



PIOS[®] (Policy Implementation Overlay Service)

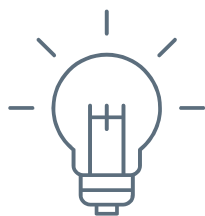
Third Quarter 2017

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Firm Overview

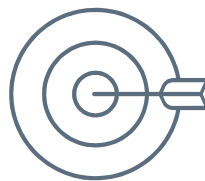
The Parametric Promise

We bring clarity and accessibility to investment science and deliver elevated, transparent, repeatable outcomes.



Ingenuity

We are not afraid to challenge assumptions with a healthy dose of skepticism.



Discipline

We are focused, systematic and apply scientific rigor to our cutting-edge execution.



Authenticity

We are transparent and dedicated to building genuine partnerships.

Parametric By The Numbers



\$220B+

Assets Under Management
Across Institutional and Wealth
Management Clients*



85+

Client-Facing Professionals
Across 5 Offices



89

Investment Professionals
Across 2 Investment Centers



12 Years

Average Industry Experience
of Our Portfolio Managers

*As of 9/30/2017. AUM includes the assets of Parametric Investment & Overlay Strategies and Parametric Custom Tax-Managed & Centralized Portfolio Management.



3 Decades of Expertise and Growth

Milestones

1987 Founded by William Cornelius and Mark England-Markun

1987 First Overlay Client*

1992 First Tax-Managed Client

1994 First Emerging Markets Client

1996 First Liability-Driven Investment Client*

2002 First Centralized Portfolio Management (CPM) Portfolio

2003 Eaton Vance Becomes A Majority Shareholder

2010 Expanded into Commodity Strategies

2010 Expanded into International Equity and Global Equity Strategies

2011 Launched Defensive Equity Strategy*

2012 Acquired the Clifton Group

2013 Launched Dividend Income Strategy

2014 Established Sydney Office

2015 Launched Global Defensive Equity Strategy

2015 Launched Factor Strategies

2015 Launched Eight Responsible Investing Strategies

2017 Partnered With Research Affiliates To Launch Systematic Alternative Risk Premia Strategy**



*Strategy developed by The Clifton Group, an investment adviser that was acquired by Parametric in 2012. **Formerly known as Systematic Global Macro. As of 9/30/2017. AUM includes the assets of Parametric Investment & Overlay Strategies and Parametric Custom Tax-Managed & Centralized Portfolio Management.

Core Competencies

Our strategies apply scientific rigor and in-depth research to measure and manage risk with a sharp focus on controlling costs.

Better Beta

- > Custom SMAs
- > Tax Management
- > Responsible Investing
- > Factor Investing



ELEVATED PORTFOLIO

Efficient Implementation

- > Customized Exposure Management
- > Overlay Services
- > Centralized Portfolio Management

Non-Traditional Alpha

- > Volatility Risk Premium
- > Emerging Markets
- > Dividend Income
- > Systematic Alternative Risk Premia
- > Commodities

Our Offerings

Better Beta	Efficient Implementation	Non-Traditional Alpha
<p>Tax-Managed SMAs</p> <ul style="list-style-type: none"> > Custom Core™ <p>Responsible Investing</p> <ul style="list-style-type: none"> > Client-Driven > Thematic <p>Factor Investing</p> <ul style="list-style-type: none"> > Value > Momentum > Quality 	<p>Customized Exposure Management</p> <ul style="list-style-type: none"> > Currency Hedging > Hedging > ETFS/Treasuries > Liability-Driven Investing <p>Overlay Services</p> <ul style="list-style-type: none"> > Cash Securitization > Manager Transitions > Rebalancing <p>Centralized Portfolio Management</p>	<p>Systematic Alpha</p> <ul style="list-style-type: none"> > Emerging Markets > International > Commodities <p>Systematic Income</p> <ul style="list-style-type: none"> > Dividend Income > Energy MLP > Enhanced Income <p>Volatility Risk Premium</p> <ul style="list-style-type: none"> > Defensive Equity > Global Defensive Equity > DeltaShift > Liquid Alternative > Low Volatility Equity > Put-Selling Strategies > Multi-Asset Volatility Harvesting <p>Systematic Alternative Risk Premia</p>

Tax-managed Custom Core™ strategies are offered by Parametric Custom Tax-Managed & Centralized Portfolio Management. Non tax-managed Custom Core™ strategies are offered by Parametric Investment & Overlay Strategies.

> Public

Alaska Retirement Management Board
 Arizona State Retirement System
 California State Teachers' Retirement System
 East Bay Municipal Utility District
 Fairfax County Retirement Systems
 Houston Police Officers' Pension System
 Manhattan & Bronx Surface Transit Operating Authority Pension Plan
 Marin County Employees' Retirement Association
 Massachusetts Pension Reserves Investment Management Board
 New Mexico Public Employees' Retirement Association
 Oakland Police and Fire Retirement System
 San Joaquin County Employees' Retirement Association
 San Luis Obispo County
 San Mateo County Employees' Retirement Association
 Seattle City Employees' Retirement System
 Wisconsin Investment Board

> Endowments

Indiana University & Foundation
 Pepperdine University
 Texas Christian University
 University of Minnesota Foundation
 University of Missouri System
 University of Pittsburgh
 University of St. Thomas
 Regents of the University of Michigan

> Faith Based

Covenant Ministries of Benevolence
 Ministers & Missionaries' Benefit Board of American Baptist Churches
 Pension Fund of the Christian Church

> Healthcare

Advocate Health Care Network
 Allina Health
 North Memorial Health Care
 OhioHealth Corporation
 Rush University Medical Center
 Trinity Health

> Taft-Hartley

Board of Trustees ABC-NABET Retirement Trust Fund
 Boilermaker-Blacksmith National Pension Trust
 Central Laborers' Pension Fund
 Electrical Workers, IBEW, Pacific Coast Fund
 Chicago Laborers' Pension & Welfare Funds
 National Retirement Fund
 Teamsters, Western Pennsylvania

> Foundations

Auburn University
 The Doris Duke Charitable Foundation & Related Entities
 The John D. & Catherine T. MacArthur Foundation
 The McKnight Foundation

> Corporate

Cargill, Inc.
 Macy's, Inc.
 3M Company
 Nestlé USA, Inc.
 Eversource Energy
 Target Corporation
 United Technologies Corporation

It is not known whether the listed clients approve or disapprove of the adviser. The partial list of clients included herein were selected as being representative of the different types of institutional clients and businesses serviced by Parametric. Performance-based data was not a determining factor in their selection.

PIOS[®] Overview

Most portfolios have one or more policy implementation challenges that may prevent the portfolio from meeting its objectives



Overlay



An overlay adds value by alleviating the inefficiencies created by policy implementation challenges



Implementation Challenges

- Performance drag due to liquidity needs / inefficient cash flow process
- Residual manager cash balance performance drag
- Exposure management needs related to manager transitions
- Meaningful deviation from policy targets
- Unique exposure needs

An overlay application for each implementation challenge

Parametric Overlay Component¹

- Fund Cash Securitization
- Manager Cash Securitization
- Overlay Transition / Reallocation Management
- Rebalancing
- Outsourced Exposure Management

¹ Client selects from the Parametric Overlay Component(s) based on unique needs and objectives. Additional Parametric Overlay Components including Currency Exposure Management and Interest Rate Management are also available.

Challenge

- Holding cash to facilitate liquidity needs results in tracking error relative to the investment policy and creates a long-term expected performance drag

Potential Solution

- Efficiently eliminate unwanted cash exposure through the use of an overlay program while maintaining on-demand liquidity

Expected Benefits

- Increase expected return
- Increase day-to-day liquidity
- Reduce transaction costs
- Simplify the management of inflows and outflows resulting in time savings for staff

Intended component may not meet benefits listed above.

Challenge

- Residual or transactional manager cash exposure (e.g. 1-3% of portfolio) creates an expected long-term performance drag

Potential Solution

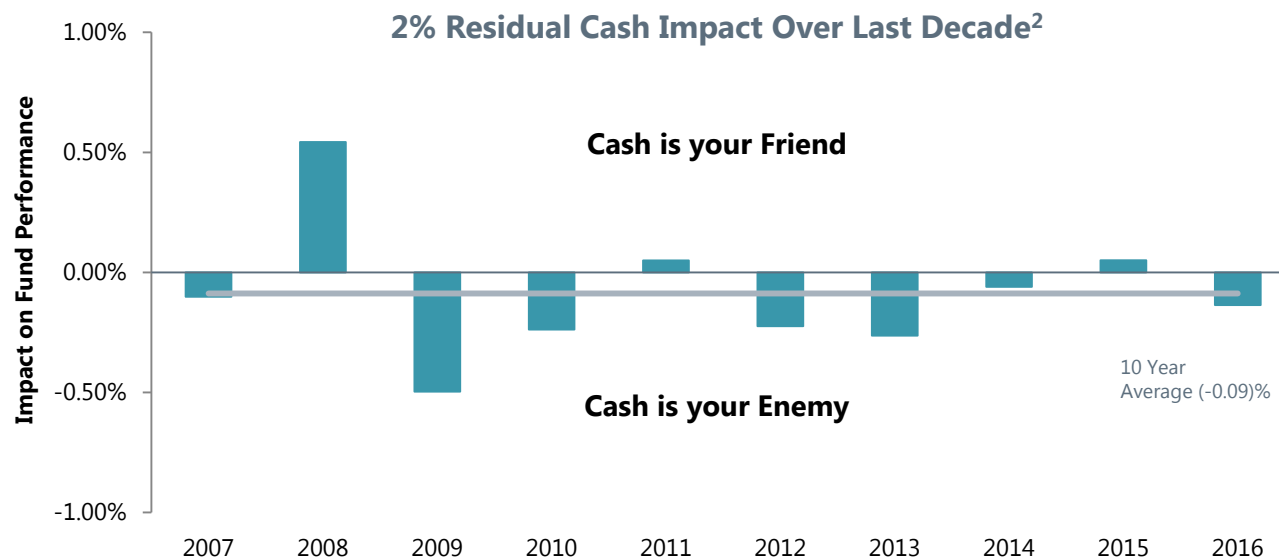
- In non-disruptive manner, efficiently eliminate unwanted manager cash exposure through the use of an overlay program

Expected Benefits

- Increase expected return
- Maintain exposure across multiple asset classes
- Ability to customize cash overlay for each manager

Intended component may not meet benefits listed above.

Example Policy Mix	
S&P 500®	20%
Russell 2000®	10%
MSCI EAFE SM	20%
MSCI EM	10%
Bloomberg Barclays U.S. Aggregate	35%
Bloomberg Commodity	5%
Total	100%



Holding 2% residual cash, on its face, does not sound significant. However, when your policy goals are to target 0% cash exposure, you may experience performance slippage. Over the last 10 years, that slippage was estimated to average (0.09)% on the total portfolio.

¹ PIOS (Policy Implementation Overlay Service) is a trademark registered in the U.S. Patent and Trademark Office.

² The analysis utilizes index total returns. Returns are net of management fees (15bps applied to cash exposure) and net of expected transaction costs (5bps).

Simulated presentations are for illustrative purposes only, do not represent actual returns of any investor, and may not be considered for investing purposes. It is not possible to invest directly in an index. Investments are subject to loss. Past performance is not indicative of future results. Material provided is supplemental to the GIPS® compliant presentation. Please refer to the GIPS® compliant presentation and other disclosures at the end of this presentation. Source: Parametric, Bloomberg; Date: 1/23/17.

Challenge

- Manager changes, manager reallocations, liquidation of illiquid holdings (e.g. hedge funds), change to target allocations, etc. which cause the fund to introduce exposure gaps and/or meaningfully deviate from target exposures

Potential Solution

- Reduce or eliminate exposure gaps using index overlays or ETF's

Expected Benefits

- Mitigation of exposure gaps which reduces performance risk
- The manager termination point can be accelerated or new manager search period can be extended as long as needed without losing targeted market exposure
- Exposures can be maintained during long-settled liquidations (e.g. hedge fund receivables)

¹ Parametric works closely with transition service providers but does not transition physical portfolio holdings. Intended component may not meet benefits listed above.

Challenge

- Asset class exposures which deviate meaningfully from long-term policy targets or short-term tactical preferences results in unwanted exposures and increased tracking error

Potential Solution

- Synthetic rebalancing of fund exposures in an efficient and cost effective manner back to desired allocation

Expected Benefits

- Reduced transaction costs
- Timely and efficient reallocation of portfolio exposures
- Minimize exposure gaps during the rebalancing process
- Reduction of tracking error

Intended component may not meet benefits listed above.

Cash-Flow Approach

Description

- Utilizing ongoing cash balance changes as a means to reduce portfolio exposure imbalances
- Mechanical process which requires no client involvement after guideline parameters are established

Parametric's Role

- Portfolio exposures and cash balances are monitored daily and overlay positions are adjusted to minimize portfolio exposure imbalances
- Cash inflows are purchased in underweight asset class(es) whereas cash outflows are sold in overweight asset class(es)

Disciplined Approach

Description

- Fund exposures are rebalanced when pre-determined thresholds are exceeded
- Mechanical process which requires no client involvement after guideline parameters are established

Parametric's Role

- Portfolio exposures are monitored daily and futures positions adjusted automatically when thresholds are exceeded
- Offsetting long/short futures positions are employed to bring all investable asset classes back to policy targets or guideline parameters

Tactical Approach

Description

- Client notification when pre-determined thresholds are exceeded or exposure preferences change
- Client owns ultimate decision on whether to implement rebalancing transactions
- Ongoing collaborative process between client and Parametric

Parametric's Role

- Daily portfolio monitoring with client notification when pre-determined thresholds are exceeded
- Exposure adjustments are implemented in a low cost and timely manner based on client desire

The majority of Parametric's overlay clients utilize the Disciplined Approach.

Intended component may not meet benefits listed above.

Rebalancing Framework

Based on our 30+ years of experience¹ in implementing and managing synthetic rebalancing strategies, Parametric believes there is no “optimal” rebalancing strategy. When deciding on a rebalancing approach, it is important to consider the following factors:

- How sensitive is the fund to the introduction of tracking error versus policy returns based on unintended asset class exposure imbalances
- Would the fund be best served by an “automatic” rebalancing approach or one which reflects current outlooks and objectives
- What are the costs and risks of moving physical assets between managers versus management of market exposures via an overlay

Parametric’s input as to when physicals or synthetics may be used to rebalance is client specific. Parametric works with each client to develop an appropriate rebalancing framework.

¹ 30 years reflects the history of the Clifton Group that was acquired by Parametric Portfolio Associates on 12/31/12.

Advantages

- Expected favorable risk-adjusted outcomes
- Timely rebalancing based on nearly real time data
- Lower implementation risk of creating exposure gaps during the rebalancing process
- May save staff time and lower costs (manager trading costs, return stream disruption, etc.)
- Reduce “behavioral” risks related to rebalancing decisions

Considerations

- Potential liquidity needs to support overlay positions
- Adverse tracking error between manager portfolios and index-based rebalancing instruments

Challenge

- Investors desire custom exposure strategies but lack internal trading capabilities and/or the expertise necessary to execute and manage exposure

Potential Solution

- Parametric executes and manages exposure through client-approved trading vehicles. Applications include:
 - Core exposure
 - Implementation of tactical views
 - Bridging exposure gaps
 - Currency management
 - Option based strategies
 - Custom OTC exposure
 - Portable Alpha programs

Expected Benefits

- Active engagement in evaluating synthetic/physical strategies, implementation alternatives, and trade structuring
- Efficient execution of desired positions
- Improved price realization on trades
- Management of all back-office operational functions
- Daily pricing and customized reporting
- Assist with selection of trade counterparties, management of OTC documents, and counterparty risk monitoring

Intended component may not meet benefits listed above.

Deep knowledge base and experience implementing and managing exposures across global markets

Execution Expertise

- > Risk controlled trade execution
- > Utilize wide array of instruments including:
 - Exchange Traded Derivatives
 - Futures
 - Options
 - OTC Derivatives
 - Swaps
 - Forwards
 - Options
 - Physicals
 - ETFs
 - Equities
 - Bonds
- > Roll management for derivative exposures

Manage all Operational and Back-Office Functions

- > Independent trade confirmation and verification
- > Reconcile and book all trades with broker / counterparty and fund custodian
- > Seek to independently value all outstanding positions
- > Verify and manage all cash flows
- > Monitor collateral flows and custodial accounts
- > Communicate documentation requirements
- > Generate detailed accounting statements

In addition to experienced implementation, Parametric provides thoughtful advice on how complex strategies may be structured.

Example: An investor with an equity allocation to Brazil may wish to adjust the exposure without impacting current physical investments. Parametric advised the investor on the available vehicles.

Unique Constraint: Brazil's numerous regulations limit the number of investment vehicles available to foreign investors.

Instrument	Consideration
Futures	<ul style="list-style-type: none"> Local registration is time consuming as Brazil requires a local ID to trade futures contracts. The U.S. Exchange listed Bovespa Futures lack sufficient liquidity to serve as a stable choice.
ETFs	<ul style="list-style-type: none"> If the exposure adjustment involves shorting, ETFs may be undesirable due to the significant borrow cost.
Swaps	<ul style="list-style-type: none"> Over-the-counter structures are customizable and available on benchmark indices, custom baskets, ETFs, and currency.
Forwards	<ul style="list-style-type: none"> If currency exposure is the primary concern, utilizing forwards can hedge out FX risk and isolate the local equity return only.

Outcome: A total return swap on Brazil's benchmark index would be chosen, as it would offer the most appropriate balance of basis risk and cost.

Challenge

- Client desires to add or remove currency exposure in an efficient and cost effective manner

Potential Solution

- Employ currency overlay to efficiently maintain desired currency exposure

Expected Benefits

- Utilization of low cost and liquid instruments
- Non-disruptive to existing international investments
- Transparent
- Flexibility to tailor currency hedge to achieve unique objectives

Intended component may not meet benefits listed above.

Challenge

- Client desires to add/remove interest rate exposure in an efficient and cost effective manner

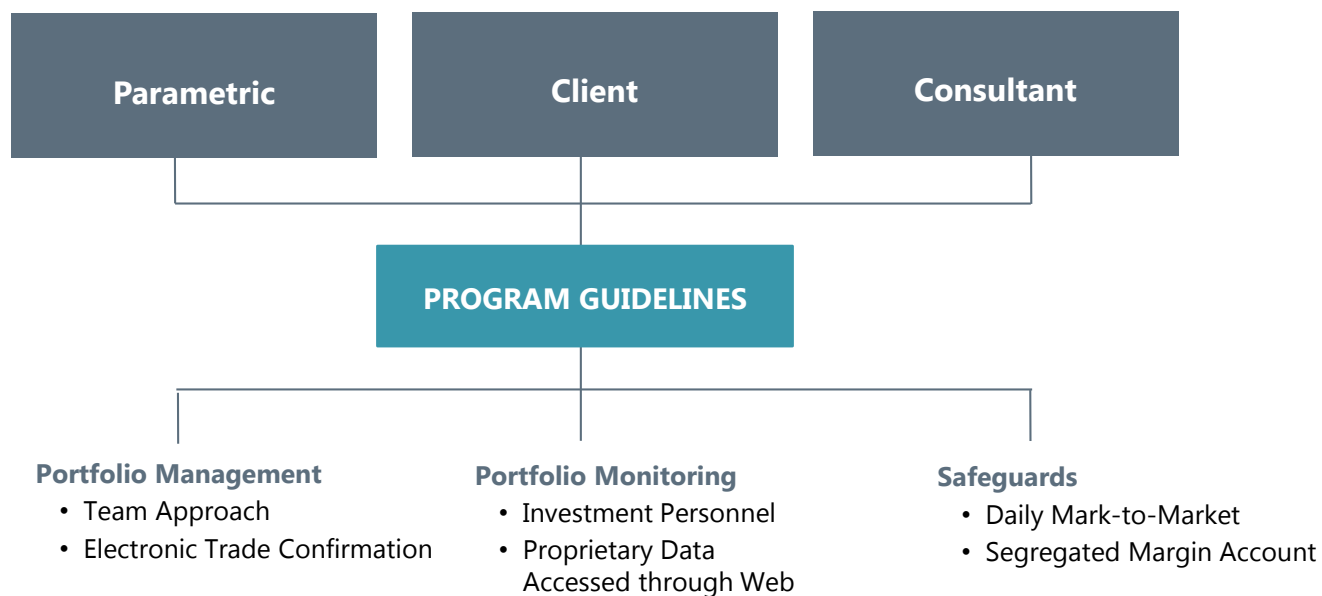
Potential Solution

- Use derivative instruments to efficiently achieve a desired duration target

Expected Benefits

- Allow core fixed income managers to manage portfolio against standard benchmarks when fund has non-standard target duration
- Interest Rate overlay is non-disruptive to current fixed income managers
- Extend duration to better match liability target or to increase expected return¹
- Flexible and cost efficient means to modify interest rate exposure

¹ Parametric also offers a comprehensive LDI Completion Program
Intended component may not meet benefits listed above.



Risk controls seek to minimize the risks, but risks are not eliminated by such controls and are often outside of the influence or control of Parametric.

See Risks section.

Cost/Benefit Illustration:

Fund Size:	\$1,000,000,000
Unintended Cash Exposure:	3%

Performance Benefits

Cash Deployment (assumes 4% net risk premium using cash exposure amount) ¹ :	\$1,200,000
Disciplined Rebalancing (assumes 10 basis points annually using overall fund size):	\$1,000,000
Estimated Program Costs ²	<u>(\$93,000)</u>

Expected Net Annual Benefit	\$2,107,000
Expected 5 Year Benefit	\$10,535,000

In this example, the estimated performance benefit-to-cost relationship is over 22 to 1.

Qualitative Benefits

- Improved liquidity and operating efficiencies
- Improved daily monitoring of fund exposures
- Transition management flexibility/risk control
- Flexibility to manage currency and interest rate exposures

¹ Assumes 4% risk premium on underlying policy mix versus cash. Risk premium varies per client as each PIOS program is customized to meet clients unique goals

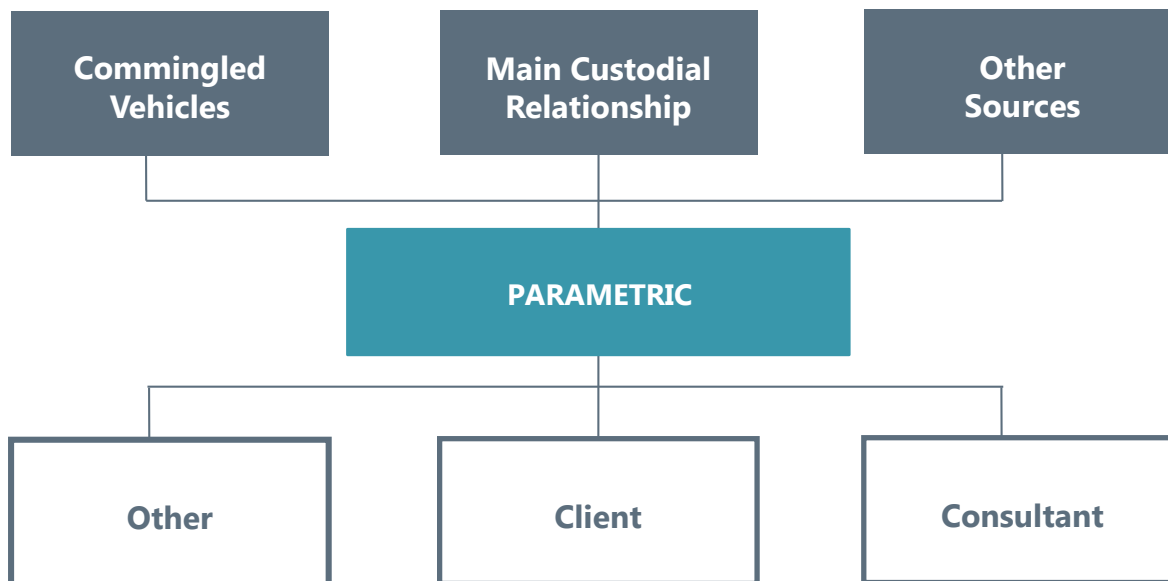
² Parametric fees assuming a 2% rebalancing position in addition to cash exposure defined above: first \$50 million @15 bps, above \$50 million @10 bps plus \$1,500 per month retainer fee.

Note: The performance benefits shown above represent an example of expected incremental return benefit. Actual results will vary from this example. Past performance does not guarantee future results. Parametric does not warrant any particular rate of return or level of tracking error. Information subject to change. Material provided is supplemental to the GIPS® compliant presentation. Please refer to the GIPS® compliant presentation and other disclosures at the end of this presentation.

Process and Reporting

For One-on-One Use with Investment Professionals and Institutional Clients Only. Not for Use with the Public.

- Analysts download available data and create Daily Tracking Report¹
- Report reviewed and verified by Analysts and Portfolio Managers
- All open futures positions are marked-to-market daily
- Trades are reviewed and verified by portfolio management team and trade order management system prior to execution to ensure compliance with policy guidelines
- Daily Report posted to website for Client / Consultant viewing



¹In some cases, data may not be available on a daily basis or is not accessible because the balance is held by a manager who does not make information available electronically. For illustrative purposes only.

A daily tracking report is available to the client that provides a comprehensive view of the portfolio's exposures each day. This report includes:

- Fund cash levels
- Manager values
- Asset class exposures and imbalances relative to target allocations
- Margin summary
- Custom portfolio metrics (e.g. funded ratio)

Parametric seeks to update all information through the previous day's close.

Fees and Benefits

Parametric charges an asset-based management fee plus a retainer fee. The asset-based fee is applied on the overlay index exposure only, not on the total fund assets.

Retainer Fee: \$1,500 per month

PIOS Asset-Based Fee:

	Overlay Portfolio Assets ²	Annual Fee as a Percentage of Average Overlay Portfolio Value
First	\$50 million	0.15%
Above	\$50 million	0.10%

\$18,750 minimum quarterly fee³

¹ PIOS (Policy Implementation Overlay Service) is a trademark registered in the U.S. Patent and Trademark Office.

² Does not include Commodity assets. Please contact Parametric for a separate Commodity schedule.

³ Retainer fee is included in minimum quarterly fee calculation.

External legal fees incurred by Parametric associated with OTC documentation are billed to client separately. Actual fees may vary.

Qualitative

Information	Liquidity	Improved Flexibility	Increased Efficiency	Service
Customized daily report that provides an up-to-date snapshot of holdings by asset class, manager value, residual cash position, funded status, and other key portfolio measures	Access to more cash “on-demand” for day-to-day fund needs and investment opportunities without incurring the opportunity cost of holding cash	Elimination of exposure gaps via precise coordination with existing managers, transition managers, and staff	Operational efficiency when rebalancing or implementing tactical changes	Access to experienced personnel to discuss overlay management applications

Quantitative

Increase Expected Return	Lower Policy Return Risk	Improved Control and Performance During Transitions	Improved Capture of Market Opportunities	Improved Price Realization
Elimination of unwanted residual cash exposure wherever it may reside within the portfolio	Reduction in unwanted policy asset class exposure imbalances	Ability to adjust exposure based on changing targets, movement of assets, cash flows, and long settle transactions	Ability to adjust exposure quickly and cheaply. Potential to increase return and reduce policy risk efficiently via more timely rebalancing moves	Experienced derivative staff working as a fiduciary seeking to deliver favorable price realizations

Expertise

With over **30 years¹ of exposure management experience**, Parametric has developed the investment management, back office, and accounting expertise that we believe exceeds client expectations.

Flexibility

Unique risk management capabilities, utilizing a universe of both physical and derivative instruments with **daily transparency**.

People

Parametric's people are dedicated, focused and hard-working. **Exceptional client service is engrained in the culture.**

Process

Parametric has developed **proprietary methodology** which provides an efficient and controlled means for managing clients' unique needs in a transparent manner. Detailed exposure positions, up to and including fund-wide reporting are **compiled and delivered daily**.

Parametric strives to provide custom strategies and is uniquely qualified as an Investment Risk Manager.

¹ 30 years reflects the history of the Clifton Group that was acquired by Parametric Portfolio Associates® LLC on December 31st, 2012.

Risks

Risk	Description	How Parametric Mitigates
Market	Market performs in a way that was not anticipated. For example, cash outperforms capital markets.	Systematic market risk is an inherent part of the PIOS® ¹ program and can neither be diversified away nor mitigated. Client specific policy guidelines are established to clearly define desired market risk based on client asset allocation targets.
Communication/ Information	Overlay index exposures are maintained based on underlying investment values provided by one or more third parties. There are often delays in the receipt of updated information which can lead to exposure imbalance risks. Inadequate communication regarding cash flow moves into and out of fund and manager changes can lead to unwanted asset class exposures and loss.	Parametric establishes communication links with custodial, manager, and other sources to obtain and verify positions and cash flow data as soon as it is available. Suspect data may be researched and staff notified.
Margin/Liquidity	Potential that the market moves in a manner adverse to the overlay position causing a mark-to-market loss of capital to the fund and a resulting need to raise liquidity or to close positions; this situation could happen at a time when underlying fund or positions are also declining in value.	Parametric strives to be aware of potential collateral and cash requirements to reduce the risk of needing to remove positions. Additional margin requirements are communicated via electronic mail and margin adequacy is available to the client daily.
Tracking Error	Futures (synthetic) index returns do not perfectly track benchmark index returns. This divergence between the price behavior of a position or portfolio and the price behavior of a benchmark is tracking error and impacts performance.	Parametric seeks to minimize tracking error by utilizing liquid futures contracts with sufficient daily trading volume and open interest. All derivative contracts will have some tracking error that cannot be mitigated by an overlay manager.
Leverage	Creation of market exposure in excess of underlying collateral value may lead to significant capital losses and result in position liquidation.	Parametric obtains daily collateral pool values and adjusts beta overlay positions to maintain the ratio of total exposure to collateral within a pre-defined client determined band.
Counterparty	Counterparty credit risk on OTC trading. Note: Bilateral centrally cleared OTC counterparty risk is similar to the clearing risk of holding futures investments.	Parametric can facilitate the negotiation of ISDA documentation that seeks to reduce the potential credit risk associated with OTC counterparties. Parametric monitors credit ratings and credit default swap spreads for all counterparties used and will inform staff of developments which may negatively impact credit risk.
Collateral	The program may experience losses on the underlying designated assets in addition to potential losses on the index market exposure overlaying these assets.	This risk cannot be mitigated by an overlay manager. Parametric discusses the potential for negative performance in the collateral used for the overlay prior to alpha transport applications with client.

¹ PIOS (Policy Implementation Overlay Service) is a trademark registered in the U.S. Patent and Trademark Office.

Appendices

Synthetic Indices

The most often used index benchmarks are as follows:

>Domestic Equity¹

- S&P 500® Index
- S&P 400® Mid Cap Index
- MSCI USA IMI Index
- MSCI Small Cap USA Index
- Russell 1000® Index
- Russell 2000® Index
- Russell 3000® Index
- Wilshire 5000 Index

>Fixed Income

- Bloomberg Barclays U.S. Aggregate Bond Index
- Bloomberg Barclays U.S. Aggregate Gov/Credit Index
- Bloomberg Barclays Intermediate U.S. Gov/Credit Index
- Bloomberg Barclays U.S. Long Gov/Credit Index
- Bloomberg Barclays U.S. Aggregate Long Treasury Index
- Bloomberg Barclays U.S. Long Treasury Index
- Bloomberg Barclays U.S. Universal Index
- Citi U.S. Broad Investment-Grade (USBIG) Bond Index
- BofA Merrill 1-3 Year U.S. Treasury Index
- Various Constant Duration Benchmarks

>International Equity

- MSCI EAFESM Index
- MSCI ACWI ex. U.S.SM
- MSCI ACWI ex. U.S. IMI
- MSCI Emerging Markets Index
- MSCI World ex. U.S.SM
- S&P Global Broad Market Index

>Global Equity

- MSCI ACWI IMI
- MSCI WorldSM

>Commodities

- S&P Goldman Sachs Commodity Index
- Bloomberg Commodities Index (BCOM)
- Custom Commodity Baskets

>International Fixed Income

- Citigroup WGBI ex. US
- Bloomberg Barclays Global Aggregate Index ex. U.S.

>Currency

- Indexes
- Individual Currency Exposure

¹ In the case of style asset exposure needs (i.e. small cap growth), Parametric can manage ETF exposures to fulfill client needs. Customized nonstandard indexes can be replicated using swaps.

Please note that only broad market (e.g. versus style) futures are available and/or liquid enough for use. Individuals may not invest directly into indexes.

Implementation Category	Application	Comments
Cash Overlay	<ul style="list-style-type: none"> • Fund level cash • Separate account manager residual cash • Commingled fund estimated residual cash • Receivable exposure related to long settle transactions (i.e. hedge fund liquidations) 	Clients may expect additional return, access to more “on-demand” liquidity, and improved operational efficiency.
Rebalancing	<ul style="list-style-type: none"> • Threshold-based rebalancing • Cash flow rebalancing • Client-directed tactical rebalancing 	Clients expect to adjust asset class exposures quickly and efficiently. The use of futures to adjust market exposure generally can be done more cheaply and quickly than by moving physical assets (see Custom Daily Portfolio Reporting section).
Transitions	<ul style="list-style-type: none"> • Close exposure gaps related to the movement of assets between managers • Implementation of new target mix before physicals are moved to existing or new managers • Innovative solutions which may allow for the maintenance of market exposure in illiquid alternative asset classes (i.e. HFOF) • Work with security-based transition managers to maintain fund wide market exposure using futures 	Clients utilize an array of financial instruments to improve expected returns, lower risk versus policy goals (eliminate exposure gaps) and increase staff efficiency.
Currency Exposure Management	<ul style="list-style-type: none"> • Hedge individual or currency exposure • Hedge regional currency exposure (e.g. Euro) • Hedge index related currency exposure (e.g. MSCI EAFE) • Obtain or remove developed or emerging market currency exposure based on specific client needs • Utilize currency options to produce asymmetric payouts 	Clients can hedge out existing currency exposure or add currency exposure to reflect future commitments (e.g. international private equity commitment).

For informational purposes only. This is not an offer to buy or sell securities. Risks vary per securities utilized in an application selected. The client should understand risks involved before selecting a particular application.

Implementation Category	Application	Comments
Interest Rate Exposure Management	<ul style="list-style-type: none"> • Extend duration (LDI) • Shorten duration (hedge/LDI versus credit) • Term structure tilts 	Clients can adjust total portfolio duration in a timely and efficient manner. Duration adjustments can also address specific exposure management needs across the term structure.
Credit Exposure	<ul style="list-style-type: none"> • Individual security CDS • High yield CDX • Investment grade CDX • Emerging market CDX • Sovereign CDX 	Through the use of centrally cleared or bilateral OTC transactions, clients can gain or remove a variety of credit exposures quickly and efficiently.
Inflation Hedges	<ul style="list-style-type: none"> • CPI swaps • Synthetic CPI hedge (e.g. long TIPS/short nominals) • Standard and custom commodity index exposure • Individual commodities 	Clients can access inflation related exposures in a variety of ways via futures, ETFs, or OTC transactions.
"Porting" Alpha	<ul style="list-style-type: none"> • Long "alpha" asset positions (e.g. active stock managers) coupled with futures-based beta hedge • Long "low beta" collateral position (e.g. absolute return manager) with long beta overlay 	Client can isolate positive alpha active risk positions. Custom "alpha port" programs generally produce lower costs while effectively maintaining beta exposure after recognition of embedded risk.

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Implementation Category	Application	Comments
Equity Options Management	<ul style="list-style-type: none"> • Individual stock option positions • Market sector option positions • Index option positions 	Clients can enter into option positions which seek to protect individual stock positions (e.g. anticipated private equity distribution) segments of the portfolio (e.g. energy) or broad market exposure via index option. Clients have also used options to add various market exposures. Each program is customized to reflect specific client needs.
Swaptions Management	<ul style="list-style-type: none"> • Payer swaptions • Receiver swaptions 	Fixed income options can be used to protect or enhance fixed income holdings or liability positions. Each program is customized to reflect specific client needs.
Custom Synthetic Exposures	<ul style="list-style-type: none"> • Futures baskets • Customs swap baskets 	Clients can gain or remove exposures using other custom futures overlay (e.g. basket of Asian futures contracts) or through the use of custom OTC basket swaps.
Custom Physical Exposures	<ul style="list-style-type: none"> • Nominal treasury fixed income portfolio • TIPS portfolio • LINKRS portfolio • Index equity exposure (e.g. ESG index) • Custom index equity exposure (e.g. S&P 500-SRI constraints) • ETFs 	Clients can generally access passive physical market exposure at a low cost.
Custom Daily Portfolio Reporting	<ul style="list-style-type: none"> • All assets tracked • Each holding is updated via download, proxy or other means • Cash levels, exposure imbalances and other important 	Managing risk requires knowing execution exposures. Clients get a very accurate look at updated portfolio exposures each morning. This becomes particularly helpful in volatile markets or when other major changes in the portfolio occur.

For informational purposes only. This is not an offer to buy or sell securities. Risks vary per securities utilized in an application selected. The client should understand risks involved before selecting a particular application.

Orison “Kip” Chaffee, CFA

Managing Principal

Mr. Chaffee is responsible for formulating strategic direction and day-to-day management of the Minneapolis and Westport Investment Centers. Prior to joining Parametric in 2008*, Kip held a number of executive positions within the financial services industry including VP of Corporate Strategy and Development for Ameriprise Financial Services and President and COO of Hantz Financial Services. He earned his B.A. in Economics from Harvard University and an MBA with a finance concentration from The Wharton School of Business. He is a CFA® charterholder and a member of the CFA Society of Minnesota.

Jack Hansen, CFA

Chief Investment Officer

Mr. Hansen leads the investment management teams located in the Minneapolis and Westport Investment Centers. Since joining Parametric in 1985*, Jack has managed futures, swaps, options, and other derivative based programs. He writes and lectures on the use of derivatives in portfolio management. He earned a B.S. degree in Finance and Economics from Marquette University and a M.S. in Finance from the University of Wisconsin, Madison. He is a CFA® charterholder and member of the CFA Society of Minnesota.

Justin Henne, CFA

Managing Director – Customized Exposure Management

Mr. Henne leads the investment team responsible for the implementation and enhancement of Parametric’s Customized Exposure Management product. Since joining Parametric in 2004*, Justin has gained extensive experience trading a wide variety of derivative instruments in order to meet each client’s unique exposure and risk management objectives. He earned a B.A. in Financial Management from the University of St. Thomas. He is a CFA® charterholder and a member of the CFA Society of Minnesota.

Thomas Lee, CFA

Managing Director – Investment Strategy and Research

Mr. Lee leads the investment team that oversees investment strategies managed in Parametric’s Minneapolis and Westport Centers. In his current position, Tom directs the research efforts that support existing strategies and form the foundation for new strategies. He is also chair of the Investment Committee that has oversight of these strategies. Tom has co-authored articles on topics ranging from liability driven investments to the volatility risk premium. Prior to joining Parametric in 1994*, Tom spent two years working for the Federal Reserve in Washington, D.C. He earned a B.S. in Economics and an MBA in Finance from the University of Minnesota. He is a CFA® charterholder and a member of the CFA Society of Minnesota.

Jay Strohmaier, CFA

Managing Director

Mr. Strohmaier leads a team of investment professionals responsible for designing, trading and managing institutional portfolios with an emphasis on Defensive Equity, hedging, and other asymmetric strategies. He has extensive experience with futures and options-based strategies and has been active in the investment industry since 1984. Prior to rejoining Parametric in 2009*, Jay worked for Cargill, Peregrine Capital Management, and Advantus Capital Management. He earned a B.S. degree in Agricultural Economics from Washington State University and an M.S. in Applied Economics from the University of Minnesota. He is a CFA® charterholder and a member of the CFA Society of Minnesota.

*Reflects the year employee was hired by The Clifton Group, which was acquired by Parametric Portfolio Associates® LLC on December 31, 2012.

Christopher Haskamp, CFA

Senior Portfolio Manager

Mr. Haskamp is dedicated to portfolio management and leading research projects in the area of risk management. Chris manages portfolios for the Liability Driven Investing program as well as for the enhanced index programs. Prior to joining Parametric in 2006*, he spent three years as a scientist at the medical device firm Beckman Coulter Inc. Chris earned a B.S. in Biochemistry from the University of Minnesota and a M.S. in Chemistry from the University of California, San Diego. Chris earned an MBA in Finance from the University of Minnesota, Carlson School of Management in May of 2007 and started full time at Parametric in June of 2007. He is a CFA® charterholder and a member of the CFA Society of Minnesota.

Clint Talmo, CFA

Senior Portfolio Manager

Mr. Talmo leads a team of investment professionals responsible for designing, trading, and managing customized overlay portfolios utilizing a wide spectrum of asset classes across global markets. Prior to joining Parametric in 2014, Clint was a Partner at Aerwulf Asset Management. Previously, he worked for Interlachen Capital Group and EBF & Associates where his responsibilities included research, trading, and portfolio management. He earned a B.S. in Finance from the University of Colorado. He is a CFA® charterholder and a member of the CFA Society of Minnesota.

Daniel Wamre, CFA

Senior Portfolio Manager

Mr. Wamre leads a team of investment professionals responsible for designing, trading, and managing overlay portfolios. He has extensive experience helping clients and consultants manage portfolio exposures and risk through futures and options-based strategies. Prior to joining Parametric in 1995* as an intern, and full-time in 1998*, Dan spent four years as a Platoon Commander/Executive Officer in the United States Marine Corps. Upon completion of graduate school, he spent ten months working as a commercial banking credit analyst for U.S. Bank in Minneapolis. He earned a B.S. from North Dakota State University and an MBA in Finance from the University of Minnesota. He is a CFA® charterholder and a member of the CFA Society of Minnesota.

Richard Fong, CFA

Portfolio Manager

Mr. Fong leads a team of investment professionals responsible for designing, trading, and managing overlay portfolios in the Minneapolis Investment Center. Since joining Parametric in 2010*, Ricky has become a valuable resource supporting management of client LDI and options-based risk management solutions. He earned a B.A. in Financial Economics from Gustavus Adolphus College. He is a CFA® charterholder and a member of the CFA Society of Minnesota.

Alex Braun, CFA

Portfolio Manager

Mr. Braun leads a team of investment professionals responsible for designing, trading and managing overlay portfolios. Prior to joining Parametric in 2010*, Alex interned at Imperial Capital (formerly Mercanti Group). He earned a B.S. degree in Finance and Accounting from the Carlson School of Management at the University of Minnesota. He is a CFA® charterholder and a member of the CFA Society of Minnesota.

*Reflects the year employee was hired by The Clifton Group, which was acquired by Parametric Portfolio Associates® LLC on December 31, 2012.

Benchmark/index information provided is for illustrative purposes only. Investors cannot invest directly in an index. Returns for indexes are calculated gross of management fees. Deviations from the benchmarks provided herein may include but are not limited to factors such as: the purchase of higher risk securities, over/under weighting specific sectors and countries, limitations in market capitalization, company revenue sources, and/or client restrictions. Parametric's proprietary investment process considers factors such as additional guidelines, restrictions, weightings, allocations, market conditions and other investment characteristics. Thus returns may at times materially differ from the stated benchmark and/or other disciplines and funds provided for comparison.

The **Bloomberg Barclays U.S. Aggregate Bond Index (BCA)** is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency). Provided the necessary inclusion rules are met, US Aggregateeligible securities also contribute to the multi-currency Global Aggregate Index and the US Universal Index, which includes high yield and emerging markets debt. The US Aggregate Index was created in 1986 with history backfilled to January 1, 1976.

The **Bloomberg Commodity Index (BCOM)** is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification. Roll period typically occurs from 6th-10th business day based on the roll schedule.

The **MSCI EAFESM Index** is a free-float weighted equity index. The index was developed with a base value of 100 as of December 31, 1969. The MSCI EAFE region covers DM countries in Europe, Australasia, Israel, and the Far East.

The **MSCI Emerging Markets Index** is broad-based and is a free float-adjusted market capitalization index calculated total return and net of foreign withholding taxes that is designed to measure equity market performance in the global emerging markets.

The **Russell 2000[®] Index** is comprised of the smallest 2000 companies in the Russell 3000 Index, representing approximately 8% of the Russell 3000 total market capitalization. The index was developed with a base value of 135.00 as of December 31, 1986.

The **Standard and Poor's 500 Index** is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries. The index was developed with a base level of 10 for the 1941-43 base period.

Derivatives such as futures, swaps, and other investment strategies have certain disadvantages and risks. Futures require the posting of initial and variation margin. Therefore, a portion of risk capital must be preserved for this purpose rather than being allocated to a manager. Liquid futures may not exist for published benchmarks which may result in tracking error. Also, some intra-period mispricing may occur. Swaps require periodic payments, may be less liquid than futures, and may have counterparty/credit risk. Some investment strategies require a cash investment equal to the desired amount of exposure.

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Parametric is headquartered at 1918 8th Avenue, Suite 3100, Seattle, WA 98101. Parametric's Minneapolis investment center is located at 3600 Minnesota Drive, Suite 325, Minneapolis, MN 55435. For more information regarding Parametric and its investment strategies, or to request a copy of Parametric's Form ADV, please contact us at 206.694.5575 (Seattle) or 952.767.7700 (Minneapolis), or visit our website, www.parametricportfolio.com.

Parametric Investment & Overlay Strategies
 PIOS Composite
 Performance Presentation
As of December 31, 2016

Period	Returns			3 Yr. Annualized Standard Deviation		Dispersion	Assets		
	Total Gross Return AWR	Total Net Return AWR	Index	Composite	Index	Internal Equal Wtd.	Number of Portfolios*	Composite (MM)*	Total Firm (MM)*
2007	4.02%	3.86%	-	-	-	2.20%	96	16,819	-
2008	-8.04%	-8.18%	-	-	-	13.57%	100	13,863	-
2009	8.70%	8.54%	-	-	-	13.65%	128	23,043	-
2010	6.59%	6.43%	-	6.19%	-	7.23%	140	24,695	-
2011	2.80%	2.65%	-	5.60%	-	7.14%	188	22,088	-
2012	5.20%	5.04%	-	4.56%	-	5.24%	206	23,543	63,431
2013	4.84%	4.69%	-	3.55%	-	13.62%	213	29,733	80,896
2014	3.08%	2.92%	-	2.77%	-	12.94%	269	36,201	94,545
2015	-0.88%	-1.03%	-	2.84%	-	4.57%	331	43,363	99,248
2016	3.43%	3.28%	-	2.69%	-	8.53%	331	46,793	111,470

* The composite was not included in the Firm Assets prior to 2012 as it was being managed by a prior firm.

Index: None

Parametric Portfolio Associates[®] LLC ("Parametric") is an investment advisory firm registered with the U.S. Securities and Exchange Commission. Parametric is headquartered in Seattle, Washington and has investment centers in Seattle, Washington; Minneapolis, Minnesota; and Westport, Connecticut providing investment management services. The Minneapolis Investment Center resulted after the purchase of Clifton Group Investment Management Company in December 2012. The Westport Investment Center was formed in 2007 and resulted after the purchase of Parametric Risk Advisors LLC. Prior to December 2016, Parametric Risk Advisors was separately registered as an investment advisory firm with the U.S. Securities and Exchange Commission.

Parametric is divided into two segments: Parametric Investment & Overlay Strategies and Parametric Custom Tax-Managed & Centralized Portfolio Management. For compliance with the Global Investment Performance Standards (GIPS[®]), the Firm is defined and held out to the public as Parametric Investment & Overlay Strategies. Parametric Investment & Overlay Strategies provides rules-based investment management services to institutional investors, individual clients and registered investment vehicles, including Engineered Alpha Strategies, Specialty Index, and Policy Implementation Overlay Service (PIOS). The Firm has complied with the GIPS standards retroactive to January 1, 2000.

Parametric Investment & Overlay Strategies claims compliance with the Global Investment Performance Standards (GIPS[®]) and has prepared and presented this report in compliance with the GIPS standards. Parametric Investment & Overlay Strategies has been independently verified for the periods January 1, 2000 to December 31, 2016. The verification report is available upon request.

Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.

The PIOS (Policy Implementation Overlay Service) Composite is comprised of all fully discretionary separate accounts that create custom overlay solutions designed to help investors achieve policy objectives. The PIOS strategy utilizes an array of investment instruments to achieve client objectives through adherence to detailed investment guidelines. Objectives can include Interest Rate Management, Currency Management, Rebalancing, Transition Management, Cash Securitization and Neutralizing Policy Performance Shortfalls.

Composite creation date is December 2013.

No benchmark is presented as our strategy composite dynamically invests in a wide variety of investments. The strategy may invest in domestic and international markets, and utilizes derivative instruments. We do not believe that any benchmark is a proper point of reference for our strategy.

Derivative securities are used in the accounts which comprise this composite. The firm's strategies contain derivatives such as futures, options, swaps, and other investment strategies that may involve certain advantages and risks. Futures require the posting of initial and variation margin. Therefore, a portion of risk capital must be preserved for this purpose rather than being allocated to a manager. Swaps require periodic payments, which may be less liquid than futures, and certain swaps may have counterparty/credit risk. Some investment strategies may require a collateral investment equal to the desired amount of exposure.

Portfolio returns are calculated based on the sum of the daily gain/loss in the client account divided by the total portfolio value of the previous month end. The total portfolio value is the market value of the Client's manager portfolios, as defined in the guidelines. The client account Overlay Target value at the prior month end is used for the composite asset weighted performance calculation.

Portfolio returns reflect the reinvestment of dividend and interest income.

Performance results are expressed in U.S. dollars.

Composite gross returns are after transaction costs and other direct expenses, but before management fees. Net returns reflect the deduction of model investment management fees, 0.15%. The fees for the investment management services herein are described in the fee schedule.

The separate account management fee schedule is as follows: First \$50M @ 0.15%; Thereafter @ 0.10%.

The dispersion of annual returns is measured by equal-weighted standard deviation of portfolio returns within the Composite for the full year.

Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

A list of composite descriptions is available upon request.

Performance prior to January 2013 was achieved by the Clifton Group Investment Management prior to its merger with Parametric Portfolio Associates, LLC and has been linked to the performance history of Parametric Investment & Overlay Strategies. Performance results prior to January 2013 should not be interpreted as the actual historical performance of Parametric Investment & Overlay Strategies. Parametric Investment & Overlay Strategies has adhered to the performance record portability requirements of the GIPS standards in regard to the presentation and linking of this performance track record.

Past performance is not a guarantee of future results.