CONTRA COSTA COUNTY CCCERA Employees' Retirement Association

AGENDA

RETIREMENT BOARD MEETING

SPECIAL BOARD MEETING
March 24, 2016
9:00 a.m.

Retirement Board Conference Room
The Willows Office Park
1355 Willow Way, Suite 221
Concord, California

THE RETIREMENT BOARD MAY DISCUSS AND TAKE ACTION ON THE FOLLOWING:

1. Pledge of Allegiance.

2. Accept comments from the public.

CLOSED SESSION

3. The Board will continue in closed session pursuant to Govt. Code Section 54956.81 to consider the sale of a particular pension fund investment.

OPEN SESSION

4. Presentation and recommendation from Verus on proposed structure and guidelines of Transition Management Program.

5. Consider and take possible action to adopt Verus recommendations regarding Transition Management Program.

6. Presentation and recommendation from Verus on proposed structure and vendor for Cash Overlay Program.

7. Consider and take possible action to approve guidelines for Cash Overlay Program

8. Consider and take possible action to select Cash Overlay manager.

9. Presentation and recommendation from Verus on proposed vendor for Transaction Cost Analysis services.

10. Consider and take possible action to retain Zeno Consulting for Transaction Cost Analysis services.

11. Miscellaneous
    a. Staff Report
    b. Outside Professionals' Report
    c. Trustees' comments

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The Retirement Board will provide reasonable accommodations for persons with disabilities planning to attend Board meetings who contact the Retirement Office at least 24 hours before a meeting.

Verus

Meeting Date
03/24/16
Agenda Item
#4

PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

MARCH 24, 2016

Transition Management Presentation to

Contra Costa County Employees' Retirement Association

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Verus

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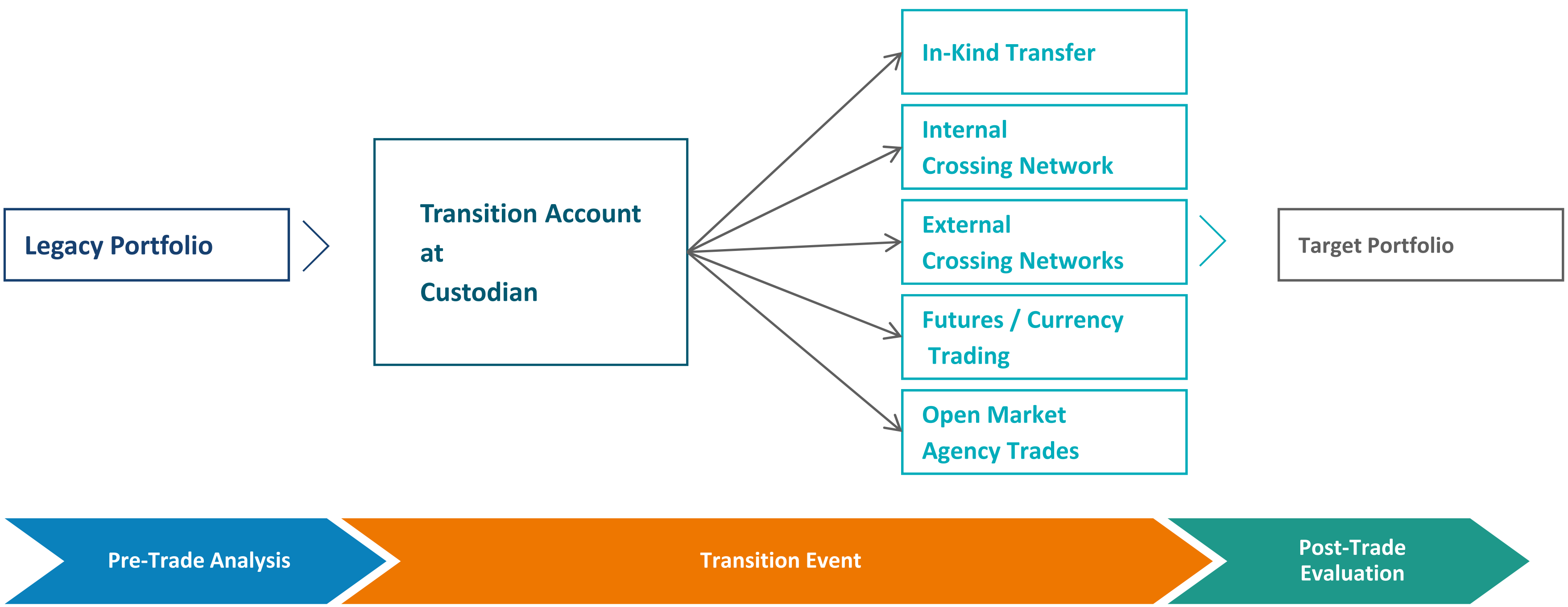
Overview

What is transition management?

Transition management is a systematic, controlled process that uses all available sources of liquidity to minimize the total cost and risk of transitioning plan assets from one investment strategy to another.

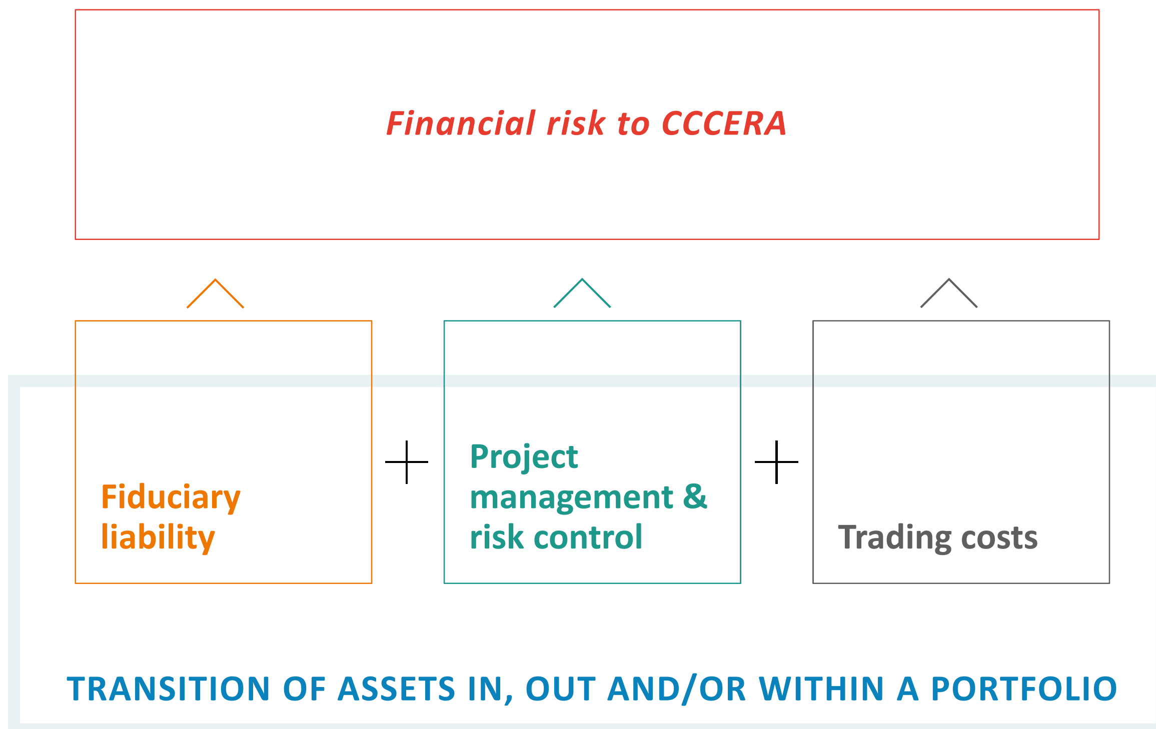
— Using a transition manager can add accountability and transparency to the transition process.



The transition management decision

Money moving in/out/within a portfolio = risk

- —Fiduciary liability
  - Transition event requires fiduciary responsibility & oversight
- —Project management & risk control
  - Best execution of trade in a risk controlled environment
    - Maximize in-kind transfers
    - Minimize market impact
- —Trading costs
  - Commission costs (explicit)
  - Implementation shortfall (implicit)



Every time money is moving in/out/within a client's portfolio, there are risks involved and someone is acting as transition manager.

Why transition management?

	Legacy Manager	**Target Manager**	**Transition Manager**
Accountability	*Assists* the transition	*Assists* the transition	*Manages* the transition
Alignment of Interest	Little – has just been terminated/reduced	Little – generally request performance holiday	Large – performance explicitly linked to transition
Expertise	Portfolio management Security selection & research	Portfolio management Security selection & research	Transition management Risk management, project management, trade development & execution
Execution	Often limited experience in high volume, big ticket trades	Often limited experience in high volume, big ticket trades	Experts in high volume, big ticket trades
Project Management	Minimal Client tends to be more heavily involved	Minimal Client tends to be more heavily involved	Significant - Manages and co-ordinates whole transition Client can choose level of involvement
Analysis & reporting	Limited – often just trade files; focus on performance reporting	Limited – often just trade files; focus on performance reporting	Detailed pre-trade analysis Extensive post trade analysis
Commission Rates*	Typically higher	Typically higher	Typically lower

**Commission rates for asset managers are typically higher since asset managers include soft dollar arrangements for research into the commission rates they charge. Transition management providers do not have the same arrangements and are able to offer lower commission rates on average.*

Transition manager considerations

Key considerations when evaluating a transition manager:

— Areas of expertise

— Business model

— Transition costs

— Tenure, depth of experience, and structure of transition management team

— Access to liquidity

— Transparency

— Potential conflicts of interest

— Historical transition activity (i.e., client type, asset class, performance, etc.)

Project management

Diversified Transition Managers

— Managers experienced with a high market value of assets transitioned
  - Absolute value of transitioned assets
  - Client type (defined benefit, defined contribution, endowment/foundation)

— Large trading operations and experienced teams

— High number of team members dedicated exclusively to transition management

— Independence

Custodial Banks

— In certain circumstances, the custodian may offer unique capabilities and efficiencies to manage transitions

Boutique Transition Managers

— Exclusive focus to transition management

— May specialize in particular asset classes or capabilities

— Independence

Transition managers

Executive summary

— To help CCCERA select transition managers, the following managers have been evaluated:

- BlackRock
- Citigroup
- Penserra
- Russell
- State Street
- Vertas

— The evaluation of providers took into consideration recent developments in this space, prior experiences with providers, due diligence on-site visits and conference calls, and review of RFI and other due diligence materials.

— Each manager was evaluated on quantitative and qualitative factors, including but not limited to:

- Areas of expertise
- Business model
- Transition costs
- Tenure, depth of experience, and structure of transition management team
- Access to liquidity
- Transparency
- Potential conflicts of interest
- Historical transition activity (i.e., client type, asset class, performance, etc.)
- Prior regulatory events

TM provider overview

	BlackRock	Citigroup Global Markets	Penserra
Headquarters	New York, NY	New York, NY	New York, NY
Firm inception	1988	1812	2007
TM service inception	1993	1996	2010
Ownership	Fully owned subsidiary of BlackRock, Inc.	Fully owned subsidiary of Citigroup, Inc.	Majority employee owned
MV of assets transitioned 2014 (millions)	$222,047	$505,125	$2,570
MV of assets transitioned 2014 (millions) by client type	DB - $136,595 DC - $3,743 E&F – $1,500	DB - $129,009 DC - $79,517 E&F - $107,188	DB - $1,542 E&F - $1,028
Willing to act as fiduciary?	Yes	Yes	Yes
Agency and/or principal?	Agency only	Both (almost always agency)	Agency Only
Key personnel (years experience/years with TM unit)	Lachlan French (30/7) Paul Francis (24/7) Zlatko Martinic (24/18) Jim Amorella (18/15) Richard Metzgen (18/17) Laura Peres (24/10) Jon Platt (16/1)	Will Cobbett (14/9) Sarah Kirschbaum (15/8) James Ngai (6/5) James Darch (20/1)	Keith Wilson (30/1) Sam Patel (20/2) Calvin Lee (18/2) Steve Lowden (19/4)
Personnel dedicated exclusively to TM	56	15	5
Fees	US Equity: 1-2 c/shr Non-US Developed Equity: 4-5 bps EM Equity: 8-10 bps US Fixed Income: 3-10 bps Non-US Fixed Income: 5-10 bps	No commission schedule, but rather establishes agreed upon commission rate based on size and difficulty	US Equity: 1 c/shr Non-US Developed Equity: 4 bps EM Equity: 8-12 bps

Footnote:

TM provider overview (cont.)

	Russell	State Street	Vertas
Headquarters	Seattle, WA	Boston, MA	Baltimore, MD
Firm inception	1936	1792	2006 (Global Transition Solutions)
TM service inception	1992	1979	2006
Ownership	Russell Investment Group will be owned by TA Associates and Reverence Capital Partners	Fully owned subsidiary of State Street Corporation	Fully owned subsidiary of Percival Financial Partners
MV of assets transitioned 2014 (millions)	$799,437	$338,503	$23,430
MV of assets transitioned 2014 (millions) by client type	DB - $540,036 DC - $10,934 E&F - $20,187	DB - $235,343 DC - $66,826 E&F – 36,334	Predominantly DB
Willing to act as fiduciary?	Yes	Yes	Yes
Agency and/or principal?	Agency Only	Agency Only	Both (all trading outsourced to ATM Cowen)
Key personnel (years experience/years with TM unit)	Steve Kirschner (22/10) Travis Bagley (21/15) Josh Houchin (10/5) Wayne Hollister (13/13) Scott Spinharney (16/16) Danny Sobba (21/19)	Nicholas Bonn (36/24) Peter Weiner (28/15) Tom Bryant (28/19)	Steve Malinowski Peter Romanelli David Bergman Kenneth Taylor
Personnel dedicated exclusively to TM	28	21	8
Fees	US Equity: 1-1.25 c/shr Non-US Equity: 4-6 c/shr EM Equity: 6-9 bps US Fixed Income: 1.5-6 bps Non-US Fixed Income: 2.5-8 bps	No set commission schedule; may on occasion agree to work on a fixed fee basis	US Equity 1 c/shr Other Asset Classes: 3 c/shr Fee structure is negotiable

Footnote:

Implementation

Selecting a transition manager

1. Identify transition event
   - What are the legacy and target strategies?
2. Determine transition type
   - Direct
     - Within same sub-asset class
     - *Example: US Large Cap Growth to US Large Cap Growth*
   - Indirect within asset class
     - Within same major asset class
     - *Example: US Large Cap Growth to US Small Cap Value*
   - Complex multi-asset class
     - Across asset classes
     - *Example: US Large Cap Growth to Short-Term Government/Credit*

Selecting a transition manager (cont.)

3. Conduct pre-trade analysis with transition manager candidates
   - Pre-trade analysis details the estimated transition cost of the transition event
     - Transition managers are provided with the holdings of the legacy portfolio and the benchmarks of the target managers
     - With an “Evergreen” contract in place, pre-trade analysis can be turned around in a matter of days

4. Compare pre-trade analyses
   - Explicit (direct) costs: reflects the fees charged by the transition manager for providing service
   - Implicit (indirect) costs: reflects the transition managers ability to effectively transition a portfolio (liquidity pools, broker access, trading capabilities, etc.)

Selecting a transition manager (cont.)

5. Select transition management provider
   - Coordinate details of transition event (timing, special requirements, etc.)

6. Transition event occurs

7. Review post-trade analysis
   - After the transition event, the transition manager provides a detailed report of the transition which includes commission (explicit) costs and implementation shortfall (implicit) costs, showing the true total cost of the transition event.
   - In a successful transition event, the pre-trade analysis and post-trade analysis are similar

Pre-trade analysis recommendations

— Direct and indirect US equity

- Penserra, Russell, Vertas
- *US equities are, for the most part, highly liquid. Most liquidity pools and trading networks of transition managers should be able to minimize implicit costs. Penserra, Russell, and Vertas provide the most competitive commission schedule.*

— Direct non-US equity, indirect non-US equity, and US fixed income

- BlackRock, Citigroup, Russell
- *These asset classes can be less liquid, therefore, larger providers with more robust liquidity pools and trading networks should be able to provide lower implicit costs*

— Complex multi-asset class

- Citigroup, Russell
- *Cross asset class transitions require experienced personnel as well as robust liquidity pools and trading networks.*

Post-trade analysis

- Review results
  - Pre-trade expectations vs. post-trade results
  - Attribution of results
  - Areas of shortfall or missed expectations

- If implementation or communication is significantly or consistently below expectations, provider be removed or replaced
  - Board approval is needed to add or remove providers

Next steps

— Board approves which transition managers to use for which events

  — Recommendation provided on slide 17

— Board directs Staff to proceed with evergreen contracts where practicable and to evaluate alternatives where necessary

Appendix

Key transition management terms

— Agency Trade

- A trade where the transition manager interfaces with the market on behalf of the asset owner and does not act as a counterparty.

— Crossing (Internal)

- Refers to the ability of a transition manager to offset (“cross”) the transition flow of its client’s legacy and target portfolios against its index funds or other internal trading flows. If natural internal crosses exit, such transactions are free of commissions with virtually no market impact.

— Crossing (External)

- Similar in concept to internal crossing; however, the transition manager uses external liquidity to “cross” its client’s transition flow. In contrast to the internal variety, external crossing exposes the transition flow to the potential of information leakage.

— Dark Liquidity Pool

- A private alternative trading system or platform where the details of trade orders are not made available to the public. A transition manager may utilize dark pools in an attempt to mitigate market impact when trading large orders (as compared to the security’s daily trading volume).

— Explicit Costs

- The most visible costs during the transition period. Costs include commissions, market taxes, exchange fees and custody fees. While the most apparent, explicit costs are the least significant component of trade expenses.

— Legacy Portfolio

- The existing portfolio that the client seeks to exit. Also known as the incumbent portfolio.

Source: Northern Trust, Russell

Key transition management terms (cont.)

— Implementation Shortfall

- Assumes that the legacy portfolio is converted instantaneously to the target at the outset of the transition period and at zero cost. Essentially, implementation shortfall is the measure of the total cost of the transition event.

— Implicit Costs

- The least visible costs during the transition period. Costs include market impact, bid/ask spread and opportunity costs. Implicit costs represent the most significant expense of a trade.

— Information Leakage

- The release of material information about a pending trade before the actual order is placed. Information leakage increases the total cost of a transition event since it allows arbitragers to "front run" the transition.

— Market Impact

- The movement of a security's price after placing a trade order.

— Opportunity Costs

- Costs associated with the time required to complete the full transition from the legacy to the target portfolio.

— Post-trade Analysis

- An analysis of the actual costs associated with a transition event compared to the pre-trade estimates.

Source: Northern Trust, Russell

Key transition management terms (cont.)

— Pre-hedging

- Trading on a bank's account ahead of a transition event with the potential economic gain accruing to the transition manager.

— Pre-trade Analysis

- An analysis of the estimated trading costs (both explicit and implicit) associated with a transition event compared against an unmanaged transition benchmark providing characteristics of the legacy and target portfolios.

— Principal Trade

- A trade where the transition manager becomes the counterparty to the transaction, either by supplying liquidity from its own inventory or assuming the risk of the position.

— T-Standard

- A standardized performance metric designed to calculate implementation shortfall during a transition event.

— Target Portfolio

- The portfolio that a client seeks to purchase (with the proceeds from the legacy portfolio). Also known as the destination portfolio.

— Transfer-In-Kind

- Securities that are instantaneously transferred from the legacy to the target portfolio with no liquidity impact. Since transfer-in-kind securities are not traded in the market, they incur no explicit or implicit costs.

Source: Northern Trust, Russell

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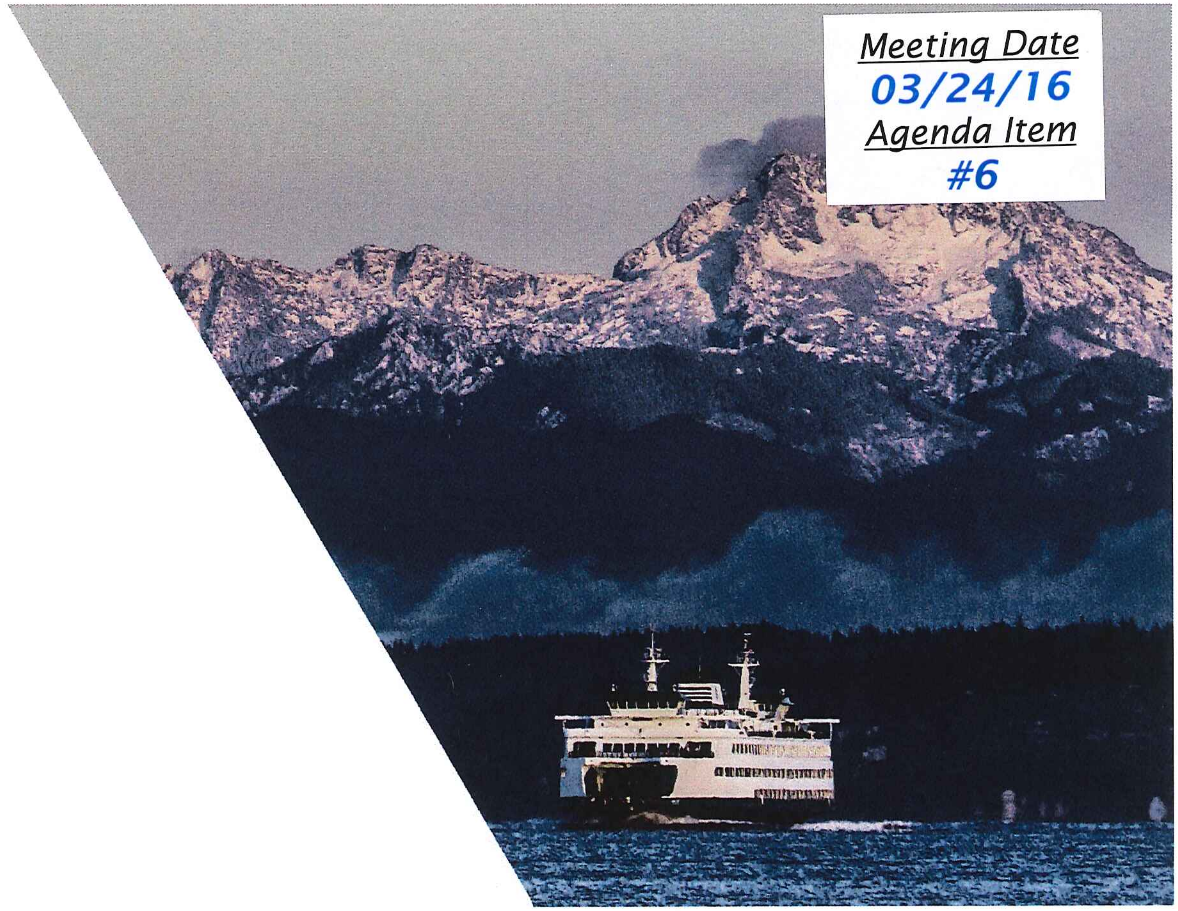

PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

MARCH 24, 2016

Cash Overlay Providers

Contra Costa County Employees' Retirement Association

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Overview

The challenge

Holding cash in a portfolio is usually necessary, but comes with side effects

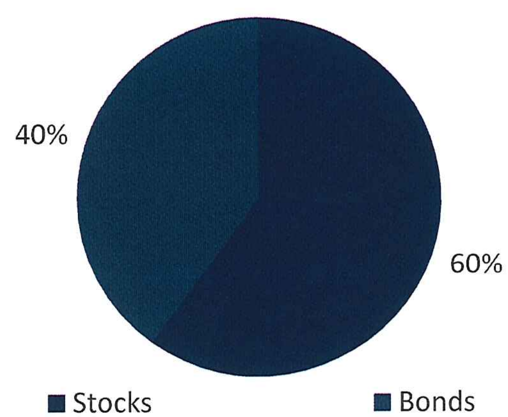
— Excess cash prevents the portfolio from being fully invested according to policy

- Example: a 60/40 portfolio with 4% cash may actually be a 58/38/4 portfolio

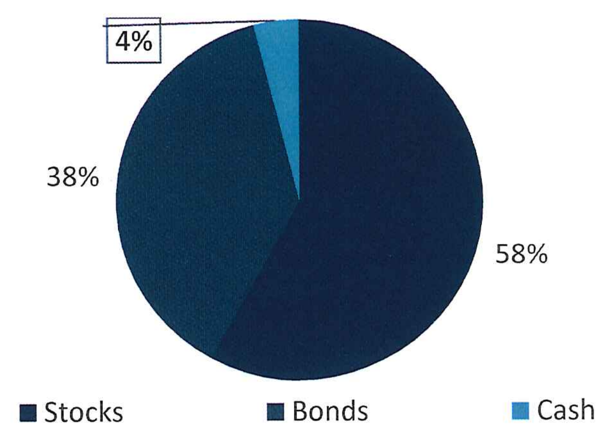
— Tracking error thus results from the portfolio being out of balance relative to its policy

— Over time, cash generates a "drag" on return since it underperforms most other asset classes

INTENDED PORTFOLIO



ACTUAL PORTFOLIO



The solution

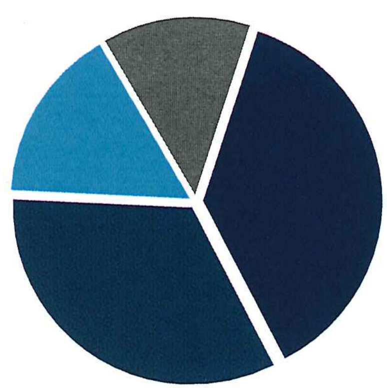
— Through the use of derivatives, cash overlay strategies efficiently gain exposures in a portfolio to reduce the effects of holding cash.

— Derivatives allow the portfolio to gain the expected exposures to various asset classes without investing in the "physical" securities.

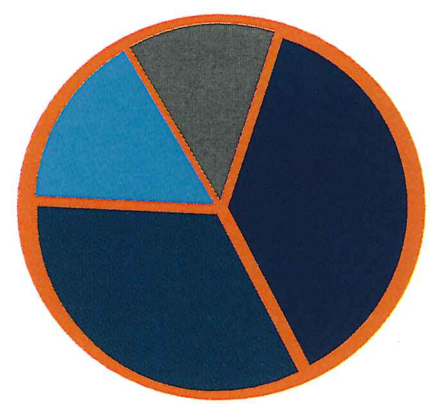
— Overlay strategies may "equitize" the cash position or rebalance a portfolio as desired.

— For CCCERA, overlay offers operational efficiency to effect general asset class rebalancing while specific investment strategies are being identified

PORTFOLIO WITHOUT CASH OVERLAY



PORTFOLIO WITH CASH OVERLAY



Risk management

Engaging in derivative transactions can be risky but these risks can be managed

— *Derivatives: a security with a price that is dependent upon or derived from one or more underlying assets. The derivative itself is a contract between two or more parties based upon the asset or assets. Its value is determined by fluctuations in the underlying asset.*[1]

— One significant risk involved with derivatives is leverage

- To mitigate this risk, the notional exposure may be capped at the current cash balance
- This prevents explicit leverage due to derivatives and ensures cash is available to collateralize the derivatives

— Forward contracts assume counterparty risk

- Counterparties must be reviewed by the service provider
- Exposure limits must be set with each counterparty
- Pre-trade compliance checks must be completed before contracts can be entered

[1] *Source: Investopedia. http://www.investopedia.com/terms/d/derivative.asp*
Policy guidelines must be established to address the proper use of an overlay strategy.
Leverage and counterparty risks are examples but others must be considered as well.

Services and expected benefits

Strategy	Expected Benefit
Cash equitization / liquidity management	Improve returns and flexibility
Passive rebalancing / asset allocation	Allows the realignment of asset class exposures without the transaction costs associated with physicals and does not disrupt underlying managers
Duration matching / liability-driven investing	Provide low cost and flexible means to modify effective duration or to match assets to liabilities
Volatility management	Provides flexibility for cheaply adjusting beta risk and implementing hedges
Active insights	Discretionary tilts and active management with the goals of increasing returns

Cash equitization

Equitization: using derivatives to economically convert cash position to equity or other asset class exposures

Why?

— Improves tracking error relative to policy

— Increases capital efficiency

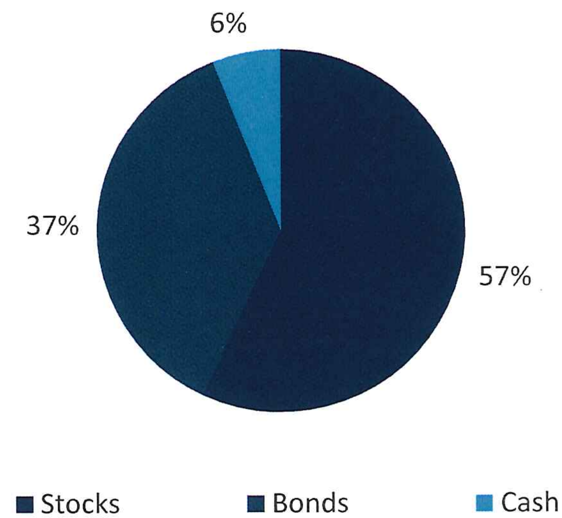
— Maintains flexibility of underlying assets

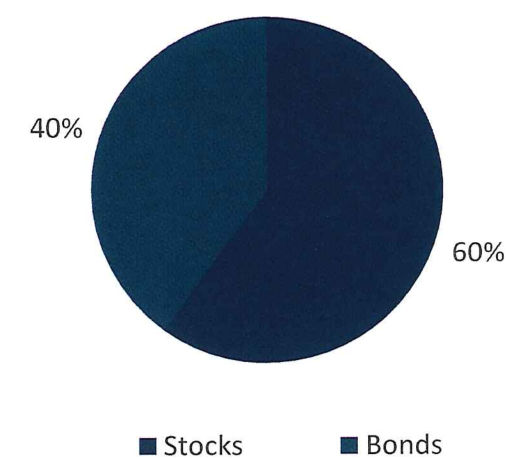
Strategy

— Cash securitization for derivatives exposures

Risks

— Potential losses greater than physical portfolio alone





Passive rebalancing

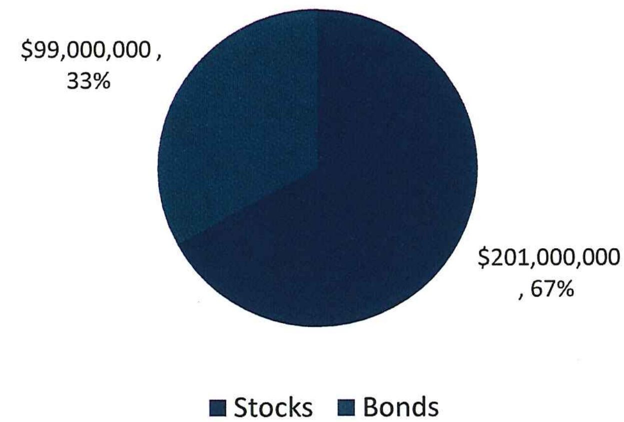
Passive rebalancing: using derivatives to gain desired asset class exposures through the use of derivatives rather than trading actual portfolio positions.

Why?
- Less disruptive to managers.
- Typically lower cost to realign assets using derivatives.

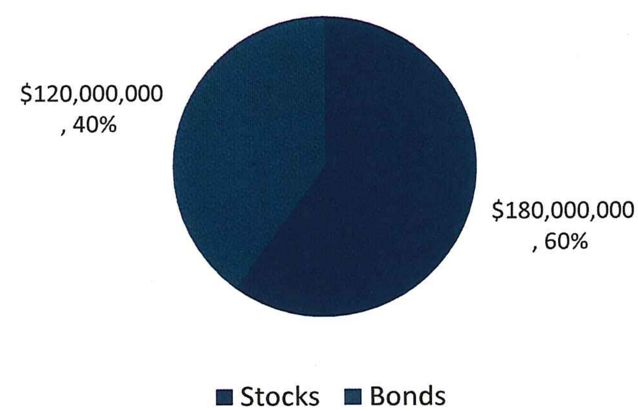
Example:
- $300 million portfolio; with 67% stocks, 33% bonds
- Policy targets = 60% Stocks, 40% bonds
- Sell $21M notional in stock futures.
- Buy $21M notional in bond futures.
- Exposure after overlay = 60% Stocks, 40% Bonds.

Risks
- Tracking error to component benchmarks.
- Small rebalances are fine, larger adjustments should be implemented using physicals.

CURRENT ALLOCATION $300M PORTFOLIO



FINAL EXPOSURE AFTER REBALANCE OVERLAY $300M PORTFOLIO



Duration matching

Duration matching: using derivatives to align total portfolio duration to the duration of pension liabilities

Why?

— Hedge interest rate risk

— Reduce basis risk between assets and liabilities

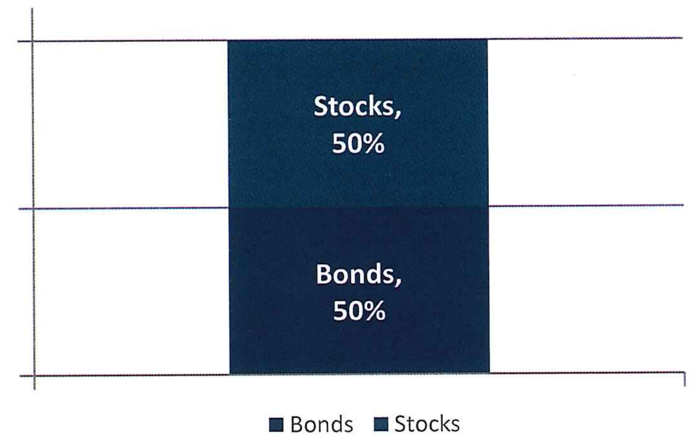
  - Within the credit sector, the number of long-dated securities is low

How does it work?

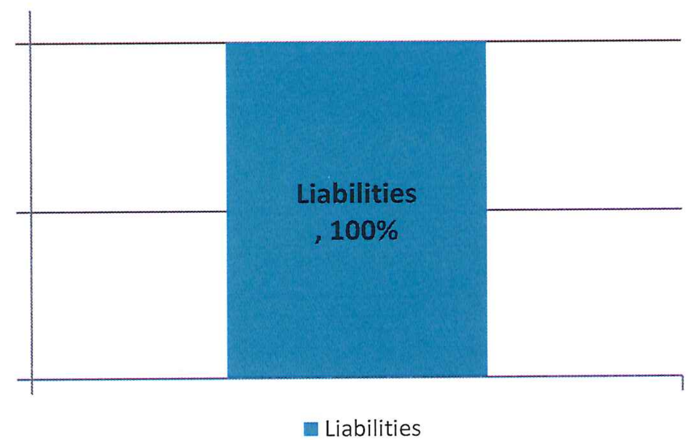
— Enter into a swap agreement to receive fixed & pay floating on a notional amount to effectively increased the duration of the assets to the desired target

— Entering into a swap agreement transforms duration but does not change the portfolio's overall market value.

ASSETS - 8 YEAR DURATION



LIABILITIES – 12 YEAR DURATION



Overlay providers

Provider details

	Parametric Portfolio Associates, LLC	Russell Investments
Headquarters	Seattle, WA	Seattle, WA
Firm Inception	1987	1936
Overlay Service Inception	1987	1992
Ownership	Majority-owned subsidiary of Eaton Vance Corp.	Russell Investment Group will be owned by TA Associates and Reverence Capital Partners

Indicative Fee Schedule	- $1,500/month plus
	  - 0.15% first $50 mil of notional value
	  - 0.10% on remainder of notional value
	- Minimum Fee: $18,750 per quarter
		- Option 1: Annual $200,000 base fee plus
		  - 0.015% to 0.05% of notional value
		- Option 2: Annual $50,000 base fee plus
		  - 0.05% to 0.10% of notional value

Fees at notional amounts: **$250mm** **$500mm** **$1,000mm**	 $293,000 $543,000 $1,043,000	 $175,000 - $325,000 $275,000 - $550,000 $350,000 - $1,050,000
Product Mix	- Fund cash equitization - Manager cash equitization - Overlay transition and reallocation management - Rebalancing - Exposure management - Currency management - Interest rate management	- Cash equitization - Exposure management - Beta management for portable alpha - Liability-driven investing - Fund restructuring - Tactical asset allocation - Currency overlays - Liquidity management

Sources: Parametric, Russell, State Street

[1]*Estimate based on discussions with SSgA*

Provider details (continued)

	Parametric Portfolio Associates, LLC	Russell Investments
Reporting	Daily tracking report available online which include - fund cash levels - manager values - asset class exposures - margin summary - custom portfolio metrics	Customized reporting that can include: - synthetic index replication analysis - counterparty exposure - total fund risk management - liquidity at risk - overlay highlights
Advantages	- Experience with sophisticated and complex overlays - Core business is focused on portfolio solutions - Long track record of overlay investment management experience - Daily tracking reports available online - Low relative base fee	- Experience with sophisticated and complex overlays - Largest asset base - Two separate fee structures available - Low relative asset based fee (option 1) - Customized reporting available
Considerations	- Smaller relative client and asset base - High relative asset based fee	- High relative base fee (specifically the Standard option) - Ownership changes since 2014

Sources: Parametric, Russell, State Street

Parametric Portfolio Advisors

Background:

— Founded in 1987, Parametric is headquartered in Seattle, WA. As of December 31, 2015, they had 318 employees. Parametric focuses on the delivery of engineered portfolio solutions, including rules-based alpha-seeking equity, alternative and options strategies, as well as implementation services including tax-managed core equity, futures overlay and centralized portfolio management. Parametric manages assets on behalf of institutions, high-net-worth individuals and fund investors in the U.S. and internationally. Parametric operates from investment centers in Seattle, WA, Minneapolis, MN and Westport, CT.

- The Seattle office focuses on rules-based, engineered portfolio solutions. Strategies range from index tracking portfolios to managed smart beta.
- The Minneapolis office focuses on overlay strategies and custom risk management solutions (formerly The Clifton Group). They provide product solutions in real asset and liquid alternatives.
- The Westport office focuses on product-based and custom option overlay solutions.

Recent notable events:

— 2014: Established offices in Sydney, Australia

— 2012: Acquired The Clifton Group

— 2007: Parametric Risk Advisors LLC was formed in Westport, CT

Source: Parametric

Russell Investments

Background:

— Founded in 1936, Russell Investments is headquartered in Seattle, WA. As of December 31, 2015, they had approximately 1,800 employees, 21 offices worldwide, and $241.8 billion assets under management. Russell Investments has over 350 investment products which focus on 5 capabilities: asset allocation, capital markets insights, factor exposures, manager research, and portfolio implementation. Russell Investments operates from U.S. offices in Seattle, WA, New York, NY, Chicago, IL, San Diego, CA, and Milwaukee WI.

- Asset allocation focuses on achieving investment objectives.
- Capital markets insights focuses on understanding the interaction between asset classes.
- Factor exposures focuses on identifying ways to gain precise exposures within a portfolio.
- Manager research focuses on identifying superior investment manager talent through a proprietary research process.
- Portfolio implementation focuses on how to implement and manage investments in the most efficient way.

Recent notable events:

— 2015: TA Associates and Reverence Capital Partners to acquire Russell Investments from the London Stock Exchange

— 2014: Russell Investments is acquired by London Stock Exchange Group from Northwester Mutual for $2.7 billion.

— 2011: Len Brennan is named as Russell's new Chief Executive Officer, replacing Andrew Doman.

Source: Russell

Appendix

Risks

Risk	Description
Basis risk	Risk attributable to uncertain movements in the spread between a futures price and a spot price
Communication / Information risk	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.
Tracking error	Futures (synthetic) 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.
Margin / Liquidity risk	Potential that the market moves in a manner adverse to the futures or swap position causing a mark-to-market loss of capital to the fund and a resulting need to raise liquidity or to close positions; this could happen at a time when underlying fund or positions are also declining in value.
Leverage	Creation of market exposure in excess of underlying collateral value may lead to significant capital losses and result in position liquidation.
Counterparty	Counterparty credit risk on OTC trading and trade disruption risk related to exchange traded futures.
Collateral	The program may experience losses on the underlying designated assets in addition to potential losses on the index market exposure overlaying these assets.
Market risk	Market performs in a way that was not anticipated. For example, cash outperforms capital markets.

Forwards and Futures

- **Forward contracts**: More credit risk, price fixed at the start, cash flows settled on delivery
  - Traded OTC as customized contracts that are privately negotiated between parties
  - Entail more credit risk and market risk as they are not backed by the exchange's clearing house
  - Settled at the forward price agreed on at the trade date
  - No cash flows until delivery
- **Futures contracts**: Protected by clearing house, price fixed on last trading day, cash flows settled with margin calls
  - Exchange traded, standardized instruments transacted through brokerage firms
  - Default exposure lives with the exchange's clearing house
  - Settled at the settlement price fixed on the last trading day of the contract
  - Requires initial margin and periodic margin calls
- **Similarities**: Forward settlement via cash or physical asset, require leverage
  - Both contracts are binding agreements to act at a later date
  - May be physically settled or cash settled
  - Both require leverage

Notices & disclosures

Verus

Memorandum

To: **Contra Costa County Employee Retirement Association**

From: **Ed Hoffman, CFA, FRM**

Subject: **Recommendation of Transition Cost Analysis Provider**

Date: **March 24, 2016**

Executive Summary

Having completed the education session on Transaction Cost Analysis (TCA) at the January 2016 meeting, we are now recommending to proceed with engaging Zeno on a trial basis. The purpose of this memo is to seek Board approval to share the necessary custodian data with Zeno. If the trial proves to add value to the overall management of the portfolio, we would recommend entering into an agreement with Zeno for ongoing TCA monitoring. If the trial does not appear to add value, no further action is necessary with regard to Zeno.

Background

An education session covering both Transition Management (TM) and Transaction Cost Analysis (TCA) was presented to the Board at the meeting on January 27th. The session identified several ways that TCA can be beneficial to a plan including: managing and controlling excessive trading costs; ensuring trading strategies are consistent with investment styles; deterring soft dollar and trading abuses; providing additional insight into performance attribution; and improving transparency of delay costs. At the conclusion of the session, Verus requested that the Board direct Verus and Staff to work with leading provider(s) to develop an initial review of the portfolio and then once that review is complete, to determine whether to proceed with a relationship.

The leading provider identified for this opportunity is Zeno Consulting Group based in Bethesda, MD. The firm was founded in 1986 as "“Plexus Group”, then acquired by JPMorgan Chase in 2002, later acquired by ITG in 2006 before finally being re-established as an independent employee-owned firm in 2010. Steven Glass, J.D. serves as the firm's President and CEO. He joined the firm in 1996 having previously served as the General Counsel to the District of Columbia Retirement Board. Zeno is a registered investment advisor (RIA) providing consulting services—not asset management or brokerage services—to their clients. The firm has satellite offices in Culver City, CA and Manalapan, NJ.

Trial Period

The trial period offered by Zeno for this engagement is based on four quarters of historical data. If entered into today, the analysis would cover the calendar year 2015. Their work will cover one equity strategy, a fixed income strategy, and another strategy that involves currency exposures (either global equity or fixed income). Zeno will then provide three separate reports covering these three areas. Once Zeno receives the data from the custodian access will be discontinued.

Zeno offers the trial period for free. It is estimated that their analysis will require approximately one month to complete. Once the reports have been received and reviewed by Verus and Staff, we will provide the Board with insights into the efficacy of the service and any issues identified during the trial period.

While the trial is being conducted, a preliminary review of an agreement with Zeno will be undertaken. The standard agreement will be shared with legal counsel while the pricing arrangement for the services is also determined. We recommend the Board authorize Staff to negotiate an agreement not to exceed $100,000 annually.