continue to monitor the impact of these changes.

International Equity (Mainstay) – 1

This international/global large core investment option was placed on watch this quarter due to an overall management transition involving two specific actions: 1.) the June 12 replacement of former portfolio manager Rupal Bansali with Edward Ramos, and 2.) the July 1 subadvisory firm replacement of MacKay Shields LLC with Madison Square Investors LLC. As part of the transition, portfolio manager Edward Ramos became an employee of Madison Square Investors. We will continue to monitor the impact of these changes.

International Growth (Invesco) – 1

This international/global large growth investment option was placed on watch this quarter due to the merger of Invesco Van Kampen International Growth into Invesco International Growth. Most MassMutual clients that had an investment in Invesco Van Kampen International Growth prior to the merger now have an investment in Invesco International Growth, either directly or via a separate investment account ("SIA"). The merger resulted in portfolio manager changes and some adjustments to the strategy's investment process. We will continue to monitor the impact of these changes.

Premier Strategic Emerging Markets (Baring) – 1

This emerging market equity investment option was placed on watch this quarter due to the first-quarter 2011 departure of portfolio managers James Syme and Paul Wimborne, who have left Baring Asset Management. Latin American strategy portfolio manager Roberto Lampl has assumed the lead portfolio manager role on this strategy and is assisted by Mark Julio, an experienced member of Baring's Global Emerging Markets Strategy (GEMS) team. Roberto Lampl and Baring expect to hire an additional experienced portfolio manager for this strategy. We will continue to monitor the impact of this change.

Options on watch for quantitative reasons

<u>Champion Income (Oppenheimer)</u> – 4+

This high yield bond investment option remains on watch for a fourteenth quarter due to its poor performance and failure to pass nearly all of its quantitative metrics for time periods ended June 30, 2011. In late 2008, we removed Champion Income from the list of investment options available for new sales or plan-level asset transfers in the MassMutual Smart Architecture Investment Program.

Quest Opportunity Value (Oppenheimer) – \(\bar{\chi}\)

Despite its passing scorecard grade for the quarter ended June 30, 2011, this asset allocation/balanced investment option remains on watch for a second quarter until it achieves a passing score for two consecutive quarters.

Mutual Beacon (Franklin) - 1

Despite its passing scorecard grade for the quarter ended June 30, 2011, this large cap value investment option remains on watch for a second quarter until it achieves a passing score for two consecutive quarters.

Value Trust (Legg Mason Capital Management) – 4+

This large cap blend investment option remains on watch for a fourteenth quarter due to its heightened level of volatility relative to its benchmark, a disappointing risk/return profile, and performance issues for the 1-, 3-, and 5-year time periods ended June 30, 2011 relative to its benchmark and peers.

<u>Premier Capital Appreciation (OFI)</u> – ↑ Capital Appreciation (Oppenheimer) – ↑

Despite their passing scorecard grades for the quarter ended June 30, 2011, Premier Capital Appreciation and Capital Appreciation, large cap growth investment options with nearly identical investment approaches, remain on watch for a fifth quarter until they achieve a passing score for two consecutive quarters.

Blue (Brandywine) – 1

After coming off watch last quarter, this large cap growth investment option was placed on watch again this quarter due to its heightened level of volatility relative to its benchmark, a disappointing risk/return profile and performance issues for the 3- and 5-year time periods ended June 30, 2011 relative to its benchmark and peers.

Growth Trust (Legg Mason Capital Management) – 4+

This large cap growth investment option remains on watch for a twelfth quarter due to its heightened level of volatility relative to its benchmark, a disappointing risk/return profile and performance issues for the 3- and 5-year time periods ended June 30, 2011 relative to its benchmark and peers.

Small- & Mid- Cap Value (Oppenheimer) – 4+

Premier Discovery Value (OFI Institutional) – 1

Small- & Mid- Cap Value remains on watch for a fifth quarter, and Premier Discovery Value was placed on watch this quarter. These mid cap value investment options are on watch due to their heightened level of volatility relative to their benchmark, disappointing risk/return profiles and performance issues for 3- and 5-year periods ended June 30, 2011 relative to their benchmark and peers.

Green Growth (Winslow) - 4+

This small cap growth investment option remains on watch for a fifth quarter due to its heightened level of volatility relative to its benchmark, a disappointing risk/return profile and performance issues for the 1-, 3-, and 5-year time periods ended June 30, 2011 relative to its benchmark and peers.

International Realty (Cohen & Steers) – \(\)

Despite its passing scorecard grade for the quarter ended June 30, 2011, this specialty (real estate) option remains on watch for a second quarter until it achieves a passing score for two consecutive quarters.

Options on watch for both qualitative and quantitative reasons

<u>Large Cap Growth (Calvert)</u> – 1

This large cap growth investment option was placed on watch this quarter due to the May 2 portfolio manager/subadviser change that replaced subadvisory firm Bridgeway Capital Management, Inc. with Atlanta Capital Management Company, LLC, ("Atlanta") which is also Calvert Equity Portfolio's subadviser. Atlanta manages Large Cap Growth Fund in strict accordance with its prospectus. This option is also on watch due to its disappointing risk/return profile and performance issues for the 3- and 5-year time periods ended June 30, 2011 relative to its benchmark and peers.

Value Opportunities (Invesco Van Kampen) – 4+

Invesco Basic Value Fund ("Basic Value") merged into Invesco Van Kampen Value Opportunities Fund ("Value Opportunities") in May 2011. Most MassMutual clients that had an investment in Basic Value prior to the merger now have an investment in Value Opportunities, either directly or via a separate investment account ("SIA"). For the purpose of this watch list, we are using the performance history of the SIA, which represents the performance of Basic Value up until the date of the merger and the performance of Value Opportunities thereafter. Given this consideration, the "surviving" Value Opportunities has assumed the watch status of the former Basic Value. As such, this large cap value investment option remains on watch for a thirteenth quarter due to its heightened level of volatility relative to its benchmark, a disappointing risk/return profile, and performance issues for the 1-, 3-, and 5-year time periods ended June 30, 2011 relative to its benchmark and peers.

As you read our evaluations contained in this document, please keep in mind the following primary characteristics of our due diligence process using the aforementioned scorecard:

Comprehensive in scope. We evaluate every eligible Smart Architecture investment option with at least a 3-year performance history.

Qualitative. We apply forward-looking metrics, such as the management of the firm, its ownership, the resources available to the manager and strategy, changes in assets under management, compliance, investment personnel changes, and the manager's adherence to a stated investment process.

Quantitative. A variety of performance-related factors are considered and relevant to specific investment types. These factors include style consistency (R-squared), risk (information ratio and tracking error), and performance (batting average and one-, three-, and five-year returns).

Performance continuity. In order to substantiate performance and eliminate short-term positive aberrations in the scorecard metrics, we maintain an investment on watch until it achieves a passing score for two consecutive quarters. If an option goes on watch for qualitative reasons, it must remain on watch for at least two quarters. Once the investment option's qualitative issues are resolved (and provided quantitative scores are passing), the

option can return to a "meets expectations" status. The following numbers or symbols that appear next to the name of each investment indicate either the number of quarters the investment has been on watch or that it is in its first quarter with a passing score.

- 1 On watch for the first time
- 2 On watch for a second quarter
- 3 On watch for a third quarter
- 4 On watch for a fourth quarter
- ↑ First quarter with passing score

Disclosures

Your plan either purchases shares of these mutual funds or other similar investments directly or it purchases units of separate investment accounts ("SIAs") through a group annuity contract issued to your plan by MassMutual. If your plan purchases units of SIAs, the SIAs, in turn, purchase shares of underlying mutual funds or other similar investments.

MassMutual provides information on the managers retained by the mutual funds for plan sponsor and intermediary use in meeting fiduciary obligations. These watch list updates are not for use as advertising or sales literature and should not be shared with participants.

If you have any questions regarding the information contained in this Update, please contact your MassMutual Retirement Services professional or call (877) 474-5496.

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 for the investment options listed, which are available from MassMutual by calling 1-888-309-3539. Please read them carefully before investing.

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8/11 RS-21689-00

Name: Metropolitan Library System Defined Contribution Plan

Contract Number: RM 83974

Contract Effective: September 1, 2005

Total Assets: \$8,865,387
Annual Contributions: \$1,127,664
Participants: 193

The Services Agreement between your company and MassMutual allows you to elect the method of payment for certain billable expense. Below is the current elected method.

Asset Charge: Ded Inc. Exp. Recordkeeping Charge: Bill Exp.
Contribution Charge: #N/A Special Charges*:
Participant Charge: Ded Exp. Transaction Charges:

* Refer to your Services Agreement for a list of optional services and associated charges.

Expenses of your plan are comprised of the billable charges and the Separate Investment Account Management Fees. The following section details the billable charges for your plan.

ASSET SCHEDULE:				
	RATE	FROM	TO	EXPENSE
	0.25%	- 1	1,000,000,000	\$22,163
TOTAL				\$22,163

PARTICIPANT SCHEDULE					
				EXPENSE	
	0.000000	-	999,999	\$	-
TOTAL				\$	-

TOTAL ANNUAL CURRENT ESTIMATED EXPENSES: \$ 22,163

Separate Investment Account Variables: Performance of underlying investment accrues to participants net of stated management fee.

SIA MANAGEMENT FEES				
Investment Name	Investment Designation	Annual Fee	SIA Assets	Fee Amount
Premier Core Bond (Babson)	SIA-AE	0.97%	\$119,026.79	\$ 1,155
Select Strategic Bond (Western)	SIA-PE	1.11%	\$631,361.83	\$ 7,008
RetireSMART In Retirement	SIA-J4	1.16%	\$22,385.86	\$ 260
RetireSMART 2010	SIA-J9	1.24%	\$408,475.68	\$ 5,065
RetireSMART 2020	SIA-K4	1.29%	\$919,126.25	\$ 11,857
RetireSMART 2030	SIA-K9	1.33%	\$481,370.81	\$ 6,402
RetireSMART 2040	SIA-M4	1.35%	\$423,802.84	\$ 5,721
Balanced (American)	SIA-TK	1.40%	\$66,195.28	\$ 927
Select Large Cap Value (Davis)	SIA-AJ	1.26%	\$386,645.08	\$ 4,872
Equity Growth (American Century)	SIA-WJ	0.70%	\$844,274.74	\$ 5,910
Sel Gr Opportnts (Sands/Delaware)	SIA-AD	1.37%	\$317,384.88	\$ 4,348
Select Focused Value (Harris)	SIA-AV	1.30%	\$219,295.95	\$ 2,851
Sel SmCoVal (Fed Clov/TRP/ERNST)	SIA-AY	1.61%	\$150,752.57	\$ 2,427
Select Mid Cap Gr II (TRP/Frontier)	SIA-AT	1.35%	\$300,253.02	\$ 4,053
Main St. Small & Mid Cap (OFI)	SIA-C1	1.25%	\$324,326.57	\$ 4,054
Premier Global (OFI)	SIA-QD	1.43%	\$434,767.53	\$ 6,217
Int'l New Discovery (MFS)	SIA-TR	1.70%	\$352,873.32	\$ 5,999
Real Estate (OFI)	SIA-C2	1.50%	\$74,465.97	\$ 1,117
Equity Portfolio (Calvert)	SIA-WN	1.23%	\$387,481.55	\$ 4,766
Value (MFS)	SIA-UV	1.23%	\$381,337.52	\$ 4,690
Mid Cap Core Equity (Invesco)	SIA-TT	1.46%	\$232,878.37	\$ 3,400
RetireSMART 2050	SIA-H8	1.31%	\$71,273.13	\$ 934
Growth (Baron)	SIA-WY	1.32%	\$2,130.54	\$ 28
International Value (Thornburg)	SIA-DJ	1.45%	\$19,095.01	\$ 277
SIA Management Fees			\$ <u>7,570,981.09</u>	\$ 94,338

\$ 22,163 94,33 <u>8</u>
\$ 116,501
1.31%
\$ <u>\$</u>

Explanatory Notes

- 1 For illustration purposes only. This analysis assumes assets and participant counts will remain constant throughout the year on a plan and contract level. Actual experience will cause these numbers to vary.
- 2 Numbers in this illustration are based on actual data as of: 11/7/2011
- 3 Expenses illustrated above are plan level expenses. Additional transactional expenses may also apply.
- 4 Actual experience by participant will vary.
- 5 The Guaranteed Interest Account credits a guaranteed rate that is set in advance on a periodic basis. The rate is credited regardless of the general account's financial performance. Plan benefits are paid from this account at book value while the contract is active, irrespective of market conditions.
- 6 Settlor expenses, if applicable, are not included in this illustration and are not payable from Plan assets.

RS-03966-01

INTRODUCTION

This report contains a detailed description and the results of a valuation of the Metropolitan Library System Pension Plan as of July 1, 2011. The purpose of the valuation is to:

- 1. set forth the financial condition of the Plan;
- 2. determine the level of the company's contribution for the July 1, 2011 through June 30, 2012 Plan Year:
- 3. provide information for tax and accounting purposes.

In completing the Valuation and subsequent Actuarial Certification, we have relied on the following sources:

The Plan:

This valuation was based upon copies of the Plan originally effective July 1, 1969, restated effective July 1, 1994 on March 30, 1994, most recently amended effective April 1, 1997 on March 11, 1997, restated December 12, 2002 and amended effective August 29, 2005.

Employee Data:

This valuation is based upon the employee data provided to us by the Plan Sponsor.

Asset Information:

This valuation was based upon asset values provided to us by Bank of Oklahoma,

N.A.

In an effort to determine the funded status of the plan for termination liability purposes, the plan assets are compared with the present value of accrued benefits:

Current plan assets (market value)

21,807,411

Present value of accrued benefits

16,945,742

The present value of accrued benefits is based on the plan's definition of actuarial equivalence which is 8% interest and UP84 mortality. This produces a benefit security ratio of 129%.

This report has been prepared in accordance with generally accepted actuarial principles and practices. It is based on financial and employee information (neither of which has been audited by us) furnished as specified above. The contents of this report are believed to comply with the section of ERISA as reflected in IRS Code Section 412 (C)(3) requiring that "actuarial assumptions must be reasonable".

Michael N. Bettis, A.S.A.

Actuary

September 14 2011

CONTRIBUTION REQUIREMENTS

The contribution is based upon the actuarial assumptions proposed by the Plan's Enrolled Actuary, and as input into the system as plan specifications.

If the Employer contribution is made on December 1, 2011, the amount is \$1,114,433. The estimated employee contributions for the 2011 plan year are assumed to be \$114,308.

...

ACTUARY'S COMMENTS

The Employer's dollar amount normal cost increased from \$ 968,727 last year to \$ 1,082,850 this year. The Employer normal cost percentage increased from 34.40% in the prior valuation to 37.89% in the current valuation.

The plan's market value investment rate of return for the year ending June 30, 2011 was approximately 21.279%. The plan's actuarial value investment rate of return for the year ending June 30, 2011 was approximately 5.159%. This compares to an assumed rate of return of 7%. This produced a loss of approximately \$ 371,000. The overall experience loss was approximately \$ 744,000.

The average salary increase for participants included in both the current and prior year valuation was approximately 9.72%. The actuarial assumption for salary increases was 5% for the prior year.

The number of active participants included in the July 1, 2011 valuation was 65 and includes 8 active participants with frozen benefits. There were 11 terminated vested participants and 79 retired participants and/or beneficiaries receiving benefits as of July 1, 2011.

METROPOLITAN LIBRARY SYSTEM'S CONTRIBUTION TO PENSION FUND FY 2011-2012

The Metropolitan Library System's contribution to the pension fund each year is based on the recommendation of the plan administrator, DailyAccess Corporation. This year the recommended amount is \$1,114,433, an increase of \$117,451 from last year's contribution.

The Administration recommends that the Metropolitan Library System's contribution to the defined benefit fund be \$1,114,433 as recommended by the actuary. The Metropolitan Library Commission has approved an amount of \$1,816,108 in the Fiscal Year 2011-12 budget for this and for the defined contribution plan, estimated to be \$761,758. This will leave a shortfall of approximately \$70,000 from the budgeted amount. At a later date, Administration will recommend transferring money available in other payroll accounts to cover this shortfall.

PROPOSED ACTION:

That the Metropolitan Library System's contribution to the defined benefit fund for FY 2011-12 shall be \$1,114,433.