## Trades Not Executed by Morgan Stanley and Potential Costs That May Be Incurred

Morgan Stanley Smith Barney LLC ("Morgan Stanley") and Executing Sub-Managers participating in some of Morgan Stanley's Separately Managed Account ("SMA") manager programs (together, the "Managers") have the authority to effect transactions through broker-dealers other than us or our affiliates when the Manager reasonably believes that such other broker-dealer may effect such transactions at a price, including any mark-ups or mark-downs and/or other fees and charges, that is more favorable to the account than would be the case if transacted through us or our affiliates. Such programs include Consulting and Evaluation Services, Select UMA, and institutional services programs. In addition, even if the price is not more favorable for such broker-dealer, the Manager may consider other factors, including execution capabilities, speed, efficiency, confidentiality, familiarity with potential purchasers or sellers, or any other relevant matters.

Managers may aggregate the securities to buy or sell for more than one client to obtain favorable execution to the extent permitted by law. The Manager is then responsible for allocating the trade in a manner that is equitable and consistent with its fiduciary duty to its clients (which could include, e.g., pro rata allocation, random allocation or rotation allocation). For block trade orders, the price to each client is the average price for the aggregate order.

We refer to trades on which we are not the executing broker as "step-out trades." If your Manager trades with another firm, you may be assessed other trading related costs (mark-ups, mark-downs and/or other fees and charges) by the other broker-dealer. Those costs are in addition to the program fees applicable to Morgan Stanley's SMA manager programs, will be included in the net price of the security, and will not be reflected as a separate charge on your trade confirmations or account statements. There are certain Managers (including, but not limited to, Managers offering municipal, corporate and convertible fixed income strategies) that have historically directed most, if not all, of their trades to outside broker-dealers. Any additional trading costs from step-out trades may increase your overall costs.

For the Select UMA manager implemented strategies and Consulting and Evaluation Services and Institutional Services programs, the Managers (and not Morgan Stanley) have discretion over broker-dealer selection and execution, and are responsible for meeting best execution obligations to program participants. Before selecting a Manager for any of Morgan Stanley's SMA manager programs identified above where the Manager has the authority to trade away from Morgan Stanley, you should carefully review all material related to that Manager, including the step-out trade information from each such Manager. Individual client account percentages may vary from the Manager strategy percentage listed below. The information is for calendar year 2024. Morgan Stanley may periodically review step-out trade data but ultimately relies on the data provided from the Manager in posting step-out trade information. Neither the Managers nor Morgan Stanley can represent that past step-out trading practices are indicative of current or future practices.

For information about costs incurred, please contact your Financial Advisor/Private Wealth Advisor (FA/PWA). If the Manager you have selected or are considering is not listed below, or if that Manager has not provided Step-Out information, please contact your FA/PWA for more information. The information provided by the Managers is summarized below. For more detailed information on trading (including related costs), please refer to the ADV Brochure for the program(s) and/or Manager(s) you are utilizing, which is available at www.morganstanley.com/ADV and from your FA/PWA.

Responses received through October 29, 2025.

© 2025 Morgan Stanley Smith Barney LLC. Member SIPC. CRC 4946980 11/2025

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
AAM Insurance Core Advisory (Custom Solution)	100.00%	0 CPS	ALS1	ICS
abrdn Inc. US Equity Small Cap Core	0.00%	0 CPS	AQU1	CES
Advent Capital Management, LLC Phoenix Convertible Income Advisory	100.00%	0 BPS	ADC2	CES
Advent Capital Management, LLC Phoenix Convertible Income Strategy	100.00%	0 BPS	ADC-2	Select UMA
Agincourt Capital Management, LLC Core Fixed Income	100.00%	0 BPS	AGA1	ICS
AllianceBernstein L.P. Concentrated Int'l Growth (MA)	0.00%	0 BPS	ALIM	CES
AllianceBernstein L.P. Concentrated US Growth	0.00%	0 BPS	ALIH	CES
AllianceBernstein L.P. Limited Duration Tax Aware SMA (Low)	79.79%	0 BPS	ALIS	CES
AllianceBernstein L.P. Limited Duration Tax Aware SMA (Low)	79.79%	0 BPS	ALI-S	Select UMA
AllianceBernstein L.P. Limited Duration Tax Aware SMA (Mid)	73.04%	0 BPS	ALIR	CES
AllianceBernstein L.P. Limited Duration Tax Aware SMA (Mid)	73.04%	0 BPS	ALI-R	Select UMA
AllianceBernstein L.P. Municipal High Quality (MA)	99.02%	0 BPS	ALIJ	CES
AllianceBernstein L.P. Municipal High Quality Portfolio SMA	99.02%	0 BPS	ALI-J	Select UMA
AllianceBernstein L.P. Strategic Research (MA)	0.00%	0 BPS	ALI2	CES
AllianceBernstein L.P. Strategic Research Balanced (MA)	0.00%	0 BPS	ALI3	CES
AllianceBernstein L.P. Strategic Research Balanced (MA)	0.00%	0 BPS	REG-B	Select UMA
AllianceBernstein L.P. Sustain Global Thematic ADR (MA)	0.00%	0 BPS	ALIO	CES
AllianceBernstein L.P. Sustainable Int'l Thematic	0.00%	0 BPS	ALIP	CES
AllianceBernstein L.P. Tax Aware Fixed Income (MA)	70.45%	0 BPS	ALI7	CES
AllianceBernstein L.P. Tax Aware Limited Duration (MA)	81.88%	0 BPS	ALIQ	CES
AllianceBernstein L.P. Tax Aware Limited Duration (MA)	81.88%	0 BPS	ALI-Q	Select UMA
AllianceBernstein L.P. Tax-Aware Fixed Income	70.45%	0 BPS	ALI-C	Select UMA
AllianceBernstein L.P. Tax-Aware Fixed Income (Low TaxBracket)	54.05%	0 BPS	ALI9	CES
AllianceBernstein L.P. Tax-Aware Fixed Income (Low TaxBracket)	54.05%	0 BPS	ALI-F	Select UMA
AllianceBernstein L.P. Tax-Aware Fixed Income (Medium TaxBracket)	53.01%	0 BPS	ALI8	CES
AllianceBernstein L.P. Tax-Aware Fixed Income (Medium TaxBracket)	53.01%	0 BPS	ALI-B	Select UMA
Allianz Global Investors Global Sustain ADR MA	0.00%	0 CPS	AGS4	CES
Allspring Global Investments Call Option Overlay Strategy	0.00%	0 CPS	WELC	CES
Allspring Global Investments CoreBuilder CorePlus	64.41%	0 CPS	ALL2	CES
Allspring Global Investments CoreBuilder CorePlus	58.24%	0 CPS	ALL-2	Select UMA
All spring Global Investments CoreBuilder Municipal Income	54.81%	0 CPS	WELB	CES
Allspring Global Investments CoreBuilder Municipal Income	52.99%	0 CPS	WEL-1	Select UMA
Allspring Global Investments Emerging Markets Equity Advantage	0.00%	0 CPS	ALL1	CES
Allspring Global Investments Fundamental Large Cap Select Growth	0.00%	0 CPS	WEL2	CES
Allspring Global Investments Fundamental Mid Cap Growth Equity	0.00%	0 CPS	WEL4	CES
Allspring Global Investments Fundamental SMID Cap Growth Equity	0.00%	0 CPS	WEL3	CES
Allspring Global Investments Golden Capital SMID Cap Core	0.00%	0 CPS	GLD3	CES
Allspring Global Investments Growth	0.00%	0 CPS	WEL5	CES
Allspring Global Investments Large Core	0.00%	0 CPS	GLD1	CES
Allspring Global Investments Mid Value SMA	0.00%	0 CPS	WLS3	CES
Allspring Global Investments Municipal Bond Ladder 1-10 Year	0.00%	0 CPS	WELL	CES
Allspring Global Investments Municipal Bond Ladder 1-10 Year	98.56%	0 CPS	WEL-L	Select UMA

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Allspring Global Investments Municipal Bond Ladder 1-20 Year	100.00%	0 CPS	WELM	CES
Allspring Global Investments Municipal Bond Ladder 1-20 Year	99.97%	0 CPS	WEL-M	Select UMA
Allspring Global Investments Municipal Bond Ladder 1-7 Year	0.00%	0 CPS	WELK	CES
Allspring Global Investments Municipal Bond Ladder 1-7 Year	99.94%	0 CPS	WEL-K	Select UMA
AMI Asset Management Large Cap Growth Equity	0.00%	0 CPS	AMI1	CES
AMI Asset Management Small Cap Growth Equity	0.00%	0 CPS	AMI2	CES
Amundi Asset Management Pioneer Equity Income SMA	0.00%	0 CPS	POI3	CES
Amundi Asset Management Pioneer Fundamental Growth	0.00%	0 CPS	POI1	CES
Amundi Asset Management Pioneer SMA	0.00%	0 CPS	POI4	CES
Anchor Capital Advisors LLC Balanced Value SMA	0.00%	0 BPS	ACP1	CES
Anchor Capital Advisors LLC Mid Cap Value	0.00%	0 CPS	ACP2	CES
Ancora Advisors Small Mid Cap	0.00%	0 CPS	NOA1	CES
Aperio Group LLC Active Tax Foreign Developed ex Canada	0.00%	0 CPS	APR-F	Select UMA
Aperio Group LLC Active Tax Global Ex-US	0.00%	0 CPS	APRE	CES
Aperio Group LLC Active Tax Global Ex-US	0.00%	0 CPS	APR-E	Select UMA
Aperio Group LLC Active Tax Global Indexing	0.00%	0 CPS	APR-D	Select UMA
Aperio Group LLC Active Tax Total US Market	0.00%	0 CPS	APR-B	Select UMA
Aperio Group LLC Active Tax US Large Cap	0.00%	0 CPS	APR-A	Select UMA
Aperio Group LLC Active Tax US Large Cap Dividend Yield Tilt	0.00%	0 CPS	APR-C	Select UMA
Aperio Group LLC Custom Strategies	0.00%	0 CPS	APR6	CES
Aperio Group LLC Developed World	0.00%	0 CPS	APR5	CES
Aperio Group LLC Full - Custom Total US Mkt SRI	0.00%	0 CPS	APR4	CES
Aperio Group LLC Standard - Total US Mkt SRI	0.00%	0 CPS	APR3	CES
Appleton Partners, Inc. Intermediate Municipal Bond	100.00%	0 BPS	APP-3	Select UMA
Appleton Partners, Inc. Municipal Bond	100.00%	0 BPS	APP4	CES
Applied Equity Advisors Balanced Custom	0.00%	0 CPS	GIS-P	Select UMA
Applied Equity Advisors Div Aristocrat	0.00%	0 CPS	GIS-I	Select UMA
Applied Equity Advisors Fixed Custom	0.00%	0 CPS	GIS-Q	Select UMA
Applied Equity Advisors Global Concentrated Equity	0.00%	0 CPS	GIS4	CES
Applied Equity Advisors Legacy Equity Strategy Custom	0.00%	0 CPS	GIS-O	Select UMA
Applied Equity Advisors Russell 1000	0.00%	0 CPS	GIS-7	Select UMA
Applied Equity Advisors Russell 3000	0.00%	0 CPS	GIS-8	Select UMA
Applied Equity Advisors US CORE CUSTOM	0.00%	0 CPS	GIS-C	Select UMA
Applied Equity Advisors US Model and Dividend Step Custom	0.00%	0 CPS	GIS-G	Select UMA
Aristotle Capital Boston, LLC Small/Mid Cap Equity	0.00%	0 CPS	ABO1	CES
Aristotle Capital Management, LLC International Equity - ADR	0.00%	0 CPS	RCB5	CES
Aristotle Capital Management, LLC Value Equity	0.00%	0 CPS	RCB4	CES
Aristotle Credit Partners, LLC Credit Short Duration HY Bnd	100.00%	0 BPS	ATD1	ICS
Asset Preservation Advisors High Quality Intermediate	100.00%	0 CPS	APD1	CES
Asset Preservation Advisors HQ Intm Tax Exempt	100.00%	0 CPS	APD-1	Select UMA
Associated Trust Company Core Bond Composite (CF)	100.00%	0 BPS	ABA1	ICS
Associated Trust Company Intermediate-Term Bond	0.00%	0 BPS	ABA2	ICS

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Atalanta Sosnoff Capital LLC Balanced	0.00%	0 BPS	ASF2	CES
Atalanta Sosnoff Capital LLC Imtermediate Duration Fixed Income	97.00%	0 BPS	ASF3	ICS
Atalanta Sosnoff Capital LLC Intermediate Duration Fixed	97.00%	0 CPS	ASF4	CES
Atalanta Sosnoff Capital LLC Intermediate Duration Fixed	97.00%	0 CPS	ASF-4	Select UMA
Atalanta Sosnoff Capital LLC Large Cap Equity	0.00%	0 BPS	ASF1	CES
Atlanta Capital Management Co., LLC High Quality Calvert Equity (MA)	0.00%	0 CPS	ATA5	CES
Atlanta Capital Management Co., LLC High Quality Select Equity	0.00%	0 CPS	ATA4	CES
Atlanta Capital Management Co., LLC High Quality SMID Cap	0.00%	0 CPS	ATA2	CES
Atlantic Trust Company Disciplined Equity	Not Provided	Not Provided	ATM1	ICS
Bahl & Gaynor, Inc. Income Growth	0.00%	0 CPS	BAH1	CES
Bahl & Gaynor, Inc. Small/Mid Cap Income Growth Wrap	0.00%	0 CPS	BAH4	CES
BlackRock Capital Appreciation - SMA	0.00%	0 CPS	BLKH	CES
BlackRock Core Bond for Managed Accounts w/ BATS	100.00%	0 CPS	BLR-F	Select UMA
BlackRock Core Bond w/ BATS - SMA	100.00%	0 CPS	BLK12	CES
BlackRock Enhanced Intermediate Municipal Fixed Income SMA	100.00%	0 CPS	BLKX	CES
BlackRock Enhanced Intermediate Municipal Fixed Income SMA	100.00%	0 CPS	BLK-X	Select UMA
BlackRock Enhanced Long-Term Municipal Fixed Income SMA	100.00%	0 CPS	BLC2	CES
BlackRock Enhanced Long-Term Municipal Fixed Income SMA	100.00%	0 CPS	BLC-2	Select UMA
BlackRock Enhanced Short-Term Municipal Fixed Income SMA	100.00%	0 CPS	BLC1	CES
BlackRock Enhanced Short-Term Municipal Fixed Income SMA	100.00%	0 CPS	BLC-1	Select UMA
BlackRock Equity Dividend - SMA	0.00%	0 CPS	BLK1	CES
BlackRock Equity Dividend w/Catholic Values	0.00%	0 CPS	BLK15	CES
BlackRock Flexible Intermediate Taxable Fixed Income SMA	100.00%	0 CPS	BLKN	CES
BlackRock Flexible Intermediate Taxable Fixed Income SMA	100.00%	0 CPS	BLK-N	Select UMA
BlackRock Fundamental Core Taxable SMA	100.00%	0 CPS	BLK5	CES
BlackRock Global Dividend Income - SMA	0.00%	0 CPS	BLK2	CES
BlackRock Global Dividend w/Catholic Values	0.00%	0 CPS	BLK16	CES
BlackRock Intermediate Corporate Fixed Income SMA	100.00%	0 CPS	BLKQ	CES
BlackRock Intermediate Corporate Fixed Income SMA	100.00%	0 CPS	BLK-Q	Select UMA
BlackRock Intermediate Duration Portfolios	100.00%	0 CPS	BAK2	CES
BlackRock Intermediate Taxable FI - SMA	100.00%	0 BPS	BLK7	CES
BlackRock International Dividend ADR	0.00%	0 CPS	BLKF	CES
BlackRock Large Cap Core - SMA	0.00%	0 CPS	BLK10	CES
BlackRock Large Cap Value - SMA	0.00%	0 CPS	BLK4	CES
BlackRock Large Cap Value w/Catholic Values	0.00%	0 CPS	BLK17	CES
BlackRock Liability Driven Investing (LDI) SMA	100.00%	0 CPS	BLKS	CES
BlackRock Municipal Ladder SMA 10-20 Year	100.00%	0 CPS	BLKJ	CES
BlackRock Municipal Ladder SMA 10-20 Year	100.00%	0 CPS	BLK-J	Select UMA
BlackRock Municipal Ladder SMA 1-10 Year	100.00%	0 CPS	BLKM	CES
BlackRock Municipal Ladder SMA 1-10 Year	100.00%	0 CPS	BLK-M	Select UMA
BlackRock Municipal Ladder SMA 1-5 Year	100.00%	0 CPS	BLKL	CES
BlackRock Municipal Ladder SMA 1-5 Year	100.00%	0 CPS	BLK-L	Select UMA

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
BlackRock Municipal Ladder SMA 5-15 Year	100.00%	0 CPS	BLKK	CES
BlackRock Municipal Ladder SMA 5-15 Year	100.00%	0 CPS	BLK-K	Select UMA
BlackRock Municipal Opportunities Fixed Income	100.00%	0 CPS	BLKP	CES
BlackRock Municipal Opportunities Fixed Income	100.00%	0 CPS	BLK-P	Select UMA
BlackRock PPM Fundamental Core Taxable SMA	100.00%	0 CPS	BLK-3	Select UMA
BlackRock PPM Intermediate Muni - SMA	100.00%	0 CPS	BLK6	CES
BlackRock PPM Intermediate Muni - SMA	100.00%	0 CPS	BLK-4	Select UMA
BlackRock PPM Intermediate Taxable FI - SMA	100.00%	0 CPS	BLK-6	Select UMA
BlackRock PPM Long Term Muni - SMA	100.00%	0 CPS	BLK8	CES
BlackRock PPM Long Term Muni - SMA	100.00%	0 CPS	BLK-7	Select UMA
BlackRock PPM Short Term Muni - SMA	100.00%	0 CPS	BLK9	CES
BlackRock PPM Short Term Muni - SMA	100.00%	0 CPS	BLK-8	Select UMA
BlackRock Russell 2500 Alpha Tilts Strategy ICS	0.00%	0 CPS	BLKR	ICS
BlackRock Short Duration	100.00%	0 CPS	BLK11	CES
BlackRock Short Duration	100.00%	0 CPS	BAK-F	Select UMA
BlackRock Short Term Taxable Fixed Income SMA	100.00%	0 CPS	BLK3	CES
BlackRock Short Term Taxable Fixed Income SMA	100.00%	0 CPS	BLK-9	Select UMA
BMO Global Asset Management Disciplined Large-Cap Growth	0.00%	0 BPS	BMH2	ICS
BMO Global Asset Management Disciplined Large-Cap Value	0.00%	0 BPS	BMH1	ICS
BMO Global Asset Management Disciplined Micro-Cap	0.00%	0 BPS	BMH3	ICS
BNY Mellon Insight Investment Mgmt Insight LDI and CDI Solution	44.43%	0 CPS	BNY2	CES
Boston Common Asset Management Large Cap Value	0.00%	0 CPS	BCA2	CES
Boston Partners Large Cap Value Eq	0.00%	0 BPS	RBE2	CES
Boston Partners Mid Cap Value Equity	0.00%	0 BPS	RBE3	CES
Boston Partners Small/Mid Cap Val Eq	0.00%	0 BPS	RBE1	CES
Boyd Watterson Asset Management, LLC Investment Grade Intermediate	100.00%	0 CPS	BOY3	CES
Boyd Watterson Asset Management, LLC Investment Grade Intermediate	99.90%	0 CPS	BOY-F	Select UMA
Boyd Watterson Asset Management, LLC Investment Grade Multi Sector	100.00%	0 CPS	BOY4	CES
Boyd Watterson Asset Management, LLC Ultra Enhanced Core SMA Fixed Income	100.00%	0 CPS	BOY2	CES
Boyd Watterson Asset Management, LLC Ultra Enhanced Core SMA Fixed Income	100.00%	0 CPS	BYD-F	Select UMA
Bramshill Investments, LLC Income Performance	100.00%	0.02-0.021 CPS	BMS1	CES
Bramshill Investments, LLC Income Performance	100.00%	0.02-0.021 CPS	BMS-1	Select UMA
Brandes Investment Partners Emerging Markets Equity ADR/GDR Preferred	0.66%	0 CPS	BRN9	CES
Brandes Investment Partners Emerging Markets Value Equity ADR	0.00%	0 BPS	BRN3	CES
Brandes Investment Partners Global Equity ADR	1.01%	2 CPS	BRN5	CES
Brandes Investment Partners International Equity	0.38%	1 CPS	BRN4	CES
Brandes Investment Partners International Equity ADR Preferred	0.00%	0 BPS	BRNA	CES
Brandes Investment Ptnrs - SMA Div U.S. Value Equity - SMA	0.00%	0 CPS	BRN2	CES
Brandywine Global Investment Managem Classic Large Cap Value	0.00%	0 CPS	BRW3	CES
Brandywine Global Investment Managem Global Fixed Income Investment Grade	0.00%	0 CPS	BRW2	CES
Breckinridge Capital Advisors Intermediate Government Credit Gender Lens	100.00%	0 CPS	BRK5	CES
Breckinridge Capital Advisors Intermediate Government Credit Gender Lens	100.00%	0 CPS	BRK-5	Select UMA

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Breckinridge Capital Advisors, Inc. Intermediat Sustainable TaxEfficient	100.00%	0 CPS	BRK4	CES
Breckinridge Capital Advisors, Inc. Intermediate Government Credit	100.00%	0 CPS	BRK2	CES
Breckinridge Capital Advisors, Inc. Intermediate Government Credit Strategy	100.00%	0 CPS	BRK-1	Select UMA
Breckinridge Capital Advisors, Inc. Intermediate Sustainable Gov Credit	100.00%	0 CPS	BRK3	CES
Breckinridge Capital Advisors, Inc. Intermediate Sustainable Gov Credit	100.00%	0 CPS	BRK-3	Select UMA
Breckinridge Capital Advisors, Inc. Intermediate Tax Efficient Sustainable	100.00%	0 CPS	BRK-4	Select UMA
Breckinridge Capital Advisors, Inc. Intermediate Tax-Efficient	100.00%	0 CPS	BRK1	CES
Breckinridge Capital Advisors, Inc. Intermediate Tax-Efficient	100.00%	0 CPS	BRK-M	Select UMA
Brentview Investment Mgmt Dividend Growth	0.00%	0 CPS	BRV1	CES
Brookfield Public Securities Grp LLC MLP SMA	0.00%	0 BPS	COA1	CES
Brown Advisory Large Cap Sust Growth	0.00%	0 CPS	BWN2	CES
Brown Advisory Tax-Exempt Sustainabl	0.00%	0 CPS	BWN3	CES
Brown Advisory Tax-Exempt Sustainabl	100.00%	0 CPS	BWN-3	Select UMA
Calamos Advisors LLC Convertible 100% SMA Strategy	86.94%	0 BPS	CAL-C	Select UMA
Calamos Advisors LLC U.S. Convertible 80/20 Strategy	97.27%	0 BPS	CMS-C	Select UMA
Calamos Advisors LLC US Convertible Strategy	97.36%	0 BPS	CMS1	CES
Calvert Investment Management International Equity ADR	0.00%	0 CPS	CAV3	CES
Calvert Investment Management Small Cap	0.00%	0 CPS	CAV1	CES
Cambiar Investors LLC Europe Select	18.00%	6.3 BPS	CBR8	CES
Cambiar Investors LLC European Equities	0.00%	0 BPS	CBR7	ICS
Cambiar Investors LLC Global Equity	0.00%	0 BPS	CBR6	CES
Cambiar Investors LLC International Equity ADR	10.00%	6.1 BPS	CBR3	CES
Cambiar Investors LLC Large Cap Value	0.00%	0 BPS	CBR1	CES
Cambiar Investors LLC SMID Value	0.00%	0 BPS	CBR4	CES
Capital Group Global Equity SMA	6.00%	0.080 CPS	CPG4	CES
Capital Group Global Growth ADR	0.00%	0 CPS	CPGC	CES
Capital Group Int. Vantage Composite	0.00%	0 CPS	CPG3	CES
Capital Group Intermediate Muni SMA	100.00%	0 CPS	CPG7	CES
Capital Group Intermediate Muni SMA	100.00%	0 CPS	CPG-7	Select UMA
Capital Group International Growth SMA	0.00%	0 CPS	CPGD	CES
Capital Group Intl. Equity SMA	81.00%	0.170 CPS	CPG1	CES
Capital Group Long Municipal SMA	100.00%	0 CPS	CPG8	CES
Capital Group Long Municipal SMA	100.00%	0 CPS	CPG-8	Select UMA
Capital Group PCS U.S. Equity	0.00%	0 CPS	CPG2	CES
Capital Group Short Municipal Bond SMA	100.00%	0 CPS	CPG6	CES
Capital Group Short Municipal SMA	100.00%	0 CPS	CPG-6	Select UMA
Capital Group U.S. Flexible Growth SMA	0.00%	0 CPS	CPG9	CES
Capital Group U.S. Growth SMA	0.00%	0 CPS	CPGB	CES
Capital Group US Conservative Growth & Income SMA	0.00%	0 CPS	CPGE	CES
Capital Group US Flexible Growth & Income SMA	0.00%	0 CPS	CPGF	CES
Capital Group US Income & Growth SMA	0.00%	0 CPS	CPGA	CES
Capital Group World Div Grower SMA	21.00%	0.089 CPS	CPG5	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Capital Wealth Planning, LLC Enhanced Dividend Income Portfolio	0.00%	0 CPS	CWP1	CES
Causeway Capital Management Global Value Equity	0.00%	0 CPS	CAO2	CES
Causeway Capital Management International Value Equity	0.00%	0 CPS	CAO1	CES
CenterSquare Investment Management U.S. REIT Separate Account	2.00%	0 CPS	CSQ1	ICS
Channing Global Advisors, LLC International Equity ADR	0.00%	0 BPS	CNN1	CES
Chartwell Investment Partners Intermediate Fixed Income	100.00%	0 CPS	WOLA	ICS
Chartwell Investment Partners Mid Cap Value	0.00%	0 CPS	WOLC	CES
Chartwell Investment Partners Short Duration BB High Yield Fixed	100.00%	0 CPS	WOLB	CES
Chartwell Investment Partners Short Duration BB High Yield Fixed	100.00%	0 CPS	WOLD	ICS
Chartwell Investment Partners Short Duration High Yield SMA	100.00%	0 CPS	WOL-B	Select UMA
Chilton Investment Services, LLC Crossover Municipal	100.00%	0 BPS	IGF1	CES
Chilton Investment Services, LLC Crossover Municipal	100.00%	0 BPS	IGF-1	Select UMA
Chilton Investment Services, LLC Short Term Crossover Municipal	100.00%	0 BPS	IGF2	CES
Chilton Investment Services, LLC Short Term Crossover Municipal	100.00%	0 BPS	IGF-2	Select UMA
Chilton Investment Services, LLC Short Term Taxable	100.00%	0 BPS	IGF4	CES
Chilton Investment Services, LLC Short Term Taxable	100.00%	0 BPS	IGF-4	Select UMA
Chilton Investment Services, LLC Taxable	100.00%	0 BPS	IGF3	CES
Chilton Investment Services, LLC Taxable	100.00%	0 BPS	IGF-3	Select UMA
Cincinnati Asset Management, Inc. Broad Market Corporate Bond Program	100.00%	0 BPS	CIN2	CES
Cincinnati Asset Management, Inc. Broad Market Corporate Bond Program	100.00%	0 BPS	CNI-5	Select UMA
Cincinnati Asset Management, Inc. High Yield Corporate Fixed-Income	100.00%	0 BPS	CIN1	CES
Cincinnati Asset Management, Inc. High Yield Corporate Fixed-Income	100.00%	0 BPS	CIN-H	Select UMA
Cincinnati Asset Management, Inc. Investment Grade Fixed Income	100.00%	0 BPS	CIN3	CES
Cincinnati Asset Management, Inc. Investment Grade Fixed Income	100.00%	0 BPS	CNI-F	Select UMA
Cincinnati Asset Management, Inc. Short Duration Fixed Income	100.00%	0 BPS	CIN4	CES
Cincinnati Asset Management, Inc. Short Duration Fixed Income	100.00%	0 BPS	CIN-1	Select UMA
Clarkston Capital Partners, LLC SMID Cap Strategy	0.00%	0 BPS	CKC1	CES
ClearBridge Investments, LLC. International Value ADR	0.00%	0 CPS	GCI2	CES
ClearBridge-FranklinTempletonRETAIL All Cap Growth (MA)	94.38%	1.03 CPS	CLDD	CES
ClearBridge-FranklinTempletonRETAIL Appreciation	95.15%	0.49 CPS	SBH	CES
ClearBridge-FranklinTempletonRETAIL Appreciation ESG	92.44%	0.405 CPS	CLD11	CES
ClearBridge-FranklinTempletonRETAIL Balanced Income 70/30	93.66%	0.260 CPS	CLDI	CES
ClearBridge-FranklinTempletonRETAIL Dividend Strategy (MA)	73.89%	1.377 CPS	SBO	CES
ClearBridge-FranklinTempletonRETAIL Dividend Strategy ESG MA	0.00%	0 CPS	CBEP	CES
ClearBridge-FranklinTempletonRETAIL ESG Large Cap Growth	100.00%	1.03 CPS	CLD4	CES
ClearBridge-FranklinTempletonRETAIL Growth ESG Portfolios MA	0.00%	0 CPS	CLD16	CES
ClearBridge-FranklinTempletonRETAIL Growth Portfolios (MA)	89.34%	1.181 CPS	CLD1	CES
ClearBridge-FranklinTempletonRETAIL Intl Growth ADR (MA)	63.39%	0.846 CPS	CLD7	CES
ClearBridge-FranklinTempletonRETAIL Intl Growth ADR ESG (MA)	100.00%	0.852 CPS	CLD17	CES
ClearBridge-FranklinTempletonRETAIL Large Cap Growth (MA)	37.50%	1.03 CPS	SAX	CES
ClearBridge-FranklinTempletonRETAIL Large Cap Value ESG MA	0.00%	0 CPS	CLD14	CES
ClearBridge-FranklinTempletonRETAIL Large Cap Value (MA)	0.00%	0 CPS	CLD5	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
ClearBridge-FranklinTempletonRETAIL LargeCapGr ESGCatholic	100.00%	1.060 CPS	CLD21	CES
ClearBridge-FranklinTempletonRETAIL LargeCapVal ESGCatholic	83.97%	1.100 CPS	CLD19	CES
ClearBridge-FranklinTempletonRETAIL Mid Cap (MA)	0.00%	0 CPS	CLD6	CES
ClearBridge-FranklinTempletonRETAIL Small Cap (MA)	0.00%	0 CPS	CLDV	CES
ClearBridge-FranklinTempletonRETAIL Small Cap Growth (MA)	0.00%	0 CPS	CLDM	CES
ClearBridge-FranklinTempletonRETAIL Value (MA)	0.00%	0 CPS	SAJ	CES
ClearBridge-FranklinTempletonRETAIL Value ESG (MA)	0.00%	0 CPS	CLD15	CES
ClearBridge-FranklinTempletonRETAIL Value ESG Catholic (MA)	0.00%	0 CPS	CLD20	CES
Clinton Investment Management, LLC Muni Bond Market Duration	100.00%	0 CPS	CIV2	CES
Clinton Investment Management, LLC MuniBond Credit Opportunities	100.00%	0 CPS	CIV1	CES
Clinton Investment Management, LLC MuniBond Credit Opportunities	100.00%	0 CPS	CIV-1	Select UMA
Clinton Investment Management, LLC MuniBond Market Duration SMA	100.00%	0 CPS	CIV-2	Select UMA
Cohen & Steers Capital Mgmt., Inc. Exch-Traded Preferred	0.00%	0 CPS	CSE1	CES
Cohen & Steers Capital Mgmt., Inc. US Realty Total Ret	0.00%	0 CPS	CSE3	CES
Coho Partners, Ltd Relative Value Equity	0.00%	0 CPS	CLP1	CES
Columbia Management Investments Contrarian Large Cap Core	0.00%	0 BPS	CMP3	CES
Columbia Management Investments Dividend Income SMA	0.00%	0 BPS	CMP2	CES
Columbia Management Investments Dividend Opportunity SMA	0.00%	0 BPS	CMP4	CES
Columbia Management Investments Focused Large Cap Value	0.00%	0 BPS	SEL4	CES
Columbia Management Investments Liability Driven Investing (LDI)	0.00%	0 BPS	CMP5	CES
Community Capital Management, LLC Impact Core Fixed Income SMA	85.00%	0 CPS	CMU1	CES
Community Capital Management, LLC Impact Core Fixed Income SMA	100.00%	0 CPS	CMU-1	Select UMA
Confluence Investment Management Large Cap Value	0.00%	0 BPS	FLU1	CES
Confluence Investment Management Small Cap Value	0.00%	0 BPS	FLU2	CES
Congress Asset Management Company Balanced Portfolio	0.00%	0 CPS	CSA3	CES
Congress Asset Management Company Large Cap Growth	0.00%	0 CPS	CSA1	CES
Congress Asset Management Company Mid Cap Growth	0.00%	0 CPS	CSA4	CES
Congress Asset Management Company Small Cap Growth	0.00%	0 CPS	CSA6	CES
Congress Asset Management Company SMid Growth	0.00%	0 CPS	CSA7	CES
Connors Investor Services, Inc. Covered Call Total Return Wrap	0.00%	0 CPS	CON1	CES
Cooke & Bieler, L.P. Large Cap Value Equity	0.00%	0 CPS	CO01	CES
Copeland Capital Management, LLC SMID Cap Dividend Growth	0.00%	0 CPS	CCN1	CES
Crossmark Global Investments Custom SRI Equity Index	0.00%	0 BPS	CPS5	ICS
Crossmark Global Investments Custom SRI Equity Index	0.00%	0 BPS	CPS3	ICS
Crossmark Global Investments Custom SRI Equity Index Intl.	0.00%	0 BPS	CPS6	ICS
Crossmark Global Investments Custom SRI International Equity Index	0.00%	0 BPS	CPS4	ICS
CS McKee Aggregate Fixed Income	100.00%	0 BPS	CSM1	CES
CS McKee All Cap Value	87.10%	0 BPS	FPT1	CES
CS McKee Large Cap Value	82.70%	0 BPS	FPT2	CES
CS McKee Micro Cap Value	93.90%	0 BPS	FTP3	ICS
Cumberland Advisors, Inc. Total Return Gov/Credit	100.00%	0 BPS	CUM2	CES
Cumberland Advisors, Inc. Total Return Gov/Credit	100.00%	0 BPS	CUM-2	Select UMA

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Cumberland Advisors, Inc. Total Return Municipal	100.00%	0 BPS	CUM1	CES
Cumberland Advisors, Inc. Total Return Municipal	100.00%	0 BPS	CUM-1	Select UMA
D.F. Dent & Company, Inc. Mid Cap Growth	0.00%	0 CPS	DFD1	CES
D.F. Dent & Company, Inc. Small Cap Growth	0.00%	0 CPS	DFD2	CES
Dana Investment Advisors, Inc. Large Cap Equity Strategy	0.00%	0 CPS	DNA2	CES
Davis Advisors Global ADR SMA	0.00%	0 CPS	DSA4	CES
Davis Advisors International ADR SMA	0.00%	0 CPS	DSA5	CES
Davis Advisors Large Cap Value	0.00%	0 CPS	DSA1	CES
Davis Advisors Multi Cap Equity	0.00%	0 CPS	DSA2	CES
Dearborn Partners, LLC Core Rising Dividend	0.00%	0 BPS	DRB1	CES
Delaware / Macquarie Intermediate Duration US Government	100.00%	0 BPS	ACI4	CES
Delaware / Macquarie Intermediate Duration US Government	100.00%	0 BPS	ACI-A	Select UMA
Delaware / Macquarie Large Cap Value Equity	0.00%	0 BPS	DCM4	CES
Delaware / Macquarie Low Duration US Government	100.00%	0 BPS	ACI7	CES
Delaware / Macquarie Low Duration US Government	100.00%	0 BPS	ALC-F	Select UMA
Delaware / Macquarie Small Cap Growth Equity	0.00%	0 BPS	DCM6	CES
Delaware / Macquarie Small Cap Value Equity	0.00%	0 BPS	DCM3	CES
DePrince, Race, Zollo, Inc. Small Cap Value	0.00%	0 CPS	DRZ1	CES
DeRoy & Devereaux All Cap Equity	0.00%	0 CPS	DDV1	ICS
Dodge & Cox Core Fixed Income	0.00%	0 CPS	DAC3	ICS
Dodge & Cox U.S. Equity	0.00%	0 CPS	DAC1	ICS
Dolan McEniry Capital Mgmt., LLC Core Plus	100.00%	0 BPS	DLM2	CES
Dolan McEniry Capital Mgmt., LLC Core Plus	100.00%	0 BPS	DLM-2	Select UMA
Dolan McEniry Capital Mgmt., LLC Core Plus	100.00%	0 BPS	DLMA	ICS
Dolan McEniry Capital Mgmt., LLC Credit	100.00%	0 BPS	DLM1	CES
Dolan McEniry Capital Mgmt., LLC Credit	100.00%	0 BPS	DLM-1	Select UMA
Dolan McEniry Capital Mgmt., LLC Credit	100.00%	0 BPS	DLMB	ICS
Dorsey Wright Systematic Relative Strength Int'l	0.00%	0 BPS	DOW3	CES
Eagle Asset Management Equity Income (MA)	0.00%	0 CPS	EAG7	CES
Eagle Asset Management Mid Cap Growth - Retail (MA)	0.00%	0 CPS	EAG6	CES
Eagle Asset Management Small Cap Growth - Retail (MA)	0.00%	0 CPS	EAG4	CES
Eagle Asset Management Small Cap Strategy (Vermont Team)	0.00%	0 CPS	EAG8	CES
Eagle Asset Management Vertical Income Portfolio	87.00%	0-3 BPS	EAG9	CES
Eagle Asset Management Vertical Income Portfolio	87.00%	0-3 BPS	EAG-9	Select UMA
Eagle Capital Management Eagle Equity	0.00%	0 CPS	ECM1	CES
Earnest Partners, LLC Mid Cap Core Equity	0.00%	0 BPS	EPL5	CES
Earnest Partners, LLC Mid Cap Value Equity	0.00%	0 BPS	EPL2	CES
Earnest Partners, LLC Small Cap Core Equity	0.00%	0 BPS	EPL6	CES
Earnest Partners, LLC Small Cap Value Equity	0.00%	0 BPS	EPL3	CES
Earnest Partners, LLC Small/Mid Cap Core Equity	0.00%	0 BPS	EPL4	CES
Eaton Vance Management Investment Grade Aggregate Core Bond	0.00%	0 CPS	EAT8	CES
Eaton Vance Management Investment Grade Intermediate Core	0.00%	0 CPS	EVAD	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Eaton Vance Management Large-Cap Value Equity	0.00%	0 CPS	EVA3	CES
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Managed Municipal Intermediate	100.00%	0 CPS	EVT2	CES
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Managed Municipal Intermediate	100.00%	0 CPS	EVT-2	Select UMA
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Managed Municipal Long	100.00%	0 CPS	EVT1	CES
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Managed Municipal Long	100.00%	0 CPS	EVT-1	Select UMA
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Managed Municipal Short	100.00%	0 CPS	EVT3	CES
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Managed Municipal Short	100.00%	0 CPS	EVT-3	Select UMA
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Municipal Ladder Intermediate	100.00%	0 CPS	EVT5	CES
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Municipal Ladder Intermediate	100.00%	0 CPS	EVT-5	Select UMA
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Municipal Ladder Long	100.00%	0 CPS	EVT4	CES
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Municipal Ladder Long	100.00%	0 CPS	EVT-4	Select UMA
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Municipal Ladder Short	100.00%	0 CPS	EVT6	CES
Eaton Vance Management Parametric Portfolio Associates TABS Enhanced Municipal Ladder Short	100.00%	0 CPS	EVT-6	Select UMA
Eaton Vance Management Parametric Portfolio Associates TABS Managed Municipal Intermediate	100.00%	0 CPS	EAT3	CES
Eaton Vance Management Parametric Portfolio Associates TABS Managed Municipal Long	100.00%	0 CPS	EAT4	CES
Eaton Vance Management Parametric Portfolio Associates TABS Managed Municipal Short	100.00%	0 CPS	EVA8	CES
Eaton Vance Management Parametric TABS Municipal Ladder Intermediate	100.00%	0 CPS	EAT7	CES
Eaton Vance Management Parametric TABS Municipal Ladder Short	100.00%	0 CPS	EAT6	CES
Eaton Vance Management Parametric TABS Total Return Intermediate	100.00%	0 CPS	ETN	CES
Eaton Vance Management Parametric TABS Total Return Long	100.00%	0 CPS	EAT5	CES
Eaton Vance Management Parametric U.S. Corporate Ladder Intermediate	100.00%	0 CPS	EATB	CES
Eaton Vance Management Parametric U.S. Corporate Ladder Long	100.00%	0 CPS	EATC	CES
Eaton Vance Management Parametric U.S. Corporate Ladder Short	100.00%	0 CPS	EATA	CES
Eaton Vance Management U.S. Small-Cap Equity	0.00%	0 CPS	EVA7	CES
Edge Asset Management Equity Income SMA	0.00%	0 CPS	EDA3	CES
Edge Asset Management SMID Dividend Income WO MLPS SMA	0.00%	0 CPS	EDA2	CES
Edgewood Management LLC Large Cap Growth	0.00%	0 CPS	EDG1	CES
Emerald Advisers, LLC Diversified Small Cap Growth	0.00%	0 BPS	EAI2	CES
Energy Income Partners Infrastructure & MLP SMAs	0.00%	0 CPS	ENE2	CES
Epoch Investment Partners, Inc. TD Epoch Global EQ Shareholder YLD	0.00%	0 BPS	MNY1	CES
Equity Investment Corporation All-Cap Value Equity	0.00%	0 CPS	EIC1	CES
Equity Investment Corporation Large-Cap Value Equity	0.00%	0 CPS	EIC2	CES
Fayez Sarofim & Co. Global Equity	0.00%	0 BPS	FAY3	CES
Fayez Sarofim & Co. Large Cap Equity	0.00%	0 BPS	FAY1	CES
Federated Hermes, Inc. Clover All Cap Value	0.00%	0 CPS	CLV4	CES
Federated Hermes, Inc. Core Aggregate	0.00%	0 CPS	FED8	CES
Federated Hermes, Inc. Core Aggregate	100.00%	0 CPS	FED-8	Select UMA
Federated Hermes, Inc. Core Aggregate Fixed Income (MA)	100.00%	0 CPS	FED5	ICS
Federated Hermes, Inc. Core Plus SMA	100.00%	0 CPS	FED-6	Select UMA
Federated Hermes, Inc. Core Plus SMA	0.00%	0 CPS	FED6	CES
Federated Hermes, Inc. Int Strat Val Div ADR SMA	0.00%	0 CPS	FED2	CES
Federated Hermes, Inc. International Strategic Value Dividend ADR with MAP	0.00%	0 CPS	FED7	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Federated Hermes, Inc. MDT All Cap Core SMA	0.00%	0 CPS	MTA2	CES
Federated Hermes, Inc. MDT Mid Cap Growth SMA	0.00%	0 CPS	MTA5	CES
Federated Hermes, Inc. MDT Small Cap Core	0.00%	0 CPS	MTA8	ICS
Federated Hermes, Inc. MDT Small Cap Value SMA	0.00%	0 CPS	MTA3	CES
Federated Hermes, Inc. MDT Tax Aware ACC SMA	0.00%	0 CPS	MTA1	CES
Federated Hermes, Inc. Strategic Value Div SMA	0.00%	0 CPS	FED1	CES
Fiduciary Mgmt., Inc. of Milwaukee All Cap Equity	0.00%	0 CPS	FMI2	ICS
Fiduciary Mgmt., Inc. of Milwaukee Large Cap	0.00%	0 CPS	FMI1	ICS
Fiduciary Mgmt., Inc. of Milwaukee Small Cap Equity	0.00%	0 CPS	FMI3	ICS
Fiera Capital Inc. Small Cap Growth	0.00%	0 BPS	APX2	CES
Fiera Capital Inc. Small-Mid Growth	0.00%	0 BPS	APX4	CES
Fiera Capital Inc. Tax Efficient Core Plus Enhanced	0.00%	0 BPS	APX5	CES
First Eagle Global SMA	0.00%	0 CPS	FEG2	CES
First Eagle Overseas ADR	0.00%	0 CPS	FEG1	CES
Fort Washington Investment Advisors Dividend Equity	0.00%	0 CPS	FWI3	CES
Fort Washington Investment Advisors Small Company Equity	0.00%	0 CPS	FWI2	CES
Franklin Templeton AC Growth Bal 70/30 Taxable	71.87%	1.038 CPS	CLD-U	Select UMA
Franklin Templeton All Cap Growth Balanced 60/40	100.00%	1.03 CPS	CLDJ	CES
Franklin Templeton All Cap Growth Balanced 60/40	72.85%	1.05 CPS	CLD-S	Select UMA
Franklin Templeton Appreciation Balanced Taxable 60/40	81.81%	0.492 CPS	CLD-K	Select UMA
Franklin Templeton Appreciation Balanced w Muni Tax-Favored 60/40	69.91%	0.489 CPS	CLD-L	Select UMA
Franklin Templeton Balanced Income 70/30	77.75%	0.255 CPS	CBE-8	Select UMA
Franklin Templeton Balanced Income with Municipals 70/30	0.00%	0 BPS	LGM1	CES
Franklin Templeton Balanced Income with Municipals 70/30	82.83%	0.256 CPS	CBE-J	Select UMA
Franklin Templeton Dividend Strat Bal 70/30 Tax Favored	62.71%	1.381 CPS	CLD-H	Select UMA
Franklin Templeton Dividend Strat Bal 70/30 Taxable	82.85%	1.370 CPS	CLD-G	Select UMA
Franklin Templeton Dividend Strategy Balanced 60/40	63.13%	1.359 CPS	CLD-J	Select UMA
Franklin Templeton Dividend Strategy Balanced Tax Favored 60/40	49.94%	0-1.360 CPS	CLD-I	Select UMA
Franklin Templeton Income SMA	0.00%	0 BPS	FKMK	CES
Franklin Templeton Income SMA	0.00%	0 BPS	FKM-K	Select UMA
Franklin Templeton Investments Intl ADR Equity SMA	0.00%	0 BPS	TPAG	CES
Franklin Templeton Large Cap Growth Balanced 60/40	56.88%	1.080 CPS	CBE-B	Select UMA
Franklin Templeton Large Cap Growth Balanced Tax-Favored 60/40	57.02%	1.100 CPS	CBE-F	Select UMA
Franklin Templeton Large Cap Growth ESG Balanced (60/40)	37.09%	1.080 CPS	CLD-C	Select UMA
Franklin Templeton Legg Mason Apprec Bal wMuni 70/30	85.19%	0.479 CPS	CLD-N	Select UMA
Franklin Templeton Legg Mason Appreciation Balanced 70/30 taxable	81.81%	0.495 CPS	CBE-3	Select UMA
Franklin Templeton LMPPG DynaTech SMA	0.00%	0 BPS	TPA7	CES
Franklin Templeton LMPPG Inter Municipal FI SMA	100.00%	0 BPS	FKM-M	Select UMA
Franklin Templeton LMPPG Intermediate Term Fixed Income	5.00%	0 BPS	FKM-F	Select UMA
Franklin Templeton Lrg Gr ESG Bal 70-30 Taxable	64.12%	1.070 CPS	CBE-M	Select UMA
Franklin Templeton Private Portfolio Group, LLC Intl Equity ORD	0.00%	0 CPS	FKM6	CES
Franklin Templeton Private Portfolio Group, LLC LMPPG Inter Municipal FI SMA	100.00%	0 BPS	FKM9	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Franklin Templeton Private Portfolio Group, LLC LMPPG Intermediate FI SMA	5.00%	0 BPS	FKMC	CES
Franklin Templeton Private Portfolio Group, LLC LMPPG Small Cap Growth SMA	0.00%	0 BPS	FKM1	CES
Franklin Templeton Value Balanced 60/40	0.00%	0 CPS	CLDC	CES
Franklin Templeton Value Balanced 60/40	78.08%	1.070 CPS	CLD-R	Select UMA
Fred Alger Management, LLC Capital Appreciation SMA	0.00%	0 CPS	FAL3	CES
Fred Alger Management, LLC Focus Equity	0.00%	0 CPS	FAL5	ICS
Fred Alger Management, LLC Small Cap Focus SMA	0.00%	0 CPS	FAL2	CES
FullerThaler Behavioral Mid-Cap Value	0.00%	0 CPS	FUT4	CES
FullerThaler Behavioral Small-Cap Equity	0.00%	0 CPS	FUT3	CES
FullerThaler Behavioral Small-Cap Growth	0.00%	0 CPS	FUT2	CES
FullerThaler Behavioral Small-Cap Value	0.00%	0 CPS	FUT1	CES
Gabelli Asset Management Company All Cap Value	0.00%	0 CPS	GAM1	CES
Galliard Capital Management, LLC Broad Market Core	0.00%	0 BPS	GRD6	CES
Galliard Capital Management, LLC Intermediate Govt/Credit	0.00%	0 BPS	GRD5	CES
Galliard Capital Management, LLC Short Intermediate Core	0.00%	0 BPS	GRD7	CES
Garcia Hamilton & Assoc formerly DHJ Fixed Income - Aggregate	81.90%	0 CPS	DHI5	CES
Garcia Hamilton & Assoc formerly DHJ Fixed Income - Intermediate G/C	18.82%	0 CPS	DHI3	CES
Garcia Hamilton & Assoc formerly DHJ Fixed Income - Short Duration Opp.	21.32%	0 CPS	DHI4	CES
Geneva Capital Management LLC US Mid Cap Growth	0.00%	0 CPS	GNC2	CES
Geneva Capital Management LLC US Small Cap Growth	0.00%	0 CPS	GNC1	CES
Geneva Capital Management LLC US SMID Cap Growth	0.00%	0 CPS	GNC3	CES
GIS - BlackRock PPM Global Fixed Income	100.00%	0 CPS	BLK-B	Select UMA
GIS - BlackRock PPM Municipal Bond Portfolio	100.00%	0 CPS	BLK-W	Select UMA
GIS - BlackRock PPM US Taxable FI Portfolio	100.00%	0 CPS	BLK-Y	Select UMA
GIS - Chilton Corporate Fixed Strategy	100.00%	0 BPS	GIF-4	Select UMA
GIS - Chilton Crossover Fixed Strategy	100.00%	0 BPS	GIF-D	Select UMA
GIS - Chilton Crossover Liquidity Strategy	100.00%	0 BPS	GIF-C	Select UMA
GIS - Chilton Global Fixed Strategy	100.00%	0 BPS	GIF-5	Select UMA
GIS - Chilton International Fixed Strategy	100.00%	0 BPS	GIF-6	Select UMA
GIS - Chilton Taxable Fixed Strategy	100.00%	0 BPS	GIF-3	Select UMA
GIS - Chilton Taxable Liquidity Strategy	100.00%	0 BPS	GIF-1	Select UMA
GIS - Chilton Tax-Advantaged Fixed Strategy	100.00%	0 BPS	GIF-2	Select UMA
GIS - Chilton Tax-Advantaged Liquidity Strategy	100.00%	0 BPS	GIF-B	Select UMA
GLOBALT Investments innovatETF Strategy - Conservative	0.00%	0 BPS	GLB1	CES
Goldman Sachs Asset Mgmt. Dynamic Municipal Income SMA	100.00%	0 CPS	GOL7	CES
Goldman Sachs Asset Mgmt. Dynamic Municipal Income SMA	100.00%	0 CPS	GOL-7	Select UMA
Goldman Sachs Asset Mgmt. TACS Enhanced Divided US Large Cap	0.00%	0 CPS	GOL6	CES
Goldman Sachs Asset Mgmt. TACS Enhanced Divided US Large Cap	0.00%	0 CPS	GOL-6	Select UMA
Goldman Sachs Asset Mgmt. TACS International Developed ADR	0.00%	0 CPS	GOL5	CES
Goldman Sachs Asset Mgmt. TACS International Developed ADR	0.00%	0 CPS	GOL-5	Select UMA
Goldman Sachs Asset Mgmt. TACS US All Cap	0.00%	0 CPS	GOL4	CES
Goldman Sachs Asset Mgmt. TACS US All Cap	0.00%	0 CPS	GOL-4	Select UMA

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Goldman Sachs Asset Mgmt. TACS US Large Cap	0.00%	0 CPS	GSA1	CES
Goldman Sachs Asset Mgmt. TACS US Large Cap	0.00%	0 CPS	GSA-1	Select UMA
Goldman Sachs Asset Mgmt. US Mid Cap Value	0.00%	0 CPS	GOL3	CES
Goldman Sachs Asset Mgmt. US Mid Cap Value	0.00%	0 CPS	GOL-S	Select UMA
Goldman Sachs Asset Mgmt. US Strategic Growth	0.00%	0 CPS	GOL2	CES
GQG Partners Global Equity ADR	0.00%	0 CPS	GQG2	CES
GQG Partners US Equity	0.00%	0 CPS	GQG1	CES
Granite Investment Partners, LLC Large Cap Equity	0.00%	0 CPS	GIP2	CES
Granite Investment Partners, LLC Small Core Select Equity	0.00%	0 CPS	GIP3	CES
Grantham, Mayo, Van Otterloo & Co. LLC (GMO) Quality	0.00%	0 CPS	GMV5	CES
Great Lakes Advisors, LLC. Core Fixed Income	0.00%	0 CPS	GLK4	CES
Great Lakes Advisors, LLC. DE SMID Catholic	0.00%	0 CPS	AIPA	CES
Great Lakes Advisors, LLC. DE TaxManaged AllCap-Single Sleeve	0.00%	0 CPS	AIP-3	Select UMA
Great Lakes Advisors, LLC. Disciplined AllCap	0.00%	0 CPS	AIP2	CES
Great Lakes Advisors, LLC. Disciplined Climate Opportunities	0.00%	0 CPS	AIP7	CES
Great Lakes Advisors, LLC. Disciplined LargeCap	0.00%	0 CPS	AIP3	CES
Great Lakes Advisors, LLC. Disciplined LargeCap Catholic	0.00%	0 CPS	AIP6	CES
Great Lakes Advisors, LLC. Disciplined SMidCap	0.00%	0 CPS	AIP5	CES
Great Lakes Advisors, LLC. Disciplined TaxManaged LargeCap	0.00%	0 CPS	AIP1	CES
Great Lakes Advisors, LLC. Large Cap Value	0.00%	0 CPS	GLK3	ICS
Great Lakes Advisors, LLC. LargeCap ESG	0.00%	0 CPS	AIP4	CES
Great Lakes Advisors, LLC. SMidCap ESG	0.00%	0 CPS	AIP8	CES
Great Lakes Advisors, LLC. US Large-Cap Core	0.00%	0 CPS	ROT3	CES
Great Lakes Advisors, LLC. US Large-Cap Value	0.00%	0 CPS	ROT4	CES
Guggenheim Wealth Solutions, LLC Core Plus	100.00%	0-1 BPS	GWS1	CES
Guggenheim Wealth Solutions, LLC Core Plus	100.00%	0-1 BPS	GWS-1	Select UMA
Guggenheim Wealth Solutions, LLC Limited Duration	0.00%	0 BPS	GWS2	CES
Guggenheim Wealth Solutions, LLC Limited Duration	100.00%	0-1 BPS	GWS-2	Select UMA
GW&K Investment Management, LLC 2-8 Year Active Muni Strategy	100.00%	0 CPS	GAN-5	Select UMA
GW&K Investment Management, LLC 2-8 Year Active Municipal Bond	100.00%	0 CPS	GAN5	CES
GW&K Investment Management, LLC Enhanced Core Bond Strate	100.00%	0 CPS	GAN-6	Select UMA
GW&K Investment Management, LLC Enhanced Core Bond Strategy	100.00%	0 CPS	GAN6	CES
GW&K Investment Management, LLC Municipal Bond Strategy	100.00%	0 CPS	GAN4	CES
GW&K Investment Management, LLC Municipal Bond Strategy	100.00%	0 CPS	GAN-3	Select UMA
GW&K Investment Management, LLC Small Cap Core Strategy	0.00%	0 BPS	GAN1	CES
GW&K Investment Management, LLC Small/Mid Cap Core Strategy	0.00%	0 CPS	GAN2	CES
Hahn Capital Management Mid Cap Value	0.00%	0 CPS	HAH1	CES
Hamlin Capital Management, LLC Equity Income Strategy	0.00%	0 CPS	HHM2	CES
Hamlin Capital Management, LLC Equity Income Strategy	0.00%	0 CPS	HHM1	ICS
Harding Loevner LP Global Equity ADR	0.00%	0 BPS	HLM2	CES
Harding Loevner LP International Equity ADR	83.00%	0.13 BPS	HLM1	CES
Harris Associates L.P. Concentrated Value Equity	0.00%	0 BPS	HRA1	ICS

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Harris Associates L.P. U.S. Large Value	0.00%	0 BPS	HRA2	CES
Horizon Kinetics Asset Mgmt., LLC Core Value	0.00%	0 BPS	HOR1	CES
Hudson Edge Investment Partners, Inc International Equity	0.00%	0 CPS	HGK7	ICS
Hudson Edge Investment Partners, Inc Large Cap Value	0.00%	0 CPS	HGK2	CES
Income Research + Management Aggregate	100.00%	0 BPS	IRM16	CES
Income Research + Management Core (SMA)	100.00%	0 BPS	IRM2	ICS
Income Research + Management Core Muni ESG Startegy	100.00%	0 BPS	IRM11	CES
Income Research + Management Core Municipal	100.00%	0 BPS	IRM1	CES
Income Research + Management Core Plus	100.00%	0 BPS	IRM15	CES
Income Research + Management Core Plus (SMA)	100.00%	0 BPS	IRM3	ICS
Income Research + Management Intermediate Corporate	100.00%	0 BPS	IRM13	CES
Income Research + Management Intermediate Corporate (SMA)	100.00%	0 BPS	IRM5	ICS
Income Research + Management Intermediate Corporate/Credit	100.00%	0 BPS	IRM14	CES
Income Research + Management Intermediate Credit (SMA)	100.00%	0 BPS	IRM6	ICS
Income Research + Management Intermediate Government Credit	100.00%	0 BPS	IRM12	CES
Income Research + Management Intermediate Government/Credit (SMA)	100.00%	0 BPS	IRM4	ICS
Income Research + Management Long Corporate (SMA)	100.00%	0 BPS	IRM9	ICS
Income Research + Management Long Credit (SMA)	100.00%	0 BPS	IRM10	ICS
Income Research + Management Long Government/Credit (SMA)	100.00%	0 BPS	IRM8	ICS
Income Research + Management Short Duration	100.00%	0 BPS	IRM17	CES
Income Research + Management Short Duration (SMA)	100.00%	0 BPS	IRM7	ICS
Ingalls & Snyder LLC Fundamental Equity Advisors All-Cap	0.00%	0 CPS	IGL2	CES
Ingalls & Snyder LLC Fundamental Equity Advisors SMID	0.00%	0 CPS	IGL3	CES
Invesco Corp Bond 100 IG SMA	100.00%	0 BPS	IVCM	CES
Invesco Corp Bond 100 IG SMA	100.00%	0 BPS	IVC-M	Select UMA
Invesco Corp Bond 50 IG SMA	100.00%	0 BPS	IVCQ	CES
Invesco Corp Bond 50 IG SMA	100.00%	0 BPS	IVC-Q	Select UMA
Invesco Corp Bond 75 IG SMA	100.00%	0 BPS	IVCO	CES
Invesco Corp Bond 75 IG SMA	100.00%	0 BPS	IVC-O	Select UMA
Invesco Diversified Dividend	0.00%	0 BPS	IVC7	CES
Invesco Growth and Income SMA/WRAP	0.00%	0 BPS	IVC9	CES
Invesco Int Corp Bd 50 IG SMA	100.00%	0 BPS	IVCS	CES
Invesco Int Corp Bd 50 IG SMA	100.00%	0 BPS	IVC-S	Select UMA
Invesco Int Corp Bd 75 IG SMA	100.00%	0 BPS	IVCP	CES
Invesco Int Corp Bd 75 IG SMA	100.00%	0 BPS	IVC-P	Select UMA
Invesco Int CorpBd 100 IG SMA	100.00%	0 BPS	IVCN	CES
Invesco Int CorpBd 100 IG SMA	100.00%	0 BPS	IVC-N	Select UMA
Invesco Intermed Term Muni Income WRAP	100.00%	0 BPS	IVCB	CES
Invesco Intermed Term Muni Income WRAP	100.00%	0 BPS	IVC-B	Select UMA
Invesco International ADR Growth - SMA/WRAP	0.00%	0 BPS	IVC3	CES
Invesco Investment Grade Govt-Credit Enhanced Cash SMA	100.00%	0 BPS	IVC11	CES
Invesco Investment Grade Govt-Credit Intermediate Term SMA	100.00%	0 BPS	IVC13	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Invesco Investment Grade Govt-Credit Long Term SMA	100.00%	0 BPS	IVC14	CES
Invesco Investment Grade Govt-Credit Short Term SMA	100.00%	0 BPS	IVC12	CES
Invesco Investment Grade Taxable Enhanced Cash SMA	100.00%	0 BPS	IVCY	CES
Invesco Investment Grade Taxable Enhanced Cash SMA	100.00%	0 BPS	IVC-Y	Select UMA
Invesco Invt Grade Floating Rate Bond WRAP	100.00%	0 BPS	IVCL	CES
Invesco Invt Grade Floating Rate Bond WRAP	100.00%	0 BPS	IVC-L	Select UMA
Invesco Limited Term Municipal WRAP	100.00%	0 BPS	IVCA	CES
Invesco Limited Term Municipal WRAP	100.00%	0 BPS	IVC-A	Select UMA
Invesco Mid Cap Growth SMA	0.00%	0 BPS	IVCT	CES
Invesco Tax-Aware Enhanced Cash SMA	100.00%	0 BPS	IVC15	CES
Invesco Tax-Free Enhanced Cash SMA	100.00%	0 BPS	IVCX	CES
Invesco Tax-Free Enhanced Cash SMA	100.00%	0 BPS	IVC-X	Select UMA
Invesco U.S. Treasury Ladder 1-12 Month	100.00%	0 BPS	IVCU	CES
Invesco U.S. Treasury Ladder 1-12 Month	100.00%	0 BPS	IVC-U	Select UMA
Invesco U.S. Treasury Ladder 1-24 Month	100.00%	0 BPS	IVCV	CES
Invesco U.S. Treasury Ladder 1-24 Month	100.00%	0 BPS	IVC-V	Select UMA
Invesco U.S. Treasury Ladder 1-5 Year	100.00%	0 BPS	IVCW	CES
Invesco U.S. Treasury Ladder 1-5 Year	100.00%	0 BPS	IVC-W	Select UMA
Invesco US REITs	99.30%	0 BPS	IVC2	CES
J.P. Morgan Asset Management Core Bond	100.00%	0 BPS	FLM1	CES
J.P. Morgan Asset Management Equity Income - MA	0.00%	0 BPS	FLM9	CES
J.P. Morgan Asset Management Growth Advantage SMA	0.00%	0 BPS	FLMK	CES
J.P. Morgan Asset Management Growth and Income	0.00%	0 BPS	FLML	CES
J.P. Morgan Asset Management Intermediate Municipal Bond - MA	100.00%	0 BPS	FIM6	CES
J.P. Morgan Asset Management Intermediate Municipal Bond - MA	100.00%	0 BPS	FIM-M	Select UMA
J.P. Morgan Asset Management International ADR - MA	0.00%	0 BPS	FIM1	CES
J.P. Morgan Asset Management Large Cap Growth	0.00%	0 BPS	FLM4	CES
J.P. Morgan Asset Management Mid Cap Growth	0.00%	0 BPS	FLMJ	CES
J.P. Morgan Asset Management Mid Cap Value	0.00%	0 BPS	FLMA	CES
J.P. Morgan Asset Management Mortgage-Backed Securities	100.00%	0 BPS	FIM8	CES
J.P. Morgan Asset Management Municipal Ladder 1-10 Year	100.00%	0 BPS	FLM-2	Select UMA
J.P. Morgan Asset Management Municipal STEP 1-10	100.00%	0 BPS	FLM6	CES
J.P. Morgan Asset Management Municipal STEP 1-17	100.00%	0 BPS	FLM7	CES
J.P. Morgan Asset Management Municipal STEP 1-17	100.00%	0 BPS	FLM-3	Select UMA
J.P. Morgan Asset Management Municipal STEP 1-5	100.00%	0 BPS	FLM5	CES
J.P. Morgan Asset Management Municipal STEP 1-5	100.00%	0 BPS	FLM-1	Select UMA
J.P. Morgan Asset Management Municipal STEP Yield	100.00%	0 BPS	FLM8	CES
J.P. Morgan Asset Management Municipal STEP Yield	100.00%	0 BPS	FLM-4	Select UMA
J.P. Morgan Asset Management Small Cap Core	0.00%	0 BPS	FLMM	CES
J.P. Morgan Asset Management US Equity SMA	0.00%	0 BPS	FLMN	CES
J.P. Morgan Asset Management Value Advantage - MA	0.00%	0 BPS	FLMC	CES
Janus Henderson Investors Concentrated Growth Managed Account	0.00%	0 CPS	JCG1	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Janus Henderson Investors Global Life Sciences	0.00%	0 CPS	JCG3	CES
Jennison Associates LLC Focused Large Cap Growth Equity SMA	0.00%	0 CPS	JNA8	CES
Jennison Associates LLC Global Equity Opportunities SMA	0.00%	0 CPS	JNA6	CES
Jennison Associates LLC International Equity Opportunities SMA	0.00%	0 CPS	JNA7	CES
Jennison Associates LLC Large Cap Growth Equity	0.00%	0 CPS	JNA1	CES
Jennison Associates LLC Mid Cap Growth SMA	0.00%	0 CPS	JNA3	CES
Jensen Investment Management, Inc. Quality Growth Composite	0.00%	0 CPS	JMA1	CES
John Hancock Asset Management Core Bond SMA	77.00%	0 CPS	JHA3	CES
John Hancock Asset Management Core Bond SMA	77.00%	0 CPS	JHA-3	Select UMA
John Hancock Asset Management Core Plus Bond SMA	68.00%	0 CPS	JHA4	CES
John Hancock Asset Management Core Plus Bond SMA	68.00%	0 CPS	JHA-4	Select UMA
John Hancock Asset Management Fundamental Large Cap Core	0.00%	0 CPS	JHA1	CES
Karpus Investment Management Conservative Balanced	19.44%	0 BPS	KAR2	ICS
Karpus Investment Management Fixed Income Management SMA	12.08%	0 CPS	KAR-1	Select UMA
Karpus Investment Management Taxable Fixed Income	26.73%	0 CPS	KAR1	CES
Kayne Anderson Rudnick Invst. Mid Cap Core (MA)	7.00%	1.399 CPS	KAY6	CES
Kayne Anderson Rudnick Invst. Mid Cap Growth	0.00%	0 CPS	KAY7	CES
Kayne Anderson Rudnick Invst. Small Cap Growth	66.00%	1.2-2.399 CPS	KAY2	CES
Kayne Anderson Rudnick Invst. Small Cap Quality Value (MA)	0.00%	0 CPS	KAY3	CES
Kayne Anderson Rudnick Invst. Small-Mid Cap Core (MA)	0.00%	0 CPS	KAY4	CES
Kayne Anderson Rudnick Invst. Small-Mid Cap Quality Value	0.00%	0 CPS	KAY5	CES
Kennedy Capital Management LLC Mid Cap Value	0.00%	0 CPS	KEC1	CES
Kovitz Investment Group, LLC Core Equity	0.00%	0 CPS	KOV1	CES
Lazard Asset Management LLC Developing Markets Eq Select ADR-SMA	0.00%	0 CPS	LZDD	CES
Lazard Asset Management LLC EM Core ex-China ADR	0.00%	0 CPS	LAZ4	CES
Lazard Asset Management LLC Emerging Markets Core Equity	0.00%	0 CPS	LZDE	CES
Lazard Asset Management LLC Emerging Markets Eq Select ADR - SMA	0.00%	0 CPS	LZDL	CES
Lazard Asset Management LLC Global Balanced Select ADR - SMA	0.00%	0 CPS	LZDH	CES
Lazard Asset Management LLC Global Equity Select ADR	0.00%	0 CPS	LZD3	CES
Lazard Asset Management LLC International Eq Select ADR	0.00%	0 CPS	LZD4	CES
Lazard Asset Management LLC International Eq Select w/EM ADR	0.00%	0 CPS	LZDF	CES
Lazard Asset Management LLC US Equity Concentrated	0.00%	0 CPS	LZDA	ICS
Lazard Asset Management LLC US Equity Concentrated - SMA	0.00%	0 CPS	LZDU	CES
Lazard Asset Management LLC US Equity Select - SMA	0.00%	0 CPS	LZD9	CES
Lazard Asset Management LLC US Equity Value - SMA	0.00%	0 CPS	LZDB	ICS
Leeward Investments, LLC Mid Cap Value	0.00%	0 CPS	LWI1	CES
Legg Mason Inc. Western Asset Municipal Opportunities Portfolios	0.00%	0 CPS	WTMJ	CES
Legg Mason Inc. Western Asset Municipal Opportunities Portfolios	98.00%	0 CPS	WTM-J	Select UMA
Longfellow Investment Mgmt. Co. Intermediate Duration Fixed Income	100.00%	2-7 BPS	LNG1	CES
Longfellow Investment Mgmt. Co. Short Duration Fixed Income Mgmt	100.00%	2-7 BPS	LNG2	CES
Loomis, Sayles & Company, L.P. 1-3 Year Government	100.00%	0 BPS	LSA-2	Select UMA
Loomis, Sayles & Company, L.P. 1-3 Year Government SMA	100.00%	0 BPS	LSA2	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Loomis, Sayles & Company, L.P. All Government	100.00%	0 BPS	LSA-3	Select UMA
Loomis, Sayles & Company, L.P. All Government SMA	100.00%	0 BPS	LSA3	CES
Loomis, Sayles & Company, L.P. Core	100.00%	0 BPS	LSF	CES
Loomis, Sayles & Company, L.P. Core Fixed Income	100.00%	0 BPS	LSA5	CES
Loomis, Sayles & Company, L.P. Core Fixed Income	69.00%	0 BPS	LSA-8	Select UMA
Loomis, Sayles & Company, L.P. Core Municipal Bond	100.00%	0 BPS	MDI4	CES
Loomis, Sayles & Company, L.P. Core Municipal Bond	100.00%	0 BPS	MDI-M	Select UMA
Loomis, Sayles & Company, L.P. Core Plus	79.00%	0 BPS	LSA6	CES
Loomis, Sayles & Company, L.P. Core Plus	79.00%	O BPS	LSA-6	Select UMA
Loomis, Sayles & Company, L.P. Government/Credit	100.00%	O BPS	LSA4	CES
Loomis, Sayles & Company, L.P. Government/Credit Bond Portfolio	100.00%	O BPS	LSA-4	Select UMA
Loomis, Sayles & Company, L.P. Intermediate Duration Fixed Income	100.00%	O BPS	LSS1	CES
Loomis, Sayles & Company, L.P. Intermediate Duration Fixed Income Canadian Dollar Hedge	100.00%	0 BPS	LSA7	ICS
Loomis, Sayles & Company, L.P. Intermediate Municipal Bond	100.00%	0 BPS	MDI3	CES
Loomis, Sayles & Company, L.P. Intermediate Municipal Bond	100.00%	0 BPS	MDO-M	Select UMA
Loomis, Sayles & Company, L.P. Large Cap Growth	0.00%	0 BPS	LSA9	ICS
Loomis, Sayles & Company, L.P. Multisector Full Discretion	100.00%	0 BPS	LSS3	CES
Loomis, Sayles & Company, L.P. Small Cap Value	0.00%	0 BPS	LSS4	CES
Loomis, Sayles & Company, L.P. Small/Mid Cap	0.00%	0 BPS	LSS5	CES
Lord, Abbett & Co., LLC 1-10 Year Municipal Ladder	100.00%	0 BPS	LOC-G	Select UMA
Lord, Abbett & Co., LLC 1-10 Yr Muni Ladder SMA	100.00%	0 BPS	LOCG	CES
Lord, Abbett & Co., LLC 1-15 Year Municipal Ladder	100.00%	0 BPS	LOC-E	Select UMA
Lord, Abbett & Co., LLC 1-15 Yr Muni Ladder SMA	100.00%	0 BPS	LOCE	CES
Lord, Abbett & Co., LLC 1-20 Year Municipal Ladder	100.00%	0 BPS	LOC-H	Select UMA
Lord, Abbett & Co., LLC 1-20 Yr Muni Ladder SMA	100.00%	0 BPS	LOCH	CES
Lord, Abbett & Co., LLC 1-5 Year Municipal Ladder	100.00%	0 BPS	LOC-D	Select UMA
Lord, Abbett & Co., LLC 1-5 Yr Muni Ladder SMA	100.00%	0 BPS	LOCD	CES
Lord, Abbett & Co., LLC 5-10 Year Municipal Ladder	100.00%	0 BPS	LOC-F	Select UMA
Lord, Abbett & Co., LLC 5-10 Yr Muni Ladder SMA	100.00%	0 BPS	LOCF	CES
Lord, Abbett & Co., LLC 5-15 Year Municipal Ladder	100.00%	0 BPS	LOC-I	Select UMA
Lord, Abbett & Co., LLC 5-15 Yr Muni Ladder SMA	100.00%	0 BPS	LOCI	CES
Lord, Abbett & Co., LLC Convertibles MA	98.00%	0 BPS	LOA3	CES
Lord, Abbett & Co., LLC Convertibles MA	98.00%	0 BPS	LOC-C	Select UMA
Lord, Abbett & Co., LLC Core Plus Total Return	0.00%	0 BPS	LOA7	CES
Lord, Abbett & Co., LLC Core Plus Total Return	0.00%	0 BPS	LOA6	ICS
Lord, Abbett & Co., LLC HQ Barbell Muni SMA	100.00%	0 BPS	LOC9	CES
Lord, Abbett & Co., LLC HQ Barbell Muni SMA	100.00%	0 BPS	LOC-M	Select UMA
Lord, Abbett & Co., LLC HQ Int. Muni SMA	100.00%	0 BPS	LOA5	CES
Lord, Abbett & Co., LLC HQ Int. Muni SMA	100.00%	0 BPS	LOC-5	Select UMA
Lord, Abbett & Co., LLC Large Cap Value SMA	0.00%	0 BPS	LOA2	CES
Lord, Abbett & Co., LLC Limited Duration	0.00%	0 BPS	LOCJ	CES
Lord, Abbett & Co., LLC Limited Duration	1.00%	0 BPS	LOC-J	Select UMA

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Lord, Abbett & Co., LLC Multi-Cap Value SMA	0.00%	0 BPS	LOA4	CES
Lord, Abbett & Co., LLC Value Balanced - Taxable	0.00%	0 BPS	LOC-3	Select UMA
Lyrical Asset Management, L.P. U.S. Value Equity - CS	0.00%	0 CPS	LYR1	CES
M.D. Sass Concentrated Value	0.00%	0 CPS	MDS2	CES
MacKay Shields LLC Convertible	0.00%	0 CPS	MKY2	CES
MacKay Shields LLC Convertible Securities	89.00%	0 CPS	MKY-C	Select UMA
MacKay Shields LLC Core Investment Grade	0.00%	0 CPS	MKY1	CES
MacKay Shields LLC Fixed Income Intermediate	0.00%	0 CPS	MKY4	ICS
Madison Investment Advisors, LLC Active Intermediate Duration	100.00%	0 CPS	RHC-1	Select UMA
Madison Investment Advisors, LLC Active Intermediate Fixed Income	100.00%	0 CPS	RHC2	CES
Madison Investment Advisors, LLC Intermediate - Government Only	100.00%	0 CPS	MAD-2	Select UMA
Madison Investment Advisors, LLC Intermediate Corporate Bond	100.00%	0 CPS	MAD7	CES
Madison Investment Advisors, LLC Intermediate Corporate Bond	100.00%	0 CPS	MAV-F	Select UMA
Madison Investment Advisors, LLC Intermediate Fixed Income	100.00%	0 CPS	MDV-F	Select UMA
Madison Investment Advisors, LLC Intermediate Government Bond (MA)	100.00%	0 CPS	MAD8	CES
Madison Investment Advisors, LLC Intermediate Govt/Corp Bond	100.00%	0 CPS	MAD3	CES
Madison Investment Advisors, LLC Large Cap Equity	0.00%	0 CPS	MAD4	CES
Madison Investment Advisors, LLC Mid Cap Equity	0.00%	0 CPS	MAD5	CES
Manning & Napier Advisors, LLC Disciplined Value	0.00%	0 BPS	MAN4	ICS
Manning & Napier Advisors, LLC U.S. Core Equity	0.00%	0 BPS	MAN3	ICS
Mar Vista Investment Partners, LLC U.S. Quality	0.00%	0 CPS	MVS2	CES
MartinCurrie-FranklinTempletonRETAIL Emerging Mkts SMA	22.34%	0.724 CPS	MRE1	CES
MayTech Global Investments, LLC Global Growth Equity	0.00%	0 CPS	MGG1	CES
MetLife Investment Advisors, LLC Long Credit	100.00%	0 CPS	LOP2	CES
Metropolitan West Asset Management, LLC Core Plus Fixed Income	0.00%	0 CPS	MET4	CES
Metropolitan West Asset Management, LLC Intermediate Fixed Income	0.00%	0 CPS	MET2	CES
Metropolitan West Asset Management, LLC Low Duration	0.00%	0 CPS	MET3	CES
MFS Investment Management International Equity ADR	0.00%	0 BPS	MFS9	CES
MFS Investment Management Large Cap Growth (SMA)	0.00%	0 BPS	MFS7	CES
MFS Investment Management Large Cap Value (SMA)	0.00%	0 BPS	MFS5	CES
MFS Investment Management Mid Cap Growth (SMA)	0.00%	0 BPS	MFS8	CES
Miller/Howard Investments, Inc. Income-Equity Strategy (No MLPs)	0.00%	0 CPS	MLH2	CES
Miller/Howard Investments, Inc. Income-Equity Strategy with MLPs	0.00%	0 CPS	MLH5	CES
Miller/Howard Investments, Inc. Infrastructure	0.00%	0 CPS	MLH4	CES
Miller/Howard Investments, Inc. MLP & Midstream Energy Income	0.00%	0 CPS	MLH1	CES
Minneapolis Port. Mgmt. Group All Cap Value	0.00%	0 BPS	MIN2	CES
Model Delivery Select UMA Portfolio and Trading Solutions Executed Transactions*	11.00%	0.70 CPS		Select UMA
Mondrian Investment Partners Limited Intl ADR Eq-Mondrian (SMA)	0.00%	0 CPS	DCM2	CES
Morgan Stanley Investment Management AEA Enhanced Russell 1000	0.00%	0 CPS	GIS6	CES
MSIM Fixed Income Managed Solutions Intermediate Duration Municipal SMA	100.00%	0 CPS	MAFE	CES
MSIM Fixed Income Managed Solutions Laddered Municipal Intermediate SMA	100.00%	0 CPS	MAFF	CES
MSIM Fixed Income Managed Solutions Non-Resident Client Eligible Preferred SMA	100.00%	0 CPS	MAFU	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
MSIM Fixed Income Managed Solutions Preferred Securities (Custom) SMA	100.00%	0 CPS	MAFG	CES
MSIM Fixed Income Managed Solutions Preferred Securities SMA	100.00%	0 CPS	MAFC	CES
MSIM Fixed Income Managed Solutions Short Duration Municipal SMA	100.00%	0 CPS	MAFI	CES
MSIM Fixed Income Managed Solutions Short-Term Corporate Bond SMA	100.00%	0 CPS	MAFD	CES
Natixis Advisors, L.P. Tax Man Core Bal Strat	0.00%	0 CPS	NTX1	CES
Natixis Advisors, L.P. Tax Man Core Bal Strat	0.00%	0 CPS	NTX-1	Select UMA
Neuberger Berman Emerging Markets Equity	0.00%	0 CPS	NEUB	CES
Neuberger Berman International ADR (WRAP)	0.00%	0 CPS	NEU1	CES
Neuberger Berman Large Cap Value	0.00%	0 CPS	NEUC	CES
Neuberger Berman NB Dynamic Core	0.00%	0 CPS	NBR5	CES
Neuberger Berman Rachlin Energy Transition & Infra	0.00%	0 CPS	NBR3	CES
Neuberger Berman Rachlin Energy Transition Infra Plus	0.00%	0 CPS	NBR2	CES
Neuberger Berman S&P 500 Hedged Option Premium Strategy	0.00%	0 CPS	NBR1	CES
Neuberger Berman Small Cap Intrinsic Value (WRAP)	0.00%	0 CPS	NEU6	CES
Neuberger Berman Sustainable Equity	0.00%	0 CPS	NEU2	CES
Neuberger Berman The Rachlin Group - Income Plus	0.00%	0 CPS	NBR4	CES
New Century Advisors, LLC Global Inflation-linked Bond	0.00%	0 BPS	NNC2	ICS
New Century Advisors, LLC Short Duration Plus	0.00%	0 BPS	NNC4	CES
New Century Advisors, LLC Short Duration Plus	100.00%	0 BPS	NNC-4	Select UMA
New York Life Investment Management LLC Hedge Multi-Strgy Tracker ETF	0.00%	0 CPS	IIQ1	CES
NewSouth Capital Management, Inc. Small Cap Value Equity	0.00%	0 CPS	NWS2	ICS
NewSouth Capital Management, Inc. Small/Mid Value Equity	99.23%	0 CPS	NWS3	ICS
Newton Capital Management Dynamic Value	0.00%	0 BPS	MOL1	CES
Newton Capital Management Global Equity	0.00%	0 BPS	NEC2	CES
Newton Capital Management Global Equity Income ADR	0.00%	0 BPS	NEC3	CES
Newton Capital Management Global Natural Resources SMA	0.00%	0 BPS	MOL5	CES
Newton Capital Management International Equity	0.00%	0 BPS	NEC1	CES
Newton Capital Management Large Cap Growth	0.00%	0 BPS	MOL4	CES
Newton Capital Management Small-Mid Cap Growth	0.00%	0 BPS	MOL2	CES
Nia Impact Capital Global Solutions	0.00%	0 CPS	NPL1	CES
NorthCoast Asset Management CAN SLIM	0.00%	0 CPS	NMG1	CES
Nuance Investments, LLC Mid Cap Value	0.00%	0 CPS	NUA1	CES
Nuveen, a TIAA Company 1-10 Year Municipal Ladder	98.00%	1-10 BPS	NUV-1	Select UMA
Nuveen, a TIAA Company 1-15 Year Municipal Ladder	98.00%	1-10 BPS	NUV-2	Select UMA
Nuveen, a TIAA Company Dividend Growth	0.00%	0 BPS	CPT3	CES
Nuveen, a TIAA Company Dividend Value	0.00%	0 BPS	NUV3	CES
Nuveen, a TIAA Company Flexible Income SMA	0.00%	0 BPS	NUVA	CES
Nuveen, a TIAA Company Flexible Income SMA	0.00%	0 BPS	NUV-A	Select UMA
Nuveen, a TIAA Company Interm Gov/Credit FI	96.00%	1-5 BPS	NUVB	CES
Nuveen, a TIAA Company Interm Gov/Credit FI	96.00%	1-5 BPS	NUV-B	Select UMA
Nuveen, a TIAA Company Intermediate Gov/Credit FI	96.00%	1-5 BPS	NUV2	ICS
Nuveen, a TIAA Company Intermediate Term Municipal HQ MA	98.00%	1-10 BPS	NVE9	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Nuveen, a TIAA Company Intermediate Term Municipal HQ MA	98.00%	1-10 BPS	NVE-M	Select UMA
Nuveen, a TIAA Company International Value (ADR)	0.00%	0 BPS	TGI1	CES
Nuveen, a TIAA Company International Value Equity	0.00%	0 BPS	TGI4	CES
Nuveen, a TIAA Company Large Cap Value Balanced	0.00%	0 BPS	NWQ1	CES
Nuveen, a TIAA Company Large Cap Value Balanced	0.00%	0 BPS	NWQ-B	Select UMA
Nuveen, a TIAA Company Large Cap Value Opportunities	0.00%	0 BPS	NWQ2	CES
Nuveen, a TIAA Company Multi Cap Value	0.00%	0 BPS	NWQ3	CES
Nuveen, a TIAA Company Municipal Bond Ladder 10-25 Yr	98.00%	1-10 BPS	NUV-9	Select UMA
Nuveen, a TIAA Company Municipal Bond Ladder 10-25 Yr (MA)	98.00%	1-10 BPS	NUV9	CES
Nuveen, a TIAA Company Municipal Bond Ladder 1-10 Year (MA)	98.00%	1-10 BPS	NUV4	CES
Nuveen, a TIAA Company Municipal Bond Ladder 1-15 Year (MA)	98.00%	1-10 BPS	NUV5	CES
Nuveen, a TIAA Company Municipal Bond Ladder 1-7 Year	98.00%	1-10 BPS	NUV-7	Select UMA
Nuveen, a TIAA Company Municipal Bond Ladder 1-7 Year (MA)	98.00%	1-10 BPS	NUV7	CES
Nuveen, a TIAA Company Municipal Bond Ladder 5-15 Year	98.00%	1-10 BPS	NUV-8	Select UMA
Nuveen, a TIAA Company Municipal Bond Ladder 5-15 Year (MA)	98.00%	1-10 BPS	NUV8	CES
Nuveen, a TIAA Company Municipal Limited Maturity (MA)	98.00%	1-10 BPS	NVE8	CES
Nuveen, a TIAA Company Municipal Limited Maturity (MA)	98.00%	1-10 BPS	NUV-M	Select UMA
Nuveen, a TIAA Company Municipal Long Term (MA)	98.00%	1-10 BPS	NUV1	CES
Nuveen, a TIAA Company Municipal Long Term (MA)	98.00%	1-10 BPS	NVM-M	Select UMA
Nuveen, a TIAA Company Municipal Total Return	68.00%	1-10 BPS	NVE-5	Select UMA
Nuveen, a TIAA Company Municipal Total Return (MA)	68.00%	1-10 BPS	NVE6	CES
Nuveen, a TIAA Company Stable Growth	0.00%	0 BPS	CPT2	CES
Oak Ridge Investments, LLC All Cap Growth	0.00%	0 CPS	OKR2	CES
Oak Ridge Investments, LLC Small to Mid Cap Growth	0.00%	0 CPS	OKR1	CES
O'Shaughnessy Asset Management, LLC Enhanced Dividend	0.00%	0 CPS	OSH3	CES
O'Shaughnessy Asset Management, LLC Market Leaders Value	0.00%	0 CPS	OSH5	CES
O'Shaughnessy Asset Management, LLC Market Leaders Value	0.00%	0 CPS	OSH4	ICS
Pacific Income Advisers, Inc. Limited Duration	25.00%	0-1 BPS	PIA1	CES
Pacific Income Advisers, Inc. Limited Duration SMA	78.00%	0-1 BPS	PIF-F	Select UMA
Pacific Income Advisers, Inc. Market Duration (SMA)	91.00%	0-1 BPS	PIA2	CES
Pacific Income Advisers, Inc. Market Duration SMA	46.00%	0-1 BPS	PIA-F	Select UMA
Pacific Income Advisers, Inc. Moderate Duration MACS	97.00%	0-1 BPS	PIA3	CES
Pacific Income Advisers, Inc. Moderate Duration MACS	70.00%	0-1 BPS	PIA-1	Select UMA
Pacific Investment Mgmt. Co 1-12 Year National Muni Ladder MA	100.00%	0 CPS	PCOC	CES
Pacific Investment Mgmt. Co 1-12 Year National Muni Ladder MA	100.00%	0 CPS	PCO-C	Select UMA
Pacific Investment Mgmt. Co 1-18 Year National Muni Ladder MA	100.00%	0 CPS	PCOD	CES
Pacific Investment Mgmt. Co 1-18 Year National Muni Ladder MA	100.00%	0 CPS	PCO-D	Select UMA
Pacific Investment Mgmt. Co 1-6 Year National Muni Ladder MA	100.00%	0 CPS	РСОВ	CES
Pacific Investment Mgmt. Co 1-6 Year National Muni Ladder MA	100.00%	0 CPS	PCO-B	Select UMA
Pacific Investment Mgmt. Co 3-11 Yr National Muni Ladder	100.00%	0 CPS	PCO7	CES
Pacific Investment Mgmt. Co 3-11 Yr National Muni Ladder	100.00%	0 CPS	PCO-7	Select UMA
Pacific Investment Mgmt. Co 3-17 Yr National Muni Ladder	100.00%	0 CPS	PCO8	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Pacific Investment Mgmt. Co 3-17 Yr National Muni Ladder	100.00%	0 CPS	PCO-8	Select UMA
Pacific Investment Mgmt. Co Core Plus - Total Return Full Auth.	100.00%	0 CPS	PCO3	CES
Pacific Investment Mgmt. Co Corp Bond Ladder 1-3Y	100.00%	0 CPS	PCOK	CES
Pacific Investment Mgmt. Co Corp Bond Ladder 1-3Y	100.00%	0 CPS	PCO-K	Select UMA
Pacific Investment Mgmt. Co Corporate Bond Intermediate Ladder	100.00%	0 CPS	PCOH	CES
Pacific Investment Mgmt. Co Corporate Bond Intermediate Ladder	100.00%	0 CPS	PCO-H	Select UMA
Pacific Investment Mgmt. Co Corporate Bond Ladder 3-11 year	100.00%	0 CPS	PCOI	CES
Pacific Investment Mgmt. Co Corporate Bond Ladder 3-11 year	100.00%	0 CPS	PCO-I	Select UMA
Pacific Investment Mgmt. Co Corporate Bond Ladder 3-8 year	100.00%	0 CPS	PCOJ	CES
Pacific Investment Mgmt. Co Corporate Bond Ladder 3-8 year	100.00%	0 CPS	PCO-J	Select UMA
Pacific Investment Mgmt. Co Corporate Bond Short Ladder	100.00%	0 CPS	PCOG	CES
Pacific Investment Mgmt. Co Corporate Bond Short Ladder	100.00%	0 CPS	PCO-G	Select UMA
Pacific Investment Mgmt. Co International Bond USD-Hedged	100.00%	0 CPS	PCO1	CES
Pacific Investment Mgmt. Co Investment Grade Credit Strategy	100.00%	0 CPS	PCOE	CES
Pacific Investment Mgmt. Co Long-Term Credit Strategy	100.00%	0 CPS	PCOF	CES
Pacific Investment Mgmt. Co Muni Bond National Intermediate	100.00%	0 CPS	PCO6	CES
Pacific Investment Mgmt. Co Muni Bond National Intermediate	100.00%	0 CPS	PCO-1	Select UMA
Pacific Investment Mgmt. Co Muni Inc Opp 10% FI Shares	100.00%	0 CPS	PCOL	CES
Pacific Investment Mgmt. Co Muni Inc Opp 10% FI Shares	100.00%	0 CPS	PCO-L	Select UMA
Pacific Investment Mgmt. Co Muni Inc Opp 20% Fl Shares	100.00%	0 CPS	PCOM	CES
Pacific Investment Mgmt. Co Muni Inc Opp 20% Fl Shares	100.00%	0 CPS	PCO-M	Select UMA
Pacific Investment Mgmt. Co Muni Inc Opp 40% FI Shares	100.00%	0 CPS	PCON	CES
Pacific Investment Mgmt. Co Muni Inc Opp 40% FI Shares	100.00%	0 CPS	PCO-N	Select UMA
Pacific Investment Mgmt. Co Real Return for Managed Accounts	100.00%	0 CPS	PCO-6	Select UMA
Pacific Investment Mgmt. Co Real Return Managed Accounts	100.00%	0 CPS	PCO5	CES
Pacific Investment Mgmt. Co Total Return for Managed Accounts	100.00%	0 CPS	PCO-2	Select UMA
Pacific Investment Mgmt. Co Total Return MA	100.00%	0 CPS	PCO2	CES
PanAgora Asset Management, Inc. U.S. Small Cap Core Stock Selector	0.01%	0.699 BPS	PAA1	ICS
Parametric Portfolio Advisors LLC. Risk Managed Put Selling Program	0.00%	0 CPS	PPAO	CES
Parametric Portfolio Associates \$25 Preferred	100.00%	0 CPS	EVTE	CES
Parametric Portfolio Associates Calvert Intl ADR Tax Mngd by PPA	1.00%	0-0.005 CPS	PPMB	CES
Parametric Portfolio Associates Calvert Intl ADR Tax Mngd by PPA	1.00%	0-0.005 CPS	PPM-B	Select UMA
Parametric Portfolio Associates Capital Group Glob Eqty ADR TM by PPA	0.00%	0 CPS	PPM-N	Select UMA
Parametric Portfolio Associates Capital Group Intl Eqty SMA Cust by PPA	0.00%	0 CPS	PPM-C	Select UMA
Parametric Portfolio Associates Capital Group US Income and Growth by PPA	0.00%	0 CPS	PPM-A	Select UMA
Parametric Portfolio Associates CC Developed Intl ADR -TM	0.00%	0 CPS	PPA9	CES
Parametric Portfolio Associates CC US Broad Cap - TM	1.00%	0-0.005 CPS	PPA5	CES
Parametric Portfolio Associates CC US Large Cap - TM	1.00%	0-0.005 CPS	PPA7	CES
Parametric Portfolio Associates CC US SRI Broad Cap - TM	0.00%	0 CPS	PPA4	CES
Parametric Portfolio Associates Columbia Contrarian CoreTM by PPA	0.00%	0 CPS	PPM-Q	Select UMA
Parametric Portfolio Associates Columbia Dividend Income TM by PPA	0.00%	0 CPS	PPM-F	Select UMA
Parametric Portfolio Associates Columbia SCG Tax Mngd by PPA	0.00%	0 CPS	PPM-G	Select UMA

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Parametric Portfolio Associates Custom Core - S&P 500	1.00%	0-0.005 CPS	PPA-7	Select UMA
Parametric Portfolio Associates Custom Core Developed International Gender Lens	1.00%	0-0.005 CPS	PPAM	CES
Parametric Portfolio Associates Custom Core Developed International Gender Lens	0.00%	0 CPS	PPA-M	Select UMA
Parametric Portfolio Associates Custom Core Developed Intl Value ADR	0.00%	0 CPS	PPE-V	Select UMA
Parametric Portfolio Associates Custom Core Developed World ADR	1.00%	0-0.005 CPS	PPA-J	Select UMA
Parametric Portfolio Associates Custom Core Developed World Ex-U.S. ADR	0.00%	0 CPS	PPE-H	Select UMA
Parametric Portfolio Associates Custom Core Developed World Value ADR	0.00%	0 CPS	PPE-M	Select UMA
Parametric Portfolio Associates Custom Core EAFE ADR	0.00%	0 CPS	PPA-1	Select UMA
Parametric Portfolio Associates Custom Core Emerging Markets ADR	0.00%	0 CPS	PPAU	CES
Parametric Portfolio Associates Custom Core Global ADR	1.00%	0-0.005 CPS	PPA-C	Select UMA
Parametric Portfolio Associates Custom Core Global ex US ADR	1.00%	0-0.005 CPS	PPA-I	Select UMA
Parametric Portfolio Associates Custom Core KLD400	0.00%	0 CPS	PPA-4	Select UMA
Parametric Portfolio Associates Custom Core Midcap 400 Value	0.00%	0 CPS	PPE-X	Select UMA
Parametric Portfolio Associates Custom Core RU3000	1.00%	0-0.005 BPS	PPA-2	Select UMA
Parametric Portfolio Associates Custom Core Russell 2500	0.00%	0 CPS	PPE-U	Select UMA
Parametric Portfolio Associates Custom Core U.S. Broad 1500	0.00%	0 CPS	PPE-G	Select UMA
Parametric Portfolio Associates Custom Core U.S. Broad Cap Growth	0.00%	0 BPS	PPE-K	Select UMA
Parametric Portfolio Associates Custom Core U.S. Broad Cap Value	0.00%	0 CPS	PPE-I	Select UMA
Parametric Portfolio Associates Custom Core U.S. Large Cap Equal Weight	0.00%	0 CPS	PPE-L	Select UMA
Parametric Portfolio Associates Custom Core U.S. Large Cap Growth	0.00%	0 CPS	PPE-P	Select UMA
Parametric Portfolio Associates Custom Core U.S. Large Cap Value	0.00%	0 CPS	PPE-N	Select UMA
Parametric Portfolio Associates Custom Core U.S. Megacap	0.00%	0 CPS	PPE-Q	Select UMA
Parametric Portfolio Associates Custom Core U.S. Mid and Small Cap	0.00%	0 CPS	PPE-R	Select UMA
Parametric Portfolio Associates Custom Core U.S. Midcap Russell Midcap	0.00%	0 CPS	PPE-J	Select UMA
Parametric Portfolio Associates Custom Core U.S. Midcap Value	0.00%	0 CPS	PPE-O	Select UMA
Parametric Portfolio Associates Custom Core U.S. Small Cap 2000	0.00%	0 CPS	PPE-T	Select UMA
Parametric Portfolio Associates Custom Core U.S. Small Cap 600 Growth	0.00%	0 CPS	PPE-W	Select UMA
Parametric Portfolio Associates Custom Core U.S. Small Cap 600 Value	0.00%	0 CPS	PPE-S	Select UMA
Parametric Portfolio Associates Custom Core US Large Cap Gender Lens	0.00%	0 CPS	PPAK	CES
Parametric Portfolio Associates Custom Core US Large Cap Gender Lens	0.00%	0 CPS	PPA-K	Select UMA
Parametric Portfolio Associates Custom Core US Large Mid Cap Core	0.00%	0 CPS	PPA-G	Select UMA
Parametric Portfolio Associates Custom Core US Large-Mid Cap Growth	0.00%	0 CPS	PPA-H	Select UMA
Parametric Portfolio Associates Custom Core US Large-Mid Cap Value	0.00%	0 CPS	PPA-F	Select UMA
Parametric Portfolio Associates Custom Core US Mid Cap	0.00%	0 CPS	PPA-E	Select UMA
Parametric Portfolio Associates Custom Core US Small Cap	0.00%	0 CPS	PPA-D	Select UMA
Parametric Portfolio Associates Custom Multi-Asset Taxable (CES) 30/70	0.00%	0 CPS	PPM6	CES
Parametric Portfolio Associates Custom Multi-Asset Taxable (CES) 50/50	0.00%	0 CPS	PPM5	CES
Parametric Portfolio Associates Custom Multi-Asset Taxable (CES)70/30	0.00%	0 CPS	PPM4	CES
Parametric Portfolio Associates Custom Multi-Asset Tax Advantaged (CES)30/70	0.00%	0 CPS	PPM3	CES
Parametric Portfolio Associates Custom Multi-Asset Tax Advantaged (CES)50/50	0.00%	0 CPS	PPM2	CES
Parametric Portfolio Associates Custom Multi-Asset Tax Advantaged (CES)70/30	0.00%	0 CPS	PPM1	CES
Parametric Portfolio Associates Custom Passive Index	0.00%	0 CPS	PPA1	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Parametric Portfolio Associates Custom Russell 3000 / Int Ldr Corporate (60/40)	0.00%	0 CPS	PPE-8	Select UMA
Parametric Portfolio Associates Custom Russell 3000 / Interm Laddered Muni (60/40)	0.00%	0 CPS	PPE-5	Select UMA
Parametric Portfolio Associates Custom Russell 3000 / Short Laddered Muni (60/40)	0.00%	0 CPS	PPE-2	Select UMA
Parametric Portfolio Associates Custom S&P 500 / Short Laddered Muni (60/40)	0.00%	0 CPS	PPE-1	Select UMA
Parametric Portfolio Associates Custom S&P500 / Int Laddered Corporate (60/40)	0.00%	0 CPS	PPE-7	Select UMA
Parametric Portfolio Associates Custom S&P500/Intermediate Laddered Muni (60/40)	0.00%	0 CPS	PPE-4	Select UMA
Parametric Portfolio Associates Custom S&P500/MSCI EAFE ADR/Int Ldr Corp 30/30/40	0.00%	0 CPS	PPE-9	Select UMA
Parametric Portfolio Associates Custom SP500/MSCI EAFE ADR/Int Ldr Muni 30/30/40	0.00%	0 CPS	PPE-6	Select UMA
Parametric Portfolio Associates Custom SP500/MSCI EAFE ADR/Sht Ldr Muni 30/30/40	0.00%	0 CPS	PPE-3	Select UMA
Parametric Portfolio Associates Delta Shift Strategy	1.00%	0-0.005 CPS	PPM7	CES
Parametric Portfolio Associates Eaton Vance SC Tax Man by PPA	0.00%	0 CPS	PPM9	CES
Parametric Portfolio Associates Eaton Vance SC Tax Man by PPA	0.00%	0 CPS	PPM-9	Select UMA
Parametric Portfolio Associates Eaton Vance/Parametric Multi Cap MSP	0.00%	0 CPS	PPA8	CES
Parametric Portfolio Associates EatonVance LCVTaxManParametric	0.00%	0 CPS	PPM8	CES
Parametric Portfolio Associates EatonVance LCVTaxManParametric	0.00%	0 CPS	PPM-8	Select UMA
Parametric Portfolio Associates Enhanced Inc Core Tax-Adv	1.00%	0-0.005 CPS	PPAA	CES
Parametric Portfolio Associates Enhanced Income	1.00%	0-0.005 CPS	PPA3	CES
Parametric Portfolio Associates Enhanced Income Core	1.00%	0-0.005 CPS	PPAB	CES
Parametric Portfolio Associates Enhanced Income Tax-Adv	1.00%	0-0.005 CPS	PPA6	CES
Parametric Portfolio Associates Intermediate Laddered Muni	100.00%	0 CPS	MAF-F	Select UMA
Parametric Portfolio Associates Intermediate Municipal	100.00%	0 CPS	MAF-E	Select UMA
Parametric Portfolio Associates Jennison Glob Eqty Opport TM by PPA	0.00%	0 CPS	PPM-K	Select UMA
Parametric Portfolio Associates Jennison LCG Eqty Tax Mngd byPPA	0.00%	0 CPS	PPM-L	Select UMA
Parametric Portfolio Associates Jennison MCG Egty TM by PPA	0.00%	0 CPS	PPM-M	Select UMA
Parametric Portfolio Associates JPMorgan Equity Income Tax Mngd by PPA	0.00%	0 CPS	PPM-H	Select UMA
Parametric Portfolio Associates JPMorgan Intl Equity ADR Tax Mngd by PPA	0.00%	0 CPS	PPM-I	Select UMA
Parametric Portfolio Associates JPMorgan LCG Tax Mngd by PPA	0.00%	0 CPS	PPM-O	Select UMA
Parametric Portfolio Associates Lazard EM Eqty Select ADR TM by PPA	0.00%	0 CPS	PPM-J	Select UMA
Parametric Portfolio Associates Lazard Intl Eqty Select EM ADR TM by PPA	0.00%	0 CPS	PPM-P	Select UMA
Parametric Portfolio Associates Lazard US Equity Select TM byPPA	0.00%	0 CPS	PPM-R	Select UMA
Parametric Portfolio Associates Managed Municipal Intermediate	100.00%	0 CPS	EVT-A	Select UMA
Parametric Portfolio Associates Managed Preferred	100.00%	0 CPS	EVTD	CES
Parametric Portfolio Associates Managed Preferred	100.00%	0 CPS	EVT-D	Select UMA
Parametric Portfolio Associates Managed Short Duration Corporate	100.00%	0 CPS	EVTB	CES
Parametric Portfolio Associates Managed Short Duration Corporate	100.00%	0 CPS	EVT-B	Select UMA
Parametric Portfolio Associates Morgan Stanley Investment Management Managed Municipal Intermediate	100.00%	0 CPS	EVTA	CES
Parametric Portfolio Associates MS Glob Franch Tax Mngd by PPA	0.00%	0 CPS	PPMD	CES
Parametric Portfolio Associates MS Glob Franch Tax Mngd by PPA	0.00%	0 CPS	PPM-D	Select UMA
Parametric Portfolio Associates MS Intl Resili Tax Mngd by PPA	0.00%	0 CPS	PPME	CES
Parametric Portfolio Associates MS Intl Resili Tax Mngd by PPA	0.00%	0 CPS	PPM-E	Select UMA
Parametric Portfolio Associates NRC Eligible Preferred	100.00%	0 CPS	MAF-U	Select UMA
Parametric Portfolio Associates NRC Preferred	100.00%	0 CPS	EVTF	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Parametric Portfolio Associates NRC Preferred	100.00%	0 CPS	EVT-F	Select UMA
Parametric Portfolio Associates Preferred Securities (Custom)	100.00%	0 CPS	MAF-G	Select UMA
Parametric Portfolio Associates Short Duration Municipal	100.00%	0 CPS	MAF-I	Select UMA
Parametric Portfolio Associates Short Term Corporate Bond	100.00%	0 CPS	MAF-D	Select UMA
Parametric Portfolio Associates Stock Delta Shift	1.00%	0-0.005 CPS	PPAC	CES
Parametric Portfolio Associates TABS Managed Municipal Intermediate	100.00%	0 CPS	EVM-M	Select UMA
Parametric Portfolio Associates TABS Managed Municipal Long	100.00%	0 CPS	ETV-M	Select UMA
Parametric Portfolio Associates TABS Managed Municipal Short	100.00%	0 CPS	EAT-M	Select UMA
Parametric Portfolio Associates TABS Municipal Ladder Intermediate	100.00%	0 CPS	EAT-4	Select UMA
Parametric Portfolio Associates TABS Municipal Ladder Long	100.00%	0 CPS	EAT-5	Select UMA
Parametric Portfolio Associates TABS Municipal Ladder Short	100.00%	0 CPS	EAT-6	Select UMA
Parametric Portfolio Associates TABS Total Return Intermediate	100.00%	0 CPS	EAT-3	Select UMA
Parametric Portfolio Associates TABS Total Return Limited	100.00%	0 CPS	EAT-2	Select UMA
Parametric Portfolio Associates TABS Total Return Long	100.00%	0 CPS	EAT-1	Select UMA
Parametric Portfolio Associates Tax Harvest Core US Broad Cap	1.00%	0-0.005 CPS	PPAN	CES
Parametric Portfolio Associates Tax Harvest Core US Broad Cap	1.00%	0-0.005 CPS	PPA-N	Select UMA
Parametric Portfolio Associates Tax Harvest Core US Large Cap	1.00%	0-0.005 CPS	PPAL	CES
Parametric Portfolio Associates Tax Harvest Core US Large Cap	1.00%	0-0.005 CPS	PPA-L	Select UMA
Parametric Portfolio Associates Tax Optimized Ladder Intermediate	100.00%	0 CPS	PPAV	CES
Parametric Portfolio Associates Tax Optimized Ladder Intermediate	100.00%	0 CPS	PPA-V	Select UMA
Parametric Portfolio Associates Tax Optimized Ladder Short	100.00%	0 CPS	PPAY	CES
Parametric Portfolio Associates Tax Optimized Ladder Short	100.00%	0 CPS	PPA-X	Select UMA
Parametric Portfolio Associates TaxEff All Eq	1.00%	0-0.005 CPS	PPA-O	Select UMA
Parametric Portfolio Associates TaxEff BalGrow	0.00%	0 CPS	PPA-Q	Select UMA
Parametric Portfolio Associates TaxEff Income	0.00%	0 CPS	PPE-F	Select UMA
Parametric Portfolio Associates TaxEff MktGrow	1.00%	0-0.050 CPS	PPA-P	Select UMA
Parametric Portfolio Associates TaxEff Mod1 HM	0.00%	0 CPS	PPE-D	Select UMA
Parametric Portfolio Associates TaxEff Mod2 HM	0.00%	0 CPS	PPE-C	Select UMA
Parametric Portfolio Associates TaxEff OppGrow	1.00%	0 CPS	PPE-B	Select UMA
Parametric Portfolio Associates TaxEff W-Consv	0.00%	0 CPS	PPE-A	Select UMA
Parametric Portfolio Associates U.S. Corporate Ladder Intermediate	100.00%	0 CPS	EAT-B	Select UMA
Parametric Portfolio Associates U.S. Corporate Ladder Short	100.00%	0 CPS	EAT-A	Select UMA
Parametric Portfolio Associates U.S. Treasury Ladder 1-12 Month	100.00%	0 CPS	PPAR	CES
Parametric Portfolio Associates U.S. Treasury Ladder 1-12 Month	100.00%	0 CPS	PPA-R	Select UMA
Parametric Portfolio Associates U.S. Treasury Ladder 1-24 Month	100.00%	0 CPS	PPAS	CES
Parametric Portfolio Associates U.S. Treasury Ladder 1-24 Month	100.00%	0 CPS	PPA-S	Select UMA
Parametric Portfolio Associates U.S. Treasury Ladder 1-5 Year	100.00%	0 CPS	PPAT	CES
Parametric Portfolio Associates U.S. Treasury Ladder 1-5 Year	100.00%	0 CPS	PPA-T	Select UMA
Patient Capital Management, LLC Opportunity Equity SMA	0.00%	0 CPS	MIL1	CES
Penn Capital Management Capital Mid Cap Equity	0.00%	0 CPS	PNN4	CES
Penn Capital Management Capital Opportunistic HY	0.00%	0 CPS	PNN1	CES
Penn Capital Management Small Cap Equity	0.00%	0 CPS	PNN2	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Penn Capital Management Small to Mid Cap Equity	0.00%	0 CPS	PNN	CES
PGIM Custom Harvest Global Equity Plus	0.00%	0 BPS	PCR2	CES
PGIM Custom Harvest Global Equity Plus	0.00%	0 BPS	PCR-3	Select UMA
PGIM Custom Harvest US Equity Plus	0.00%	0 BPS	PCR1	CES
PGIM Custom Harvest US Equity Plus	0.00%	0 BPS	PCR-1	Select UMA
PineBridge Investments US High Yield Bond Strtgy	0.00%	0 CPS	PNE1	CES
Pinnacle Associates Ltd Small/Mid Cap Equity	0.00%	0 CPS	PIN1	CES
Polen Capital Management, LLC Focus Growth	0.00%	0 BPS	POL1	CES
Polen Capital Management, LLC Global Growth ADR	0.00%	0 BPS	POL2	CES
Polen Capital Management, LLC International Growth ADR	0.00%	0 BPS	POL3	CES
Polen Capital Management, LLC U.S. Small Company Growth	0.00%	0 BPS	POL4	CES
Principal Global Equities Equity SMA	0.00%	0 CPS	PGI5	CES
Principal Global Equities U.S. Blue Chip Equity	0.00%	0 CPS	PGI6	CES
Principal Global Investors LLC Liability Driven Investing	100.00%	0 CPS	PGI7	CES
Principal Real Estate Investors Real Estate Equity Securities SMA	0.00%	0 CPS	PGI1	CES
Putnam Investment Management LLC Ultra Short Duration Income	70.00%	0 BPS	PTN3	CES
Putnam Investment Management LLC Ultra Short Duration Income	70.00%	0 BPS	PTN-3	Select UMA
Putnam Investment Management, LLC Sustainable Leaders	0.00%	0 CPS	PTN1	CES
Putnam Investment Management, LLC US Large Cap Value Equity Concentrated	0.00%	0 CPS	PTN2	CES
Pzena Investment Management, LLC International Value ADR	0.00%	0 BPS	PZE2	CES
Ramirez Asset Management Core Strategy	100.00%	0 BPS	RME1	CES
Ramirez Asset Management Core Strategy	100.00%	0 BPS	RME-1	Select UMA
Ramirez Asset Management Emerging Markets ADR	0.00%	0 BPS	TMS1	CES
Ramirez Asset Management Intermediate Strategy	100.00%	0 BPS	RME3	CES
Ramirez Asset Management Intermediate Strategy	100.00%	0 BPS	RME-3	Select UMA
Ramirez Asset Management International ADR	0.00%	0 BPS	TMS2	CES
Ramirez Asset Management Long Duration Strategy	100.00%	0 BPS	RME2	CES
Ramirez Asset Management Long Duration Strategy	100.00%	0 BPS	RME-2	Select UMA
Ramirez Asset Management Strategic Core	100.00%	0 BPS	RME4	CES
Ramirez Asset Management Strategic Core	100.00%	0 BPS	RME-4	Select UMA
Reinhart Partners, LLC Genesis Private Market Value SMA	0.00%	0 CPS	RHC3	CES
Reinhart Partners, LLC Mid Cap Private Market Value Equity	0.00%	0 CPS	RHC1	CES
Renaissance Investment Management International Equity ADR- Wrap (MA)	0.00%	0 CPS	REN2	CES
Renaissance Investment Management Large Cap Growth - Wrap (MA)	0.00%	0 CPS	REN1	CES
Reynders, McVeigh Capital Mgmt., LLC Global Sustainable Focused Core Equity	100.00%	0.029 CPS	REY1	ICS
Rice, Hall, James & Associates Micro Cap Equity	0.00%	0 BPS	RHJ4	CES
Rice, Hall, James & Associates Micro Cap Growth	0.00%	0 BPS	RHJ3	ICS
Rice, Hall, James & Associates Micro Cap Opportunities	0.00%	0 BPS	RHJ5	CES
Rice, Hall, James & Associates Small Cap Growth Equity	0.00%	0 BPS	RHJ1	ICS
Rice, Hall, James & Associates Small Cap Opportunities	0.00%	0 BPS	RHJ6	CES
Rice, Hall, James & Associates SMID Cap Growth	0.00%	0 BPS	RHJ2	ICS
Rice, Hall, James & Associates SMID Cap Opportunities	0.00%	0 BPS	RHJ7	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Richard Bernstein Advisors Core Plus Total Return ETF Strategy	0.00%	0 CPS	RBS3	CES
Richard Bernstein Advisors Global Equity ETF	0.00%	0 CPS	RBS2	CES
Richard Bernstein Advisors Risk-Bal Glbl ETF Strategy MA	0.00%	0 CPS	RBS1	CES
Riverbridge Partners, LLC All Cap Growth	0.00%	0 CPS	RIV5	CES
Riverbridge Partners, LLC Small Cap Growth	0.00%	0 CPS	RIV1	CES
Riverbridge Partners, LLC SMID Cap Growth	0.00%	0 CPS	RIV3	CES
Riverfront Investment Group, LLC Dynamic Equity Income	0.00%	0 CPS	RVG5	CES
Riverfront Investment Group, LLC Global Allocation	79.81%	0-0.50 CPS	RVG3	CES
Riverfront Investment Group, LLC Global Growth	0.00%	0 CPS	RVG2	CES
Riverfront Investment Group, LLC Moderate Growth & Income	39.15%	0 CPS	RVG4	CES
RNC Genter Capital Management Taxable Quality Short-Term Fixed Income	100.00%	0 BPS	RNC1	ICS
Royce & Associates-Franklin Templeton RETAIL Premier SMA	0.00%	0 CPS	RYC1	CES
Royce & Associates-Franklin Templeton RETAIL Small-Cap Total Return	0.00%	0 CPS	RYC2	CES
RSW Investments, LLC Market Duration Muni	100.00%	0 BPS	RSW-1	Select UMA
RSW Investments, LLC Market Duration Tax-Exempt Bond	100.00%	0 BPS	RSW1	CES
Sage Advisory Services, Ltd. Co. Core Government Credit Fixed In	100.00%	0 CPS	SGE1	CES
Sage Advisory Services, Ltd. Co. Core Taxable Fixed Income	100.00%	0 CPS	SAG-1	Select UMA
Sage Advisory Services, Ltd. Co. Intermediate Corporate Only	100.00%	0 CPS	SGE-2	Select UMA
Sage Advisory Services, Ltd. Co. Intermediate Term Corporate	100.00%	0 CPS	SGE8	CES
Sage Advisory Services, Ltd. Co. Intermediate Term Fixed Income	100.00%	0 CPS	SGE2	CES
Sage Advisory Services, Ltd. Co. Intermediate Term Fixed Income	100.00%	0 CPS	SGS-F	Select UMA
Sage Advisory Services, Ltd. Co. Long Duration LDI ( 10+ Years)	100.00%	0 CPS	SGEA	CES
Sage Advisory Services, Ltd. Co. Short Term Fixed Income	100.00%	0 CPS	SGE3	CES
Sage Advisory Services, Ltd. Co. Short Term Fixed Income	100.00%	0 CPS	SGE-F	Select UMA
Sage Advisory Services, Ltd. Co. Sustainable Enhanced Cash Management Fixed Income Strategy	100.00%	0 CPS	SAG2	CES
Sage Advisory Services, Ltd. Co. Sustainable Enhanced Cash Management Fixed Income Strategy	100.00%	0 CPS	SAG-2	Select UMA
Sage Advisory Services, Ltd. Co. Sustainable Short Term Fixed Income Strategy	100.00%	0 CPS	SGA1	CES
Sage Advisory Services, Ltd. Co. Sustainable Short Term Fixed Income Strategy	100.00%	0 CPS	SGA-1	Select UMA
Sagewood Asset Management LLC Volatility Yield	0.00%	0 CPS	SGW1	CES
Sands Capital Management, LLC Select Growth Equity	0.00%	0 CPS	SNS1	CES
Sawgrass Asset Management, LLC Large Cap Quality Growth Equity	0.00%	0 CPS	SWG2	CES
Schafer Cullen Capital Management Emerging Market High Dividend	0.00%	0 CPS	SCC4	CES
Schafer Cullen Capital Management Enhanced Equity Income	0.00%	0 CPS	SCC6	CES
Schafer Cullen Capital Management Enhanced Equity Income -CES	0.00%	0 CPS	SCC5	ICS
Schafer Cullen Capital Management High Dividend Value Equity	0.00%	0 CPS	SCC3	CES
Schafer Cullen Capital Management International High Dividend Val. ADR	0.00%	0 CPS	SCC1	CES
Scharf Investments, LLC Instl Large Cap Equity	0.00%	0 BPS	SID1	CES
Schroders International Alpha	0.00%	0 BPS	WER1	CES
Segall Bryant & Hamill All Cap	0.00%	0 BPS	SEG2	CES
Segall Bryant & Hamill Core Fixed Income	85.00%	0 BPS	SEG8	CES
Segall Bryant & Hamill Core Fixed Income	85.00%	0 BPS	SEG-8	Select UMA
Segall Bryant & Hamill Core Fixed Income	100.00%	0 BPS	SEG3	ICS

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Segall Bryant & Hamill High Yield Fixed Income	0.00%	0 BPS	DEV1	ICS
Segall Bryant & Hamill Intermediate Fixed Income	37.00%	0 BPS	SEG5	ICS
Segall Bryant & Hamill Intermediate Fixed Income	40.00%	0 BPS	SEG7	CES
Segall Bryant & Hamill Intermediate Fixed Income	40.00%	0 BPS	SEG-7	Select UMA
Segall Bryant & Hamill Quality High Yield Fixed Income	95.00%	0 BPS	SEG6	CES
Segall Bryant & Hamill Quality High Yield Fixed Income	25.00%	0 BPS	SEG-6	Select UMA
Segall Bryant & Hamill Short Term Fixed Income	36.60%	0 BPS	SEG4	ICS
Segall Bryant & Hamill Short Term Fixed Income	95.00%	0 BPS	SEG9	CES
Segall Bryant & Hamill Short Term Fixed Income	95.00%	0 BPS	SEG-9	Select UMA
Segall Bryant & Hamill SMID Cap	0.00%	0 BPS	SEG1	CES
Seix Investment Advisors Core Bond	100.00%	0 BPS	SIF-F	Select UMA
Seix Investment Advisors Core Bond SMA	100.00%	0 BPS	SIX7	CES
Seix Investment Advisors High Quality High Yield	100.00%	0 BPS	SIX9	CES
Seix Investment Advisors High Quality High Yield	100.00%	0 BPS	SIX-H	Select UMA
Seizert Capital Partners Core-Equity-ICS	0.00%	0 BPS	SZR2	ICS
Shapiro Capital Management Co. All Cap Value	0.00%	0 CPS	SPC1	CES
Sheets Smith Investment Mgmt., LLC Absolute Return Balanced Portfolio	0.00%	0 CPS	SSA1	CES
Silvercrest Asset Mgmt. Group LLC U.S. Small Cap Value	0.00%	0 CPS	SIL1	CES
Silvercrest Asset Mgmt. Group LLC U.S. SMID Value	0.00%	0 CPS	SIL4	CES
Sit Investment Associates, Inc. Municipal Short Duration	0.00%	0 BPS	SIZ1	ICS
Sit Investment Associates, Inc. Short Duration	100.00%	0 BPS	SIZ3	CES
Smead Capital Management, INC. US Value Strategy	0.00%	0 CPS	SMD1	CES
Smith Asset Management Group Large Cap Focused	0.00%	0 CPS	SMG1	CES
Spectrum Asset Mgmt. Preferred Securities	60.00%	0 CPS	PGI3	CES
Spectrum Asset Mgmt. Tax Advantage SMA	0.00%	0 CPS	PGI4	CES
SpiderRock Advisors LLC Hedged Equity Concentrated Stock Call Writing Overlay Strategy	0.00%	0 CPS	SRA1	CES
Sterling Capital Management Mid Cap Value SMA	0.00%	0 CPS	SCM1	CES
Stonebridge Advisors LLC StandardTaxable Preferred Securities	39.11%	0 CPS	STG2	CES
Stonebridge Advisors LLC Tax-Advantaged Preferred Securities	38.35%	0 CPS	STG4	CES
Sun Life Capital Management Intermediate Gov/Credit	100.00%	0 CPS	RLI1	CES
Sun Life Capital Management LDI Extended Duration	100.00%	0 CPS	RLI2	CES
Sun Life Capital Management Short Duration Gov/Credit	100.00%	0 CPS	RLI3	CES
Sun Life Capital Management SLC Mgmt. U. S. Long Credit	100.00%	0 CPS	RLI6	CES
Sustainable Growth Advisers, LP U.S. Large Cap Growth	0.00%	0 BPS	SGC1	CES
Systematic Financial Management, L.P Small Cap Free Cash Flow	0.00%	0 CPS	SYS1	CES
T. Rowe Price International Core Equity SMA	0.00%	0 CPS	TRR2	CES
T. Rowe Price US Blue Chip Growth Equity SMA	0.00%	0 CPS	TRR1	CES
Tandem Investment Advisors, Inc. Large Cap Core Wrap	9.19%	1 CPS	TNI1	CES
TCW Balanced - Managed Accounts	0.00%	0 CPS	TCA5	CES
TCW Balanced Managed Accounts	0.00%	0 CPS	TCW-B	Select UMA
TCW Concentrated Large Cap Growth	0.00%	0 CPS	TCA8	CES
TCW Relative Value Large Cap	0.00%	0 CPS	TCA4	CES

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
TCW Relative Value Mid Cap	0.00%	0 CPS	TCA2	CES
The Ithaka Group, LLC Growth Portfolio	0.00%	0 CPS	IHK1	ICS
The Ithaka Group, LLC US Large-Cap Growth Strategy	0.00%	0 CPS	IHK2	CES
The London Company of Virginia, LLC Income Equity	0.00%	0 CPS	LND3	CES
The London Company of Virginia, LLC Mid Cap	0.00%	0 CPS	LND4	CES
The London Company of Virginia, LLC Small Cap	0.00%	0 CPS	LND1	CES
The London Company of Virginia, LLC SMID	0.00%	0 CPS	LND2	CES
ThomasPartners Inc. Dividend Growth Strategy K-1	40.29%	0-1 CPS	TPZ3	CES
ThomasPartners Inc. Dividend Growth Strategy Non K-1	40.29%	0-1 CPS	TPZ1	CES
Thompson, Siegel & Walmsley LLC Mid Cap Value	0.00%	0 CPS	TSW3	CES
Thompson, Siegel & Walmsley LLC Small/Mid (SMID) Cap Value	0.00%	0 CPS	TSW4	CES
Thornburg Investment Management, Inc Emerging Markets ADR	0.00%	0 CPS	THI5	CES
Thornburg Investment Management, Inc International ADR Strategy	0.00%	0 CPS	THI2	CES
Thornburg Investment Management, Inc Intl Equity Strategy	0.00%	0 CPS	THI1	CES
Thornburg Investment Management, Inc Intl Growth ADR Strategy	0.00%	0 CPS	THI4	CES
Thornburg Investment Management, Inc Limited Term Municipal SMA	100.00%	0 CPS	THI-6	Select UMA
Thornburg Investment Management, Inc Term Muni Strategy	100.00%	0 CPS	THI3	CES
Todd Asset Management LLC International Intrinsic Value	0.00%	0 CPS	TOD1	CES
Todd Asset Management LLC Large Cap Intrinsic Value	0.00%	0 CPS	TOD2	CES
Tortoise Capital Advisors, LLC Midstream MLP Separate Acct	100.00%	0 CPS	TCZ1	ICS
Tortoise Capital Advisors, LLC Midstream MLP SMA	100.00%	0 CPS	TCZ2	ICS
Trillium Asset Management LLC ESG Large Cap Core	0.00%	0 CPS	TAM1	CES
Trillium Asset Management LLC ESG Small/Mid Cap Core	0.00%	0 CPS	TAM3	CES
Trillium Asset Management LLC Large Cap Core w/Catholic Values	0.00%	0 CPS	TAM2	CES
Uniplan Investment Counsel REIT Portfolio	0.00%	0 CPS	UNI2	CES
Vaughan Nelson Investment Management Small Capitalization Value	0.00%	0 CPS	VNVM	CES
Vaughan Nelson Investment Management Value Opportunity	0.00%	0 CPS	VNVA	ICS
Victory Capital Management Inc. Diversified Equity	0.00%	0 CPS	SPR2	CES
Victory Capital Management Inc. Income Investors IG Conv SMA	0.00%	0 CPS	SPR3	CES
Victory Capital Management Inc. Investment Gr Conv Sec SMA	0.00%	0 CPS	SPR-C	Select UMA
Victory Capital Management Inc. THB Small Cap Core Equity	0.00%	0 CPS	SPR5	CES
Virtus/NFJ Dividend Value MA	0.00%	0 CPS	NFJ2	CES
Virtus/NFJ Mid-Cap Value SMA	0.00%	0 CPS	NFJ8	CES
Voya Investment Management Co., LLC. Core Plus Fixed Income	15.00%	0 CPS	FSCL	CES
Voya Investment Management Co., LLC. Core Plus Fixed Income SMA	15.00%	0 CPS	FSC-L	Select UMA
Voya Investment Management Co., LLC. Corporate Leaders 100 SMA	0.00%	0 CPS	FSCB	CES
Voya Investment Management Co., LLC. Enhanced Yield Fixed Income	38.00%	0 CPS	FSC-1	Select UMA
Voya Investment Management Co., LLC. Enhanced Yield Fixed Income SMA	38.00%	0 CPS	FSCK	CES
Voya Investment Management Co., LLC. High Yield SMA	13.00%	0 CPS	FSC4	CES
Voya Investment Management Co., LLC. High Yield SMA	13.00%	0 CPS	INH-H	Select UMA
Voya Investment Management Co., LLC. Intermediate Fixed Income SMA	46.00%	0 CPS	FSC5	CES
Voya Investment Management Co., LLC. Intermediate Fixed Income SMA	46.00%	0 CPS	FSC-F	Select UMA

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
Voya Investment Management Co., LLC. Large Cap Core Growth	0.00%	0 CPS	FSCC	CES
Voya Investment Management Co., LLC. Large Cap Value	0.00%	0 CPS	FSCN	CES
Walden Asset Management SMID Cap Equity	95.00%	0 CPS	WLM3	ICS
Walter Scott & Partners Limited International Stock ADR	0.00%	0 BPS	MOL3	CES
Waycross Partners Focused Core Equity SMA	100.00%	2.5-3 CPS	WYC1	ICS
WCM Investment Management Focused Growth International	0.00%	0 CPS	WCM4	ICS
WCM Investment Management Focused Intil Gr	0.00%	0 CPS	WCM2	CES
Weaver C. Barksdale & Associates Inc Core Agg Control Rsk	100.00%	0 CPS	WCB-1	Select UMA
Weaver C. Barksdale & Associates Inc Core Controlled Risk Fixed	100.00%	0 CPS	WCB1	CES
Weaver C. Barksdale & Associates Inc Diversified Value	0.00%	0 CPS	WCB5	CES
Weaver C. Barksdale & Associates Inc Intermediate	100.00%	0 CPS	WCB-4	Select UMA
Weaver C. Barksdale & Associates Inc Intermediate Fixed	100.00%	0 CPS	WCB4	CES
Weaver C. Barksdale & Associates Inc Short Cntrlled Risk Fixed	100.00%	0 CPS	WCB3	CES
Weaver C. Barksdale & Associates Inc Short Control Risk	100.00%	0 CPS	WCB-3	Select UMA
WEDGE Capital Management, L.L.P. Core- Aggregate Fixed Portfolio	100.00%	0 CPS	WED3	CES
WEDGE Capital Management, L.L.P. Core- Aggregate Fixed Portfolio	100.00%	0 CPS	WED5	CES
WEDGE Capital Management, L.L.P. QVM Large Cap Value	0.00%	0 CPS	WED1	CES
WEDGE Capital Management, L.L.P. QVM Large Cap Value	0.00%	0 CPS	WED4	ICS
Wellington Management Company LLP US Research Equity	0.00%	0 BPS	WIG1	CES
WestEnd Advisors Global Balanced	0.00%	0 CPS	WEA3	CES
WestEnd Advisors Global Equity	0.00%	0 CPS	WEA2	CES
WestEnd Advisors Large-Cap Core Equity	0.00%	0 CPS	WEA1	CES
WestEnd Advisors U.S. Sector	0.00%	0 CPS	WEA5	CES
WesternAsset-FranklinTempletonRETAIL Act. Bond Gov/Corp SMA	98.00%	0 CPS	WTM9	CES
WesternAsset-FranklinTempletonRETAIL Active Bond Aggreg SMA	98.00%	0 CPS	SBB	CES
WesternAsset-FranklinTempletonRETAIL Active Bond Aggregate	98.00%	0 CPS	WTM-B	Select UMA
WesternAsset-FranklinTempletonRETAIL Active Bond Gov-Corp	98.00%	0 CPS	WTM-D	Select UMA
WesternAsset-FranklinTempletonRETAIL Core Bond SMA	98.00%	0 CPS	WTM2	CES
WesternAsset-FranklinTempletonRETAIL Core Plus Portfolios	98.00%	0 CPS	WTM-A	Select UMA
WesternAsset-FranklinTempletonRETAIL Core Plus SMA	98.00%	0 CPS	WTM1	CES
WesternAsset-FranklinTempletonRETAIL Core Portfolios	98.00%	0 CPS	WTM-9	Select UMA
WesternAsset-FranklinTempletonRETAIL Corp Bond Ladders 1-10	98.00%	0 CPS	WTMF	CES
WesternAsset-FranklinTempletonRETAIL Corp Bond Ladders 1-10	98.00%	0 CPS	WTM-F	Select UMA
WesternAsset-FranklinTempletonRETAIL Corp Bond Ladders 1-5	98.00%	0 CPS	WTME	CES
WesternAsset-FranklinTempletonRETAIL Corp Bond Ladders 1-5	98.00%	0 CPS	WTM-E	Select UMA
WesternAsset-FranklinTempletonRETAIL CurrentMarket Muni SMA	98.00%	0 CPS	WTM4	CES
WesternAsset-FranklinTempletonRETAIL CurrentMarket Muni SMA	98.00%	0 CPS	WSN-M	Select UMA
WesternAsset-FranklinTempletonRETAIL Enhanced Cash SMA	98.00%	0 CPS	WEC	CES
WesternAsset-FranklinTempletonRETAIL Govt/Corp SMA	98.00%	0 CPS	SAA	CES
WesternAsset-FranklinTempletonRETAIL GSM 3 Year Portfolio	98.00%	0 CPS	WTM-4	Select UMA
WesternAsset-FranklinTempletonRETAIL GSM 3-Year SMA	98.00%	0 CPS	SAT	CES
WesternAsset-FranklinTempletonRETAIL GSM 5 Year Portfolio	98.00%	0 CPS	WTM-2	Select UMA

Product	Dollar-Weighted percentage of MSSB client step-out trades for the investment strategy	Average additional trading related costs included in net price for trades executed away from MSSB (cents per share or basis points)	Manager Code	Advisory Program
WesternAsset-FranklinTempletonRETAIL GSM 5-Year SMA	98.00%	0 CPS	SAF	CES
WesternAsset-FranklinTempletonRETAIL GSM 7 Year Portfolio	98.00%	0 CPS	WRN-F	Select UMA
WesternAsset-FranklinTempletonRETAIL GSM 7-Year SMA	98.00%	0 CPS	WTM6	CES
WesternAsset-FranklinTempletonRETAIL GSM Gov/Corp	98.00%	0 CPS	SAL-A	Select UMA
WesternAsset-FranklinTempletonRETAIL Managed Muni SMA	98.00%	0 CPS	WTMG	CES
WesternAsset-FranklinTempletonRETAIL Managed Muni SMA	98.00%	0 CPS	WTM-G	Select UMA
WesternAsset-FranklinTempletonRETAIL Short Term Municipal Fixed Income	98.00%	0 CPS	WTM-6	Select UMA
WesternAsset-FranklinTempletonRETAIL ShortTerm MunicipalSMA	98.00%	0 CPS	WTMA	CES
WesternAsset-FranklinTempletonRETAIL US Core Plus	0.00%	0 CPS	WTMC	CES
WesternAsset-FranklinTempletonRETAIL US Long Duration/LDI	0.00%	0 CPS	WTMH	CES
Westfield Capital Management Co, LP All Cap Growth Equity	85.34%	0 CPS	WES4	ICS
Westfield Capital Management Co, LP Large Cap Growth Equity	78.82%	0 CPS	WES3	CES
Westfield Capital Management Co, LP Mid Cap Growth Equity	0.00%	0 CPS	WES5	CES
Westfield Capital Management Co, LP Small Cap Growth Equity	87.02%	0 CPS	WES2	CES
Westfield Capital Management Co, LP Small/Mid CapGrowth Equity	76.53%	0 CPS	WES1	CES
Westwood Management Corp MLP Separate Account	0.00%	0 CPS	FWM2	CES
Westwood Management Corporation SmallCap Value	0.00%	0 CPS	WWD3	CES
Westwood Management Corporation Tactical Growth	0.00%	0 CPS	BDK1	CES
Winslow Capital Management, LLC. U.S. Large Cap Growth	0.00%	0 BPS	WIN1	CES
Zacks Investment Management, Inc. All Cap Core Strategy	0.00%	0 CPS	ZAK1	CES
Ziegler Capital Management Large Cap Growth Equity	0.00%	0 CPS	RGG2	CES
Ziegler Capital Management Small Cap Core	0.00%	0 CPS	MVP1	CES

<sup>\*</sup>These numbers are based on a manual estimate of number of shares typically traded away, for example ADRs, by the UMA Trading Desk.